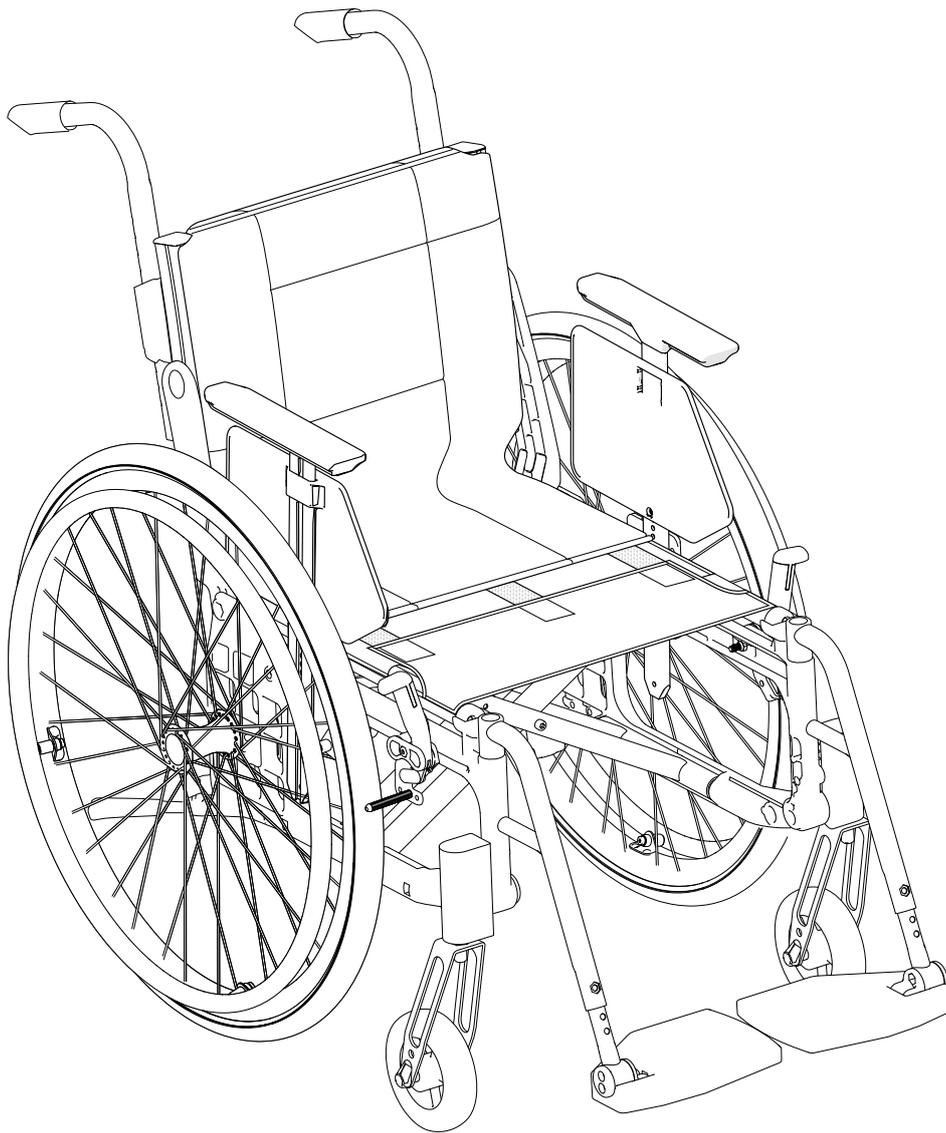


Etac Cross 6

etac®

Manual English

75401D 210511



Content

Thank you for choosing an Etac product. To avoid damage during assembly, handling and use, this manual should be read and saved. You can also find it at www.etac.com. There is also other documentation such as prescribing information, sales guide and reconditioning instructions.

In this manual, the User is the person sitting in the chair. The attendant is the person who assists the user.



This symbol appears in the manual along with text. It recognizes the instances where the safety of the wheelchair, the user or the attendant could be compromised.



This symbol appears in the manual along with text. Here you will find advice and tips worth considering.

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1. General

Product description:

Etac Cross 6 (Hereafter referred to as Cross 6) is a manual, cross-folded all-round wheelchair. Cross 6 offers great possibilities for customization through settings and configurable parts. Cross 6 is designed for indoor and outdoor use. Cross 6 has fixing points for transport in motor vehicles. Cross 6 is intended for reuse.

Intended use:

Cross 6 is designed to be customized to meet the user's individual ability and needs.

Intended user:

Cross 6 is intended for users with physical disabilities. The wheelchair can be used without an assistant if the user can understand its functions independently and can drive and brake on their own. The wheelchair is intended for hand and foot operation. The design of the wheelchair is based on adult size users with a body length of 140 cm. The wheelchair is also suitable for amputees. The wheelchair is usually not suitable for small children. The maximum permissible user weight is stated in the technical data below. The use of the wheelchair is not limited to specific diagnosis.

Contraindications:

Users with dementia or cognitive disabilities should not move in and out of the wheelchair without assistance.

CE marking, tests:

The product conforms to the requirements of the Medical Devices Regulation (EU) 2017/745.

The product has been tested and meets the requirements of EN 12183, which includes fire testing in accordance with ISO 8191-2.

Combination agreement is available, see www.etac.com.

The product is crash tested at RISE, Research Institutes of Sweden, according to ISO 7176-19. The tests have been carried out with clamping device UNWIN_WWR/ATF/K/R according to ISO 10542, and with three point strap 907523, Klippan Safety AB.

The tested product was equipped with:
 The parking brakes activated
 Anti-tip guards activated
 Head support mounted with head support bracket 3A
 Handrims on the rear wheels

Service life:

The expected duration and life span of the main product is at least five years when used in accordance with its intended use, safety instructions, reconditioning manual and maintenance instructions in the manual. The main product is covered by seat and back chassis. Remaining parts/accessories are handled in accordance with the manual and reconditioning manual. The actual life span may vary depending on how much and intensively the product is used, but is a maximum of 10 years. If the product is intended to be used after the life span specified by Etac, it is incumbent on the product owner to ensure the product's performance in accordance with the manual and reconditioning instructions. If this cannot be ensured, the product must be taken out of service.

The following surface treatment methods have been used:

Varnished surfaces = Powder-applied polyester or ED varnish
 Unvarnished aluminium parts = Anodizing
 Unvarnished steel surfaces = Galvanized

Warranty:

5 year warranty against defects in material and manufacture. For conditions, see www.etac.com.

Customization:

is everything that goes beyond the manual's instructions and settings. Wheelchair specially adapted by the customer must not retain Etac's CE marking. Etac's warranty expires. If there is any uncertainty regarding the execution of the customization, consult Etac. Wheelchairs coupled with another product may not retain either product's CE mark unless combination agreements exist. Contact Etac for current information.

Reutilization:

Cross 6 can be reused. Follow the instructions in "Reconditioning instructions, Etac manual wheelchairs" at www.etac.com.

Etac is continuously improving its products. We therefore reserve the right to change the products without prior notice. The dimensions given in the drawings or other materials are only indicative. We will not be responsible for printing errors and incompleteness.



To be sorted according to national regulations

Tools



Allen key
3, 4, 5, 6 mm



Box-end spanner
8, 10, 13, 24 mm



Spanner socket
19 mm

2. Safety

Symbols and warnings

These symbols appear on labels and in manuals.



Anchoring. Fixing points for the clamping system for transport in motor vehicles.



Tipping hazard: Always have the anti-tip guard lowered when driving.



Detachable part, do not lift!

General warnings

The following must be taken into account when using the product.



Strong sunlight can heat parts of the chair and cause burns.



The seat can tip over if the backward tilt is greater than 6°. Use anti-tip guard!



When adjusting the seat height, balance position or back angle, the function of the anti-tip guard must be checked.

In case of an adverse event occurred in relation to use of the device, it should be reported to your local dealer and the national competent authority in a timely manner. The local dealer will forward information to the manufacturer.



Warning: This product can be adjusted beyond safe use. The prescription of Cross 6 must be done by medical personnel and tested by a specialist.

2. Safety

Transport in vehicles

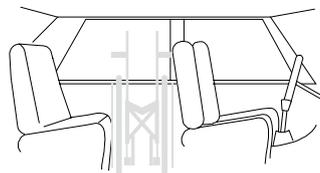
The product is crash tested and approved according to ISO 7176-19 (see section "CE marking, tests" in the manual).

Etac recommends in the following order:

1) The user moves to a vehicle seat and uses the vehicle's three-point belt during transport. The wheelchair is then placed securely in the luggage compartment or in the back seat so that it can't overturn or roll.



- The wheelchair should primarily be placed in the luggage compartment.
- If the wheelchair is placed in the back seat, make sure it can't overturn or roll. If possible, secure it with the car's seat belt.



2) The wheelchair is anchored forward in the vehicle according to this manual, the user uses a separate three-point belt that is anchored in the vehicle. This is the way the wheelchair is tested and approved according to ISO 7176-19.

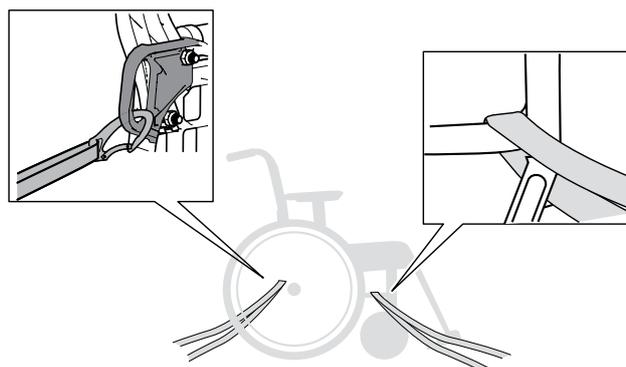
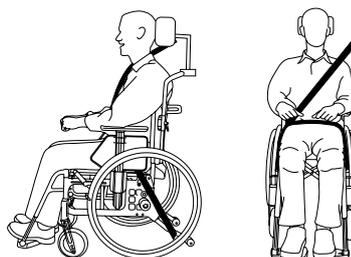
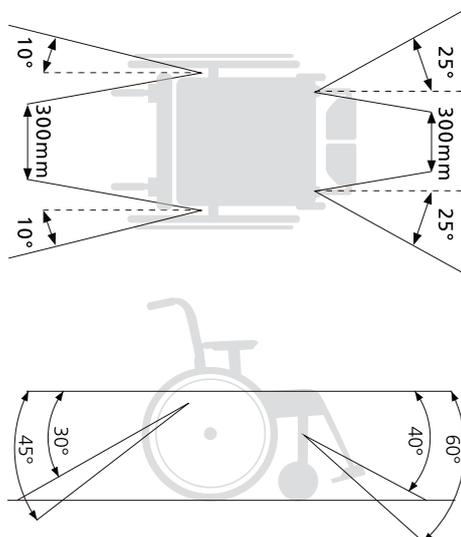


Anchoring

- Rear transport bracket must be used
- The anchoring device must not be pulled through the wheels or around the back posts.



- See section "CE-marking, tests"
- Accessories that can be detached without tools must be removed and clamped
- If head support is mounted other than with head support bracket 3A, cross bar must be used



3) Pursuant to Directive 2001/85/EC, Annex VII, point 3.8.3. in vehicles, there may be specially marked wheelchair spaces that allow transport with the wheelchair facing the direction of travel. If this mode of travel is used, the user/attendant must be active in the ride, be prepared for sudden movements and have the ability to maintain a safe sitting position throughout the transport. The user's disability must not be to such an extent that he cannot hold on himself and the wheelchair to the handle mounted in the vehicle in the event of changes in speed or direction.



- The parking brake must be used
- Anti-tip guard must be folded down
- Add-on options/accessories that can be detached without tools must be removed and clamped.
- A properly set head support must be used
- Positioning belt should be used

3. Service and maintenance

Cleaning

Back upholstery, seat upholstery and arm support upholstery:

Wash as per the washing instructions on the product.

Chassis, handle and arm supports:

Everyday maintenance: Clean the chassis with commonly used cleaning agents without abrasives that have a pH value between 5 - 9. Rinse and dry.

Disinfection

With 70% disinfectant. Allow to air dry. Cleaning in addition to everyday maintenance/reconditioning: See reconditioning instructions at www.etac.com.

Observe the disinfectant manufacturer's user and safety instructions.

Other maintenance

Rear wheels/castor wheels

Tyre/tube: Check tyre pressure (see tyre side) at least once a month, and also tyre tread.

Spokes: Loose spokes can cause warped wheels. Contact a bicycle shop or technical aids centre if you need to adjust the spokes.

Wheel axles: Clean rear wheel and castor wheel axles from hair and dirt if necessary.

Bearings: Maintenance-free.

Hand rim: If a hand rim is scratched that could damage your hand during propulsion, it must be replaced.

Front fork attachments:

For best driving characteristics, the mounts must be set perpendicularly. Also check that the front forks are properly tightened. See section "*Removing/mounting front fork*".

Brakes

The effect of the brakes depends on the tyre pressure. Heavy soiling can adversely affect the braking mechanism. If adjustment is required, see section "*Brake, adjustment*".

Touch-up paint

For minor scratches and lacquer damage, touch-up paint is available in all the frame colours of the product.

Other

If something on your wheelchair does not work, contact your prescriber or technical aids centre. A defective wheelchair must not be used.

When reconditioning and replacing parts, original Etac parts or components of similar quality should be used. When using other parts, Etac is not responsible for function and safety.



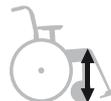
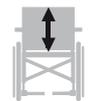
If necessary, lubricate moving parts/joints with bicycle oil or similar.

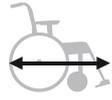
Troubleshooting guide

The wheelchair is pulling sideways	<ul style="list-style-type: none"> • Pump the tyres • Check and adjust the height and angle of the front fork attachments • Check that the rear wheel brackets are correctly mounted • The user load is uneven on the wheelchair • The propulsion is stronger on one side
The wheelchair is "hard" to drive	<ul style="list-style-type: none"> • Pump the tyres • Check that the rear wheel brackets are correctly mounted • Clean hair and dirt from the castor wheel axles • Too much weight over the castor wheels, adjust the wheelchair's balance position
The wheelchair is "hard" to turn	<ul style="list-style-type: none"> • Pump the tyres • Make sure that the front forks are not too tight • Clean hair and dirt from the castor wheel axles • Too much weight over the castor wheels, adjust the wheelchair's balance position
The brakes are bad	<ul style="list-style-type: none"> • Pump the tyres • Adjust the distance between the tyre and the brake
The rear wheels are "loose"	<ul style="list-style-type: none"> • Adjust the length of the hub shaft
The rear wheels are difficult to remove/put on	<ul style="list-style-type: none"> • Lubricate and clean the quick-release coupling, with e.g. bicycle oil • Adjust the length of the hub shaft
The castor wheels are "wobbling"	<ul style="list-style-type: none"> • The front axles are not tightened hard enough • Check and adjust the height and angle of the front fork attachments • Too much weight over the castor wheels, adjust the wheelchair's balance position
The wheelchair is difficult to fold/unfold	<ul style="list-style-type: none"> • The upholstery is too tight • Lubricate and clean the cross sections under the seat
The wheelchair feels "unsteady"	<ul style="list-style-type: none"> • Pump the tyres • Make sure screws and controls are tightened properly

4. Technical data

Chair type	Art no	Total width	Seat depth from back post *	Weight
				
35 cm short	13240101	55,5 cm	36-49 cm	14.6 kg
35 cm long	13240102	55,5 cm	42-55 cm	14.8 kg
37.5 cm short	13240103	58,0 cm	36-49 cm	14.7 kg
37.5 cm long	13240104	58,0 cm	42-55 cm	14.9 kg
40 cm short	13240105	60,5 cm	36-49 cm	14.8 kg
40 cm long	13240106	60,5 cm	42-55 cm	15.0 kg
42.5 cm short	13240107	63,0 cm	36-49 cm	14.9 kg
42.5 cm long	13240108	63,0 cm	42-55 cm	15.1 kg
45 cm short	13240109	65,5 cm	36-49 cm	15.1 kg
45 cm long	13240110	65,5 cm	42-55 cm	15.3 kg
47.5 cm short	13240111	68,0 cm	36-49 cm	15.2 kg
47.5 cm long	13240112	68,0 cm	42-55 cm	15.4 kg
50 cm short	13240113	70,5 cm	36-49 cm	15.3 kg
50 cm long	13240114	70,5 cm	42-55 cm	15.5 kg
52.5 cm short	13240115	73,0 cm	36-49 cm	15.4 kg
52.5 cm long	13240116	73,0 cm	42-55 cm	15.6 kg

Max user weight	Seat height back	Seat height front	Back support height	Transport width
				
135 kg	32-53 cm	32-56.5 cm	32-45 cm 38-51 cm	32 cm

Total height	Total length	Leg support length	Length collapsed	Leg support angle
				
72-116 cm	80-122 cm	26-64 cm	62-86 cm	108° -114°

Hand rim size	Maximum tilt sideways	Maximum tilt down	Maximum tilt brake
			
46.5-58 cm	>20°	>20°	>7°

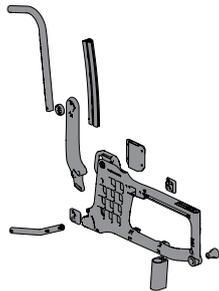
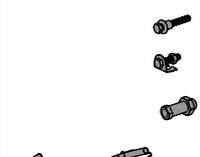
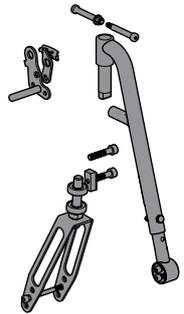
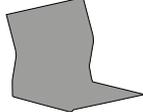
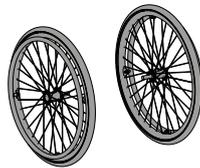
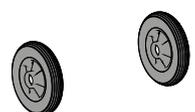
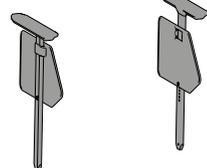
Weights apply to a chair with 24" rear wheels, high-pressure tyres, aluminium hand rims, handles, leg supports, foot plate, brake, arm support mount, 6 1/2" castor wheels and medium fork. Dimensions stated can vary ± 2%.

* With Cross brace 2 36-42/42-48 cm

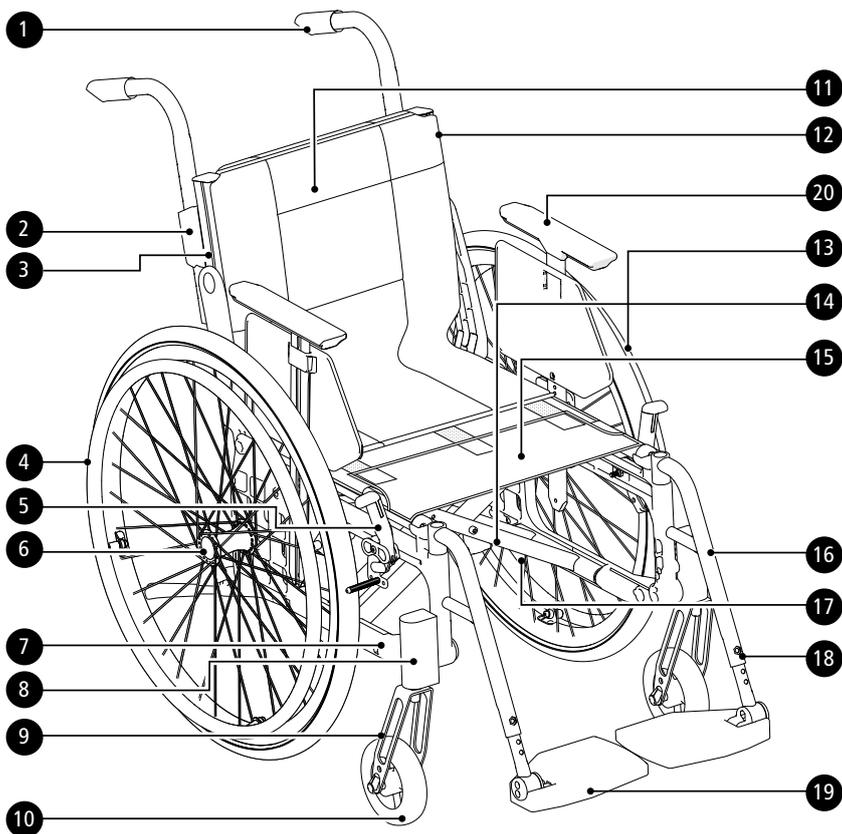
Tyre

	High pressure 22"	High pressure 24"	Solid 22"	Solid 24"	Solid (solid inner tube) 22"	Solid (solid inner tube) 24"	High pressure 24" (Carbon)
	110/7.5	110/7.5	-	-	-	-	110/7.6
	550 mm	590 mm	550 mm	600 mm	550 mm	590 mm	592
	25 mm	25 mm	32 mm	32 mm	25 mm	25 mm	23 mm



					
ALU	ALU	Fe	Fe	PES	Fe/CF/ALU
					
PP/TPR	ALU/PA/PE/PU				

5. Description/Standard version



1. Handles
2. Steering handle lock
3. Back rail
4. Hand rim
5. User brake
6. Quick release
7. Gable
8. Front fork attachment
9. Front fork
10. Castor wheel
11. Back cover
12. Upholstery back
13. Rear wheel
14. Cross
15. Upholstery seat
16. Leg support
17. Article and serial numbers
18. Steering wheel foot lock
19. Footplate
20. Arm support

6. The chair's possibilities

In the section "The chair's possibilities" you can see all the adjustments that can be made to the wheelchair. Additional "Odd combinations" exist, e.g. in terms of rear wheels, castor wheels and back model. Contact customer service.

For more information about the chair's possibilities, see www.etac.com

Seat height	Front	32-56.5 cm	
	Back	32-53 cm	
Seat angle	Max forward angle: 2 cm lower than back (3°) Max backward angle: 6 cm higher than back (9°)		
Castor wheel	4" solid (max user weight 100 kg)		
	5" solid		
	6" semi-solid		
	6.5" solid		
	7" solid soft		
	8" semi-solid or air pumped		
Front fork	Extra short (two height positions for castor wheels)		
	Short (three height positions for castor wheels). 3 or 4 mm thick		
	Medium (three height positions for castor wheels). 3 or 4 mm thick		
	Long		
Rear wheel	20"		
	22"		
	24"		
	24" Carbon (not with attendant brake)		
	26"		

6. The chair's possibilities

Handrims	Aluminium		
	Stainless steel		
	Plastic		
	Foam rubber (not with attendant brake)		
	Titanium (not with attendant brake)		
Camber angle	2°		
	0°		
Seat	Seat upholstery		
	Hard seat		
Back support 3A/ Back support 3A high		Back 3A	Back 3A high
	Height	32-45 cm	38-51 cm
	Hip angle	-5° - +20°	-5° - +20°
	Lumbar angle	-16° - +16°	
Seat depth	Short frame 36-49.5 cm		
	Long frame 41-55.5 cm		
Back support mod. 2	Height 30-45 cm, angle -5° - +15°. Standard		
	Height 30-45 cm, angle -5° - +15°. Widened		
Seat depth back support mod. 2	Short frame 36-42 cm. Long frame 42-48 cm. Func: Short frame 42-48 cm. Long frame 48-54 cm.		
Back support upholstery	Adjustable upholstery		
Back support cover	Standard		
	Comfort		
	Tidy, wipeable		
Push handles/ Bow handle	Height-adjustable push handles with 2 cm intervals. Detachable.		
	Height-adjustable bow handle with 2 cm intervals. Detachable.		
Fixed push handles	Ri/le fits Cross back support 3A		
Fixed back with fixed push handles, 2B	Height low back 35-40 Height high back 42.5-47.5 Angles -5 to +15		
Leg supports, detachable swing-away	Normal knee angle		
	Narrow angle (fits only with 5" castor wheels)		
	Narrow angle short		
Leg supports lockable	Normal knee angle		
	Narrow angle		
	Narrow angle short		
Leg supports Elevating	Elevating with folding calf plate from 40 cm seat width		
	Elevating with cushion console and padded folding calf plate.		
	Elevating with folding cushion console and padded calf plate.		
Leg supports other	Plaster cast leg supports		
	Amputee leg support		
	Amputee weight		
Arm support	Height adjustable, 25 cm long, solid plate, black		
	Height adjustable, 38 cm long, solid plate, black		

6. The chair's possibilities

Foot supports	Std	Max length: 51 cm. Min length: 33 cm.	
	Extended attachment tubes +10 cm		
	Shorter attachment tubes -8 cm		
	One-piece foot support		
	One-piece foot support compl for 35-37.5 seat width, angle adjustable, height and depth adjustable		
Front fork attachment	Low, widened		
	Standard		
	Widened 6 cm		
User brake	Angled handle red		
	Angled handle black		
	Extended handle		
	Single hand brake (standard or angled handle)		
Attendant brake	Brake handle 75 mm opening grip		
	Brake handle 100 mm opening grip		
Single-hand drive	For the right or left side. Telescopic shaft, easy to detach when folded (not with attendant brake)		
Colour frame	01 = Black	92 = White	78 = Grey

7. Accessories

Installation instructions are included with all accessories when delivered from Etac. You can find them and more info about the accessories on our website www.etac.com.

Settable = Adjustable using tools. Adjustable = Adjustable without tools.

Arm support	Short 26 cm
Arm support	Long 36 cm
Cover arm support	Detachable, 25 alt 38 cm long padded alt gel, dark grey plush alt black Dartex. Fits arm support with solid plate.
Arm support pad hemi	Swivel for mounting on long arm support
Arm support locking kit	Locked arm support is not detachable but free for height adjustment
Side protection	Black
Mudguard	Right or left
Thigh support	
Thigh support	With soft pad
Widening kit	To move the rear wheels, brake and arm support 5 mm per side
Tray	Transparent, mounted on long arm supports
Hemi tray	Transparent, Width 35-50 cm Can be mounted on short or long arm supports.
Anti-slip hemi tray	
Hemi tray/Communication tray half	Right/left
Seat extension	Mounted at the rear with a 3A back support
Seat cushion	Dark grey plush and black velour, 56 cm long, cut to adjusted seat depth, washable
Seat cushion Tidy	Water repellent, wipeable
Comfort wedge	For the cushion, levels off the front of the seat
Cover for calf plate	On elevating leg support, black Hygiene
Calf strap	Detachable, black nylon, adjustable in length

7. Accessories

Padding	For calf strap	
Calf pad	Plush. Mounted/adjusted with Velcro	
Heel strap	Black nylon, adjustable in length	
Foot plate, padding	For foot support depth 13 cm	
	For one-piece, angle adjustable foot plate	
Extended foot plate	Mounted on existing foot plate, seat width 40-55 cm	
Positioning belt	Two-piece with snap-fit buckle, fixing points on the wheelchair frame	
Seat belt	With snap-fit buckle	
Head support, traditional	Adjustable in height, depth and angle. Available in several models	
	With side support. Adjustable in height, depth and angle.	
Head support attachment 3A	For Cross 3A back support, mod 4	
Head support attachment	For mounting on chassis	
Cross-brace (for back support)	For Cross 3A back support. With snap-fit buckle	
Cross-brace (for back support)	For Cross 2 back support. With snap-fit buckle	
Back wedge	Three different sizes, attached with Velcro. Provides support and shape in back support. The wedges can also be combined with other accessories and adapted to the desired size, and several wedges can be built together.	13x9.5x2 cm
		19x12x2 cm
		20x17x2.5 cm
	Dark grey plush	15 cm
		30 cm
Side cushion	Provides light side support. Used in cases where trunk supports are too stabilizing. (Combined with arm supports and side stops if needed)	
Side stop	Combined with wedge or side support cushion. Creates a more distinct stop and holds wedge or side support cushion in place	Straight
		Angled, 1.5 cm
		Angled, 3 cm
Lateral support	Adjustable in height, depth and width and detachable.	
Lateral support	Swing-away and detachable. Adjustable in height, depth and width	
Lateral support	Cross 3A back support, PUR or Dartex	
Lateral support	Cross 3A back support, swing-away, medium or large cushion	
Anti-tip guard	Telescoping foldable, adjustable in height, adjustable in length and angle	
Cane holder	Two piece of which the elastic part is attached around the cane post	
Drip stand	Bracket and stand	
Spoke guards	With grey or yellow colour print	
Tetra quick release adapter	For users with reduced hand function	
Tool kit		

8. Installation upon delivery

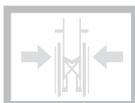
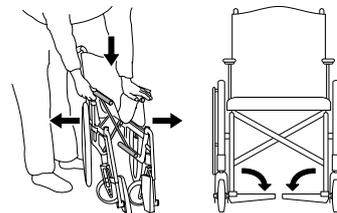
Leg supports with foot plates and arm supports/side covers are delivered unassembled and must be mounted upon delivery.

9. Handling



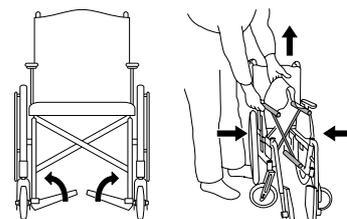
Unfolding

- Push one seat post down, with your whole hand on top of the seat.
- Do not hold the seat post when unfolding.
- Fold down the foot plates.



Folding

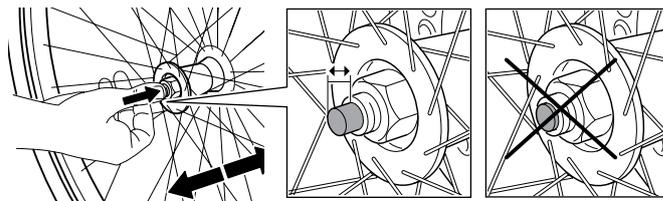
- Any drive handle and/or crossbar are detached/unclipped.
- Fold up the foot plates.
- Lift the seat up.



Rear wheels with quick-release axle



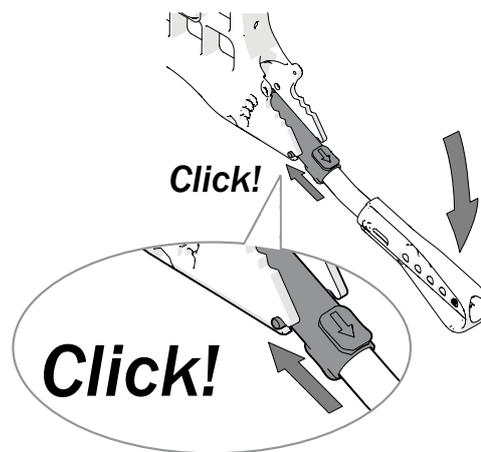
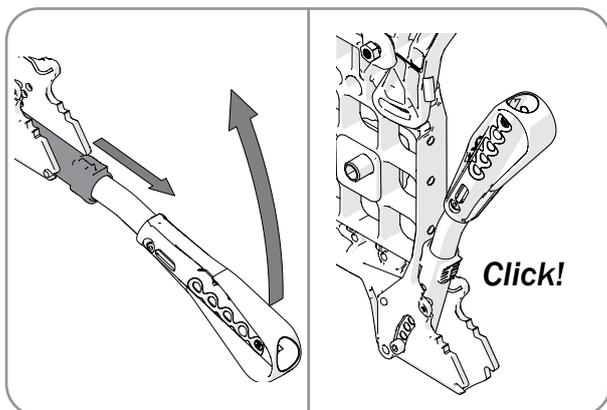
When assembling, always make sure that the quick-release button in the hub springs out properly. Test by pulling the wheel.



Anti-tip guard

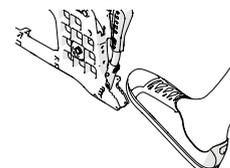
- The anti-tip guards are foldable in two locking positions. The first locking position may be required if the anti-tip guard pushes against the back chassis.
- When unfolding the anti-tip guard, make sure that the locking pin snaps in properly.

3-7 cm



- After all adjustments to the chair, the function of the anti-tip guard must be checked. If the anti-tip guard needs to be adjusted, contact your technical aids centre.

Tilter is integrated in the frame

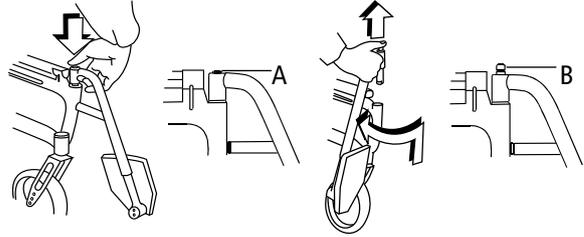


9. Handling

Leg supports

The leg supports can be lifted off/swung to the side if needed. Lockable leg supports by pressing the red button (A).

When installing lockable leg supports, press the red button (A), place the leg support in position and release the button. The leg support is now locked (B).



Check that the leg supports are locked before lifting.

Push handles/bow handle, height adjustable

Release the locking handle. Set the desired height position. Make sure the handles are in a "snap-in" position, lock the locking handle.



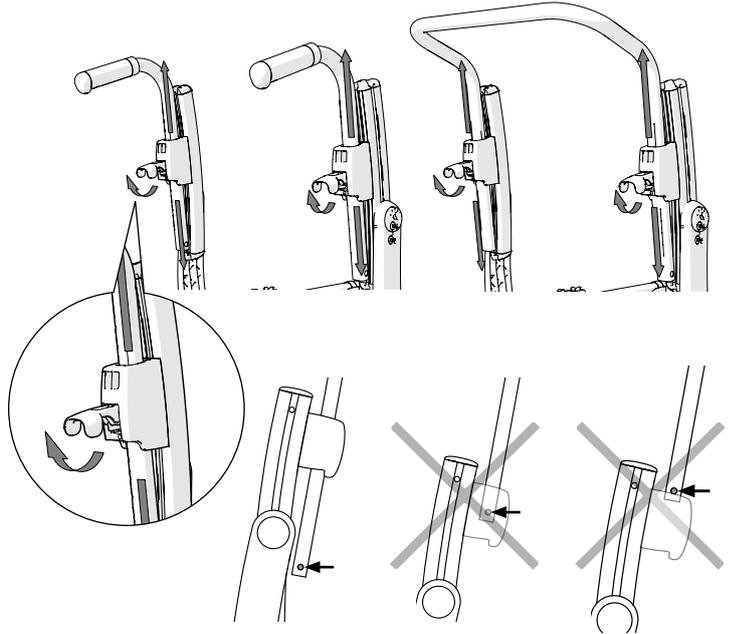
Make sure the locking handles are properly locked. This is especially important when lifting the wheelchair with the user in situ.



Make sure that the locking handle of the handle always snaps out under the handle bracket.

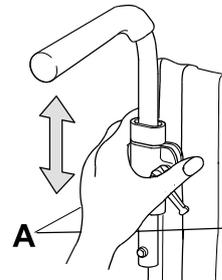


The bow handle must be removed before the chair can be collapsed.

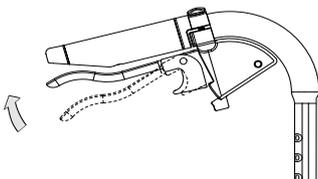


Cross 2 back support

Release the knob (A), push in the red wedge. Then as above.

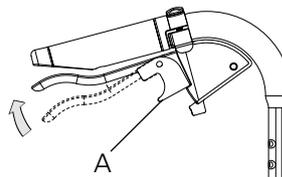


Attendant brake (service brake)



- Brake during travel by pulling the brake lever upwards.

Attendant brake (parking brake)



- To activate the parking brake, pull the brake lever upwards and press the A button.
- Release by pulling the handle upwards.

10. Seating comfort settings

Seating comfort

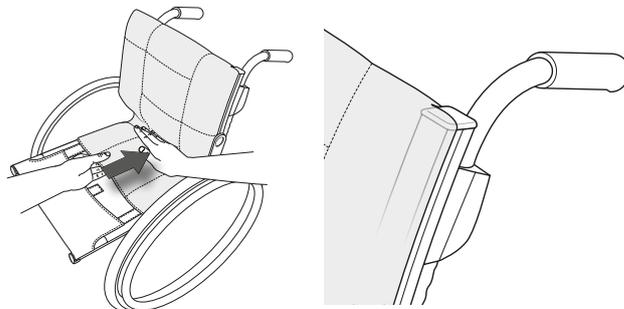
What constitutes good seating comfort depends on the needs and condition of each individual. Here are some general guidelines to consider when making the settings.

Choose a seat cushion with care. In addition to comfort, it affects stability and thereby freedom of movement. Seat cushions also have different degrees of pressure distribution.

The back support setting is a combination of angles, height and shape. Therefore, the angular settings and height of the back support may also need to be fine-tuned when adjusting the back upholstery.

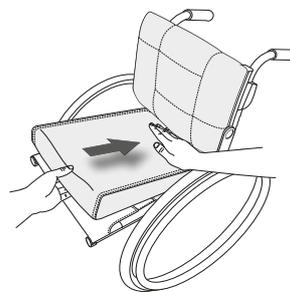
Back cover

- Slacken all back straps, but make sure the Velcro straps still lock against each other.
- Position the back cover so that it covers the upper edge of the back rails and forms a crease between the seat and back support so that the user can “sit” properly on the seat.



Seat cushion

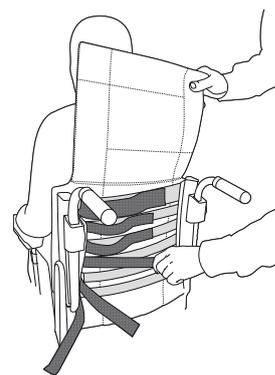
- Make sure the seat depth is set correctly.
- Place the cushion so far back on the seat that the rounded corners go in between the back support rails.
- Measure the appropriate length for the seat cushion, and cut it according to the instructions provided.
- For a more contoured seat cushion, it can be supplemented with a comfort wedge, which is placed in the pocket on the underside of the seat cushion.



Back upholstery

Adjustment of the back upholstery is done with the user sitting in the wheelchair.

- Make sure the user sits as far back as possible on the seat.
- Support the pelvis by tightening the strap placed just below the trunk.
- Then adjust the upper strap so that the user gets support and balance in the upper body.
- The other straps are adjusted to leave space for the seat and follow the natural rounding of the back.



Consider the risk of tipping.
Always check the setting of the anti-tip guard.



Do not over-tighten the top straps as this affects the folding of the cross, i.e. the seat posts lock against the frame.

Back angle

The back angle may need to be adjusted when setting the back upholstery shape.

Contact your prescriber.

10. Seating comfort settings

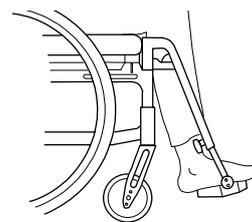
Foot plates

Adjust the height so that your feet feel supported and your thighs rest against the cushion.

For outdoor use, the foot plates should be 4 - 5 cm from the ground.

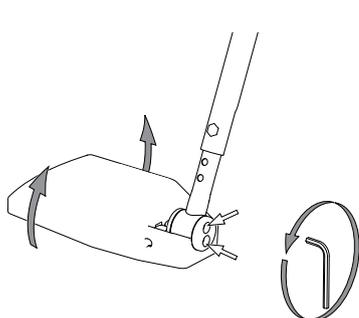


Tipping hazard!
Never stand on the foot plates.



Angle adjustment

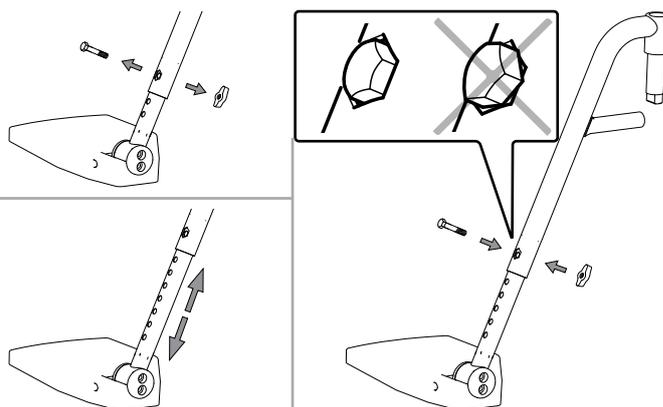
Adjust the angle of the foot plates so that the ankles are at a 90° angle.



5 mm

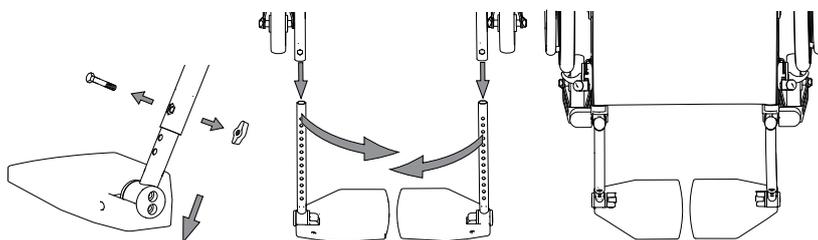
Height adjustment

Loosen the locking knob completely on the leg support. Undo the screw. Adjust the height. Install screw and knob. Tighten properly.



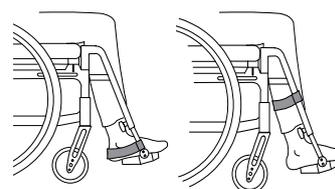
Changing the depth of the foot plates

Adjust the depth of the foot plates by switching the left and right foot plates. Don't forget to adjust the angle.



Calf/Heel strap

- Adjust the length so that the middle part of the feet are on the foot plates.

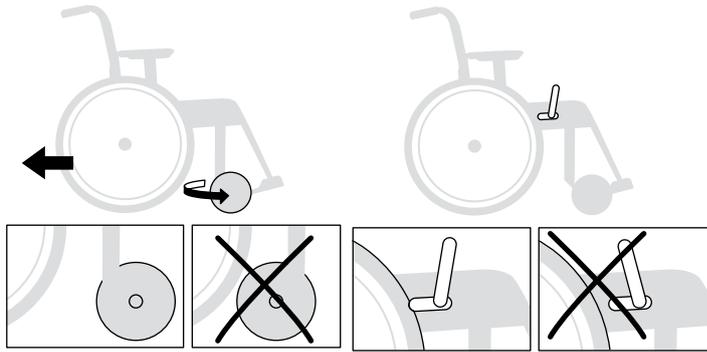


11. Driving technique use



Parking

Turn the castor wheels forward, apply the brakes.



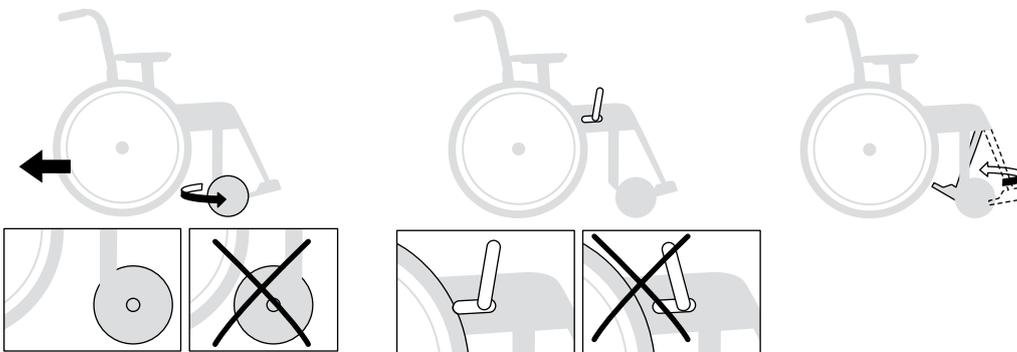
Do not park on a hill with user in the wheelchair.

Transfer to/from a wheelchair

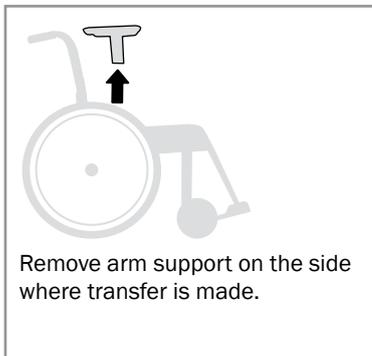
Turn the castor wheels forward, apply the brakes, fold up the foot plates and swing away the leg supports.



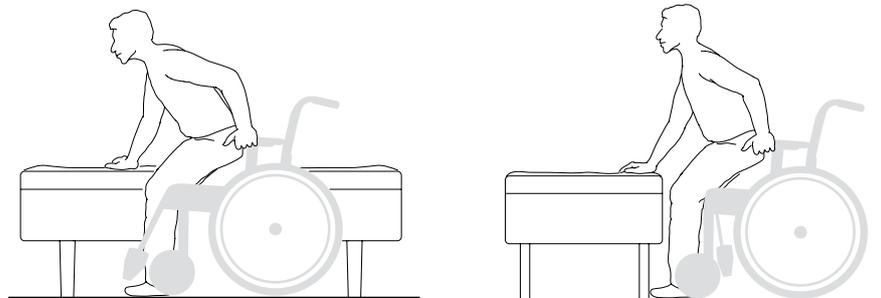
Never stand on the foot plates, risk of tipping!



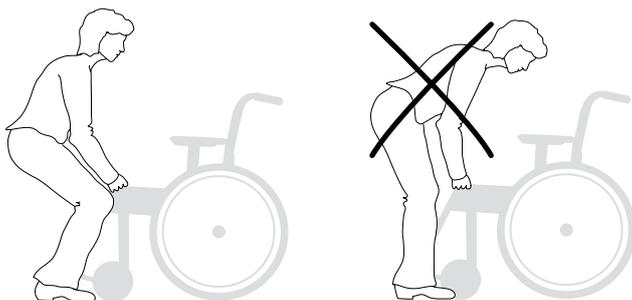
Sideways



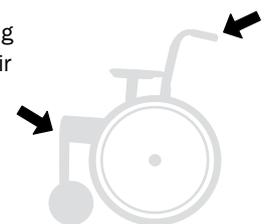
From the front



Lift off wheelchair



- Make sure that adjustable push handles are properly tightened and that lockable leg supports are properly locked.
- Non-lockable leg supports are swung in under the seat and the wheelchair is lifted at the front upper part of the frame.



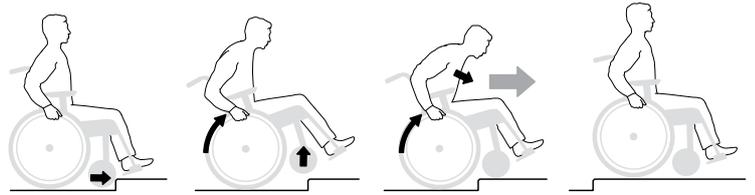
11. Driving technique use

 The following sketches show principles for driving technique and dealing with obstacles.

User, up forwards

This technique is only recommended for experienced wheelchair users.

- Make sure the anti-tip guards are inactive.

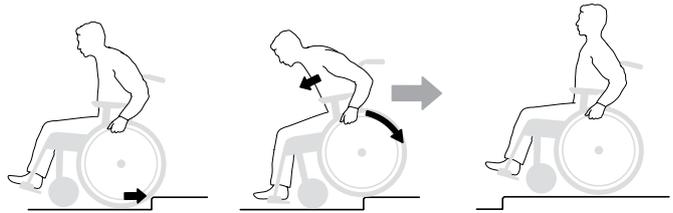


 Activate the anti-tip guards afterwards!

User, up backwards

This technique only works with a low edge/threshold, depending on the height adjustment of the foot plates.

- Make sure the anti-tip guards are inactive.

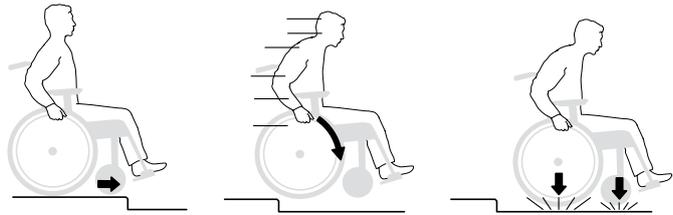


 Activate the anti-tip guards afterwards!

User, down forwards

This technique is only recommended for experienced wheelchair users.

- Make sure the anti-tip guards are inactive.

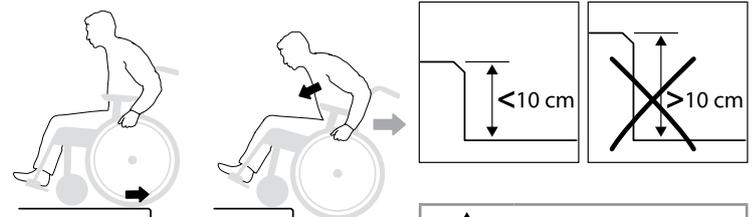


 Activate the anti-tip guards afterwards!

User, down backwards

This technique is only recommended for experienced wheelchair users.

- Make sure the anti-tip guards are inactive.



 The risk of tipping is great in this maneuver!

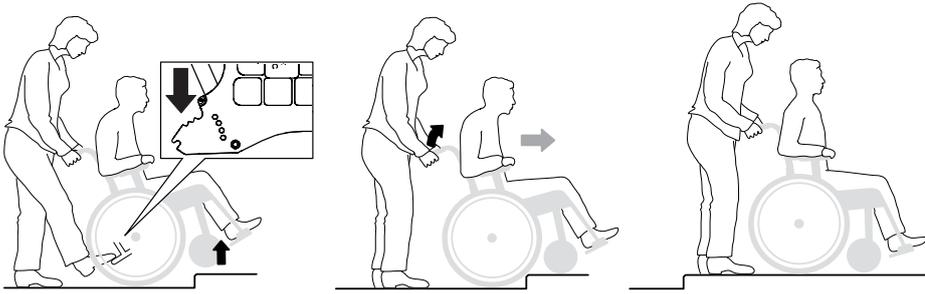
 Activate the anti-tip guards afterwards!

11. Driving technique use



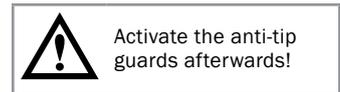
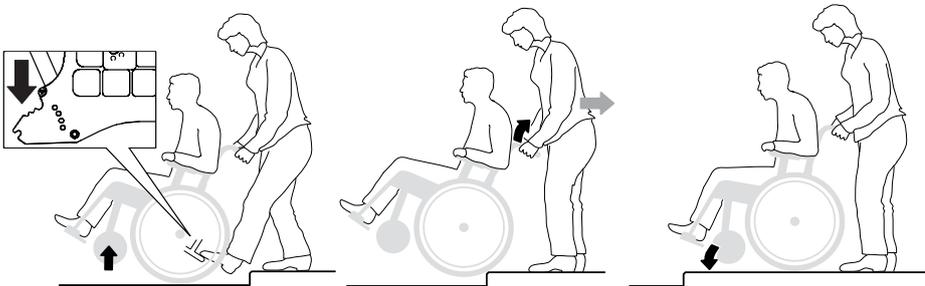
Attendant, up forwards

- Make sure the anti-tip guards are inactive.



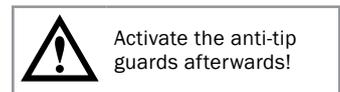
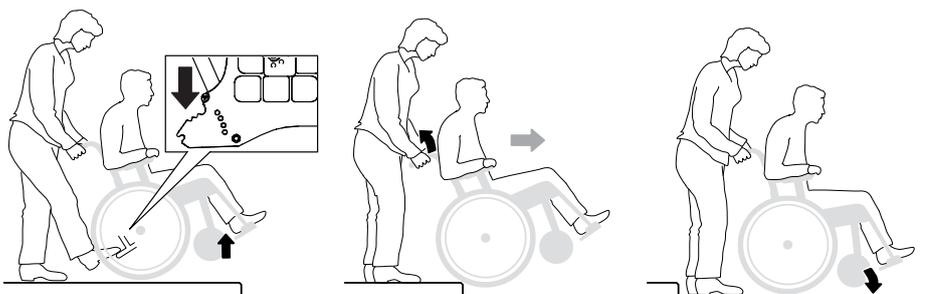
Attendant, up backwards

- Make sure the anti-tip guards are inactive.



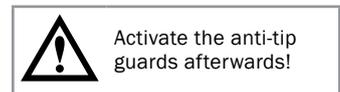
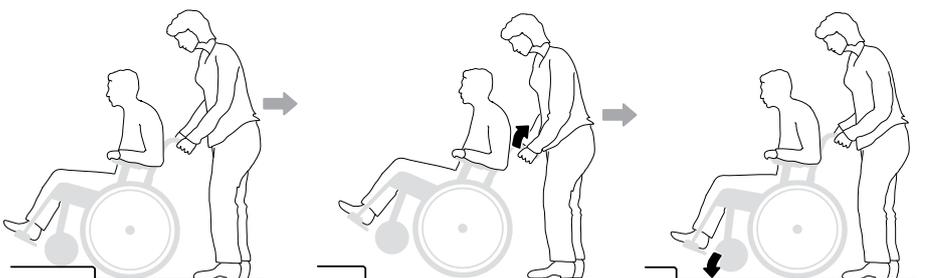
Attendant, down forwards

- Make sure the anti-tip guards are inactive.



Attendant, down backwards

- Make sure the anti-tip guards are inactive.



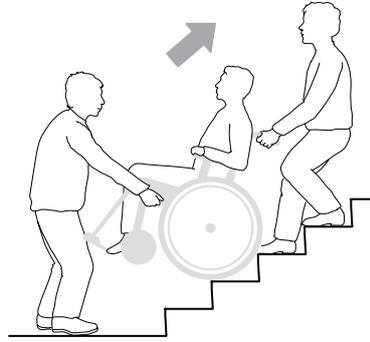
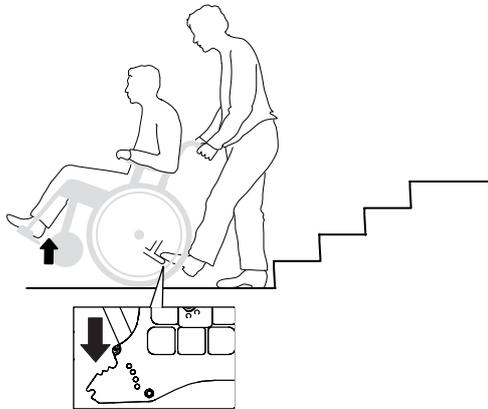
11. Driving technique use



Stairs, up

- Make sure the anti-tip guards are inactive. Never use escalators, even if there is an attendant. Make sure that height adjustable handles are tightened.

We recommend that there always be two attendants in this move. One who goes behind and holds the handles and one who goes in front and holds the frame (or the leg supports if they are lockable).



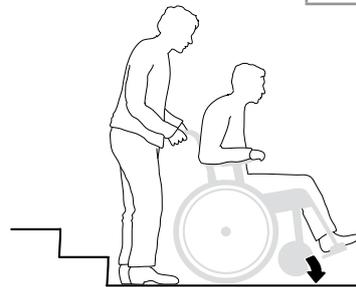
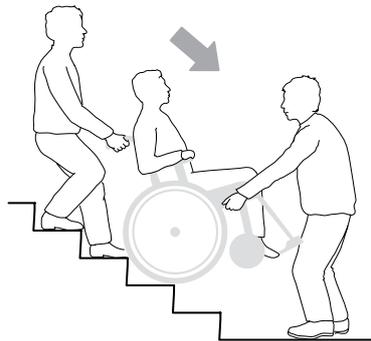
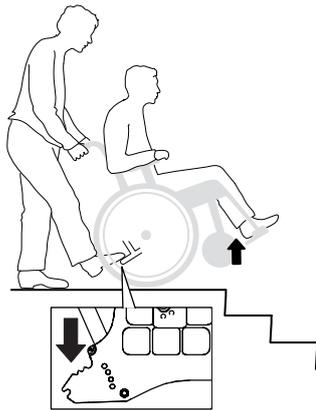
 Activate the anti-tip guards afterwards!



Stairs, down

- Make sure the anti-tip guards are inactive. Never use escalators, even if there is an attendant. Make sure that height adjustable handles are tightened.

We recommend that there always be two attendants in this move. One who goes behind and holds the handles and one who goes in front and holds the frame (or the leg supports if they are lockable).



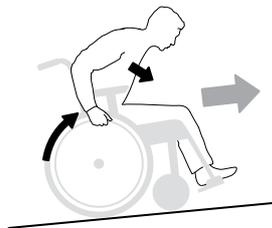
 Activate the anti-tip guards afterwards!



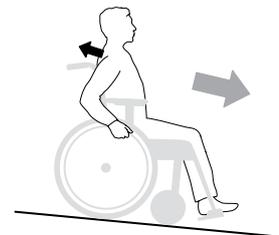
Driving uphill/downhill

Check your speed with the hand rims, not with the brakes!
Avoid turning in the middle of a hill. Always drive as straight up/down as possible. If you are unsure, ask for help.

Uphill
Tilt your body forwards to correct the centre of gravity.

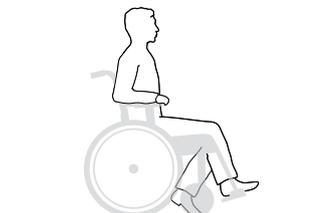


Downhill
Tilt your body backwards to correct the centre of gravity.



Foot propel

The user propels the wheelchair with one or two feet.

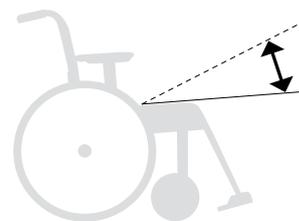


12. Advanced settings, customization

The seat angle is obtained by the difference between front and rear seat height.

At changed seat angle:

- Adjust the angle of the front fork attachments.
- Check the back support angle.

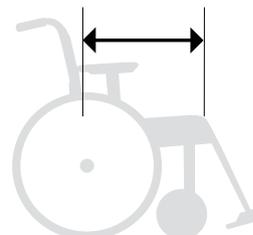


The seat depth can be adjusted by lifting the front seat upholstery and moving it backwards/forwards.

With Cross back support 3A, the seat depth can be extended by using the back support adjustment (see section "Adjusting the seat depth using the lumbar angle, 3A").

Seating comfort

After adjusting the seat height, seat angle, seat depth and back angle, the back upholstery should be adjusted to provide support and comfort. See section "Seating comfort settings".



Consider the risk of tipping. Always check the setting of the anti-tip guard.

Front seat height can be adjusted using:

- Front fork attachment, adjustable in height and angle.
- Changing the position of the castor wheel in the front fork.
- Change of front fork
- Change of castor wheel
- Change of front fork attachment



Consider the risk of tipping. Always check the setting of the anti-tip guard.



Installation instructions can be found in the sections "Height adjustment front fork attachment", "Angle adjustment front fork attachment", "Removing/mounting front fork" and "Removing/installing castor wheels".

		Front seat height table												
		Castor wheel position (cm)												
		Front fork extra short			Front fork short			Front fork medium			Front fork long			
	Rear wheel position	Castor wheel	1	2	3	1	2	3	1	2	3	1	2	3
Low front fork attachment	H	4"*	-	32-36	33.5-37.5	-	-	-	-	-	-	-	-	-
	G	4"*	-	34-38	35.5-39.5	-	-	-	-	-	-	-	-	-
	G	5"	-	-	-	36-40	37.5-41.5	-	-	-	-	-	-	-
	A-F	5"	-	-	-	36-40	37.5-41.5	39-43	-	-	-	-	-	-
Standard/Widened front fork attachment	A-F	6½"	-	-	-	-	-	41-45	-	-	-	-	-	-
		5"	-	-	-	37.5-41.5	39-43	40.5-44.5	43-46	45-48	46-49	-	-	-
		6"	-	-	-	-	40-44	41.5-45.5	45-47	46-49	47-50	-	-	-
	A-E	7"	-	-	-	-	-	-	-	47.5-49.5	48.5-51.5	-	-	53-56
	A-C	8"***	-	-	-	-	-	-	-	48-51	49-52	-	52.5-54.5	53.5-56.5

* Max user weight 100 kg.

For correct adjustment of the front fork attachment: Max backwards angle 6 cm higher than rear (9°), max forward angle 2 cm lower than rear (3°).

** Works in balancing 4-6 with 3° backward angle and Std leg support. Make sure that the front fork/castor wheel can rotate freely without hitting the wheelchair or the user. For castor wheels 8x2", use fork Transit (gives seat height 47-51 cm).

12. Advanced settings, customization

Rear seat height can be adjusted using:

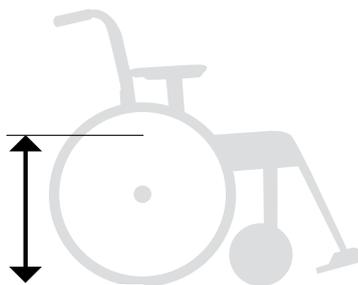
- The position of the rear wheel (camber washer) in the gable.
- Camber washer's twist in the gable.
- Change of rear wheels



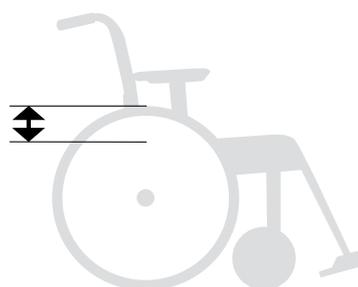
Consider the risk of tipping.
Always check the setting of the anti-tip guard.

Back seat height table

	Rear wheel	Seat height cm	Distance cm seat-rear wheel
Position A	20"	46	4.5
	22"	48.5	7.0
	24"	51	9.5
	26"	53.5	12
Position B	20"	44	6.5
	22"	46.5	9.0
	24"	49	11.5
	26"	51.5	14
Position C	20"	42	8.5
	22"	44.5	11.0
	24"	47	13.5
	26"	49.5	16
Position D	20"	40	10.5
	22"	42.5	13
	24"	45	15.5
	26"	47.5	18
Position E	20"	38	12.5
	22"	40.5	15
	24"	43	17.5
	26"	45.5	20
Position F	20"	36	14.5
	22"	38.5	17
	24"	41	19.5
	26"	43.5	22
Position G	20"	34	16.5
	22"	36.5	19
	24"	39	21.5
	26"	41.5	24
Position H	20"	32	18.5
	22"	34.5	21
	24"	37	23.5
	26"	39.5	26



Seat height



Distance seat-rear wheel

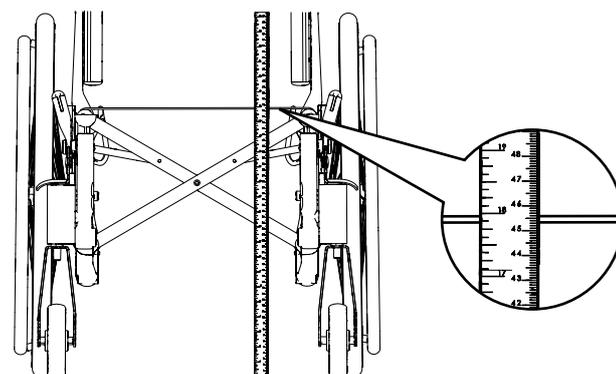
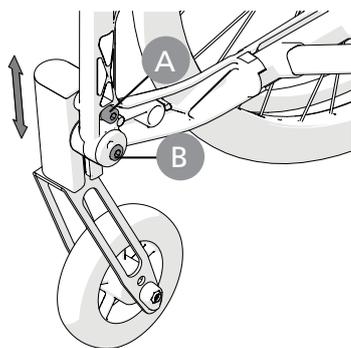
12. Advanced settings, customization

Height adjustment front fork attachment

Loosen the screws (A and B). Set the desired seat height by measuring from the floor to the top of the seat post (push down the post in the cup when measuring) and tighten the screws on one of the front fork attachments. Use the bar markings as a reference for height adjustment of the opposite side. Tighten the other attachment. Check and adjust so that the attachments are vertical (see section "Angle adjustment of front fork attachment"). Fine-tune the height of the front fork attachments so that both wheels are on the floor.



Consider the risk of tipping.
Always check the setting of the anti-tip guard.



Angle setting front fork attachment

Correct angle setting is important for the wheelchair's driving characteristics.

Loosen the retaining screw (A) about 2 turns so that the shaft (C) moves freely inside the sleeve.

Insert the Allen key into the hole (B) and turn until the attachment is vertical. Always start from a position so that the wheel moves forward in rotation (D).

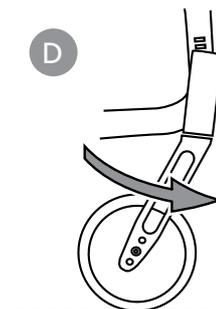
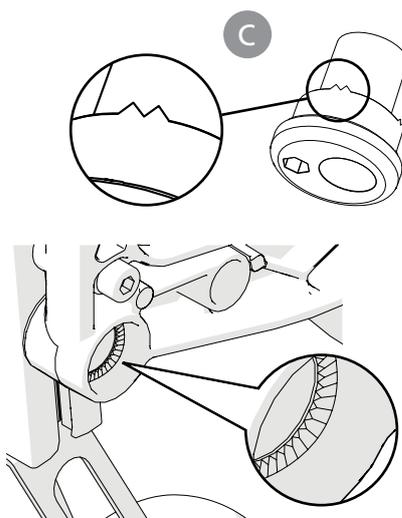
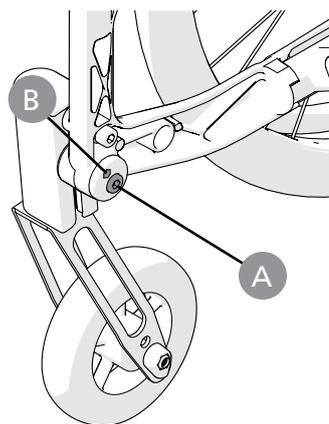
Push in the sleeve and hold in the correct position while tightening the retaining screw.



Consider the risk of tipping.
Always check the setting of the anti-tip guard.



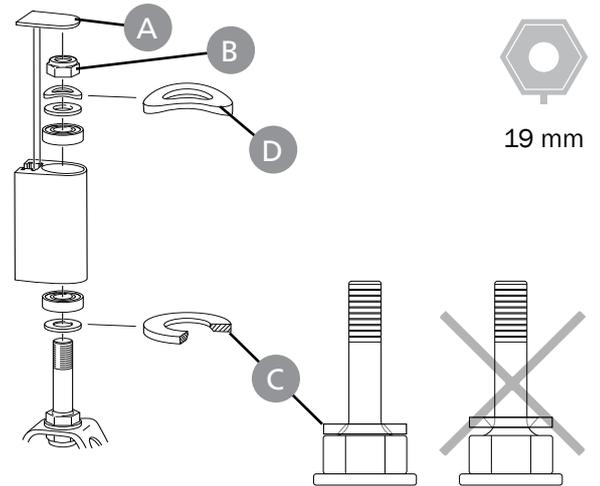
Aim for something vertical, such as door post, table legs when setting.



12. Advanced settings, customization

Removing/mounting front fork

- Remove cover (A) and loosen lock nut (B). Pull out the front axle and move the beveled washer (C) and the ball bearing to the new axle.
- Mount the washers and ball bearings in the front fork attachment as illustrated. The washer (C) is placed with a beveled side against the axle. Spring washer (D) at the top under the lock nut.
- Gently tighten the lock nut until the front axle spins with some inertia and then loosen about 1/2 turn. The spring washer then has the correct tension, which reduces the risk that the castor wheel starts to "wobble".
- Fit the cover.

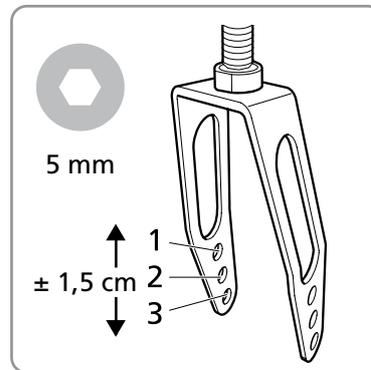
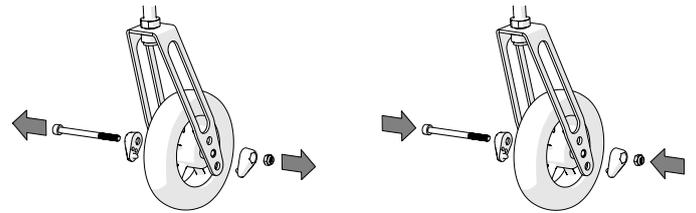


Removing/mounting castor wheels

Loosen screw, nut and spacer and mount the wheel in the appropriate position.



Consider the risk of tipping.
Always check the setting of the anti-tip guard.



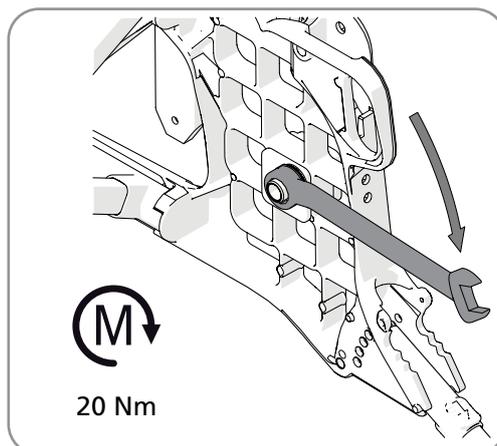
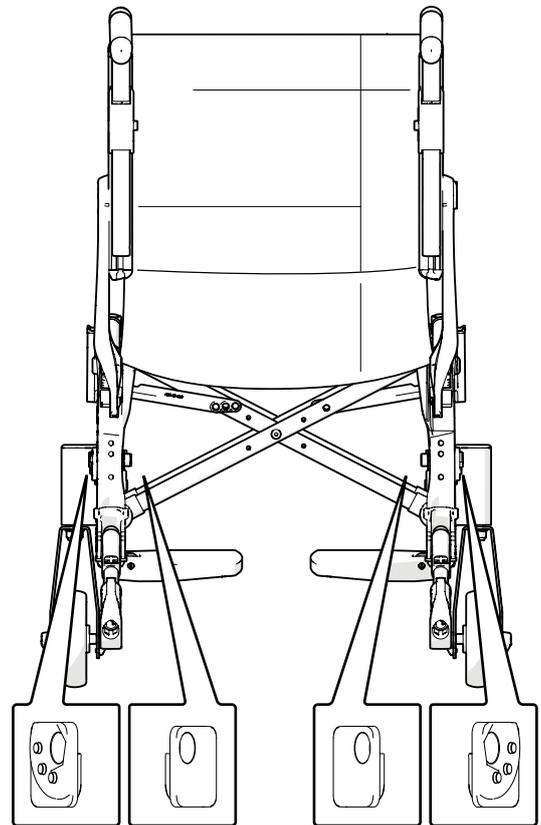
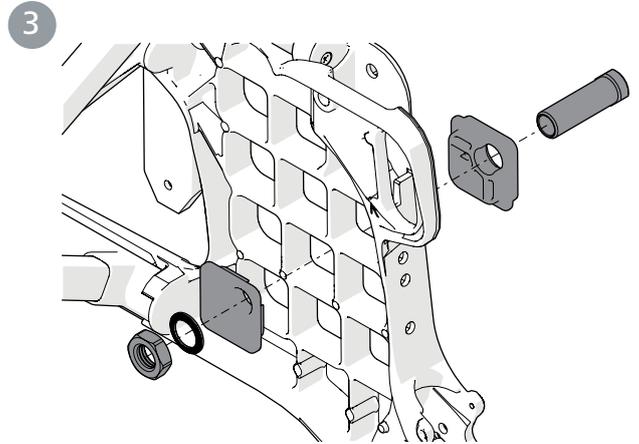
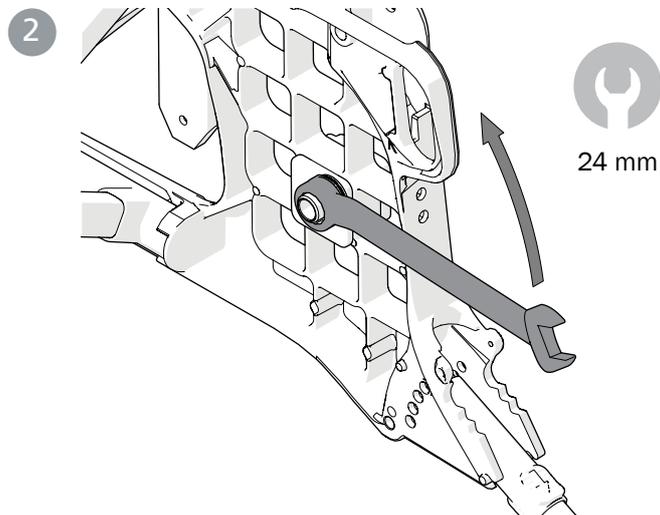
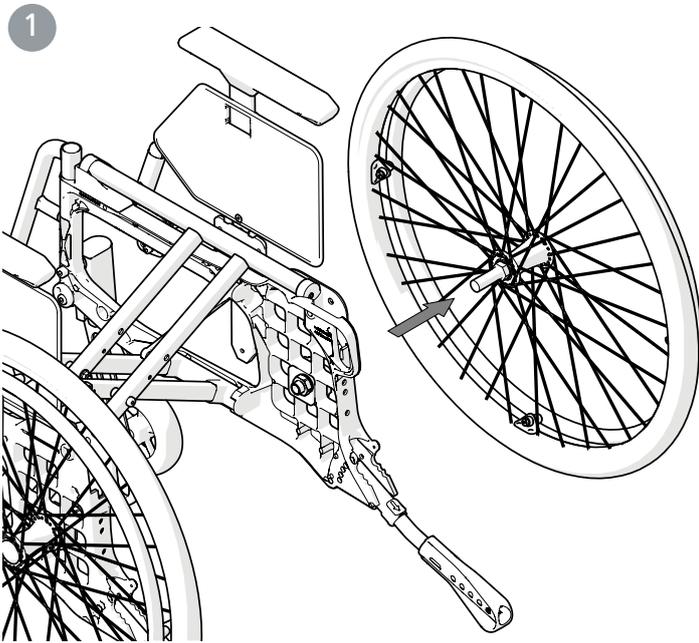
12. Advanced settings, customization

Change rear wheel position

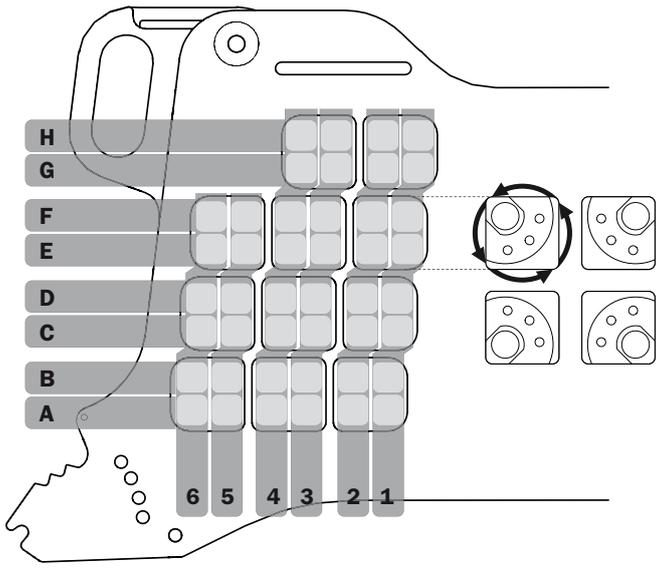
1. Remove the rear wheel
2. Loosen the nut.
3. Take the assembly apart with the washers and mount in the desired position (see table in section "Rear seat height table").



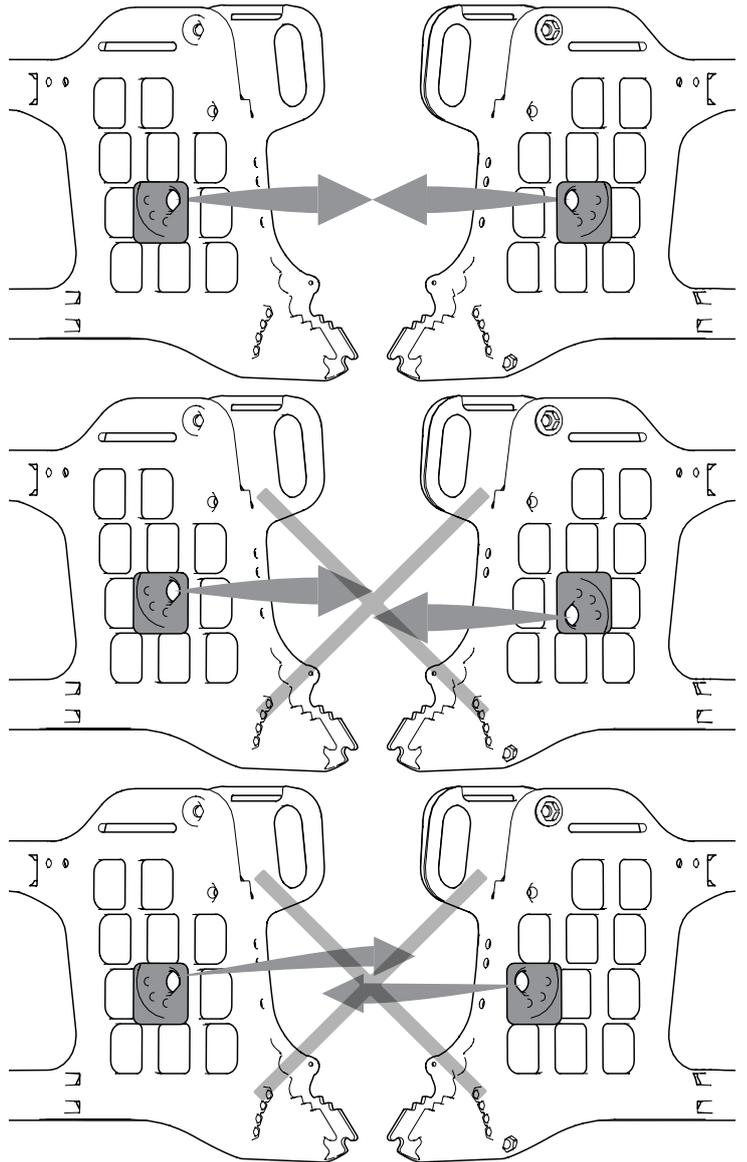
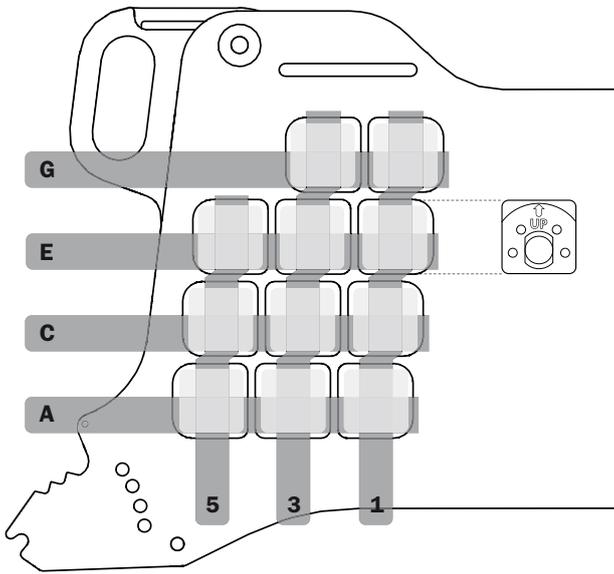
Consider the risk of tipping.
Always check the setting of the anti-tip guard.



12. Advanced settings, customization



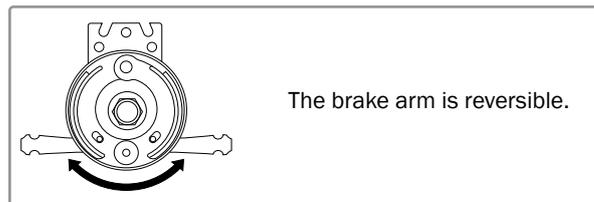
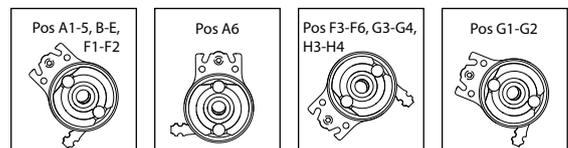
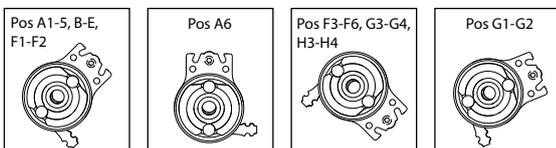
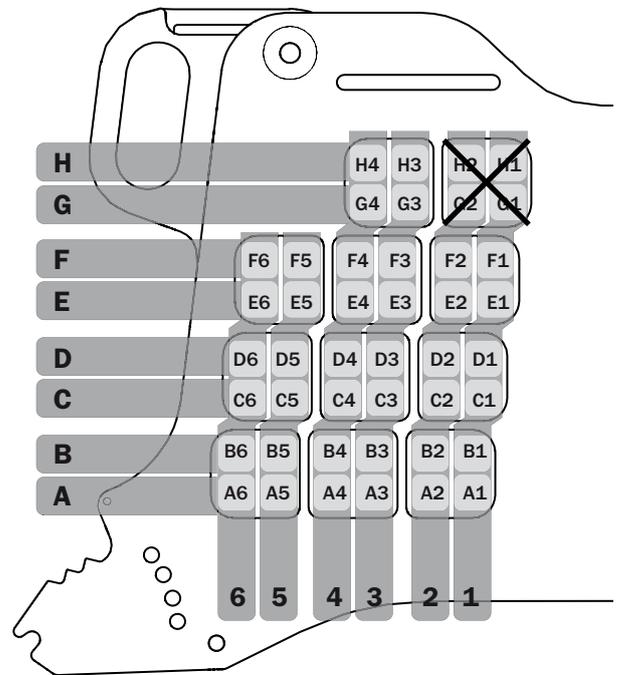
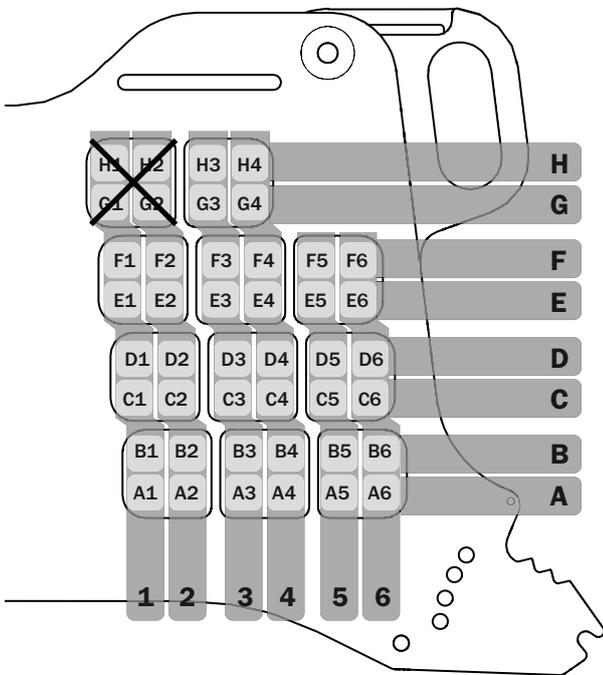
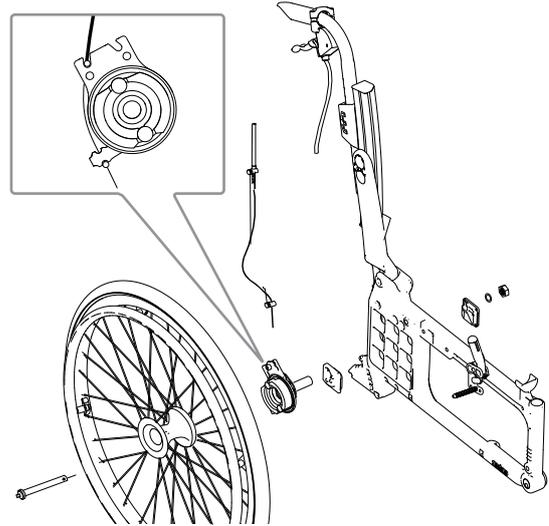
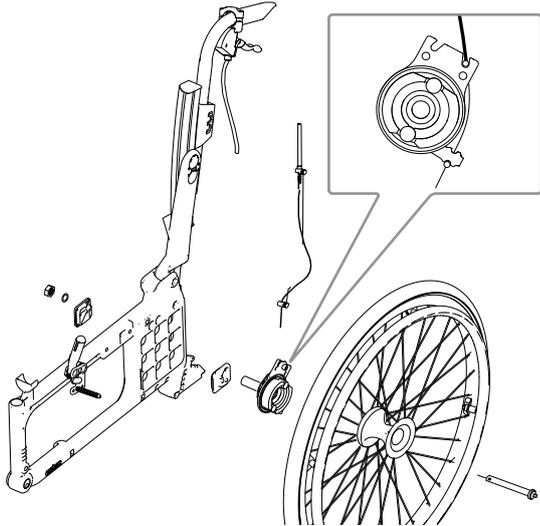
Fitting 0° Camber



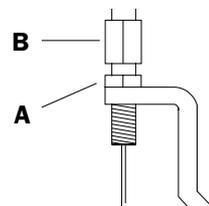
When fitting, check that the rear wheel hub shaft is correctly set. The button in the hub should spring out to its original position. Test by pulling the wheel.

12. Advanced settings, customization

Change rear wheel position, attendant brake



When adjusting the brake, loosen the nut (A) and adjust the brake by screwing (B) up/down.
When the brake is tight enough tighten the nut (A). This adjustment should be made when the brake does not work satisfactorily.



12. Advanced settings, customization

Adjust the back support angle, 3A

The angle of the back support is continuously adjustable (see "The chair's possibilities").

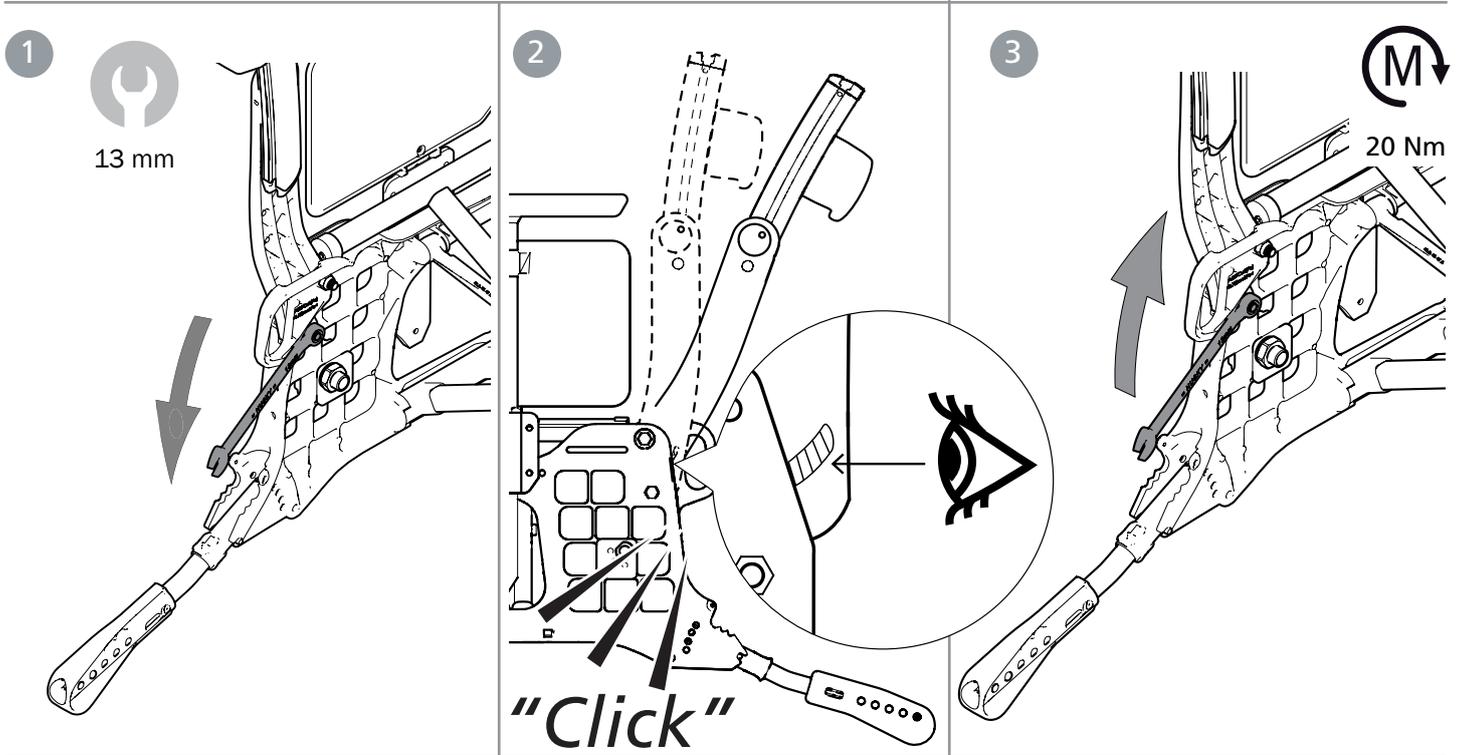
1. Loosen the nut.
2. Adjust the back angle. Use the bar markings or count the number of "clicks" to get the same back angle on the right and left sides respectively. The click positions have 3° intervals and are only

for simplifying the setting, the back angle can therefore also be adjusted between the click positions.

3. Tighten the nut.



Consider the risk of tipping.
Always check the setting of the anti-tip guard.



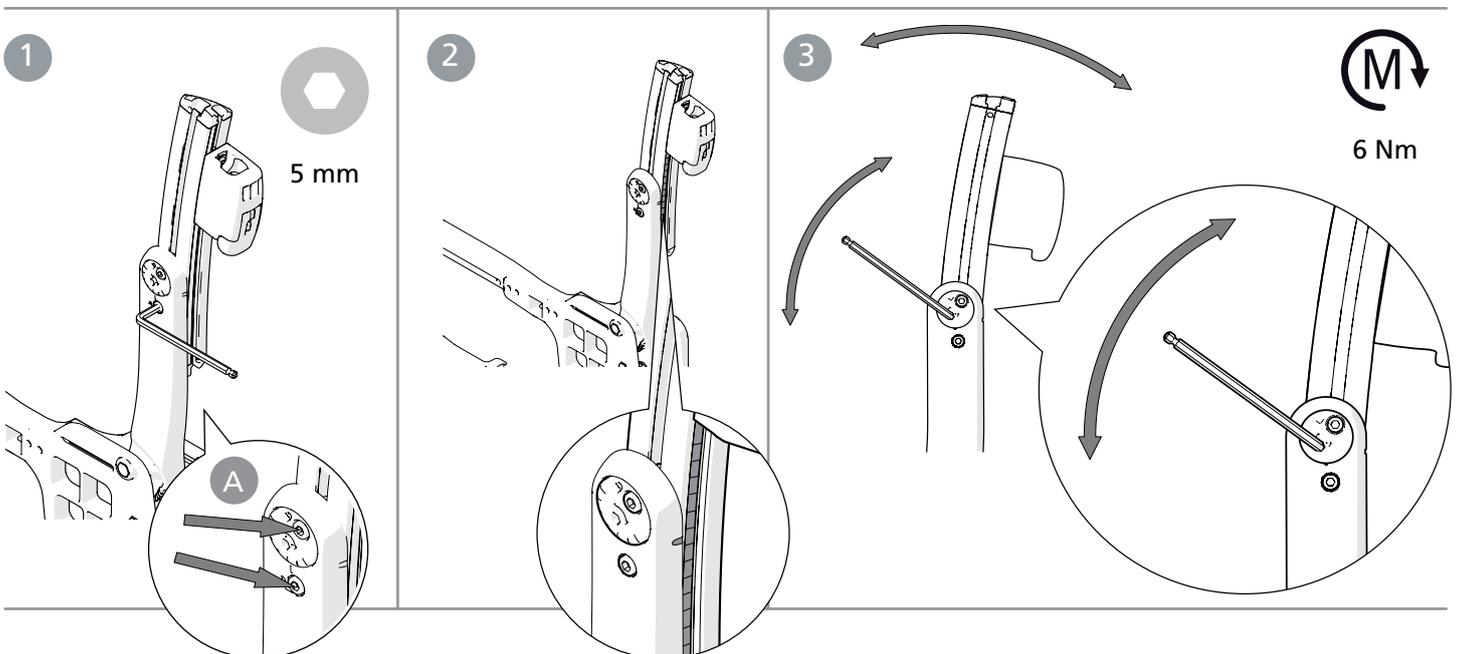
Adjust the back support height and lumbar angle, 3A

The back height is adjustable (see "The chair's possibilities").

1. Loosen the locking screws (A) max 1 turn.
2. Adjust the back height using the scale and mark on the lower back rail. Tighten the locking screws max 1/2 turn.
3. Insert the Allen key into the eccentric sleeve locking screw and loosen this 1/2 turn. Move the Allen key to the eccentric sleeve's key grip and set the desired lumbar angle.
4. Tighten the locking screws.



Consider the risk of tipping.
Always check the setting of the anti-tip guard.



12. Advanced settings, customization

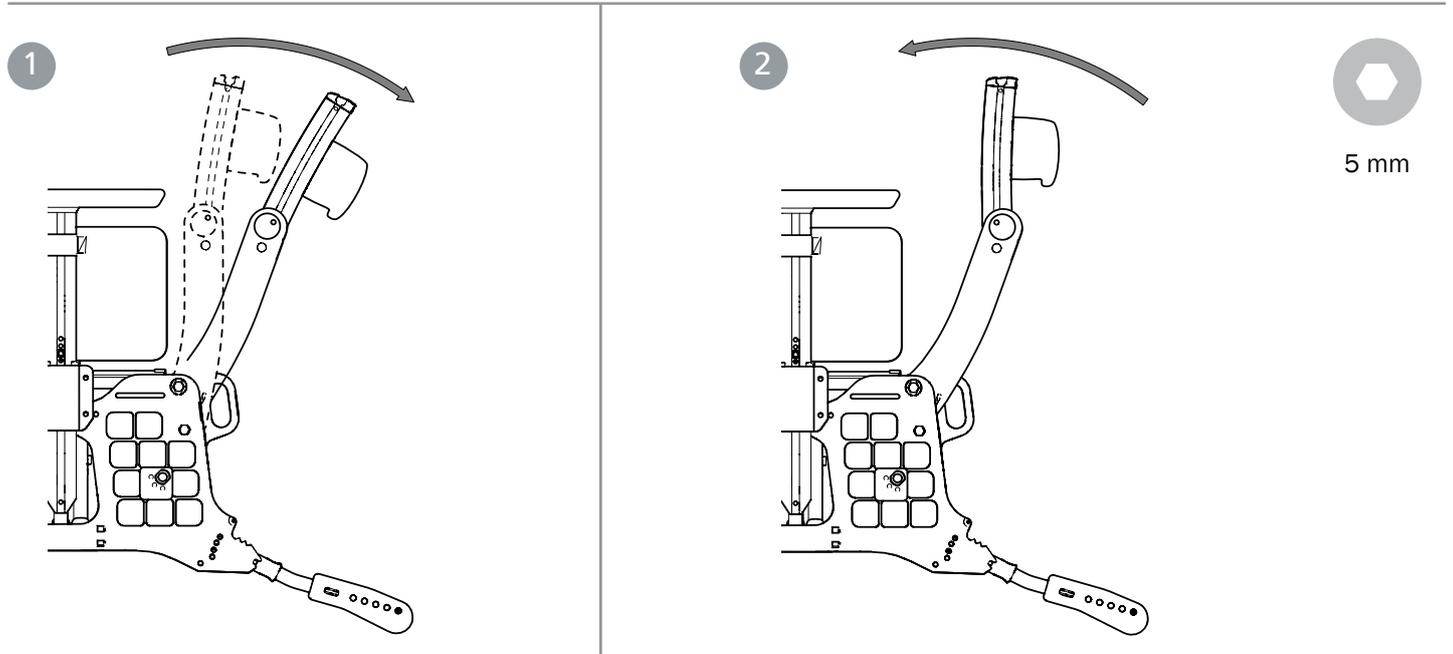
Adjust seat depth using lumbar angle, 3A

An extended seat depth is obtained by opening the back support angle (hip) and following with the lumbar angle.

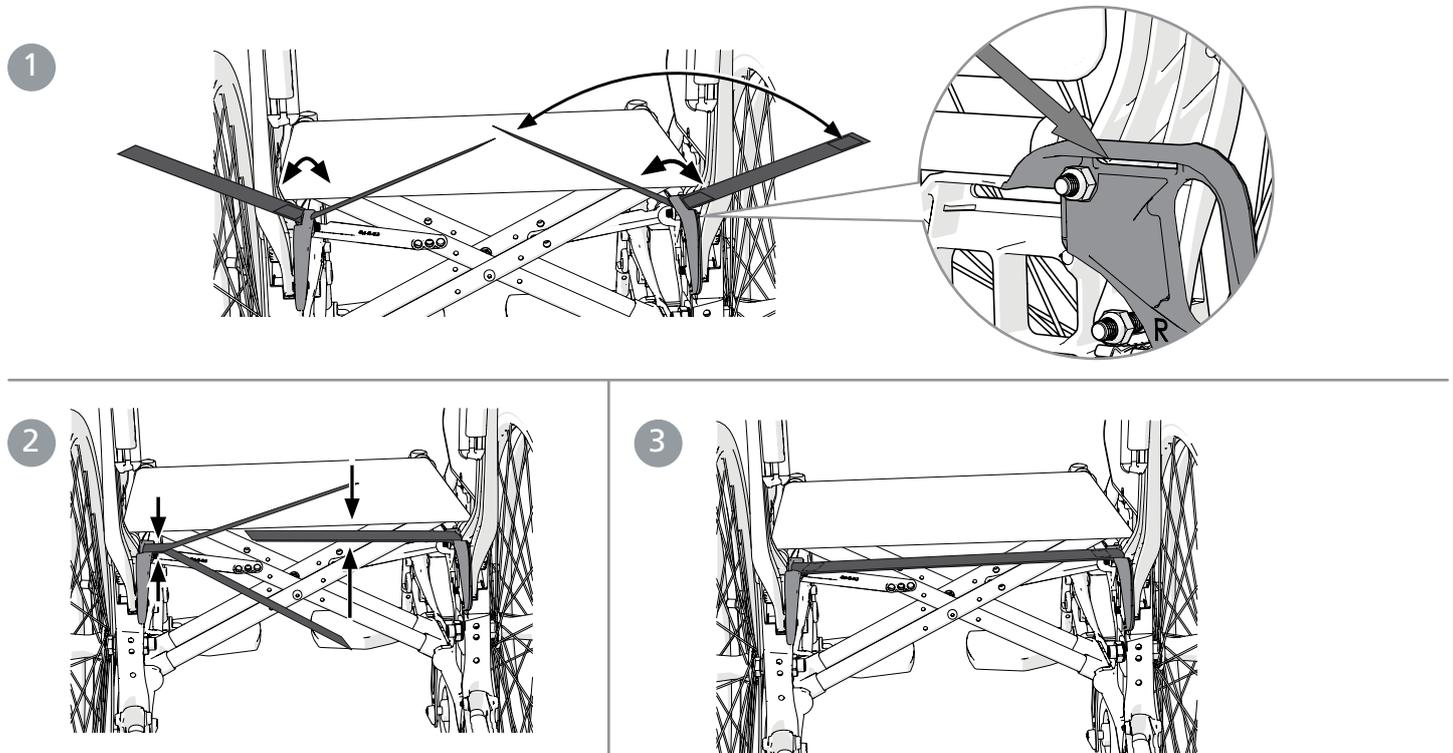
1. Adjust the back angle (see section "Adjusting the back support angle 3A").
2. Adjust the lumbar angle using the eccentric sleeve to the desired back angle (see "Adjusting the back support height and lumbar angle, 3A").
3. If necessary, mount the seat extender (accessory).



Consider the risk of tipping.
Always check the setting of the anti-tip guard.



Mount the seat extender



Consider the risk of tipping.
Always check the setting
of the anti-tip guard.

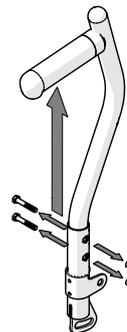
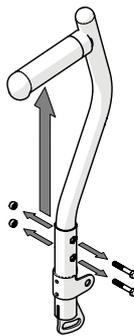
12. Advanced settings, customization

Adjust the back support height, 2B

The back height is adjustable (see “The chair’s possibilities”). Loosen the screws to adjust the back height. Tighten the screws.



Consider the risk of tipping.
Always check the setting of the anti-tip guard.



4 mm



8 mm

Adjust the back angle, 2B

The angle of the back support is continuously adjustable (see “The chair’s possibilities”). The angle is adjusted by means of the nut on the inside of the rear wheel mounts.

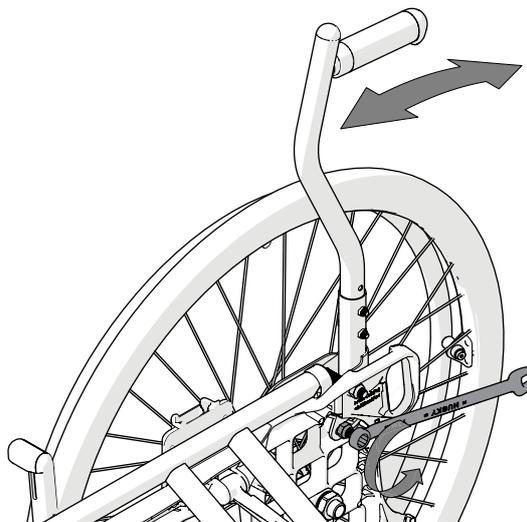
- Loosen the nut for one of the back posts, set the desired angle and tighten.
- Adjust the other back post equally.



Check that the angle is the same on both sides by comparing the distance between the back post and the arm support plate.



Consider the risk of tipping.
Always check the setting of the anti-tip guard.



13 mm

13. Settings, readjustments

Brake, adjustment

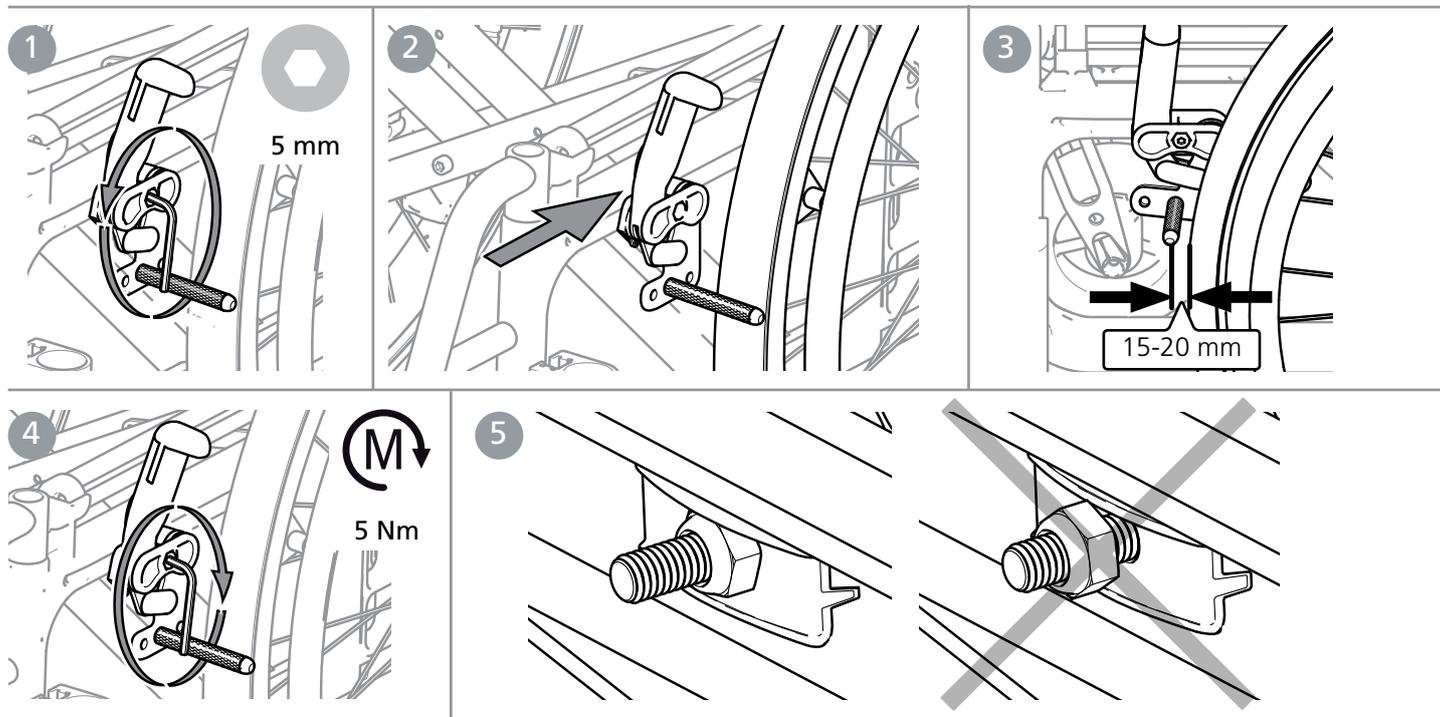
The brake is continuously adjustable.

1. Loosen the screw a few turns.
2. Adjust the brake position
3. The brake pin must be approximately 15-20 mm from the tyre in the unbraked position.

4. Make sure the brake is straight in the groove. Tighten the nut by about 5 Nm. Test the brakes!
5. Make sure the nut locks on the inside.

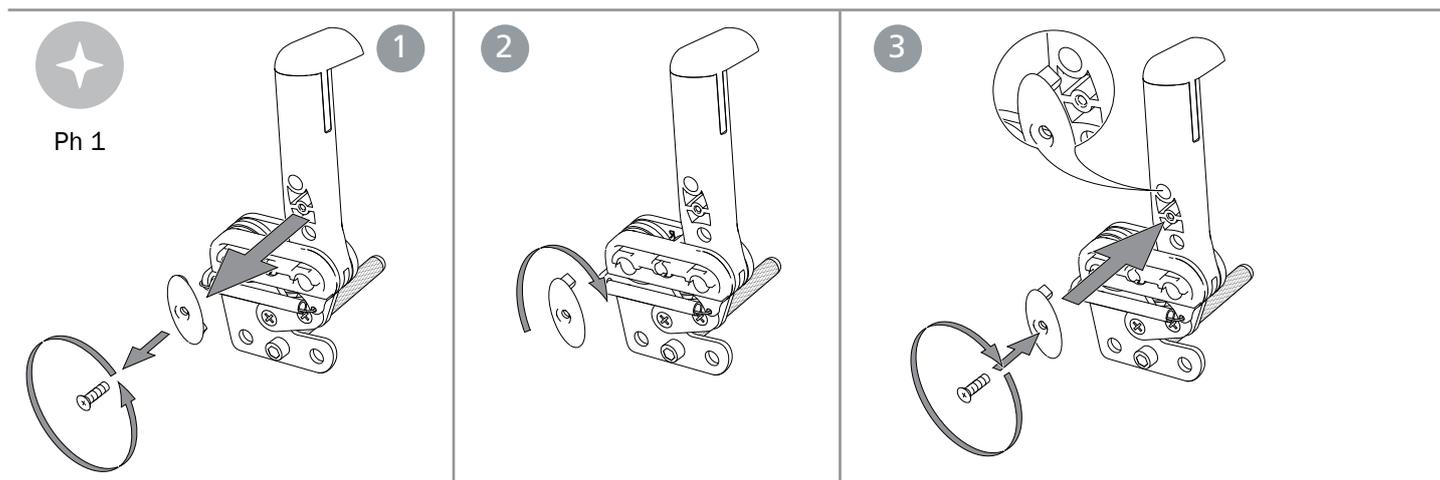


The braking effect depends on the tyre pressure. The brake is a parking brake and should not be used as a driving brake.

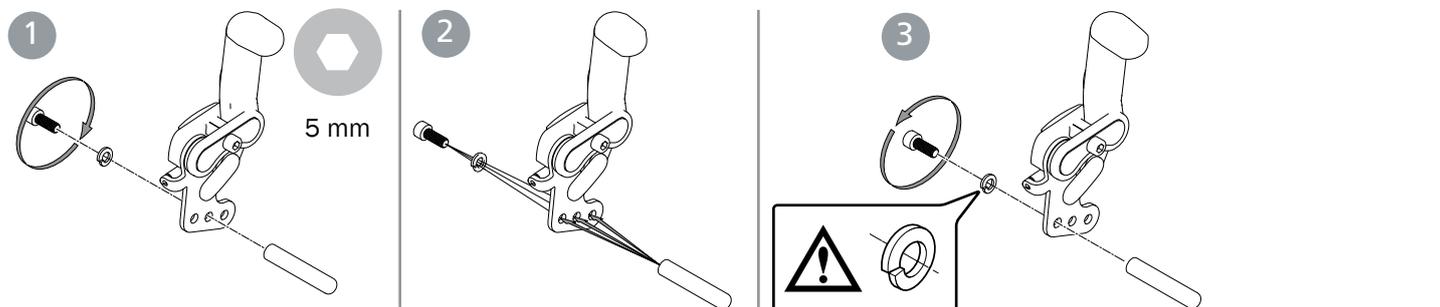


If the rear wheels are mounted in one of the front positions, leg supports that are folded aside can release locked brake. To avoid this, the brake lever should be adjusted so that it gets a "free position". Then the brake is released only when the brake lever is moved near the rear wheel.

1. Loosen the screw on the inside of the brake lever.
2. Remove the oval plate, turn it 180° (the spike on the inside of the plate should come in the upper hole).
3. Screw it in again.



Adjusting the brake pin at certain rear wheel positions:



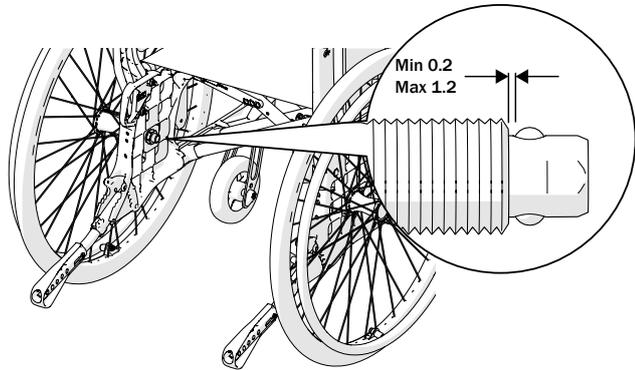
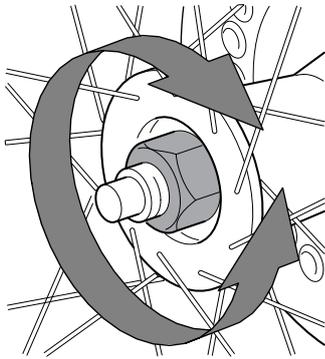
13. Settings, readjustments

Rear wheels with quick-release axle

The distance between the hub sleeve and the locking balls can be adjusted by adjusting the nut on the outside of the hub. The distance between the hub sleeve and the locking balls should be 0.2 to 1.2 mm.



When assembling, always make sure that the quick-release button in the hub springs out properly. Test by pulling the wheel.



Leg supports, continuously elevating

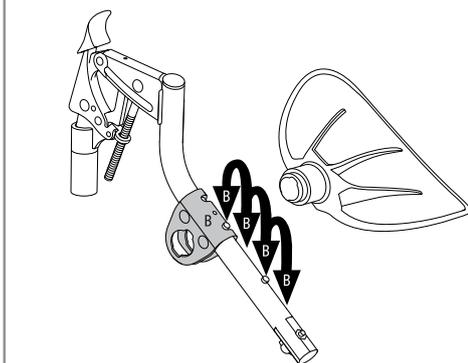
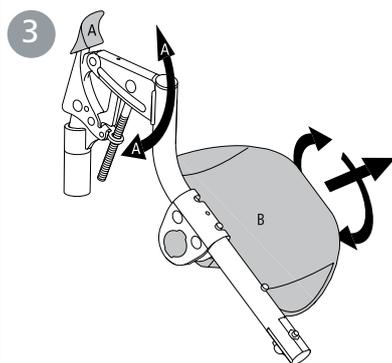
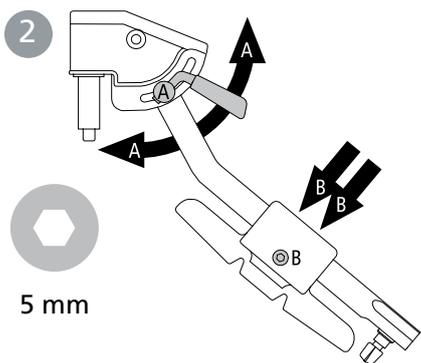
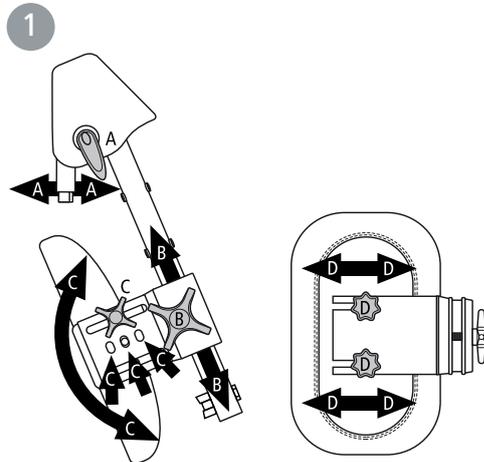
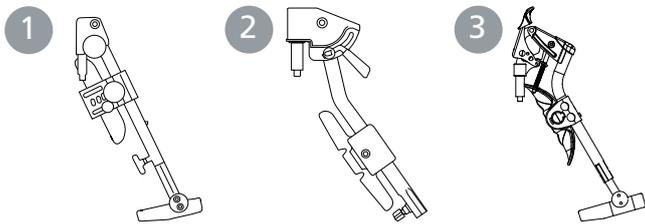
can be adjusted.



Never stand on the foot plates, risk of tipping! When lifting a wheelchair, remove the leg supports and lift the frame (lower or upper frame post).



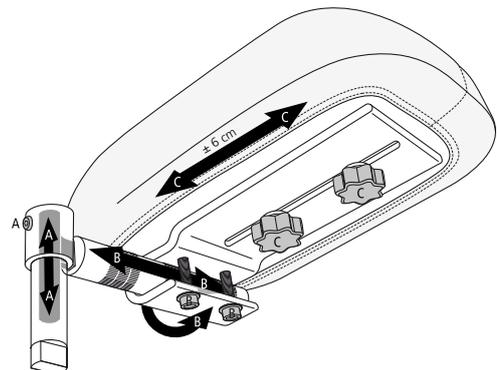
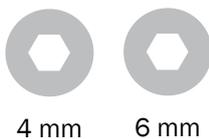
Always have screws and knobs for foot plate mounted even if foot plate is not used.



Amputee leg support can be adjusted.



Never sit on the amputee support. When lifting a wheelchair, remove the amputee support, fold the other leg support under the seat (or remove it) and lift the frame (lower or upper frame post).



13. Settings, readjustments

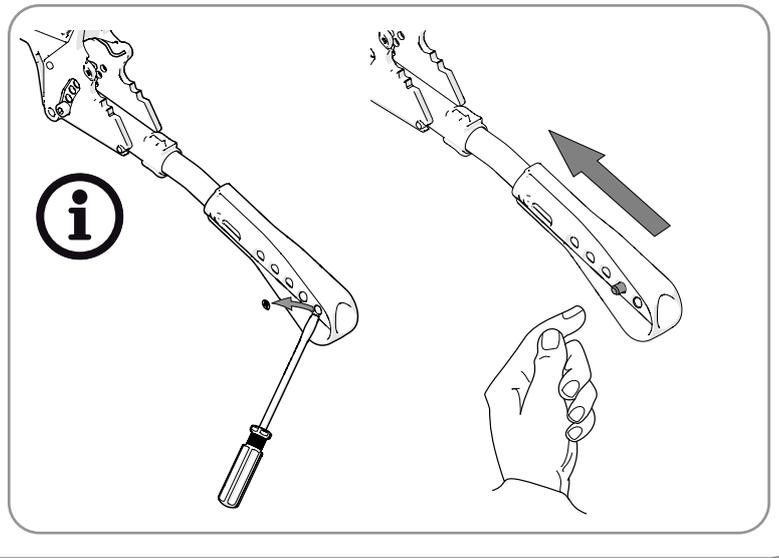
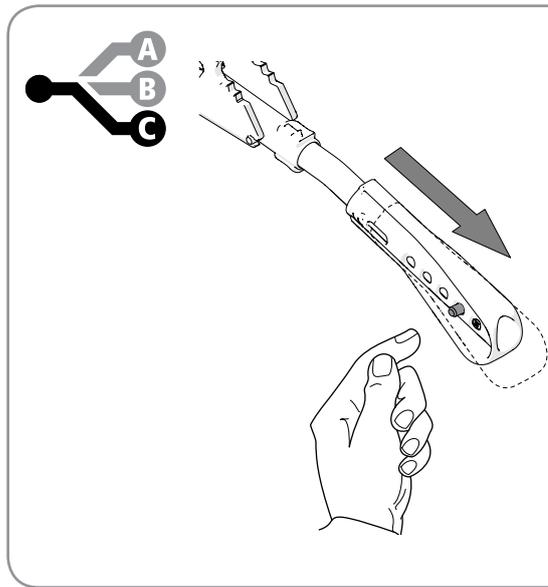
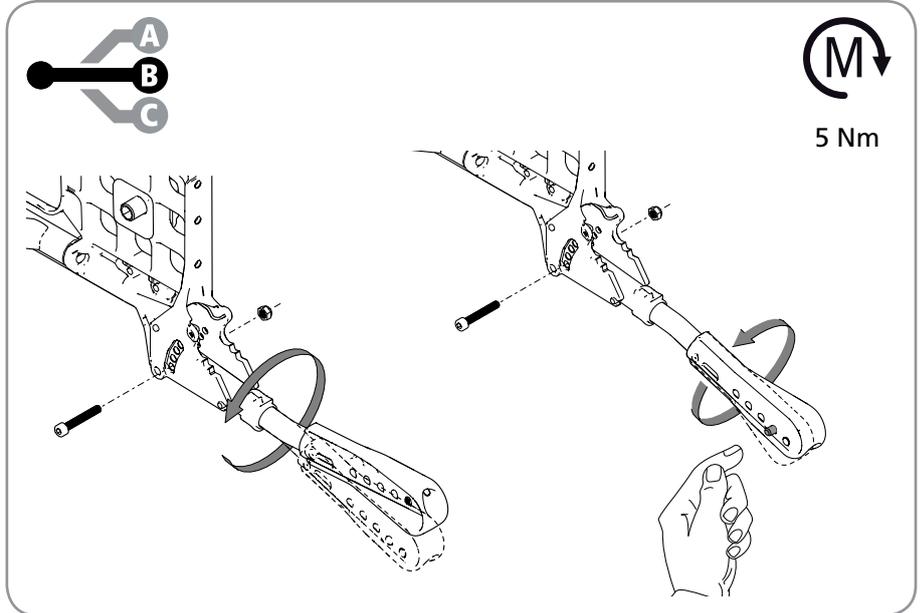
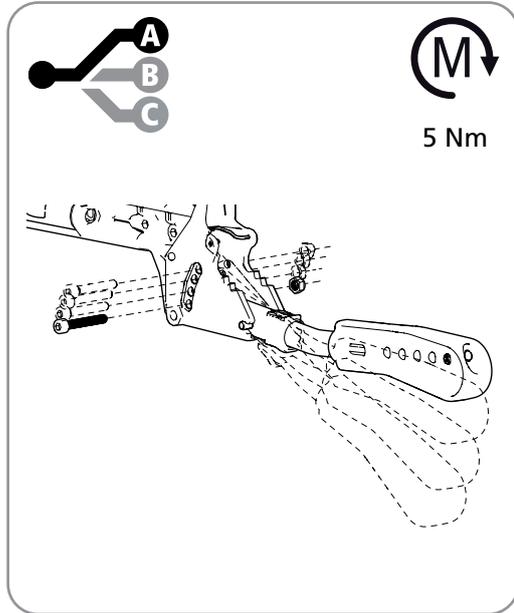
The **anti-tip guards** are adjustable in height and angle and adjustable in length.



When adjusting the seat height, balance position or back angle, the function of the anti-tip guard must always be checked.



5 mm



The **material of the handrims** and the distance between the rear wheels - the handrim affects the user's grip possibilities. Foam rubber and plastic are available as an option.



Risk of crushing your fingers may occur when passing through narrow passages, and if your fingers enter the spokes.

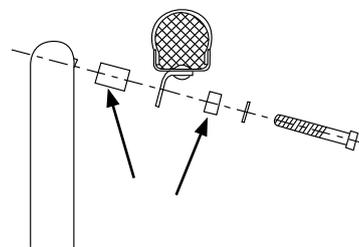


Foam rubber/plastic handrims give higher friction. In the event of heavy braking, slight burns (e.g. blisters) may occur.



If there is a risk that the user can get his fingers in the spokes, we recommend spoke guards.

Hand rim spacing on rear wheels 24", 22" and 20" with aluminium, stainless steel, plastic and foam rubber handrim can be adjusted by moving/changing the space between the two distances.



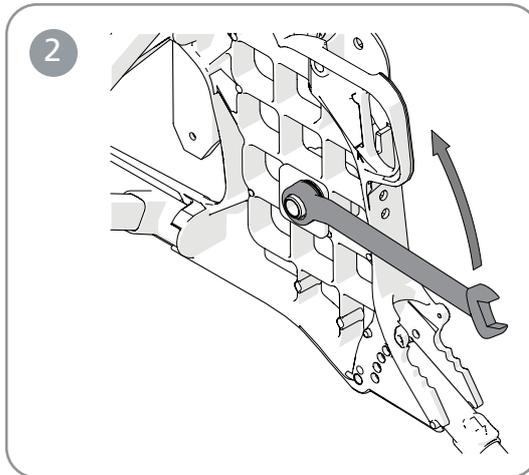
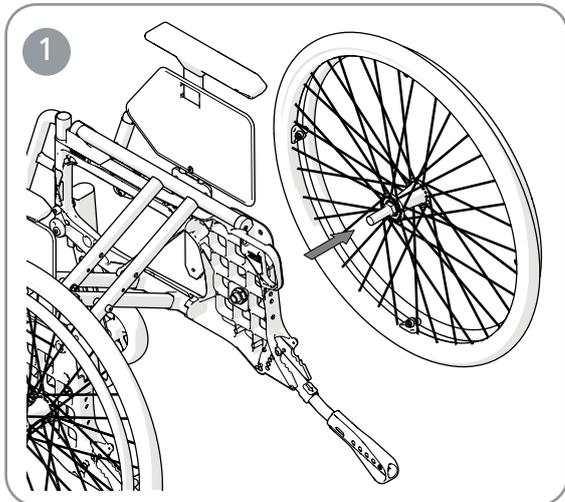
4 mm

13. Settings, readjustments

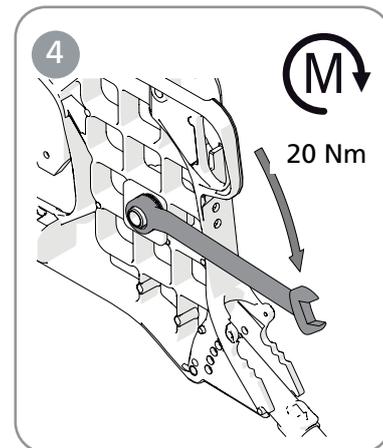
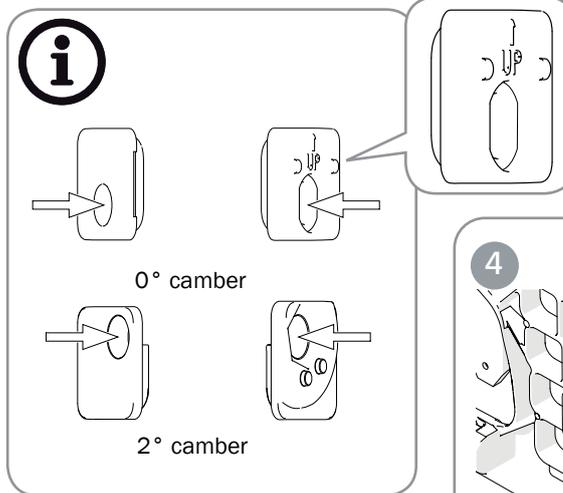
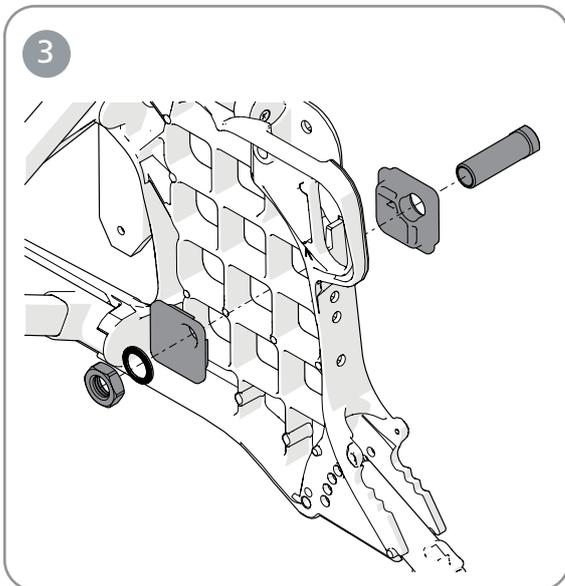
The camber angle can be changed by replacing the washers between the hub sleeve and the nut (see also section “*Changing the rear wheel position*”).



Check that the rear wheel hub shaft is set correctly. The button in the hub should spring out to its original position. Test by pulling the wheel.



24 mm



The centre of gravity/balance setting is adjusted by changing the position of the rear wheels.
- Move hubs/rear wheels forwards or backwards.

backwards increases.
See section “*Changing the rear wheel position*”.



Also check the brakes, see section “*Brake, adjustment*”.



The centre of gravity also changes when changing seat angle and/or back angle.



Use of anti-tip guards is recommended.



When assembling rear wheels, always make sure that the quick-release button in the hub springs out properly. Test by pulling the wheel.



24 mm

When the rear wheel position is moved forwards, the wheelchair becomes easier to drive and swivel, but the tendency to tilt

Toe-in, toe-out

Due to the design there is no need for a toe-in correction. Even when the rear wheel position is adjusted in height or centre of balance the rear wheel attachment makes sure that the adjustment of the toe-in is always correct.

13. Settings, readjustments

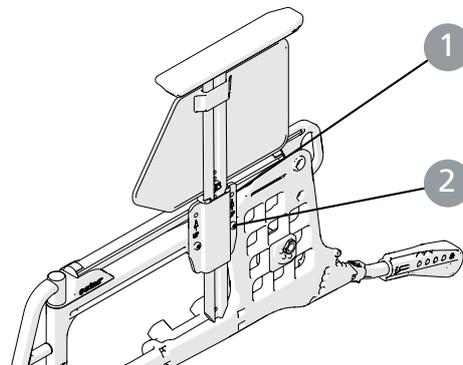
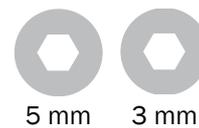
The arm support mount can be mounted at 2 different heights.

In position 1, the arm support height is adjustable between 18–26 cm and in position 2 (standard) between 24–31 cm with 1 cm interval.

The square nut determines both the height of the arm support and attaches the side plate:

- Loosen the screw holding the square nut.
- Slide the side plate up or down to the desired height.
- Tighten the nut again on the side plate.

If necessary, the right arm support can be mounted on the left side and vice versa.

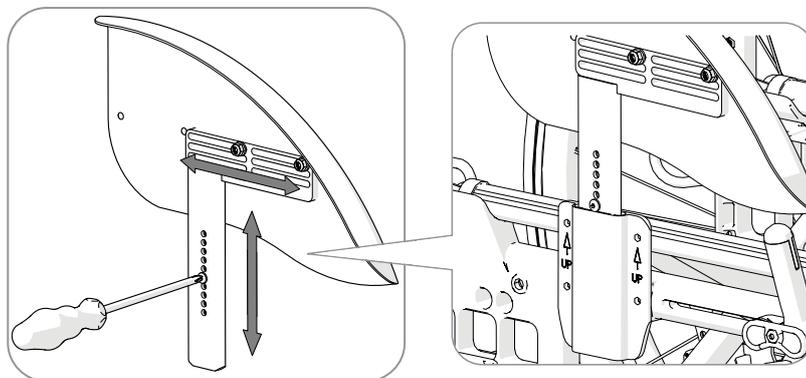


Do not lift the wheelchair using the arm supports.



With 24" low pressure or solid tyres in pos. F1 & E1, the arm support side cover does not cover the front of the rear wheel.

Mudguard can be adjusted in height and depth.



14. Settings, accessories

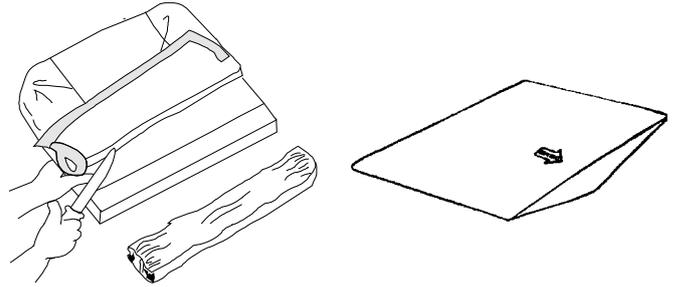
Installation instructions are always included with the accessories when delivered from Etac. Instructions are also available on our website www.etac.com

The seat cushion is cut to the set seat depth at the front or rear edge. Make sure that the cushion fits properly between the back posts with the rounded corners backwards when measuring the length.



The cushion is a standard type and not intended for users with bed sores.

The cushion can be supplemented with a **comfort wedge**. It flattens out the front seat, which significantly improves seating comfort. Place the comfort wedge in the inner pocket of the pillow case on the underside of the cushion. The arrow on the comfort wedge should be facing up and pointing forwards.



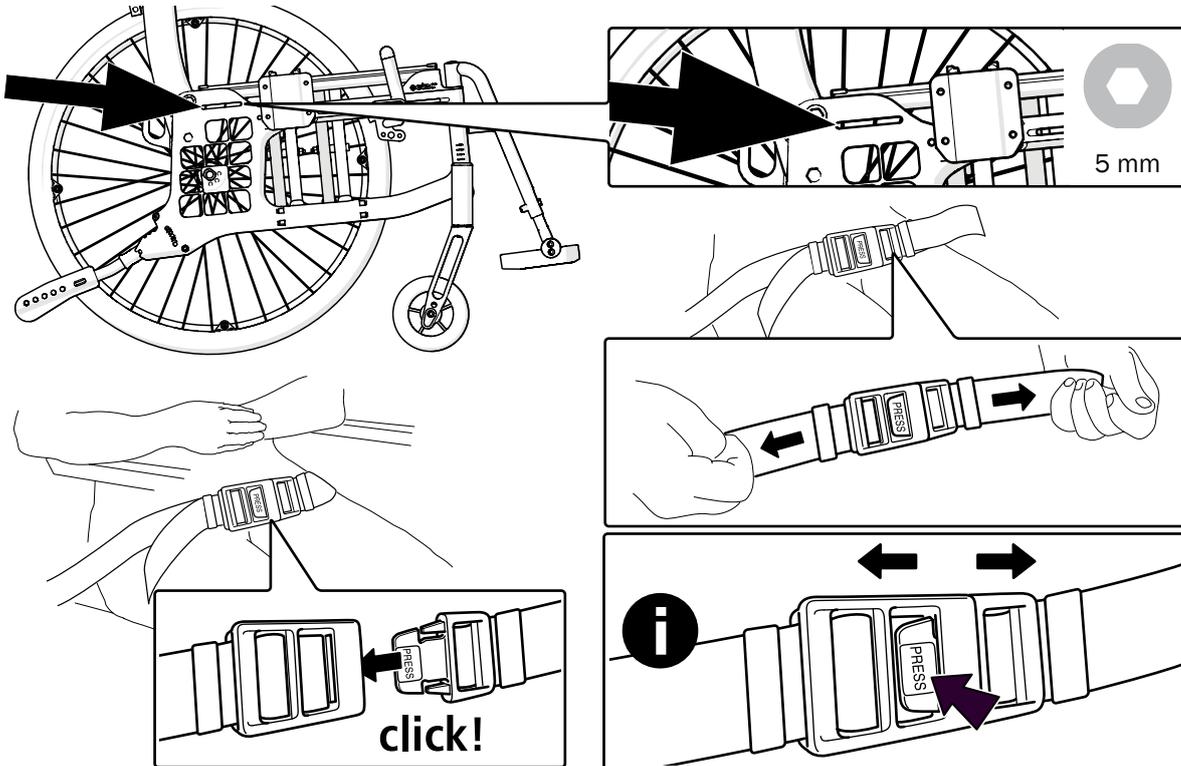
The positioning belt is two-piece, adjustable in length and has a snap-fit buckle. It is mounted in the groove just in front of the back support, above the rear wheel mount.



The positioning belt is only for positioning in the wheelchair. It must not replace a seat belt in a car.



Ensure that the user does not slide forwards on the seat as the belt tightens the blood supply in the hip/waist region.



14. Settings, accessories

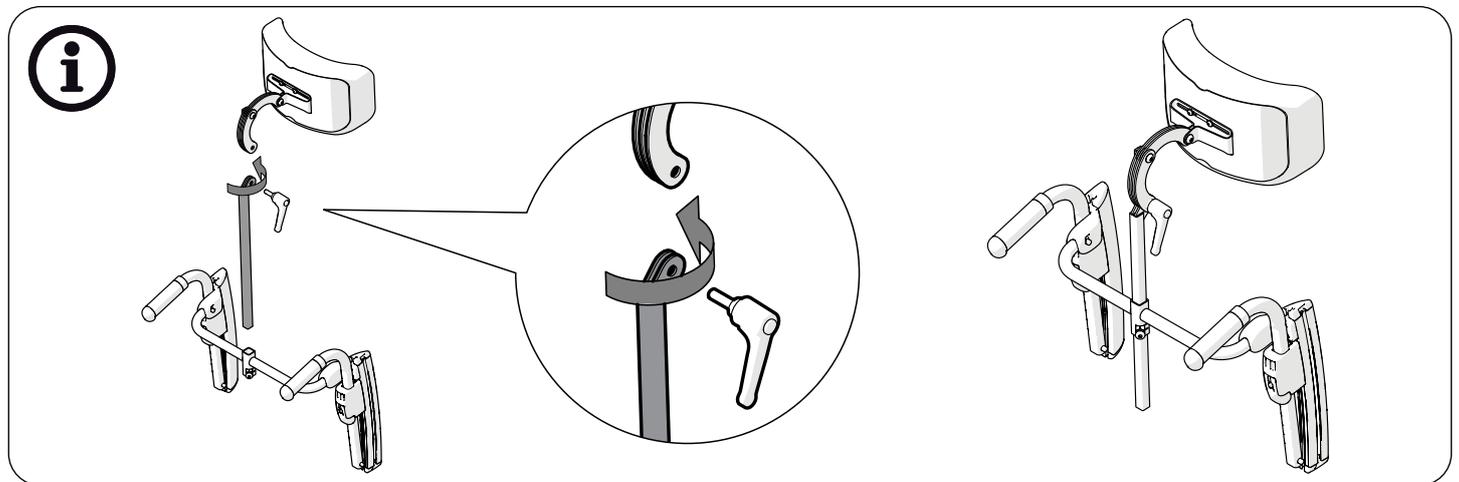
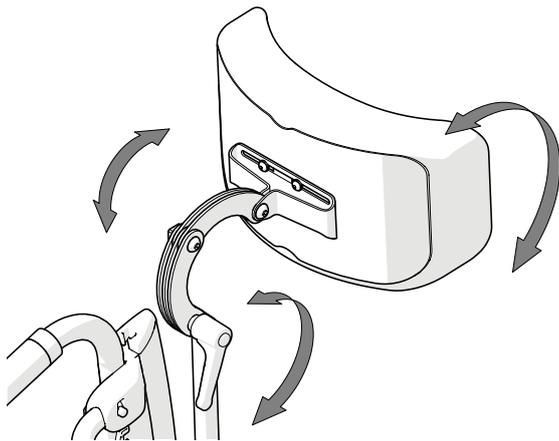
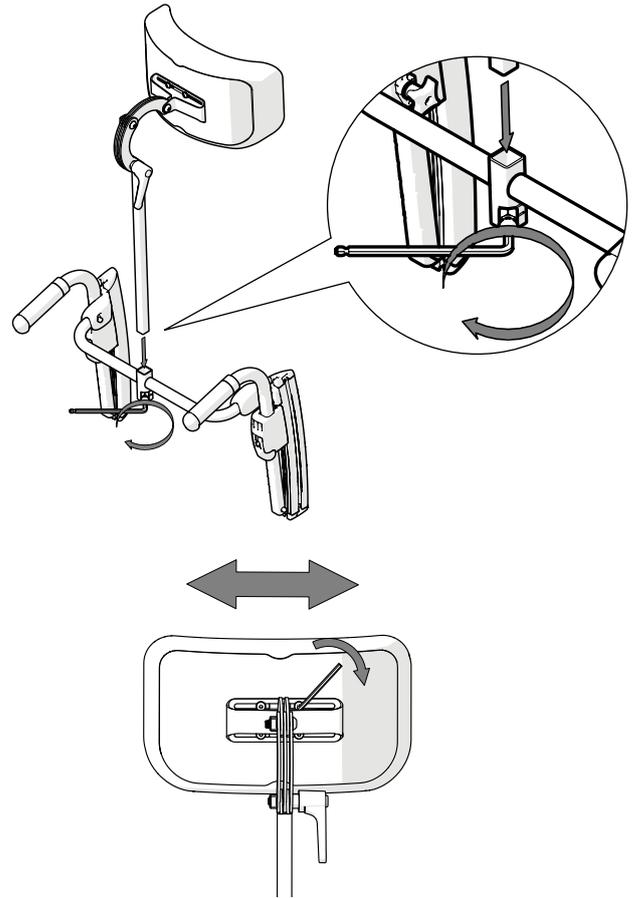
Head support is mounted on a separate head support mount or on a bow handle (optional). The head support is adjustable in height, depth, angle and sideways and detachable.



Before adjusting the head support, make sure that the user has a good sitting position and is seated firmly.



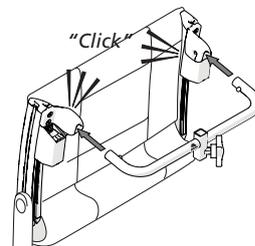
Check the wheelchair balance when the user leans his head against the head support. Use of anti-tip guards is recommended.



Head support mount is used for mounting head supports.



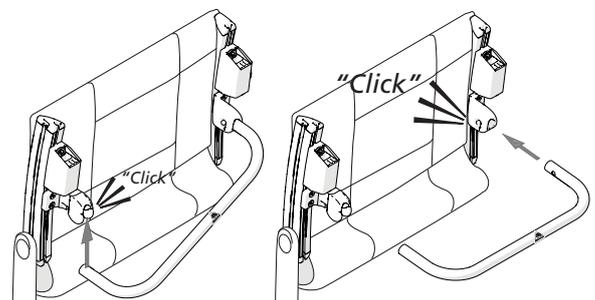
Do not lift the wheelchair by the head support mount.



Crossbar is used when the back chassis needs to be reinforced.



Do not lift the wheelchair by the crossbar.



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