

User manual

NAGGL



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Introduction

We are very pleased that you have chosen the NAGGL mobility aid for your child. The NAGGL mobility aid is particularly suitable for children with central and peripheral neurological damage and its consequences to promote motor skills and general development.

Before using the mobility aid for the first time, please read the user manual carefully.

Always follow these instructions and recommendations in handling to prevent damage to your child, third persons or the mobility aid.

If you have a hard time reading this manual, you can download a version with bigger letter at If you are unable to download the manual you can ask your doctor if he/she can supply you one.

Preparation before use

The NAGGL mobility aid is delivered to you **fully assembled** by personnel trained by Conixus Benelux BV. To view an entire list of our personnel trained to use the NAGGL mobility aid, you can check our website (www.naggl.nl/service).

This person will train you in detail about the **therapy concept** and the various possibilities of adjusting the mobility aid NAGGL to your child's circumstances. If you want yourself or your personnel to be trained and certified in the use with the NAGGL mobility aid you can contact us via our service mail, service@naggl.nl.

If you have any further questions, please do not hesitate to contact us via our **Service E-mail**, service@naggl.nl.

We have highlighted important information in **bold text** for you.

Indication and Contra indication

The NAGGL mobility aid is a class 1 medical device, primarily designed for children with severe neurological diseases and their consequences for the body's motor function.

The mobility aid supports the pelvis and the trunk so that active standing is possible first and then active walking with defined compensation of the body motor restriction.

Indication:

Central neurological damage to the brain and spinal cord, e.g.

- Congenital brain anomalies and developmental disorders (orphan diseases)
- Occlusion of blood vessels / intracranial haemorrhage (stroke, cerebral palsy)
- Global oxygen deficiency of the brain (e.g. after birth trauma, cerebral palsy)

Peripheral nerve damage acute/chronic

- Spinal cord injuries (partial transection)
- Traumatic peripheral nerve injuries

Restrictions / injuries of the musculoskeletal system

- After musculoskeletal trauma
- After paediatric orthopaedic / neurosurgical surgical procedures due to malgrowth.

Relative contraindications:

- Massive restlessness that can be influenced under supervision
- Malformations in the anogenital region
- Sudden loss of consciousness of unclear aetiology
- Decreased function of the respiratory/cardiac system with potential for improvement.

The relative contraindications must always be agreed with the treating medical team and/or the therapeutic treatment team depending on the severity of the manifestation.

Absolute contraindications:

- Massive uninfluenceable restlessness
- Unstable perianal and/or genital wounds
- Decubitus perianal and/or genital
- Unstable wounds on the abdomen and/or chest area
- Pressure sores on the abdomen and/or chest
- Unstable fractures/injuries of the pelvis/thorax/spine
- Inadequate function of the respiratory / cardiac system with no potential for improvement.

Remarks:

After craniectomy to relieve pressure on the brain, with or without cranioplasty, use of a head protection helmet is mandatory, while using the NAGGL mobility aid.

After surgical interventions (e.g. orthopaedic / neuro-orthopaedic / neuro-surgical), the use of the NAGGL mobility aid must always be agreed with the surgical team and the extent of the use and the load must be determined.

The indication of pain should always lead to a review of the mobility aid in its setting and also to a discussion of the indication for its use.

Finding the "right" setting

For the adjustment of the NAGGL mobility aid during the first use of the product, the help from 2 people is beneficial. One person can position the child and take care of the child's needs whilst the other person adjusts the NAGGL.

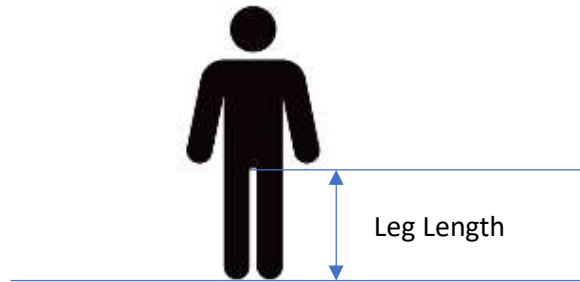
Give your child the time it needs to come to terms with the new situation. Allow your child to "grasp" the mobility aid with his or her hands and encourage your child's interest in the device. If necessary, divide the adjustments into several sessions. Try not demand too much from your child. Standing is the first step towards verticalization. Standing is already an enormous achievement and demands a lot from your child. Give your child the time, It will show you when it feels comfortable and wants to initiate the first step. Initially, we would recommend initiating "first small steps" without shoes / orthotics. "Slipper socks" can be helpful.

Allow your child to experience themselves on the NAGGL and test limits to find a "centre of movement". If your child leans to the side or backwards, allow the child to experience this and gently help them to find their way out of an end-of-movement position, if possible with guidance (e.g. positioning a hand to pull independently). Your child needs to learn the limits and will find a movement middle position in time.

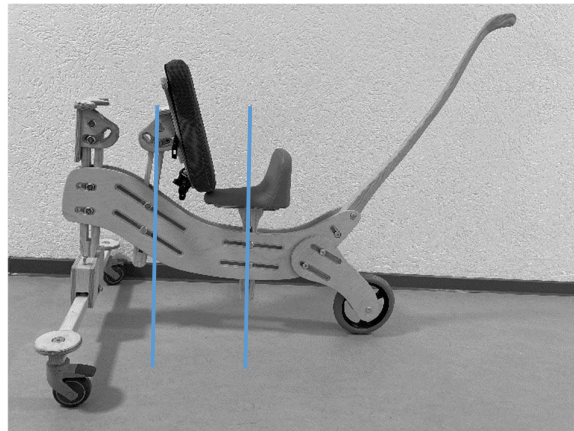
If necessary, activate the step initiation with slight support by pushing the mobility aid NAGGL. You can also tilt the mobility aid slightly to the side in time with the step in order to give the stepping leg room to swing through and to give pressure to the standing leg.

Basic adjustment

Start by adjusting and setting the base frame height. Measure or estimate the sitting height of your child while standing on the floor.



First lock the parking brakes on the front wheels. Now loosen the clamping screws of the chest support and the saddle support and set them in a central position in alignment with the slotted holes on the base frame and as well as the slotted holes on the supports. The support columns should initially be perpendicular to the ground.



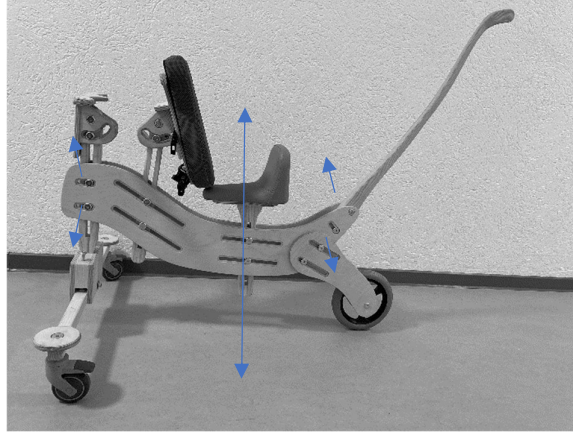
Slightly tighten the clamping screw so that the components can no longer wriggle in relation to each other. Watch out whilst adjusting the components to avoid pinching your fingers.

Height adjustment of the base frame

This part of the manual covers adjustment and positioning of the height of the base frame. Use the estimated or measured leg length as the height of the upper edge of the saddle seat.

In the next step, loosen one clamp of the rear wheel support completely, the other only so far that the base frame and the wheel support does not move towards each other by themselves.

Now loosen one clamp on the front axis completely, open the other clamp only so far that the base frame and the front axis column do not move towards each other by themselves.



Now alternately open and close the clamp to gradually adjust the frame height. Make sure that the slotted holes for fixing the saddle are aligned as parallel as possible to the ground.

When adjusting the rear frame height, the front axis can tilt forwards or backwards. By lightly clamping the front axis post at only one point, you can very easily bring the front axis into a vertical position. We recommend this position as a starting position for the first adjustment.

When you are satisfied with the adjustment, tighten both clamps with the Allen keys (one Allen key for countering on one side, one Allen key for tightening on the other side).

The minimum height that can be adjusted to is limited by the seat post, which must be distanced at least 3 cm from the floor (danger of feet getting stuck). The minimum stepping height is approx. 36 cm.

Once these settings have been made, all connections can be tightened according to the specifications. A helper can now hold the child and position it for the first time in order to roughly check the basic setting.

If you are satisfied with the result and your child's feet are touching the ground while sitting on the saddle, you can continue with the adjustment of the saddle and chest support.

If you have adjusted the unit too high or too low, then take the child off the unit and adjust the height of the base frame again.

Front axis adjustment

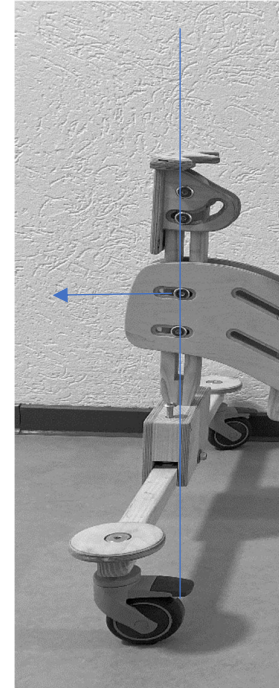
By opening the clamping screws, you can move the front axis by sliding it in the slotted holes of the base frame and the front axis column as you wish within the ranges specified by the holes.

Front axis inclination (angles and horizontal)

In order to be able to adjust the front axis column vertically to any preferred frame position, slotted holes are provided in the base frame. The clamping screws can move within the range of these holes.

If the front axis column and axis wheels are positioned vertically, the wheels should be steerable by applying slight lateral pressure on the frame without any problems.

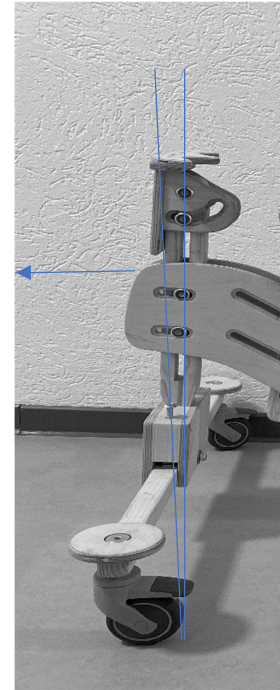
However, this means that the wheels will not follow a straight line. In order for your child to be able to move straight ahead, it must apply force to the ground as symmetrically as possible on both sides via the legs. Symmetry and the initiation of side steps can be trained very well in this setting.



Caster wheels

If your child finds it difficult to move symmetrically, the front axis column can be tilted forwards by approx. 3-5°. This in turn makes it more difficult for the wheels to turn to the side and thus increases directional stability. Especially for children with asymmetric strength, tone and motor function of the lower extremities, the adjustment of a caster wheel to stabilise the track is helpful and motivates them to simply cover straight distances. **More than 5° angle of the caster wheel is usually not necessary.** Bear in mind that an excessively adjusted caster wheel will encourage **forward tipping**. If the caster wheel needs to be adjusted to an extreme, the child must be positioned further back so that the shoulders and head do not hang over the front axis.

The caster wheel can be adjusted at any time during the course of therapy/application. At the beginning we recommend small to no adjustment in the wheels.

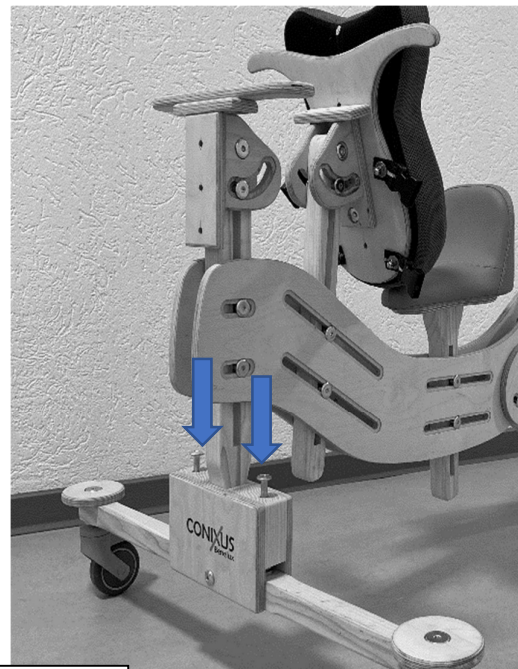


Damping / side tilt

The front axis has a damping system that allows the entire base frame to tilt to the side.

This feature is important for children who have weakness in the hip flexor muscles. The damping system lets the patient initiate the stride through pendulum movements with the trunk.

The **pendulum movement** works so that balance is trained and alternating movement patterns are encouraged. The controlled and defined lateral inclination of the device also increases the need to activate independent balance by activating the leg and pelvic muscles.



Turn counterclockwise

-> Minimisation of
damping and swivelling to
sides



Clockwise rotation ->

Maximisation of damping
and swivelling to the sides



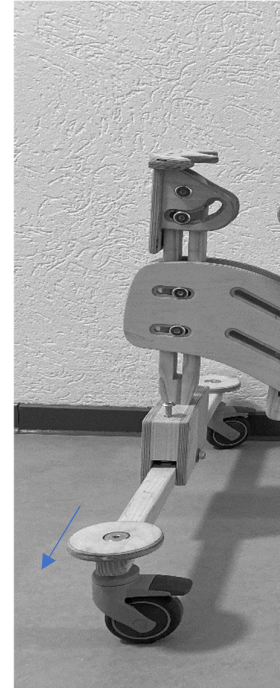
The lateral sway can be adjusted from fixed to maximum movement by symmetrically tightening the screws (clockwise) on the spring box with the Allen key. A lateral inclination of approx. 7° to each side is possible. The unit automatically adjusts to a central position when the screws are adjusted symmetrically.

By tightening the screws on the spring box asymmetrically, the NAGGL mobility aid can also be tilted to the right or to the left side and will then swing asymmetrically. This adjustment can be used for children who tend to tip to one side due to a muscular imbalance, especially on the lower body. The counteracting forces of the mobility aid NAGGL help to find the balance and to get into mobility.

Parking Brakes

The mobility aid NAGGL has two parking brakes on the castors of the front axis. These can be operated by a supervisor by simply pressing the levers. This allows the mobility aid NAGGL to be turned into a verticalization aid. This is especially important at the beginning of therapy, where standing and body control are to be achieved first. **Only a stable lower body with sufficient pelvic and head control enables step initiation.** However, the establishment of mobility assistance can also be used in the context of extended therapy, e.g. to promote the use of the upper extremities in the vertical position.

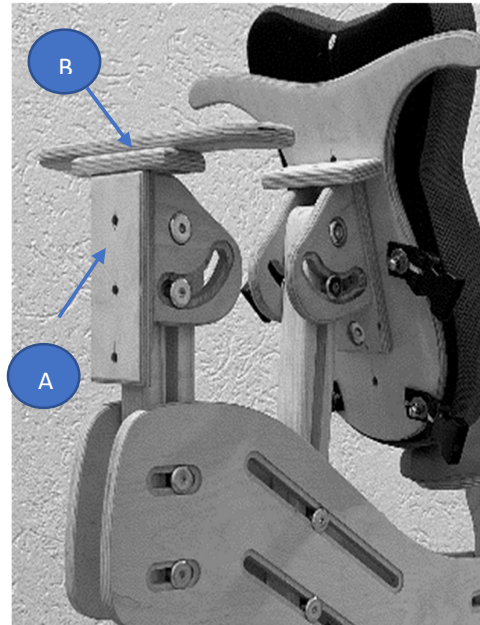
Please do not overburden your child with the goal of step initiation, especially at the beginning. Allow your child enough time to explore the vertical and the three-dimensional space first.



Universal mount for attachments

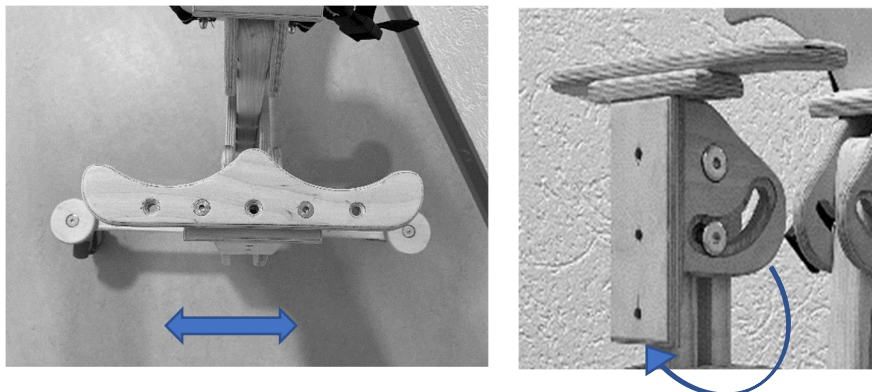
The ends of the chest support column and the front axis column are designed for the attachment of a universal mount. This mount has a high swivel radius and in the basic configuration serves as a support for the handle on the front axis column and for the breast plate on the breast column.

The breast plate is mounted on the long side (A) and can be adjusted in height by the variable perforation in series. The universal support can be rotated between 0 and 70° on the front axis, furthermore the support of the breast plate can be installed inclined, so that a variety of individual possibilities between 0° and 180° to the support axis can be achieved.



Handlebar

On the front axis column, the universal mount can be attached with the long side (A) facing to the front or to the rear, thus allowing almost complete rotation of an attachment in any desired position. The short side (B) serves as a mount for the hand holder.



The handle can be moved to the left and right in the row of holes if necessary to compensate for asymmetries and contractures in the upper extremities.

Saddle

Height

The height of the saddle should be adjusted so that the child finds a firm seat **at the beginning of therapy and can place both legs on the ground**. As the therapy progresses, the height of the saddle should be adjusted so that it no longer makes direct contact when the muscles in the lower body are actively used, but the child can sit down at any time in case of muscular weakness, tone, etc. and find a firm and secure hold.

Angle

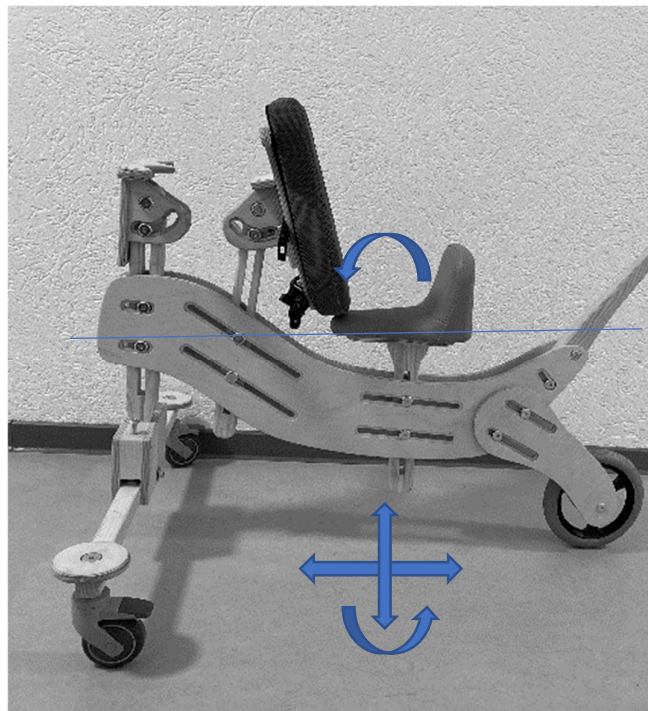
The saddle can be placed in a neutral position, but the saddle post must be fixed in a perpendicular position to the ground.

The wide buttocks will allow the pelvis to tilt.

A slight forward tilt of the saddle column pushes the pelvis into a forward tilt, which is conducive to the development of physio-logical lumbar lordosis.

By slightly tilting the seat post backwards, the pelvis is brought into a slight backward tilt. This can be helpful if the lumbar lordosis is too severe.

In principle, however, the child must sit comfortably and without pain. This ultimately determines the adjustment of the saddle's angle.



Minimum seat
height

Positioning front / rear

In principle, the child's shoulders must not overhang an imaginary line perpendicular to the centre of the front axis in order to avoid tipping forward. At the beginning of use, the head should also be behind this imaginary line. As hand activity and stability in the trunk and pelvis increase, the seat/chest support can gradually move forward. However, the shoulders should still be behind the imaginary perpendicular to the centre of the wheels. The shoulder position should be as far forward as possible to facilitate reaching and manual activities in front of the mobility aid. The positioning therefore depends on the degree to which the child needs to lean forward with the torso facing the front.

With increasing mobility, it is important to check that the child is positioned far enough back so that he/she does not step on the front axis with his/her feet.

The saddle column and thus the saddle can be adjusted in all possible ways by opening and hand-tightly closing the clamps (with Allen key and counter Allen key). An assistant who supports the child at the beginning is strongly recommended to avoid injuries. Do not make any adjustments to the NAGGL mobility aid with a child sitting on the mobility aid. If this is necessary in exceptional cases, it is essential to work with a helper to hold the child and take great care to avoid trapping or crushing any persons involved.

Torso stabilisation

Height

The height of the chest support and chest plate should be adjusted so that the child can lean on it securely but can move its head freely. The chest support should not protrude higher than the collar bones. The height can be adjusted via the slotted holes in the column of the chest support but also by the offset in the row of holes on the universal mounting support.

Angle

The angle, or the forward inclination in space, is determined by clinical conditions such as contractures, trunk stability, head control, muscular tone. In principle, the more unstable the trunk and the more unstable the pelvis, the more forward inclination of the chest plate. The pre-tilt must be tested clinically. **Your child will show you what degree of support and pre-tilt he/she needs.**

Positioning anterior / posterior

Forward and backward positioning depends on the stability and tone of the trunk and pelvis and head control. In principle, the child's shoulders should not overhang in front of a line perpendicular to the centre of the front axis in order to avoid tipping over to the front. At the beginning of use, the head should also be behind this imaginary line. As hand activity and stability in the trunk and pelvis increase, the seat/chest support can gradually move forward. However, the shoulders should still be behind the imaginary perpendicular line to the centre of the wheels. The shoulder position should be as far forward as possible to facilitate reaching and manual activities in front of the mobility aid. The positioning therefore depends on the degree of the necessary forward tilt of the child with the torso to the front. The chest column and the associated universal support can be adjusted in any desired way by opening and hand-tightening the clamps (with Allen key and counter Allen key). An assistant to support the child at the beginning is recommended.

Chest pad

To improve comfort and protect the head, the chest plate is fitted with a removable chest pad. This is simply velcroed onto the Velcro hook straps embedded in the chest plate.

The pad is larger than the chest plate. It must be placed in the centre to protect the edges of the chest plate from head impact. The lateral protrusions of the breast pad can be used to stabilise the torso. The chest pad is removable and can be separated from the foam core. It can be washed with standard detergents (see also Maintenance and care).

The chest pad stabilises the head by resting it forward. If the head control of your child is not sufficient, a modified chest pad with an extension of the support surface in the upper part can be used.

Alternatively, a separate headrest or universal support can be used in special construction. In this case, please contact Conixus Benelux BV or an authorised representative of Conixus Benelux B.V..

The torso stabilisation and the associated chest support can be adjusted in any desired way by opening and hand-tightly closing the clamps (with Allen key and counter Allen key). An assistant to support the child at the beginning is strongly recommended to avoid injuries. Do not make any adjustments to the NAGGL mobility aid with a child sitting on the mobility aid.

If this is necessary in exceptional cases, it is essential to work with a helper to hold the child and take great care to avoid trapping or crushing any persons involved.

Rear wheel support

The rear wheel support is usually adjusted during the basic adjustments.

You can also change the position of the rear wheel support at a later time.

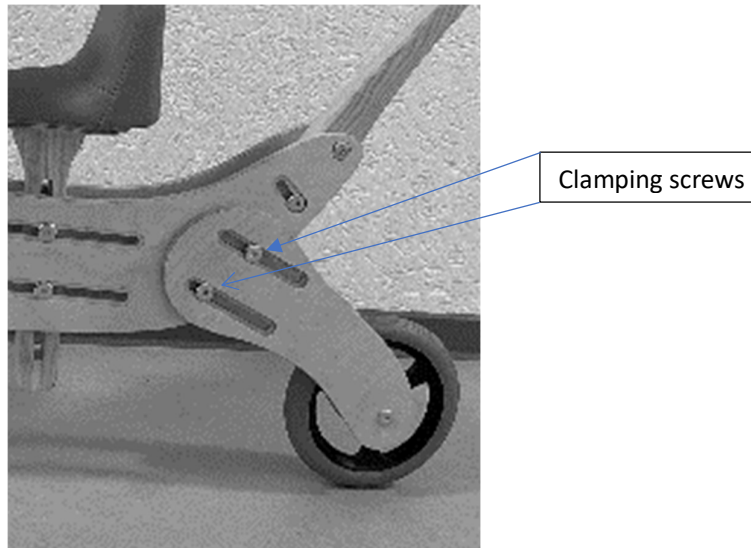
Open the two clamping screws and adjust the setting. (Change angle and height, ...).

Then carefully tighten the clamping screws again using both Allen keys (tighten and lock).

Normally the rear wheel support is mounted with the round side up. Under certain circumstances you can also install the swingarms with the concave side up.

This can sometimes be necessary when using orthoses. In this case, the rear wheel support acts in the sense of an abduction aid and facilitates the sliding movement when walking along the base frame, especially when the muscular tone of the hip joint-aspirating muscles is very high.

After adjustments are made, make sure to correct and adjust all other settings if necessary, as the conversion changes the tilting of the base frame and thus all other parameters can change as well.



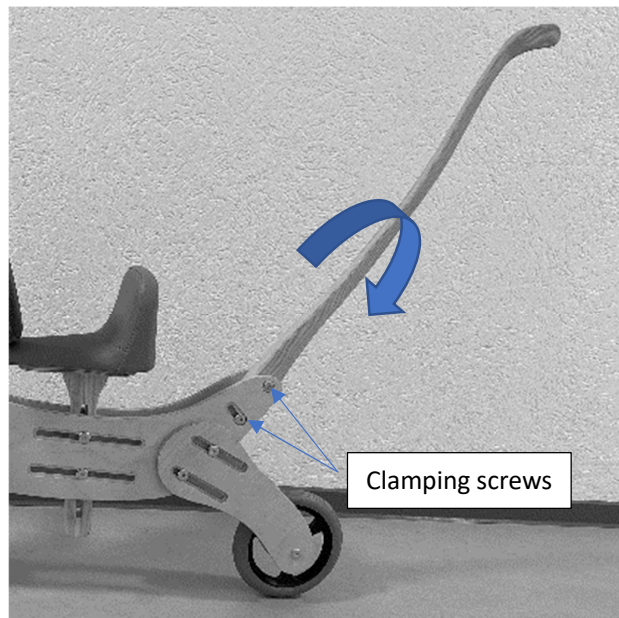
Push bar

The standard NAGGL mobility aid is equipped with a push bar. The push bar can be adjusted completely independently of the child's position on the mobility aid.

To adjust the push bar, loosen the two clamping screws with the Allen keys and set a comfortable height to support your child. The use of the push bar can be useful to helping the child increase the impulse for forward movement, but also to slow it down a little if the urge to move forward is too strong. It can also be used to increase the rolling resistance or to fix the device for a short time, e.g., for manual activities in standing position as a standing support. You can influence your child's mobility and motor actions by gently using the push bar without direct body contact.

After successful adjustment, fix the push bar by tightening the clamping screws.

The push bar is not absolutely necessary for your child to use the device. You can also use the NAGGL mobility aid without the push bar. This may be particularly helpful in confined spaces in order to increase your child's range of action..



Notes on further support for your child:

In addition to using the push bar, you can also position yourself directly behind your child and guide the NAGGL mobility aid. You can support your child from behind and easily give impulses for step direction or torso straightening. This is especially important when exploring the three-dimensional space at the beginning of use. Allow your child to test limits. Give your child help and support in situations that are not compatible with the method. Standing and or walking freely should be the learning strategy towards an upright position.

The NAGGL mobility aid is an active walking and standing support and is not intended to passively keep your child in a vertical position.

Experiencing and exploring these situations can be very strenuous and tiring for your child. **Choose shorter and more frequent periods of use per day**, especially in the beginning. Pay attention to your child, he/she will show you the limits of his/her capacity for verticality. **Standing safely and actively is the first step towards walking!**

Dynamic pelvic and trunk support

The dynamic pelvic and trunk support is not a classical fixation of your child on the mobility aid, but rather serves to support the self-awareness of the trunk and pelvis.

We recommend the use of the dynamic pelvic and hip support especially at the beginning of the application, as it supports the orientation in the three-dimensional space through proprioceptive impulses (depth sensitivity). Allow your child to test limits. Give your child help and support in situations that are not compatible with the method. Standing and or walking freely should be the learning strategy towards an upright position.

The NAGGL mobility aid is an active walking and standing support and does not serve to passively keep the child in a vertical position.

Experiencing and exploring verticalization can be very strenuous and tiring for your child, especially at the beginning. Choose shorter and more frequent periods of use per day, especially in the beginning. Pay attention to your child, he/she will show you the limits of his/her capacities for verticalization. Standing safely and actively is the first step towards walking!

The dynamic pelvic and trunk support consists of a two-part neoprene belt and the receptacles on the chest support through plastic fasteners.

Click in one side with the straps and the fasteners so that the Velcro has contact with the fleece neoprene.

Tighten the straps to the buckles as required. Adjust the width of the harness using the adjustable Velcro fastener on both parts of the harness. The tension of the belt and the contact height on the torso and pelvis are variable and depend on the limitations and motor skills of your child and the therapy goals.



Tools

We supply the following tools for adjusting the settings on the unit.

2 x 5 mm Allen key

This spanner set can be used to make all relevant adjustments to the frame, front axis damping and supports, as well as the fixings and adjustments of the universal mounts.

1 x 30 Torx Allen key

This tool can be used to adjust and fix attachments such as hand rest, chest support, parts in special construction on the universal mounts.



General notes

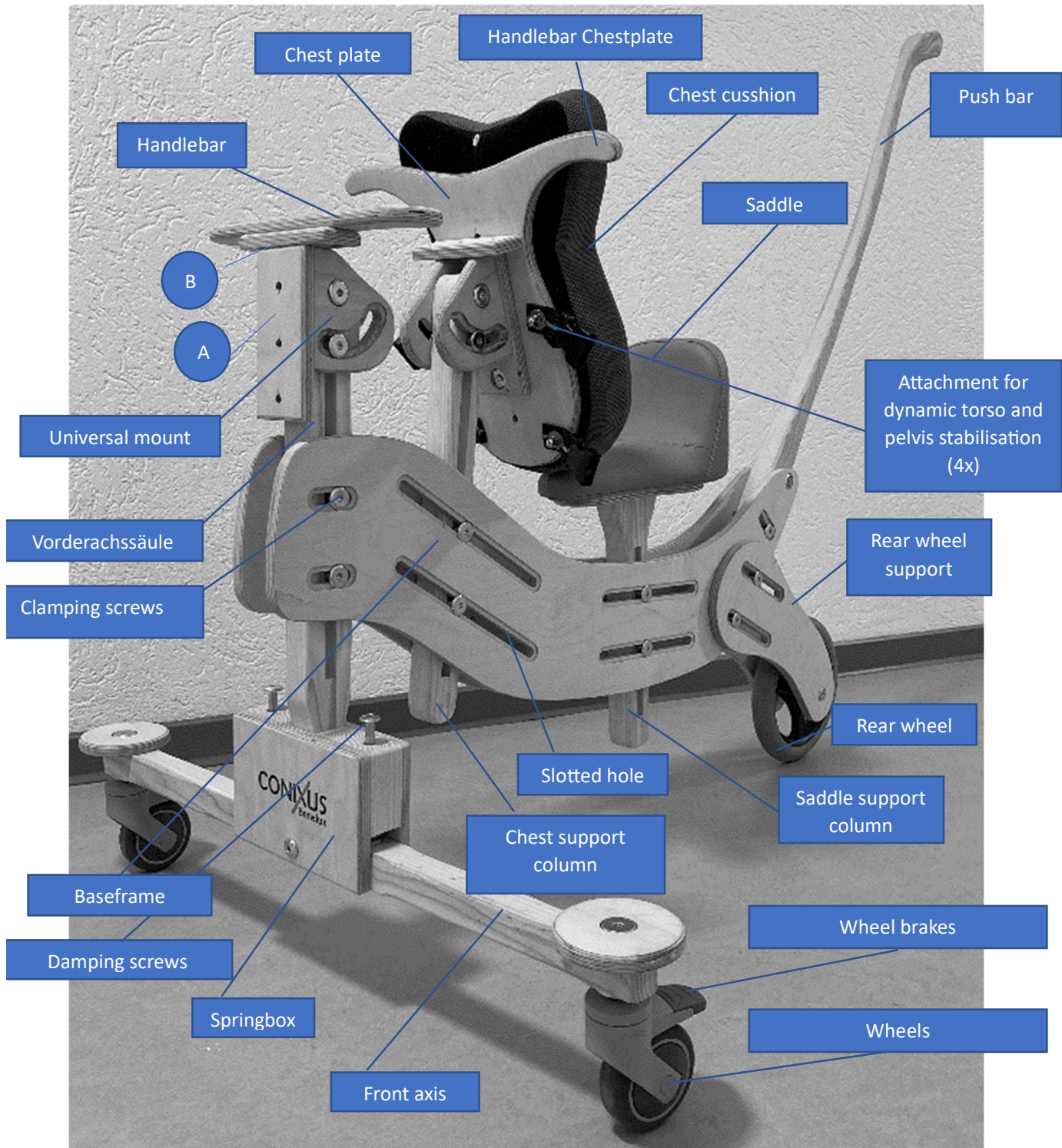
We use carefully selected wood as the main component for the construction of our NAGGL mobility aid. Wood reacts to external influences such as temperature fluctuations and humidity. You should therefore avoid large fluctuations in temperature (e.g. storage next to heating sources) or large fluctuations in humidity (e.g. storage in damp rooms). If the wood gets wet, you should remove the water promptly with a dry cloth in order to retain the natural beauty of the wood for a longer time and to prevent damage to the appliance.

Avoid storing the appliance next to heat sources, as the wooden parts could crack and/or the metal parts could heat up considerably and your child could be harmed by thermal effects.

Due to the natural expansion of wood at high humidity and shrinkage at low humidity, please check the tight fit of the clamping screws for the add-on parts on the frame and on the universal mountings daily before use.

The screws for fixing the attachments (handle / plate for chest support) are anchored differently than the clamping screws. Counter-holding is not possible. A 30 Torx Allen key is included in the delivery to adjust these specific screws.

Terminology



Loosening and opening the clamping and screw connections.

All clamping screws on the frame and on the universal mountings consist of 2 sleeve nuts and a bolt. The bolt-sleeve nut system is mainly identical for all clamps. The clamping of the rear swingarm differs only by two slightly longer bolts, with washers in between.

To loosen and open the bolt-sleeve-nut connection, use the two supplied 5 mm Allen keys. One key is put on and fixes the sleeve nut, the other is used to loosen the sleeve nut by turning the key anti-clockwise. With the clockwise direction you wear the connection.

The clamping is done between the frame and the support columns. Make sure that the screws run inside the long holes of the support columns,

It is sufficient to **tighten all screws hand-tight with the supplied Allen keys** (5mm and 30 Torx). If the screws are overtightened, the hexagon socket of the screws and the wooden structures will be irreparably damaged.



Fixing the handlebar and the base plate

To loosen and fix the screws of the handle and the base plate on the universal mount, use the 30 Torx Allen key supplied.

Open the screws by turning them anticlockwise, close the screws clockwise. Also tighten these screws only hand-tight to avoid damage to the unit by overtightening the screws.

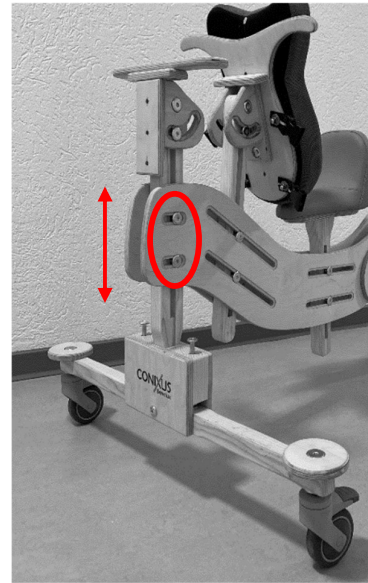


Front axis

Adjusting the height of the base frame

By opening the clamping screws on the front axis column, you can move the frame up or down as you wish by sliding it in the slotted hole of the front axis column and set the base frame height.

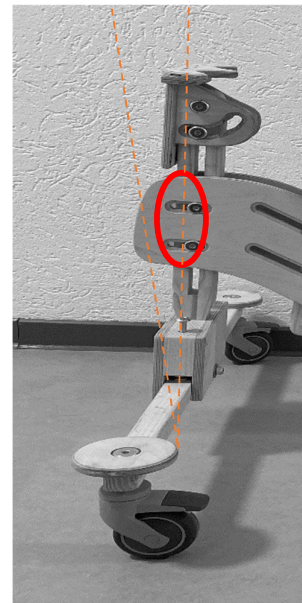
Open and fix both clamping screws as described and check that they are firmly seated before use.



Adjusting the wheels

By opening the clamping screws you can tilt the front axis column forward as you wish by moving it in the slotted hole of the front axis column. More than 5° of caster is usually not necessary.

Open and fix both clamping screws and check that they are firmly seated before use.



Adjusting the damping

To change the lateral inclination and / or the damping of the springs, open or loosen the screws on the spring box on the front axis with the 5 mm Allen key.

Variations:

Turn clockwise

-> Maximising the damping and inclination to the opposite side

Turning anticlockwise

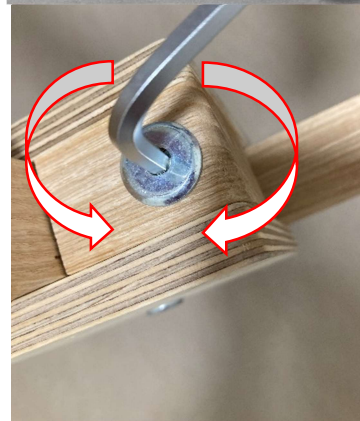
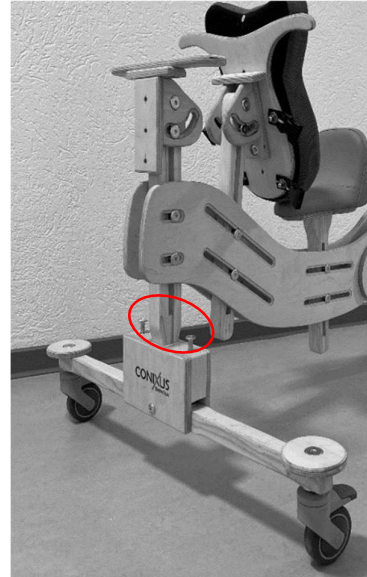
-> Minimisation of damping and inclination to the same side

Turning clockwise on both sides

-> Maximisation of damping without inclination to the opposite side

Turning counterclockwise on both sides

-> Minimisation of damping without inclination to the opposite side



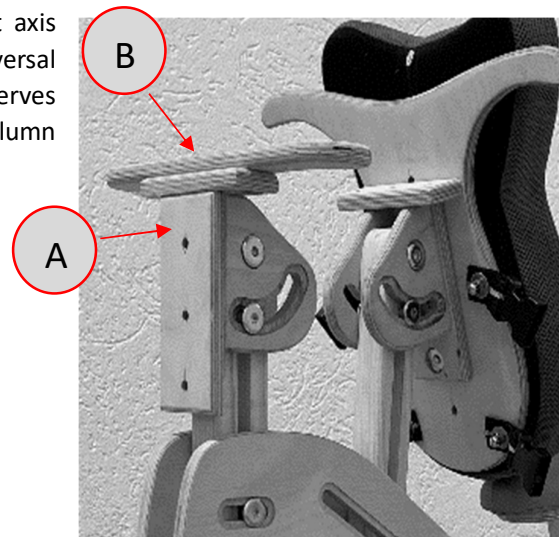
Opening/releasing the parking brakes

The mobility aid can be locked by pressing the red levers on the two wheels of the front axis. To do this, press the red button with your foot or hand. The brake locks automatically. To release, lift the lever with your foot or hand, the lever locks itself in the open position.



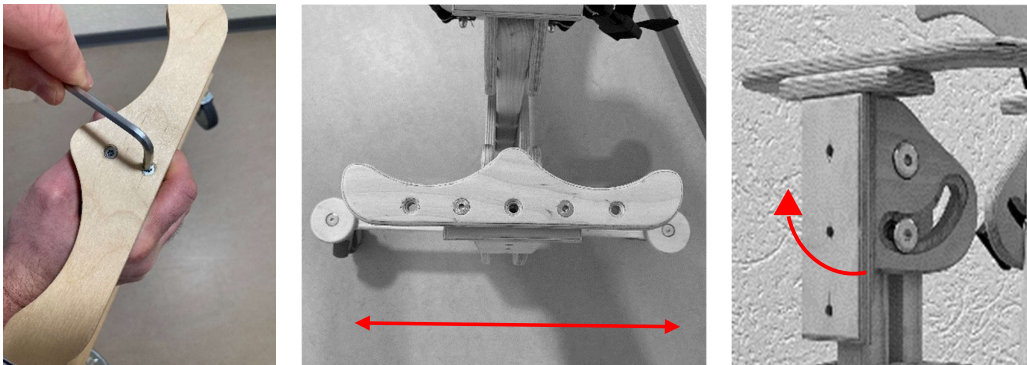
Universal mount for attachments

The ends of the support column and the front axis pillar are designed for the attachment of a universal mount. This mount has a high swivel radius and serves as a support for the handlebar on the front axis column and for the chestplate in the basic configuration.



Handlebar

On principle, the universal mount can be attached to the front axis column with the long side (see A) pointing forwards or backwards, thus allowing almost complete rotation of the attachment in any desired position. The short (B) leg serves as a receptacle for the handle holder.



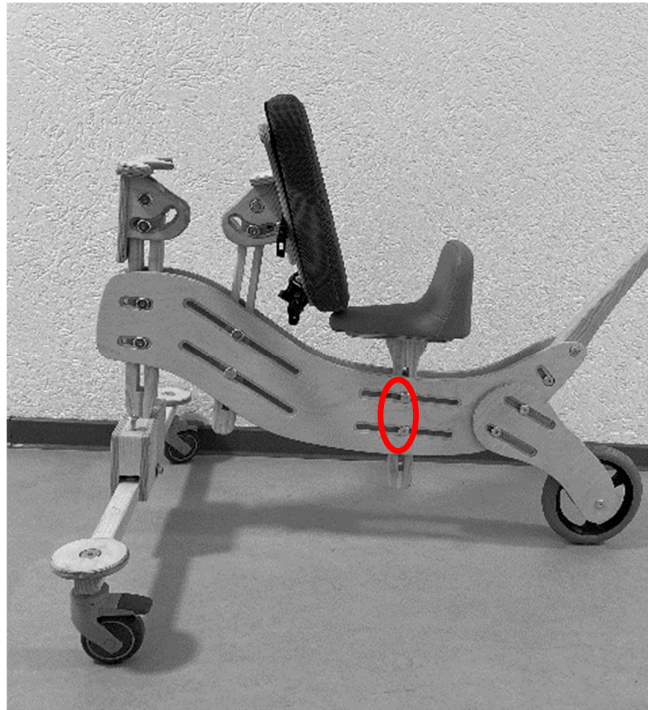
If necessary, the handle can be moved to the left and to the right in the row of holes in order to compensate for asymmetries and contractures in the upper extremities. Open and fix both clamping screws as described and check if they are tightened before use.

Saddle

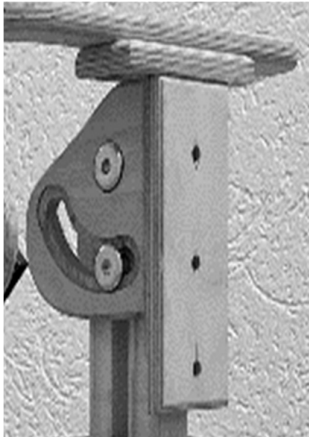
The saddle is adjusted by opening the clamping screws for the saddle. After untightening the screws, the saddle can be adjusted in the slotted hole of the base frame and in the slotted hole of the saddle column.

Open and fix both clamping screws as described and check that they are tightened before use.

A saddle covered with imitation leather sits on the saddle column and is mounted to the mounting plate of the saddle column with 3 screws. In case of contamination, the saddle can be loosened for cleaning according to the recommendations and then fixed again with the screws. For damage-free loosening and fixing of the bolts, removal of the seat post by opening the clamping bolts is strongly recommended.



Chest stabilisation



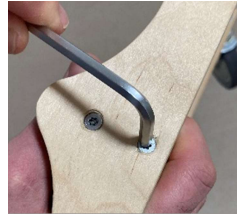
Two clamping screws fix the chestpiece support to the frame. These are opened for adjustment in the same way as for adjusting the saddle support. Then the chestpiece support can be adjusted in the slotted hole of the base frame. Open and fix both clamping screws as described and before use check if the clamp is tightened well.

At the upper end of the chestpiece support there is a universal mount like the front axis pillar.

To adjust the angle, the two clamping screws must be opened. Then the universal mount can be adjusted. The chest plate is mounted on the long support column and can be adjusted in height by the variable perforation in line. Open and fix both clamping screws as described and before use check if the clamp is tightened well.



The **chestplate** is fixed on the long side of the attachment mount with 3 screws. You can vary the height of the chest plate by moving the screws in the row of holes. To do this, use the 30 Torx Allen key supplied as described.



The **chest pad** is fixed to the chest plate with 2 velcro strips and can be removed quickly and easily. The cover of the pad can be removed by opening the zip and cleaned according to instructions.



Rear wheel support

The rear wheel support is adjusted by opening the two clamping screws. When open, the rear wheel support can be moved in relation to each other in the long holes.

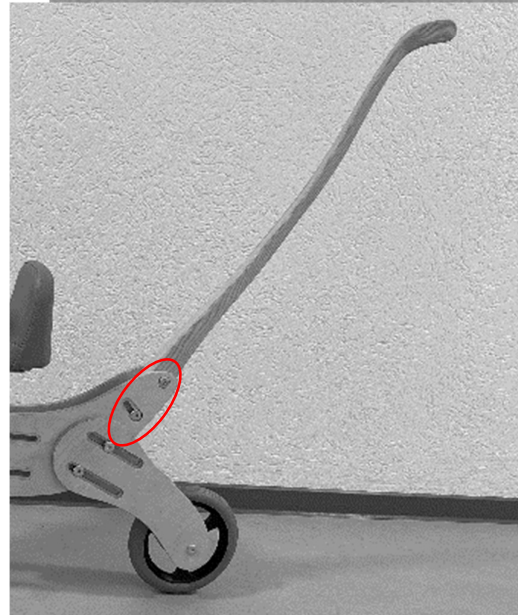
Open and fix both clamping screws as described and check that they are tightened before use.



Push bar

The push bar is adjusted by opening the two clamping screws.

The push bar is not absolutely necessary for your child to use the device. You can also use the NAGGL mobility aid without the push bar. Removal may be helpful in confined spaces, this is done to increase your child's radius of action.



Dynamic pelvic and trunk support

The dynamic pelvic and torso support is plugged into the pre-assembled connectors on the chest plate.

The adjustment of the width can be done with the length of the loops on the pelvic/torso belt.

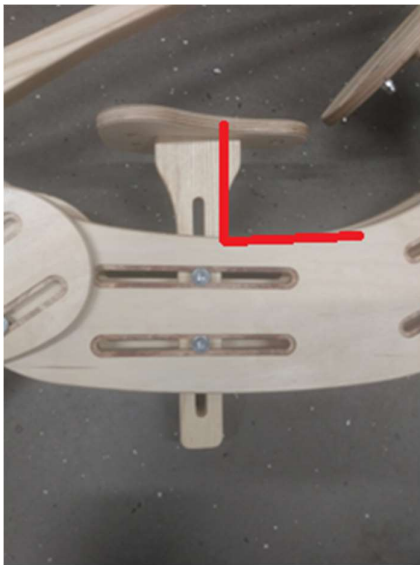
Both sides of the belt are also provided with a loop and a Velcro part, so that adjustment of the length is also possible.

The walking device can also be used without dynamic pelvic-torso stabilisation.



Save adjustments

When adjusting the device fasten the parts in a manner that it does not create tight corners. A limb or head could get caught and cause serious injury.



right adjustment



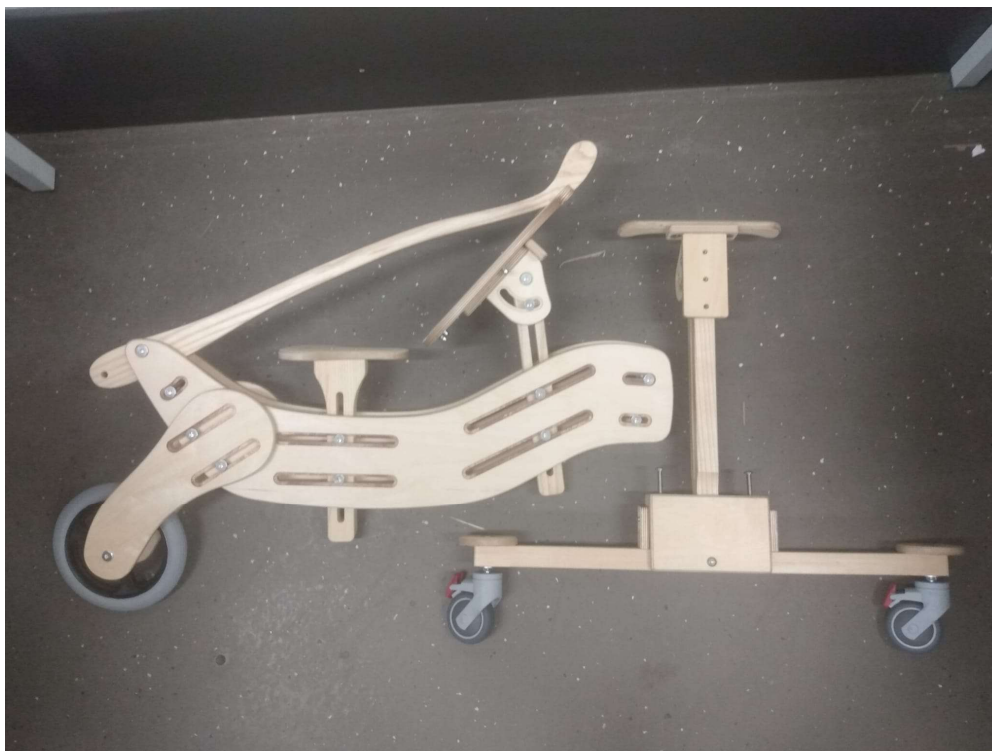
Wrong adjustment

Dismounting

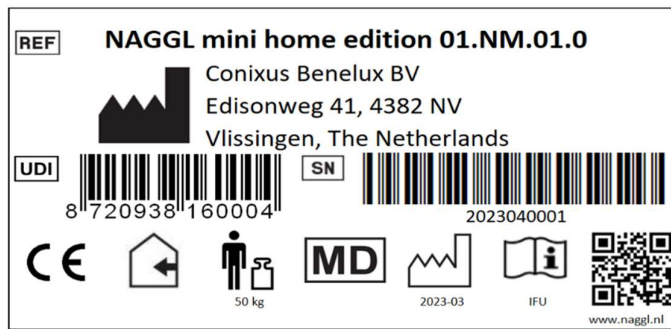
For transport and storage, you can remove the front axis by completely removing the clamping screws. This results in two components which can be carried easily.

You can also remove the lower clamping screw from the push bar. The push bar can then be turned over thus considerably reducing the length of the device.

After removing the clamping screws, fasten these in the empty holes to prevent them from getting lost.



Product identification / Notes



Intended for indoor use
This product is intended for indoor use only



Max user weight
The product is made for users up to 50 kg. (110 lbs.)



Medical device
This product is a medical device.



operating instructions
The instructions for use indicated with this symbol, should be considered when operating the device.



CE marking
The product is in conformity with European health, safety, and environmental protection standards



Manufacturer
The name and location of the manufacturer.



Date of manufacture
Year and month in with the unit was manufactured. (YYYY-MM)



Catalogue number
The name and number next to this symbol are used to identify the product in accordance with the manufacturer's catalogue.



Unique device identifier
The number next to this symbol is a unique number assigned to the product.



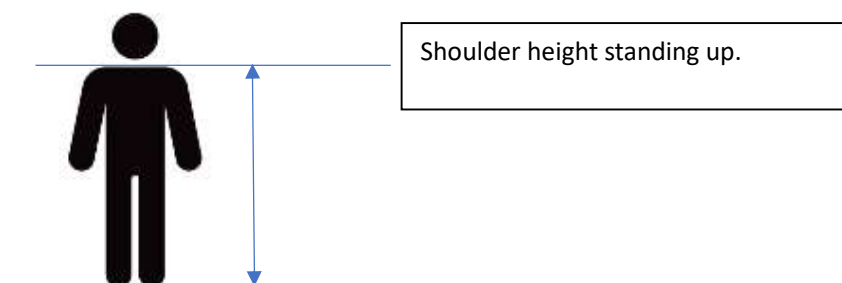
Serial number
The number next to this symbol is used to identify a particular unit.

Overloading the mobility aid may result in damage to the device, but also bring danger to the user and other persons due to possible resulting malfunction.

Body size

We deliberately do not give any information about the maximum body height of the user, as the actual body height of severely affected children usually does not correspond to the measured body height due to muscular weakness with or without contractures. The measured body height when lying down is usually longer than under load during verticalization. As a recommendation, we state that a shoulder height of 100 cm at maximum verticalization should not be exceeded for safe use of the NAGGL mobility aid.

You will also find the details attached to the back of the spring box.



Maintenance, care, reuse and disposal

Maintenance / Care

Wood is a natural product, please avoid strong fluctuations in temperature and humidity. Our product is protected with a hard oil wax. You can wipe the NAGGL mobility aid damp with a cloth if it becomes dirty with water and a mild cleaning agent (hand soap / dishwashing liquid). After washing, dry the mobility aid with a dry cloth if necessary. The surfaces are resistant to commercially available disinfectants to a limited extent. We recommend non-alcoholic disinfectants, for example, Clean Sept Wipes from Schumacher or similar products from other manufacturers.

The cushion for padding the chest can be removed by opening the zip and washed at 30°C according to the sewn-in care instructions using a household detergent. The fabric is not suitable for tumble drying. In the case of contamination, the foam insert can also be cleaned with a commercially available detergent. Make sure that the foam is completely dry before using it again.

Inspection

Wood can shrink and swell. Therefore, check the strength of all screw connections regularly before use. Also check that the wheels on the front axis and rear wheel are working properly. Before each use, check the operation of the parking brakes on the wheels of the front axis. Before each use, check for damage to the wooden components and the metal and plastic components such as the saddle, the chest pad and the pelvic stabilisation strap. In case of questions or uncertainties, contact Conixus Benelux BV or a person and institution authorised by Conixus Benelux.

Repair

In the event of problems, please contact Conixus Benelux BV or a person and institution authorised by Conixus Benelux immediately. Only original spare parts from the manufacturer, Conixus Benelux BV,

may be used for repair and maintenance of the mobility aid NAGGL. Conixus Benelux BV must be informed if special parts have to be replaced. Conixus Benelux BV accepts no liability for damage or injury caused by an unauthorised person or institution, or by the use of non-original Conixus Benelux BV spare parts. This also applies to equipment or components from possible third-party suppliers or repairs carried out by unauthorised persons.

Reuse

The mobility aid NAGGL is suitable and designed for re-use. We provide all documents as download on our homepage. In the event of reuse, it is essential that the operating instructions are also supplied. The chest pad, the saddle and the belt for dynamic pelvic stabilisation are parts must be replaced as these are prone to wear. The wheels must also be replaced for the same reason. The other components must be visually inspected for damage and, if necessary, replaced with original spare parts from Conixus Benelux BV before being used again.

Disposal

For proper disposal, please contact us via mail, service@naggl.nl. We will instruct one of our service partners to retrieve the product.

Troubleshooting

| Malfunction | Possible solutions |
|--|--|
| The front axis oscillates too much | Check if the spring damping adjustment and tension the damping is positioned symmetrically. |
| The base frame is tilted to one side | This can be adjusted with asymmetric spring tension of the front axis when the child is loaded unevenly. If you do not want the frame to be crooked, balance the frame centrally by tensioning a spring on one side. |
| The base frame seems unstable | Tighten all screw connections on the frame. |
| The wheels lock or run heavily | Check the parking brake on the wheels, clean the wheels of hair or other dirt particles if necessary. |
| The wheels cannot be locked | Check the parking brake on the wheels, clean the wheels of hair or other dirt particles if necessary. |
| The rear wheel locks or runs heavily | If necessary, clean the wheels from hair or other dirt particles. |
| The vertical supports for the torso and saddle pillar slip | Tighten the clamping screws carefully |
| The base frame slips on the front axis column | Tighten the clamping screws carefully. |
| The rear wheel support slips | Carefully tighten the two clamping screws |
| The universal mounts adjust involuntarily | Carefully retighten the two clamping screws |
| The pelvic stabilisation strap no longer holds firmly together | Check and clean the hook tape of the Velcro fastener and free it from foreign material |
| The chest plate wobbles | Tighten the screws carefully |
| The handle wobbles | Tighten the screws carefully |
| The push aid wobbles | Tighten the two clamping screws carefully |

Dimensions

The NAGGL mobility aid is a highly customisable product. Therefore, many specifications are given with a minimum and maximum range. Due to the large number of possible combinations of the adjustment of the base frame, the rear wheel support, the torso and saddle support column in combination with the universal mounts, a large number of adjustments are possible which cannot be represented numerically. The data should therefore only be considered for orientation purposes.

| Dimension | comment | Minimum | Maximum | Fix | |
|--|-----------|---------|---------|---------|----|
| Total width | | | | 7250 mm | A |
| Width base frame | | | | 540 mm | B |
| Width rear wheel support | | | | 78 mm | C |
| Width handlebar | | | | 250 mm | D |
| Width handlebar chest support | | | | 330 mm | E |
| Length without push aid | | 815 mm | 1020 mm | | F |
| Length with push aid | | 1085 mm | 1400 mm | | F' |
| Front height | (a')(a) | 600 mm | 625 mm | | G |
| Height with push aid | (a) | 715 mm | 1155 mm | | G' |
| Height centre of base frame | (a)(b)(e) | 255 mm | 385 mm | | H |
| Height top edge saddle - seat (vertical position) | (a)(c)(d) | 360 mm | 610 mm | | I |
| Height torso support - upper edge (perpendicular position) | (a)(c) | 555 mm | 835 mm | | J |
| Angle adjustment of the universal attachment perpendicular to the column | | 0° | 70° | | K |
| Length of universal attachment leg A | | | | 142 mm | L |
| Length of universal attachment leg B | | | | 25 mm | M |
| Width of universal support leg B | | | | 105 mm | N |
| Swivel radius | (a) | 660 mm | 870 mm | | |
| Lateral inclination of base frame | | 0° | 7° | | |
| Standard weight | | | | 7,4 kg | |
| Load capacity / weight of child | | 0 | 50 kg | | |

(a') Minimum measured at an angle, maximum measured in default position.

(a) Perpendicular to the front axis

(b) Perpendicular to the front slates holes of the saddle support.

(d) Including 30 mm ground clearance from the ground for the seat post.

(e) With the adjustability of the universal mount maximized on the front axis support.

Technical drawing- Dimensioning

Technical data

| Part | Material |
|---|---|
| Frame / Rack,chest unit, handle, Universal seat | Multiplex plywood birch |
| Front axis, push bar, chest-/saddle-post | natural ash, solid wood |
| Surface finish | hardwood oil |
| Upholstery, Saddle, Pelvis stabilisation | Polyester, synthetic rubber (neoprene), imitation leather |
| Screw connections | Steel, galvanised / V2A |
| Wheels, Rear Wheels | Thermoplastic elastomer, polypropylene, polyamide |

Safety and warranty

NAGGL

Safety instructions

-Please read the instructions for use and the operating instructions carefully before using the NAGGL mobility aid for the first time. We recommend that the instructions for use and the operating instructions are stored well so that you can refer to important information on use at any time. Incorrect use or failure to follow the instructions for use could affect the safety of your child or other people. If you lose the instructions for use, you can access them digitally at any time on our homepage or contact our Service Line.



Caution

-Due to the complex motor disorders of the users, the NAGGL mobility aid is already designed for adaptation to individual **modifications**. However, necessary modifications may only be carried out by **persons authorised by Conixus Benelux BV**. The modification must be presented to Conixus Benelux B.V. before it is put into operation.

-The NAGGL mobility aid is conform with the regulation (EU) 2017/745 for medical products. A testing was carried out according to EN 1985:1998. If alterations / modifications were not carried out with original parts from the manufacturer Conixus Benelux BV, the CE conformation expires and the CE marking must be removed.

-We design the maximum service life of our NAGGL mobility aid to be 3 years with daily use in a home environment. After 3 years, it is mandatory that the mobility aid is inspected and repaired by staff which have been authorised by the manufacturer, Conixus Benelux B.V.. After this, the NAGGL mobility aid can be used again without any restrictions.

-**Annual inspection** by staff authorised by Conixus B.V. is mandatory for safe use.

-The NAGGL mobility aid must never be used without supervision. Supervision must be provided by an **adult or trained staff** at all times.

-Ensure that the environment is as hazard-reduced as possible (edges, thresholds, ...). We recommend wearing a protective helmet if necessary to prevent further danger. If left unattended, the use of the product could lead to serious injuries to your child.

-The NAGGL mobility aid may only be used by **one person** at a time when in use. Improper use could result in serious injury to the user.

-If the child moves too uncontrollably or too violently on the NAGGL mobility aid, or if the body dimensions exceed the limitations of the NAGGL mobility aid, the use of the NAGGL mobility aid is not possible. If no alternatives are applicable, permanent assistance by an adult supervisor is mandatory for stabilisation to prevent dangers from uncontrolled falls.

-**Before each use**, all fixtures and components must be checked by an adult for proper placement and tightness. Use of the unit with loose fixings or defective components could result in serious injury.

-It is impossible to design the NAGGL mobility aid from non-flammable materials with our demands for functionality, design and user comfort. Our materials are all chosen to be as flame-resistant as possible, but there is still a **risk of ignition** or melting of plastics at high temperatures. Keep ignition sources such as candles, cigarettes or **very hot objects** such as fireplaces, heating rods or similar away from your child, especially when using the NAGGL mobility aid, in order to absolutely avoid injuries due to direct or thermal effects or their consequences.

-In particular **avoid contact** of the coated products or other harmful substances that could penetrate the fabrics and foam which can be released to your child via the contact surfaces.

-**There is always a risk of trapping soft tissues and extremities such as fingers and toes** if the clamp connections are not properly tightened due to the uncontrolled slipping of the components. In principle, the user could also injure their fingers or toes by inserting them into the slotted holes. The supervisor should avoid this from happening.

-The **supports** for the chest and the seat post or other attachments must have **at least 3 cm of spacing from the floor** to prevent entrapment.

If you have any questions, you can always contact your local service partner or contact us directly. We will be happy to assist you:

Conixus Benelux B.V.
Edisonweg 41
4382 NV Vlissingen

Homepage: www.naggl.nl
Mail: info@naggl.nl

Warranty and services

We are very pleased that you have chosen NAGGL Mobility Assistance for your child and thank you for the trust you have placed in our company.

In addition to the statutory warranty rights applicable in the country in which the product was distributed, the product is covered by a manufacturer's warranty. Your statutory rights in the event of defects with regard to your local service partner are not restricted by this guarantee. You can find the country-specific warranty statement for the country in which you received this product at (www.naggl.nl). Only the warranty conditions listed in the warranty declaration apply.

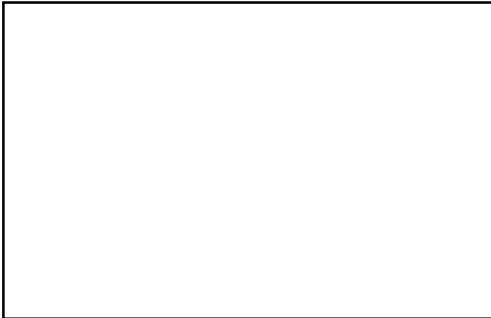
If a defect covered by the warranty occurs in your product during the warranty period, which eliminates or reduces the suitability of the product for everyday use, or if the product is not in the usual condition, you can either contact your local service partner or contact our customer service directly. For more information on customer service and the constantly growing number of authorised service partners, please visit (www.naggl.nl).

Manufacturer

Conixus Benelux B.V.
Edisonweg 41
4382 NV Vlissingen

Homepage: www.naggl.nl
Mail: info@naggl.nl

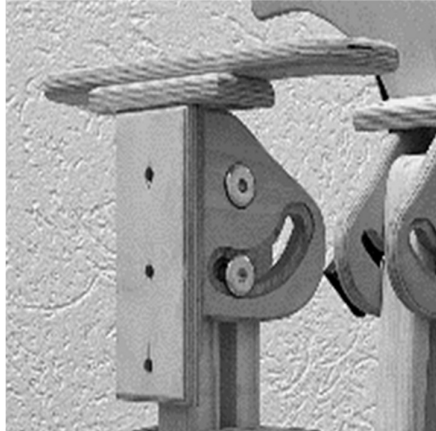
Your authorised service partner



Specific requirements

Due to many years of clinical experience, we are aware of the need for custom-made products and individual adaptations for support, especially for children with severe medical conditions.

For this very reason, we have already developed a universal frame in the basic design to facilitate, or rather enable, special customization with individual adaptations by a professional or business partner.



Modifications within the model are principally possible and also desired. However, these additions must be presented to Conixus Benelux B.V. before use and require explicit approval for application.

Note that any changes to the existing models and or components will void the warranty for the product by Conixus Benelux B.V..

Conixus Benelux B.V. also offers special solutions. Please contact us through our service line or by email.

Warranty declaration

Conixus Benelux B.V. provides a two-year warranty on the workmanship and materials which bear a heavy load (castors and wheels), as well as a three-year warranty on the base frame if used and maintained properly on a daily basis, as described within the manufacturer's instructions.

The saddle, chest pad and the elastic strap for pelvic stabilisation are covered by a one-year warranty and are considered wear items that should approximately be replaced each year, depending on their condition and use.

The NAGGL mobility aid was manufactured from high-quality, renewable materials. We assume that the customer will take daily care and maintenance of the NAGGL with the necessary care. In addition to following the instructions, this also includes the execution of recommended maintenance periods. We are always available to advise you through our Service Line if you have any questions or problems regarding the use, care and maintenance of the mobility aid, as well as in the event of unclear changes caused by the natural wood.

Conixus Benelux BV reserves the right to inspect the product and the necessary documentation. Only after inspection and testing can a warranty claim be accepted. Conixus Benelux BV also reserves the right to decide whether the defect will be replaced or repaired. In the event of a warranty claim, the customer undertakes to return the product in question to the purchase address. The warranty will be granted subsequently by Conixus Benelux BV.

Accidental damage and damage caused by improper use or care are not covered by the warranty. Due to the natural material wood, colour nuances, irregularities in the grain, as well as changes in the colour due to the influence of light are possible. These are to be regarded as optical defects and are not subject to the guarantee. The galvanised metals may lose their initial appearance over time. This is also considered an optical defect without loss of functionality.

If an incident occurs with the device please contact Conixus Benelux B.V. (info@naggl.nl). By recurring incidents and high risk incidents, Conixus Benelux B.V. will start an investigation to locate and resolve any flaws in the device to reduce or eliminate the risk of the incident occurring in the future. We are an ISO certified company that will handle your complaint or incident with highest confidentiality and we will handle your complaints and remarks within 48 hours after originally sent request towards Conixus Benelux BV by email.

Service Contracts

The Naggl is a medical device class 1 but it is preferable to have a regular check once a year with your business partner upon the changes you want in adjustment but also to service some of the parts used in the device. It depends upon the country, your location and the business partners if a service contract can be closed for your product, beyond the warranty replacement of parts and with specified response-times to help you as a customer as fast as possible.

If you are not satisfied with the warranty or service you received, please send a short email to service@naggl.nl and we will take contact with you.

Change log

The following changes have been made to the manual.

04.05.03.0, 29-06-2023

This is considered the first version of the manual, changes made before this have not been seen by the public.