



**REHASENSE**

## **ICON Mobility System**

## **ICON 120 Comfort Wheelchair**

## **User Manual**



ICON 120 SP



ICON 120 AP



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# 1. General Information

## Intended use of the device and indications for usage

The manual wheelchair is medical device indicated for use by those persons with limited motion abilities who are unable to stand, walk and/or seat independently. It dedicated for transportation and moving of such people in seating position. End Users can move with the wheelchair independently or with a help of attendant. The wheelchair can be used indoor and as well outdoor on different surfaces (asphalt, concrete, stone, and gravel) in good weather conditions. Any other use is prohibited.

### Intended usage and indications for usage

Intended usage: The manual wheelchair is a medical device indicated for use by persons with limited motion abilities who are unable to stand, walk and/or seat independently. It is dedicated for transportation and moving of such people in sitting position. Users can move with the wheelchair independently or with a help of an attendant. The chair can be used indoor and as well as outdoor on different surfaces (asphalt, concrete, stone and gravel) in good weather conditions. Any other use is prohibited.

Indications: The device is specifically indicated for individuals who (because of the wide variety of possible health problems) are unable to stand and/or walk and so they need a transportation device to maintain some or all daily tasks.

Contra-indications: This type of wheelchair must not be used by persons with flaccid paralysis or other diseases that cause serious body control problems. Such persons require special wheelchairs designed for an extra stable support of the user's body. The need and possibility of usage of an **ICON** wheelchair should be always estimated and indicated by a physician or a physical therapist. The manual wheelchair is a medical device indicated for use by persons with limited motion abilities who are unable to stand, walk and/or seat independently. It dedicated for transportation and moving of such people in seating position. Users can move with the wheelchair independently or with a help of attendant. The chair can be used indoor and as well outdoor on different surfaces (asphalt, concrete, stone, and gravel) in good weather conditions. Any other use is prohibited.

## Safety and quality standards

The wheelchair has passed all necessary tests and it is in conformity with following European Standards: EN 12182:2005; EN 12183:2010; ISO 7176-1,3,5,7,8,15,19; EN 1021-1:2007

It also fulfils all CE requirements implemented by the EEC 42/93 Medical Devices Directive. Upon a correct usage of the wheelchair we foresee its failure-free work for years.

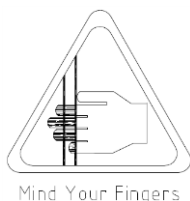
In case questions please take contact your dealer or directly manufacturer. You'll find the contact details on the first page of this manual.

## 2. Safety

### Safety Warnings & Recommendations

- Make sure that this User Manual is read by all persons using the device.
- The manufacturer doesn't take any responsibility for damages and/or injuries, caused by the fact that the User manual has not been followed.
- Use the product only in flawless condition.
- If defects or errors are detected, you must immediately contact the dealer.
- Follow the instructions and warnings on all product labels.
- Use the product only for the described purpose intended by manufacturer.
- Avoid making constructive changes on the device, unless you have the manufacturer's written acceptance for such modifications.
- The device must only be used on a stable surface.
- All wheels should be in contact with the floor ALWAYS during use. This will ensure the device is properly balanced and should avoid incidents.
- The device must not be loaded with more than 180 kg in normal use and 134 kg for use in approved transport vehicles.
- Avoid skin burns during usage of the wheelchair in the direct sunlight. Different elements of the product might become hot.
- It is not recommended to use the wheelchair on sand, in mud or in extreme weather conditions.
- The attendant of a wheelchair End User should be fully healthy and capable person.
- Do not remove by yourself any parts or accessories of the wheelchair. It may influence product's stability and rigidity.
- Do not place device near to the sources of heat or fire (fireplaces, ovens, heaters, stoves). It is not recommended to smoke cigarettes when seated on the device. The wheelchair is not fire resistant.

## Follow below warnings:



The design of the wheelchair because of its functions include many moving elements, slots, holes and gaps between device's parts. There is a risk of body part trapping during folding, unfolding and adjusting different elements of the wheelchair. It specially concerns fingers or hands. It is also possible to have a finger cut by moving parts of the device. Always be careful when you adjust or set up a wheelchair to not get your body parts squeezed and injured.

### 3. Product's General Description

The Icon wheelchair comes with all the typical features of such device like: parking brakes, detachable & height adjustable legrest, detachable & height adjustable armrest and it is equipped with rear main wheels, front turning castors. The device is made from powder coated steel or aluminum tubing. It is comfortable to touch and well preserved against corrosion. For some adjustments, you will need some standard tools available in all hardware stores.

The wheelchairs provide ease of manoeuvring, easy transfer in and out of the wheelchair.

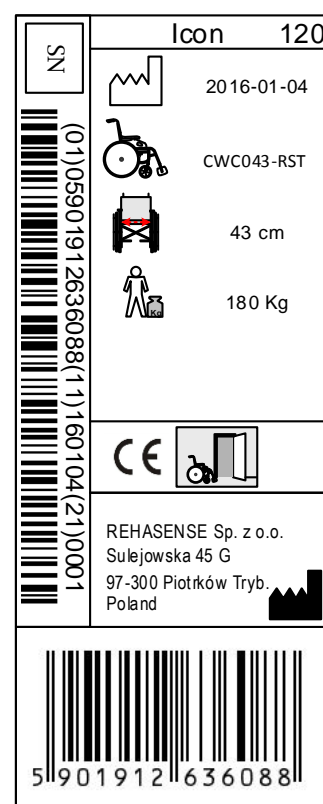
The wheelchairs are supplied in cartons, detached into few elements for easier transportation.

For standard equipped devices, every package includes:

- 1 Main frame with upholstery, 2 brakes, 2 armrests, 2 rear wheels & 2 front castors;
- 2 detachable Legrest with footplates;
- 1 User's Manual

Set of delivered additional equipment depends on order specification.

**This is an example of the product label only (not original). The product label is located on the lower frame**



## Main components:



*Above photo shows an example of wheelchair with all standard components with their location. An exact view of your wheelchair and its elements may differ from those shown above (depending on order specification), but their names, functions and locations remain the same.*

## Optional equipment

Depending on version and order specification the wheelchair can be equipped with different wheel types, drum brakes, elevating legrest, amputee stump support, hemiplegic armrests, anti-tipping wheels, headrest, side supports, safety belt, seating cushion, backrest upholstery with tension adjustment, reclining backrest, height adjustable push handles, stability bar, table, umbrella, infusion holder, crutch holder.

## Wheelchair assembly:

We recommend the wheelchair to be assembled and set up by professionals before it is delivered to the End User.

- Take all wheelchair's elements out of the box and check if all components are included per your order specification. If you'd discover at that stage that some part is missing or damaged, do not continue the assembly process. Contact your supplier of the product right away.
- Detachable components such as rear wheels, Legrest and all additional equipment should be attached and adjusted in accordance with information included in this manual's chapters related to parts.

## 4. Usage

### Techniques to get in and out of the wheelchair.

Teaching the techniques of transferring the passenger must be held under the exact supervision of qualified staff. Below we only present our recommendations.



#### Transferring the passenger from the wheelchair to the bed

The passenger should face the bed without regard on the fact if the other person helps or not. Drive the wheelchair as close to the bed as possible and ensure, that front wheels are facing towards. Pull the brake, lift the armrests / side panels on his side of the wheelchair, on which the transfer to the bed will take place.



#### Transferring the passenger from the bed to the wheelchair

The passenger should face the bed without regard on the fact if the other person helps or not. Drive the wheelchair as close to the bed as possible and ensure, that front wheels are facing towards. Pull the brake, lift the Legrest. Do not climb the Legrest, it can cause falling over the wheelchair. The attendants should use mainly the strength of muscles of legs to draw the wheelchair on stairs avoiding the excessive bending down and impairing the muscles of backs.

### Riding the wheelchair

The correct weight distribution is a basic element of the proper wheelchair usage. The correct wheelchair operation depends not only on the weight but also on the body constitution, position of the person seating on the wheelchair and location of the rear wheels of the wheelchair. The larger weight proportion of the passenger rests on the rear wheels of the wheelchair the easier to drive it. The larger weight proportion of the passenger rests on the front wheels the harder to drive the wheelchair.

**WARNING!** Always ensure, that the brake is always applied, when the attendant is not present when the passenger is sitting in it.

**WARNING!** Always ensure, that the front turning wheels are always pointing forwards, when the wheelchair is not in movement, to enlarge the contact with the base.

### How to ride on a threshold



#### Attendant and user facing the threshold

The attendant inclines the wheelchair backwards by using the step pedal, allowing the front casters to come off the base. Drive forward until the rear wheels touch the edge. Use the handles at the back of the wheelchair to lift the rear wheels on the threshold.



#### Attendant and user with their back to the threshold

Drive to the threshold so that the rear wheels touch the edge. Tilt the wheelchair backwards with use of the step pedal allowing the front casters to come off the base as much as it is necessary. Pull the wheelchair backwards on the threshold until the front casters are above the threshold. Then carefully lower the front casters onto the base.

#### **How to ride down from a threshold**

##### Attendant and user facing the thresholds edge

Incline the wheelchair backwards with use of the step pedal allowing the front casters to come off the base as much as it is necessary.

Drive the wheelchair slowly from of the edge and carefully lower the front casters onto the base.



##### Attendant and user with their back to the thresholds' edge.

Drive the wheelchair backwards as close as possible to the edge of the threshold. Drive down from the threshold very slowly and pull back the wheelchair on the rear wheels until the front casters are free from the edge. Then lower them onto the base.



## **5. Cleaning**

### **Frame**

The frame ought to be cleaned with use of damp cloth, alternatively with addition of a soft detergent. After that it should be wiped with the dry rag. The frame should be regularly controlled, to find on time the damages of varnish, which may cause corrosion. In case of any visible frame damages (cracks, painting defects etc.) ask your local dealer for diagnostics and maintenance.

### **Upholstery**

The standard seat and the backrest cushions are made of laminated PU foam with different options for the covers – breathable 3D or waterproof PU coated material.

The covers can be wiped with a damp cloth or removed and gently hand washed with an approved detergent.

Normal dirt on metal and plastic parts can be removed with standard cleaning agents and sponge or soft rag. Check the specific product information and use only commercial cleaning products which are suitable for cleaning and disinfection (no solvents or abrasives).

## **6. Maintenance & Service**

Despite the solid construction and the use of resistant materials the product is subject to wear. It is therefore recommended to let check the product at regular intervals by a professional service.

For the basic service actions, a set of socket wrenches, or adjustable spanner, flat and cross screwdriver will be sufficient.

### **Parts, which should be regularly inspected:**

<i>Part name</i>	<i>Control type</i>	<i>Control frequency</i>
Tires (pneumatic)	Tire pressure (2,0-2,2 bar), condition of tread and tires. One should take care, to keep the pressure in both tires on the same level. Harder tires provide better maneuverability of the wheelchair and easiness of driving, but they reduce the comfort on bumpy surface.	At least once a week
Spokes	Loose spokes can cause deformation of the rear wheels. Contact your dealer or local bicycle service to manage the problem of loose spokes.	If the problem occurs
Wheel axles	Remove the hair or accumulated dirt	If necessary
Push Rims	Excessively scratched push rims ought to be exchanged because they can wound the End User's hands during riding the wheelchair	If necessary
Brakes	The braking force depends on the tire pressure. The efficiency of brake operation can be also affected with dirt accumulated on tires. Keep the brakes clean wiping them with a damp cloth to remove dirt, and lubricating the funnel of fasteners, on which the brake levers turn.	Control the correctness of brake operation at least once a week
Frame	Keep the wheelchair clean for better comfort of the End User.	At least once a month, depending on usage conditions
Turning wheels	The area between the fork and the front wheel should be kept clean, because of dirt accumulating there, which can cause faster wear of turning wheel bearings. To do so, one should disassemble the front wheel by unscrewing it from the fork, remove all dirt, and then preserve the metal elements of the wheel (i.e. technical grease).	The maintenance ought to be made once a month or more often depending on usual surface type & conditions
Detachable elements	Check condition of detachable elements of the wheelchair, if fasteners are loosened they should be tighten.	In case of intensive exploitation of the wheelchair the inspection should be carry out once a month.

### Most common problems and solutions

If you notice any irregularities in the wheelchair working do not use it - contact the local point of sale or service department of the wheelchair supplier. The manufacturer does not guarantee correctness of the wheelchair operation, if the parts are not original.

<i>Symptoms</i>	<i>Possible cause</i>	<i>What to do?</i>
The wheelchair seems to lean to one side	<ul style="list-style-type: none"> <li>One of the rear tires might be inflated more than the other one.</li> </ul>	<ul style="list-style-type: none"> <li>Inflate tires (2,0-2,2 bar).</li> <li>Check displacement of the wheelchair mass</li> </ul>
The wheelchair is hard to push	<ul style="list-style-type: none"> <li>Low air pressure in tires.</li> <li>Front wheel axles are dirty.</li> <li>Too large load applied on the front turning wheels.</li> </ul>	<ul style="list-style-type: none"> <li>Inflate tires (2,0-2,2 bar).</li> <li>Remove dirt or entangled hair from the front turning wheel axles.</li> <li>Move the center of gravity.</li> </ul>
The wheelchair is hard to turn	<ul style="list-style-type: none"> <li>Low air pressure in tires.</li> <li>The front wheel horizontal axles are tied to strong</li> <li>Front wheel axles are dirty.</li> </ul>	<ul style="list-style-type: none"> <li>Inflate tires (2,0-2,2 bar).</li> <li>Check front wheel axles and loosen them if necessary.</li> <li>Remove dirt or entangled hair from the front turning wheels</li> </ul>
Brakes are not working correctly	<ul style="list-style-type: none"> <li>Low air pressure in tires.</li> </ul>	<ul style="list-style-type: none"> <li>Inflate tires (2,0-2,2 bar).</li> </ul>
The wheelchair is not stable	<ul style="list-style-type: none"> <li>Low air pressure in tires.</li> <li>The elements of wheelchair aren't rigid and tight.</li> </ul>	<ul style="list-style-type: none"> <li>Inflate tires (2,0-2,2 bar).</li> <li>Ensure, that all fasteners and nuts are tightened.</li> </ul>
Flat tires	<ul style="list-style-type: none"> <li>Possible puncture of tube &amp; tire</li> <li>Tire and tube are worn down.</li> </ul>	<ul style="list-style-type: none"> <li>Contact your nearest wheelchair dealer or bicycle service to repair or replace broken tubes and tires</li> </ul>



In case of any product failure we recommend you to contact authorized service. Manufacturer doesn't guarantee proper functioning of the device if it was repaired by unauthorized service or without original spare parts.

**WARNING! Unauthorized repairs will cause loss of warranty.**

### **Authorized services**

For authorized repair, you should contact the dealer, where product was purchased or directly manufacturer.

### **The procedure of sending the wheelchair or its parts to the service**

To accomplish the repair of the wheelchair one should contact directly the producer's service or the local seller. The wheelchair or its parts ought to be sent in a package protecting against incidental transportation damages. The best solution is to keep the original packaging. The dispatch ought to be organized through the transporting company indicated by the manufacturer.

**WARNING! Manufacturer does not take responsibility for transport damages of the device or its components caused by improper packing.**

### **Storage**

Store the device in dry place, where temperature is not freezing. You can also detach the legrest to save even more room. Freezing temperatures or humidity may cause damages on tires, fabric, axles, bearings and other elements of the product. To protect the tires against deformation during long period of storage you can place wood bricks or other supports under the frame. It is also recommended to cover the wheelchair from dust and dirt.

### **Disposal & recycling of the product**

The product may not be disposed of with household waste but must be brought to the local recycling center.

## **7. Warranty**

### **Guarantee information**

- The manufacturer covers the product with 24 months' guarantee from the purchase date.
- During that period, all material or parts defects, caused by manufacturing faults or usage of improper materials will be repaired or replaced free of charge.
- Damages of tires, upholstery and spokes caused by wear in time of exploitation are not covered by the guarantee. The other parts of the wheelchair, which undergo the normal wear during the exploitation are not covered by the guarantee either.
- All mechanical defects and damages caused by improper use or usage not intended by manufacturer are not covered by the guarantee.
- Not authorized changes and modifications of the wheelchair will cause the loss of the guarantee.
- If any defects or damages occur, one should immediately inform the supplier about that fact.

### **Range of responsibility**

- The guarantee does not cover transport cost.
- The guarantee does not cover injury or other damages eventually related to a malfunction of this product.
- The guarantee does not cover the loss, which rise in consequence of impossibility of using of the product, when faults are being removed.
- The manufacturer does not bear the responsibility for damages caused as the result of an inappropriate or incorrect understanding of this End User's manual.

### **Wheelchair modifications & additionally installed elements**

- This definition refers to any wheelchair, which was modified and which differs from details given in this manual or if additional elements, not supplied by the manufacturer, are fixed on the product. If the device is modified without the manufacturer's written authorization, it may not be compliant with the CE essential requirements and it is not covered by the guarantee.
- If you have any questions or doubts in the matter of modifications, please contact the Manufacturer before you will take any action.

## 8. Technical Data

The technical data will vary per the frame dimensions chosen and the way the wheelchair is set up (front and rear wheels).

All measurements are in centimeters (cm) for distance and kilograms (kg) for weight, unless otherwise stated.

Icon 120 Technical Data							
Max weight of a user (kg) SWL	180						
SWL of User in a transport Vehicle	134						
	32	36	41	46	51	56	61
Seat depth range (cm) (including laminated back cushion) min/max	40 - 53			45 - 58			
Rear main wheels diameter (inch.) standard 24" ( 20", 22")	16" AP - 24" SP						
Front wheels diameter (inch.) standard 7" (6", 8")	7"						
Total length with footrests (cm) 16" AP/ 24" SP	106/110						
Length of device (without footrests) (cm) 16" AP/ 24" SP	81/85						
Height of device (cm) min/max	110/130						
Rear Seat Height (cm) min/max	36 - 44						
Push Handle Height Range min/max	97 - 120						
Backrest height range (cm) (no cushion) min/maz	41 - 73						
Length of the footrest (range) (cm) min/max	40 - 60						
Armrest Height Range (cm) from seat base - no cushion - min/max	27 - 40						
Armrest Height Range (cm) with standard cushion - min/max	17 - 30						
Tilt Range (degrees)	26° interval with 4 pre-set options: -5° to +21° ; -3° to +23° ; 0° to +26° ; +3° to +29°						
Recline range (degrees)	30° interval with 6 pre-set options within a total range of 83° to 126°						
Width of device (cm) 16" AP/ 24" SP	55/51	59/55	64/60	69/65	74/70	79/75	84/80
Total weight (kg)	35,1	35,7	36,4	37,0	37,7	38,1	38,8
Main frame with parts below removed. (kg)	23,7	24,3	24,9	25,5	26,1	26,5	27,1
Leg support (kg)	2,5	2,6	2,6	2,7	2,7	2,8	2,8
Side support (kg)	0,9						
Rear wheel 24" (kg)	1,9						
16" Rear wheel (kg)	2,1						
Head support (kg)	1,5						
Seat cushion (kg)	0,9						
Back cushion (kg)	1,6						

## 9. Wheelchair Fitting and Description, Set-up and Operation.

### Fitting the ICON 120 to the End User

The ICON 120 Comfort wheelchair is a comfort wheelchair designed for extended daily use and is adjustable to provide improved positioning and pressure distribution for the End User.

While wheelchair seating and positioning is an individual process, only to be carried out by those qualified to do so, there are generally accepted guidelines to achieve the best fit of the wheelchair to the individual.

The fitting process is focused on the End User's body dimensions and functional needs:

- Select the wheelchair size based on the **End User's hip width**.
- Side Panels in the Armrests are adjusted to provide clearance between the hips (at the Greater Trochanter) and the Side Panel
- Adjust the **seat depth** to achieve the greatest contact to the thighs, and buttocks, without impinging on the soft tissue (Popliteal Fossa) at the back of the knee

- Adjust the **back height** so that the lumbar area is supported and the top of the Back is level with the crease of the armpit (Axilla)
- Adjust the Head Support so that it supports the **head and neck** at the Occiput and nape in such a way that when the seat is reclined the head neck position is neutral and comfortable
- Armrest Pads are adjusted to the level of the **forearm**, when the elbow is flexed to approximately 90 degrees
- Leg Rests are adjusted for
  1. Length (providing good support for the **legs** without lifting the thighs up from the Seat Cushion),
  2. Footplate angle (so that the foot is supported naturally in the resting **ankle angle**)
  3. Calf Pad supports the weight of the leg, when in the elevated leg position, without lifting the foot off the Foot Plate

**WARNING!** The End Users comfort needs to be checked regularly by the Care Giver or Attendant to prevent impinged blood circulation, avoid pressure concentration over bony prominences and adjust body position to encourage better overall circulation.

Setting up of the Seating and Positioning of the End User in the wheelchair is only to be done by qualified persons.

Incorrect positioning may result in serious health consequences for the End User.

**If there is any doubt, please contact the Wheelchair Prescriber and fitting team that have delivered the product to the End User.**

## 10. Safe Weight Limit (SWL) for normal use and transport vehicle use.

The Safe Weight Limit is 180kg for all sizes in normal daily (not include during vehicle transport) use. This means that the End User weight should not exceed 180 kg if using the wheelchair.

The SWL for vehicle transport use is no more than 134 kg. When the wheelchair is being transported in an approved **transport vehicle**, the SWL of the End User is restricted to a maximum of 134 kg (per ISO 7176:19).

Tie down connecting points can be provided for vehicle transport and should be used.

It is not allowed to transport the vehicle without the use of the approved tie down points (see “Section 4: Usage”: Use in Approved Transport Vehicles”

## 11. Chassis and Chassis Extenders.

The Chassis is the main frame of the wheelchair and supports the Seat Frame, Armrests and Legrest as well as provides attachment points for the front and rear wheels.

Made of steel tube, the Chassis is rigid and provides a solid support for the articulating seat assembly.

As seat widths vary, so do the lengths of the Chassis. This is achieved by the addition of **Chassis Extenders** (5 cm and 10 cm). These provide greater forward to backward stability for larger and taller End User.

Normally they are installed during the assembly process (in relation to the Seat Frame widths) but they can also be added later as a “kit”, which also includes a Seat Base Extender and Seat Plate.

Instructions for fitting are with this kit.

## 12. Seat Widths.

There are 7 different seat widths available.

The relationship between the seat width and the wheelbase is noted in “Table 1: ICON Technical Data”.

These Seat Widths are in 3 groups Small, Medium and Large, with sizes within these groups.

Selection is based on the hip width of the End User plus 4 cm to determine the best size selection.

PLEASE NOTE – the Armrest width can also be adjusted to accommodate an End User with larger upper body relative to the hip width (see “Section 14: Armrests”)

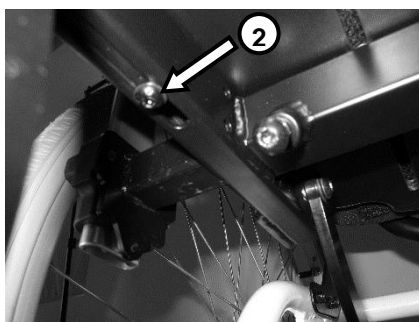
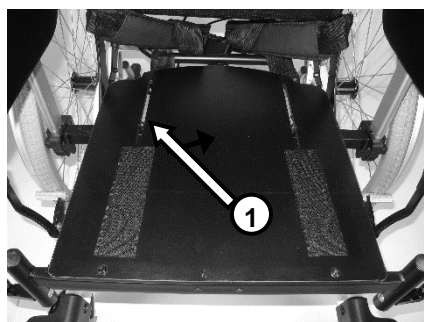
## 13. Seat Depth.

### Seat Depth Adjustment

The seat depth can be adjusted to provide better support under the thigh/hamstring area. Maximizing the seat length increases the contact area of the body to the seat and provides better pressure distribution.

The position of the front of the seat should not be closer than 3 cm to the Popliteal Crease at the back of the knee, to not impinge on the soft tissue in this area.

Adjusting the Seat Depth is achieved by



- Removing the seat cushion to expose the Seat Plate.
- Loosening the two fasteners (1) that locate the rear of the Seat Plate to the Seat Frame – loosen only – no need to remove
- Under the Seat Frame, loosen the two fasteners (2) on either side of the frame to allow the Front Seat Frame to slide freely within the Main Seat Frame.
- Adjust to the desired position and tighten the fasteners previously loosened in steps 2 and 3.

**PLEASE NOTE** The “functional seat depth” (i.e. the actual depth available for sitting once the Back Cushion or Padded Upholstery is in position) can also be adjusted by repositioning the Back Frame inside the Back Canes (see “Section 15: Back Frame”)

**WARNING!** Do not exceed the warning marks on the Lower Seat Frame indicating Maximum Seat Extension for each Chassis Extender. See guidelines on the instruction under the seat panel.

## 14. Armrests.

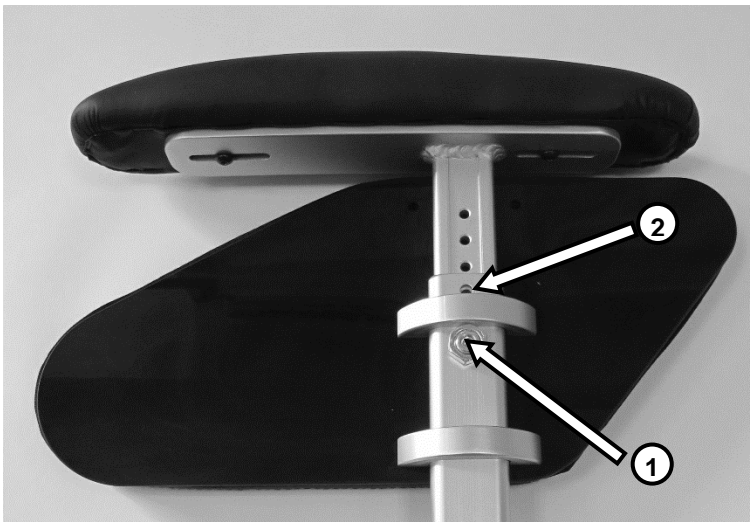
### Armrest removal and adjustment

The Armrests are “drop-in” style, have three areas for adjustment and can be easily removed to allow for transfers.

**Removing** is done by pulling the Armrest vertically from its mounting bracket on the side of the Seat Frame.

It may be necessary to press on the Release Button at the bottom of the Armrest Stem Spring clip, if the wheelchair is provided with this feature.

The **Armrest height** can be adjusted by



- Loosen the Grub Screw (1) located in the center of the lock nut, until the Stem slides easily in the Stem Retainer
- After the correct height, has been set, align the Guide hole (2) in the Arm Rest Tube with the hole in the Arm Rest Stem to screw the Grub Screw into the correct position.

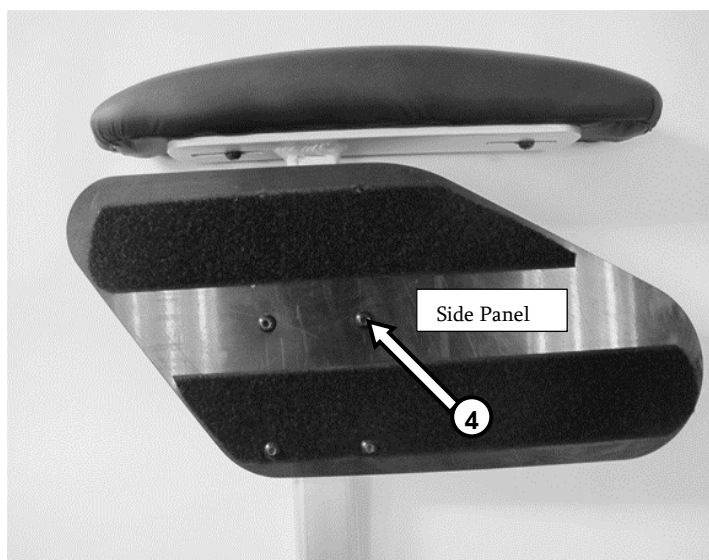
The **Armrest Pad** can also be adjusted forward and rearward by



- Loosen the two retaining fasteners (3) and slide the Armrest Pad forward or backward.
- Retighten the fasteners after setting the position.

### Side Panel height adjustment

The height of the **Side Panels** in the Armrest can also be adjusted by



- Removing the Side Panel Soft Pad
- Loosen the 4 fasteners (4) under the Pad and slide the Side Panel up and down to the desired position.
- If greater height is needed then remove the top 2 fasteners completely, slide the panel above the Side Panel Retainer and reinsert the fasteners into the Side Panel Retainer.
- Set the height and tighten the fasteners.

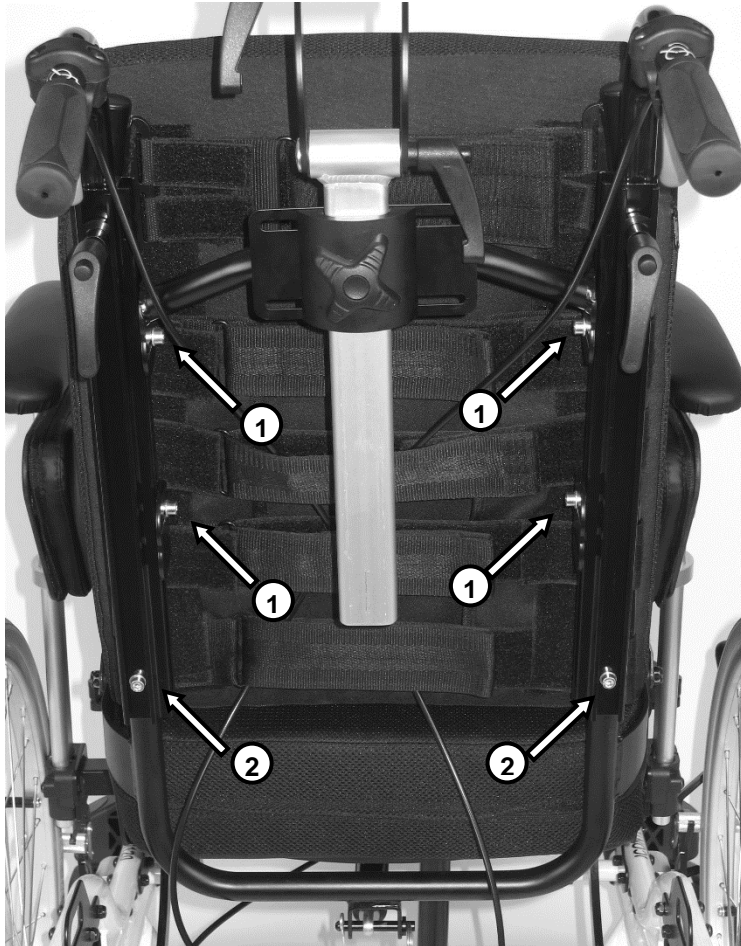
## 15. Back Frame.

### Adjusting the Back Frame

The Back Frame can be adjusted in many ways to ensure the best support, even for the mildly asymmetric backs.

The Back Frame moves inside the Back-Cane Channels, which in turn can be adjusted vertically against the Back-Cane Mounts.

Translational, tilting and minor rotational adjustments can be made to get the most comfortable fit.



- Vertically, it is adjusted by loosening the upper 4 fasteners (1) that hold the Back Frame in the Back-Cane Channels. Loosen but do not remove!
- Loosening will allow the Back Frame to slide up and down the Back-Cane Channels, as well as rotate and tilt.
- Fine adjustments are easier once the fasteners are tightened a little, enough to still allow slide, tilt and rotate.
- Once the desired setting is achieved, tighten the fasteners per the torques settings in the Torque Guide.

More vertical adjustment is possible at Back Cane Mounts:

- Loosen, but do not remove, the lowest 2 fasteners (2) and slide the Back Canes up or down until the desired position is reached.
- Retighten per the recommended torque setting.

**WARNING! Do not overtighten fasteners – follow the Torque Guide (8-10 N.m)?**

### Adjusting the Tension Back and Vertical position

Additionally, the back frame has Adjustable Tension Back for extra support or relief.

This is adjusted by loosening the Velcro straps and adjusting the tension of the strap. Replace by firmly binding the Velcro surfaces.

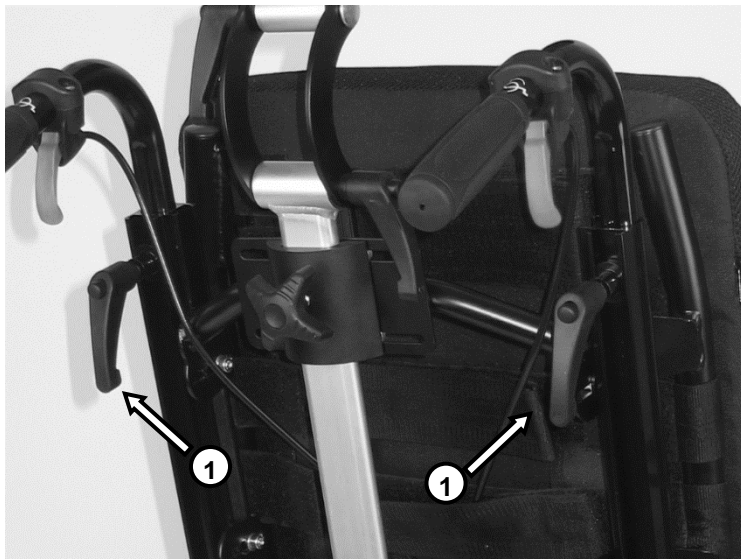
The Back-Frame height can also be changed by adjusting the position of the Back Canes in relation to the Cane Mounts, which are attached to the Seat Frame.

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## 16. Push Handles, Tilt/Recline Controls and Gas Spring Position

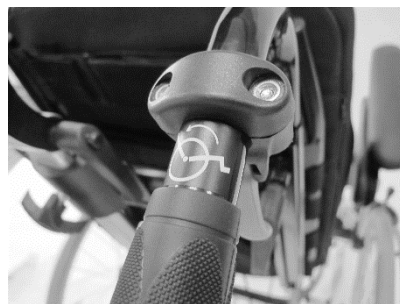
### Push Handles

The **Push Handle height** can be adjusted by



- Loosen the two toggle clamps (1).
- Retighten after adjusting to the desired position.

### Tilt and Recline Controls



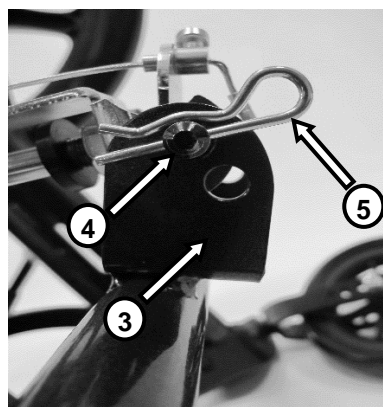
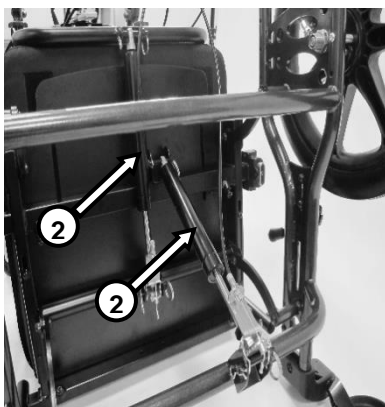
On the Push Handles are the **Tilt and Recline controls**. The functions are marked by the labels next to the controls  
Red (right side) handle for “Tilt”

Blue (left side) handle for “Recline”

### Gas Spring Assist

Both Tilt and Recline functions are assisted by Gas Springs, mounted under the Seat Frame and connected to the Chassis and Seat.

The Ranges of Motion and Start/End points are described in “Table 1: ICON Technical Data”



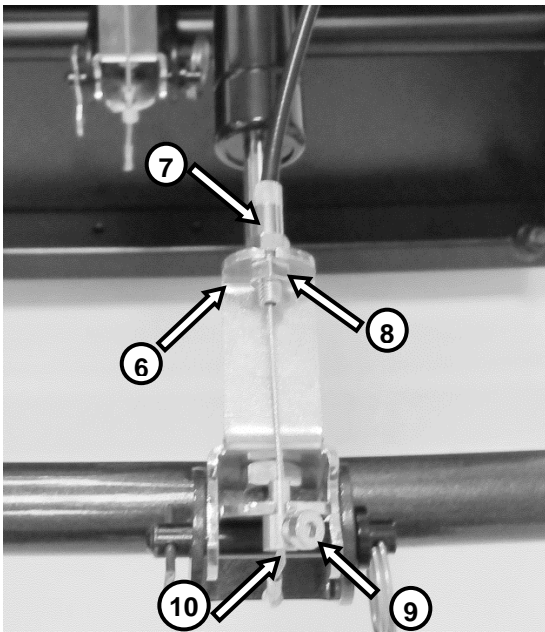
- It is possible to change the Start and End points by repositioning the **Gas Spring** locator (2) on the Mounting Bracket (3) in the other hole.
- This is done by removing the Pin Locator (4) and taking out the Retaining Pin (5), then reinsert the Pin in a new position.

**WARNING!** Ensure the Retaining Pin is firmly in position and not distorted. Inadvertent release of the Pin from the Mounting Bracket may cause sudden recline or tilt movements.



## Gas Spring Assist – adjusting handle tension

The Tilt and Recline control is by Bowden Cable and may at times need adjusting.



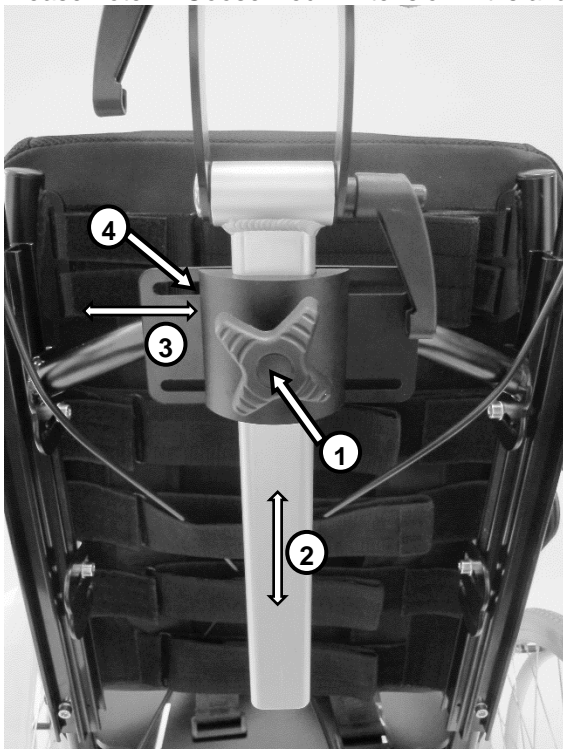
- This is done by loosening the lock nut at the distal end of the cable where it anchors to the Mounting Bracket (6) and acts over the Gas Spring Valve Switch (7). Once the lock nut is loose, then rotate the Cable Barrel to reduce the slack in the cable
- Retighten the Lock Nut (8), test the function and repeat until positive control is achieved.
- If the Cable has stretched or you are not able to adjust the Barrel any further, then loosen the Locking Bolt (9) that fixes the Cable End (10) in position, pull up the slack in the cable and retighten the Locking Bolt into the Cable

## 17. Head Support

### Adjusting the Head Support position

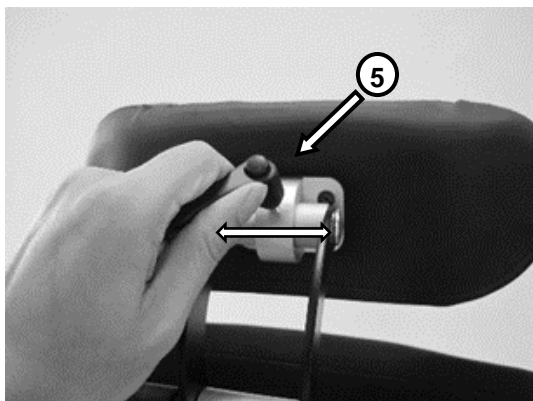
The Head Support position can be adjusted in 4 independent directions to establish optimal support for the End User.

Please note: A Goose Neck Extension Kit is available for clients who require greater reach

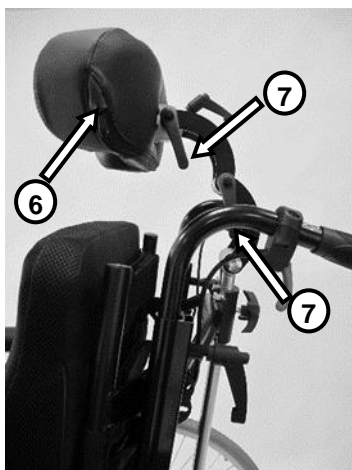


- **Height** adjustment is achieved by loosening the central Stem Retainer Knob (1) that controls the Head Rest Stem (2).
- Loosening this allows vertical adjustment. Retighten at the desired level.
- **Medio-lateral** adjustment (side to side) can be achieved at two points – at the Stem Mounting Plate and at the connecting point for the Head Rest to the Goose Neck
- Adjust at the Headrest Connecting Plate (3) by loosening the 4 fasteners (4) that attach to the Stem Retainer.
- Slide left or right until the head rest is in its best position. Retighten the fasteners.
- Slide adjustment where the Gooseneck meets the back of the Head Rest is made by loosening the fastener and sliding left or right.
- Fine **rotational adjustment** is made





by loosening the Slide Fastener (5) on the back of the Head Rest and rotating to the correct position, before re-tightening



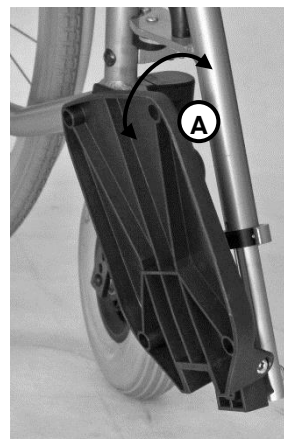
- **Positioning** the Head Rest (6) under the neck/occipital is done by loosening the Gooseneck fasteners (7) and moving the Head Rest to the desired position before re-tightening.

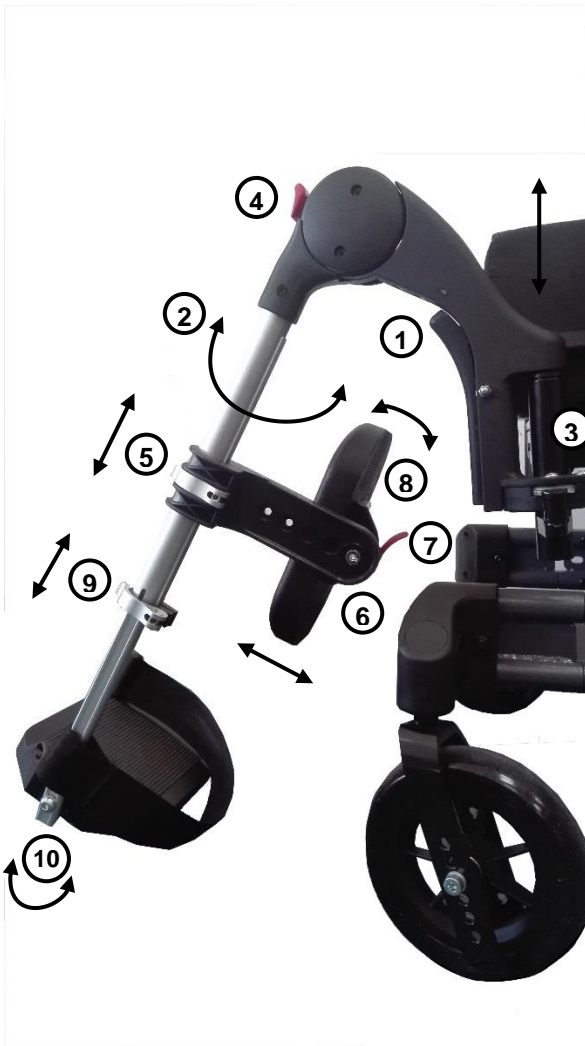
## 18. Elevating Leg Rests

### Elevating Legrest (aluminium)

- These Legrest have very wide range of adjustments. They can easily be swung sideways and detached.
- To facilitate an easy transfer into or from wheelchair, footplates can be easily flipped up (A)

**WARNING!** It is forbidden to stand on the Legrest. It may cause the wheelchair to tip over.





To swing away or detach the Legrest:

- Press the locking lever **(1)**.
- Swing the Legrest **(2)** outward side to approx. 45°.
- Then pull up to detach it from the wheelchair's frame **(3)**.

To attach the Legrest:

- Hold it set outwards, approx. 45° to a frame.
- Insert the Legrest tip into the hole on the frame **(3)**.
- When the Legrest hangs on the frame swing it to the front **(2)**. The Legrest should lock itself automatically.
- Ensure that right and left Legrest are assembled to the correct side of the frame.

To adjust the Legrest angle:

- Press red button **(4)**.
- While holding, it pressed, lift or lower the Legrest with your other hand to find the right angle.
- Release the button.

To adjust height of the calf support:

- Release the locking lever **(5)**.
- Adjust height of the support.
- Lock the locking lever.

To adjust depth of the calf support:

- Loosen and take away the bolt **(6)**.
- Put the calf support into 1 of 5 setting holes.
- Put back in and tighten the bolt.

To facilitate an easy transfer into or from the wheelchair:

- Swing the calf support rearwards by pressing the lever **(7)**.
- To move the calf support back into position simply push it forward until it locks itself automatically.

To adjust an angle of the calf support:

- Simply twist it forward or backward **(8)**.

To adjust length of the Legrest:

- Unlock the locking lever **(9)**.
- Set the Legrest length by sliding the lower tube up or down.
- Lock back the locking lever.

To adjust the footplate angle:

- Loosen the bolt **(10)**.
- Adjust the footplate position
- Tighten the bolt

**WARNING!** If the wheelchair is used outdoors, minimum distance between footplates and ground should be around 4-5 cm.

## 19. Wheels

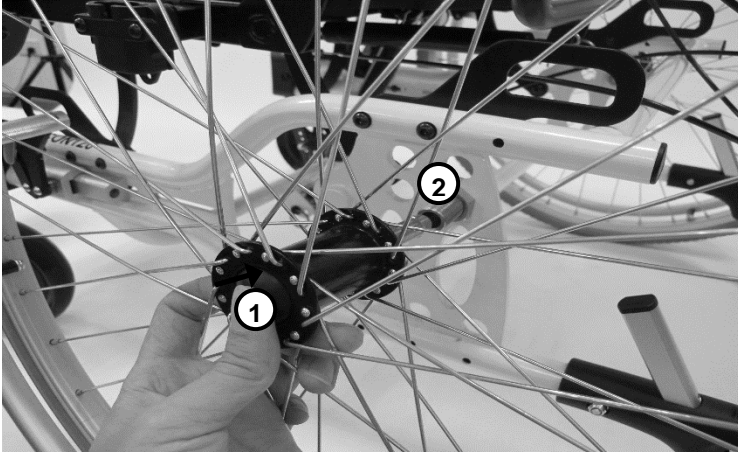
### Rear Wheels

Depending on the order specification, the wheelchair may be equipped with rear wheels that have 16" (Attendant Propelled) or 24" (Self Propelled) diameter (22" and 20" are also available).

The wheels may have pneumatic tires or puncture proof PU tires. Other sizes and types of wheels are available on request. 24" wheels are standard and equipped with push rims, for the user to propel the wheelchair by hand. Wheelchairs equipped with smaller wheels (16") can be propelled exclusively by an attendant, pushing the wheelchair.

### Quick-release axle

Depending on order specification the rear wheels may be equipped with quick-release axles that allow fast assembly or disassembly of the rear wheels.



To detach wheel off the frame:

- Press and hold the releasing button **(1)** and pull the wheel out from the bushing.

To attach the wheel back:

- Place axle's tip in the bushing **(2)**, press and hold the releasing button **(1)**, push the axle all the way into the bushing and release the button.
- Try to pull the wheel out of the bushing to check if it is safely locked in position.

**WARNING!** Mind your fingers when attaching or detaching the wheels. Don't stick your fingers between spokes or between tires and push rims.

**WARNING!** Mind your fingers when propelling the wheelchair with Don't stick your fingers between spokes or between tires and push rims. To secure your fingers you can use spoke protectors, available as accessory.

### Cambering

Rear large diameter wheels may be cambered (3 or 5 degrees) so that the End User has a better propelling contact to the Push Rings. Cambering is achieved with the addition of a Cambering Kit (Fitting Instructions included in the kit)

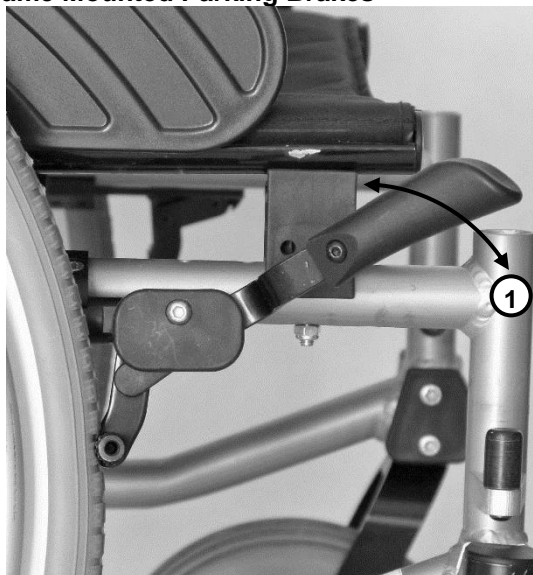
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## 20. Brakes

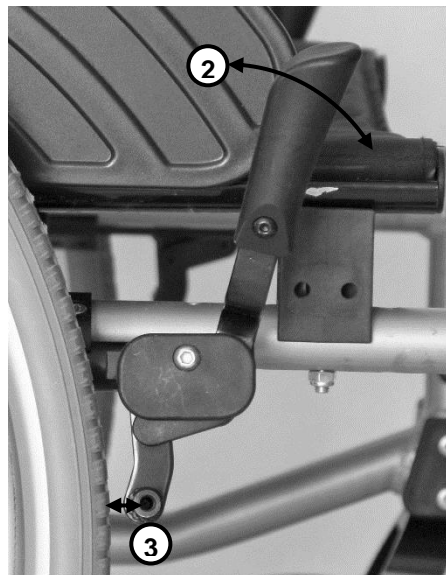
Depending on the order specification, brakes may be frame mounted and operated by lever, and/or drum brakes within the rear wheel, and controlled by the Care Giver or Attendant. Frame mounted brakes are for Parking function only and not intended for slowing down the wheelchair.

If the chair is to be used on slopes, then it should be fitted with Drum Brakes which can be used to Slow Down to Stop as well as Park the wheelchair.

### Frame Mounted Parking Brakes



*Brake engaged (wheelchair doesn't roll)*



*Brake disengaged (wheelchair rolls)*

- To engage the brake push brake lever forward **(1)**. Now the wheels are locked.
- To disengage the brake, pull the lever backwards **(2)**. Now the wheels can roll.
- Always engage the brakes if the wheelchair remains in stationary position.
- Always disengage the brakes before riding the wheelchair.

**WARNING! Always engage both brakes when getting in or out of the wheelchair**

**WARNING! Parking brakes are not designed to slow down the rolling wheelchair. They are only dedicated for parking function.**

### Brake position adjustment



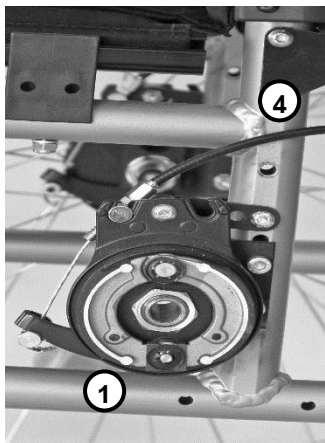
If your wheelchair is equipped with 16" rear wheels, then the brake assembly is located lower and the brake lever is longer.

Functioning and operations of the brake remains the same as described above.

## Drum brakes

Drum brakes are optional equipment and they can be assembled on a wheelchair only by manufacturer or authorized service. They are designed to help an assistant to manoeuvre the wheelchair during riding. They can also be used as parking brakes.

The set consists of 2 rear wheels equipped with integrated drum brakes **(1)**, 2 brake levers **(2)**, 2 small locking levers **(3)** to facilitate the parking function and 2 cables that connect the brakes with the levers **(4)**.



*Drum brake*

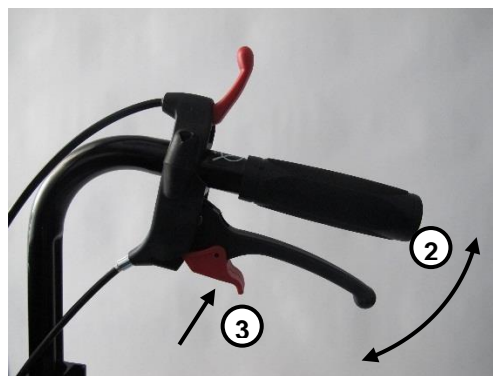
**WARNING!** Drum brakes can only be operated by assistant persons standing behind the wheelchair. Drum brakes are not designed to be operated by persons sitting on the wheelchair.

**WARNING!** Never leave the wheelchair unattended with disengaged parking brakes.

**WARNING!** Always engage brakes if the wheelchair remains not in use.



*Brake disengaged*



*Brake engaged & locked*

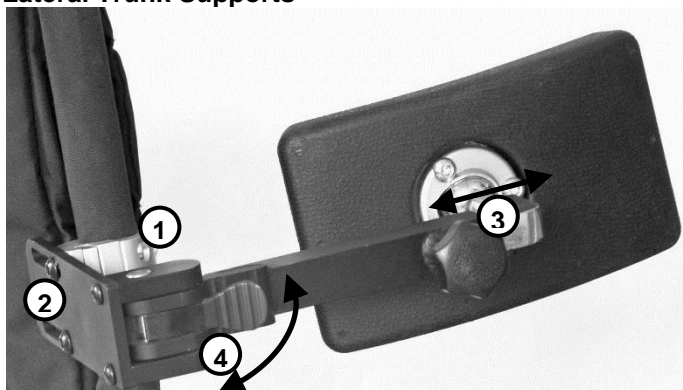
- To slow down the rolling wheelchair simultaneously pull up both brake levers **(2)** and control the braking force.
- To stop the wheelchair completely, pull the braking levers all the way up to the stop.
- To disengage the brakes, simply release both braking levers, so they can drop down freely.
- You can also use drum brakes to manoeuvre with the wheelchair by gradual braking of the wheel in the direction of which you'd like to turn.

To use drum brakes as parking brakes you must lock them in engaged position

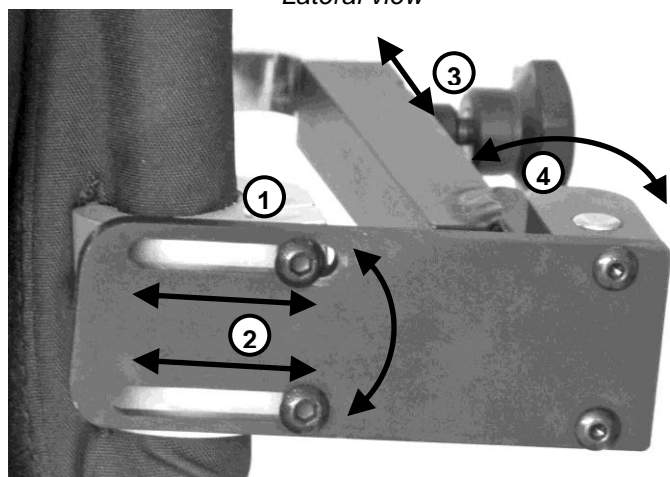
- To do that: after activating the brakes with brake levers **(2)** press up the 2 small locking levers **(3)** located under the brake levers.
- To unlock the locked brakes simply pull up both brake levers towards the push handles and then release them. The brakes will unlock themselves.

## 21. Accessory - Lateral Trunk Support

### Lateral Trunk Supports



Lateral view



Rear view

Lateral supports offer additional stabilization of End User's trunk.

Supports are attached to the backrest tubes with special bracket (1).

**WARNING!** This equipment can be assembled on a wheelchair and adjusted only by qualified service or physical therapist.

Side support is assembled on a bracket (1) with 2 bolts (2). It is possible to adjust the depth, angle and width of the support, to achieve optimum comfort for the End User.

To change angle and/or width of the support:

- Loosen the bolts (2), adjust the support to required position and tighten the bolts.

To adjust depth of the support:

- Loosen the knob (3), adjust the support to required position and tighten the knob.

It is possible to swing the support to the side to facilitate an easy transfer of the End User. To swing the support away:

- Press the red locking lever (4) with your finger and swing the support to the side.
- The support will lock itself automatically after swinging it back to straight forward position.

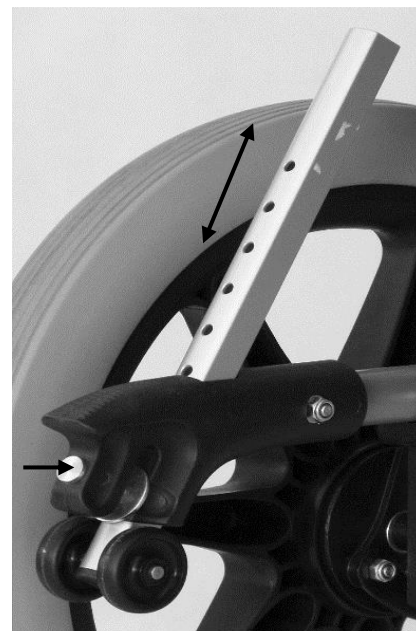
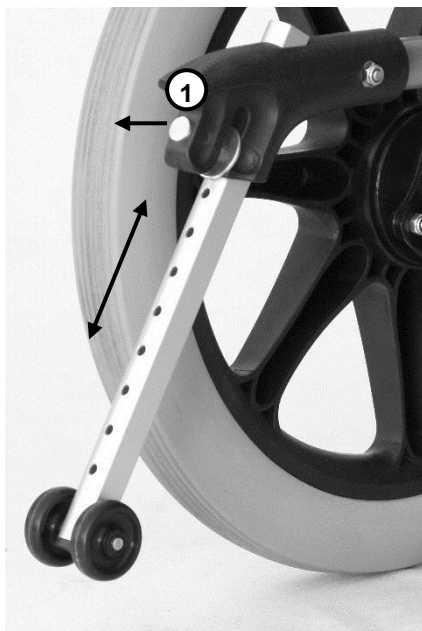
**WARNING!** Always make this adjustment with End User sitting on the wheelchair.

## 22. Accessory - Anti-tippers

### Anti-tipping device (Slide up) – left side mounted (viewed from rear)

This additional equipment improves wheelchair's rear stability and though End User's safety. It is specially recommended for End Users after legs' amputations, but we strongly suggest it for all End Users.

**WARNING! Assembly of an Anti-tipping device should be conducted by specialized service or experienced therapist only.**



Anti-tipping device is active when small wheel is located low, near to the ground. If elevated high above the floor, it is inactive.

To activate or deactivate Anti-tipping device pull out the locking pin **(1)** and hold it.

Use your second hand to slide the anti-tip in required direction (up/down). Then release the locking pin for the anti-tip to lock automatically in chosen position.

## 23. Accessory - Amputee Stump Support

### Amputee support

- This support was designed especially for persons after the lower extremity amputations.
- This support can be easily swung to sides or detached.
- The support is depth, height and angle adjustable.

**WARNING! It is forbidden to stand on the amputee support. It may cause the wheelchair to tip over.**



To adjust depth of the support:

- Loosen 2 fasteners **(1)** fixing the support from the bottom to the bracket.
- Adjust the depth.
- Tighten the fasteners.

To attach/detach the support:

- Just put it on or take it away from the frame **(2)**.

To adjust height and/or angle of the support:

- Loosen the fixing knob **(3)**.
- Adjust the position.
- Tighten the knob.





**In case of any technical questions contact your local distributor or directly with Rehasense.**

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