



User's manual

Orthopedic standing and walking brace system


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User's manual for NF-Walker 2

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1. Introduction

Congratulations on choosing the NF-Walker 2 aid. Every human has the right to movement. At Made for Movement, we make it our mission to offer opportunities for movement to people with restricted movement or who are only able to move on their own to a limited extent. NF-Walker 2 offers users with limited ability to stand or walk independently the opportunity of dynamic standing, walking and movement. NF-Walker 2 can be adjusted to suit the needs of most users. These instructions provide an introduction to the use of the NF-Walker 2.

2. Intended use

NF-Walker 2 is a helping aid intended to allow dynamic standing, walking and movement. NF-Walker 2 comes in two sizes: XS (extra small) and S (small). Please refer to chapter 5 for more information about the different sizes.

2.1 Contraindications

The user's therapist, doctor or the person prescribing NF-Walker 2 is in all cases responsible for evaluating any risks and benefits associated with using the product.

The following should be observed in order to assess possible contraindications:

- Fixed contractures
- Instable bone structure
- Open wounds on the skin in areas of the body that come into contact with parts of NF-Walker 2
- Circulatory disorders
- Respiratory disorders
- Heart complaints
- Epilepsy
- Osteoporosis

3. Symbols used in the user manual



This symbol means that the following text should be read careful







This symbol indicates that the following text contains useful tips

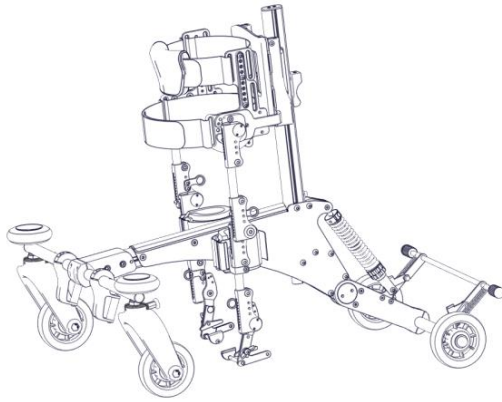
4. Warnings

- NF-Walker 2 must only be used when the user is under the supervision of an adult, responsible person
- NF-Walker 2 is a personal helping aid and must not be used by persons for whom it has not been specially adjusted for
- NF-Walker 2 must not be adjusted by persons not qualified to do so
- NF-Walker 2 must not be used without regular follow-ups by Made for Movement or its representatives
- NF-Walker 2 must only be used with shoes compatible with the shoe-clips belonging to NF-Walker 2's brace
- NF-Walker 2 must be stored in such a way that children or unauthorised persons cannot use it as a toy or tamper with the settings
- NF-Walker 2 may only be used and stored in dry environments. Not in wet rooms as showers, washing areas, moist environments etc.
- During transport, the NF-Walker 2 must be appropriately secured to avoid transport damage or damage to the interior of the vehicle or persons in the car
- Belts, straps, paddings and upholsters are flammable!
- Control the surface-temperature of the NF-Walker 2 before use. NF-Walker 2 may be affected in temperature by heaters, direct sunlight etc.
- There are squeeze hazards for fingers around the joints of the brace during handling and use. Please be careful and aware of where the user is placing his/hers hands and where you as an assistant are holding on to the NF-Walker's brace.

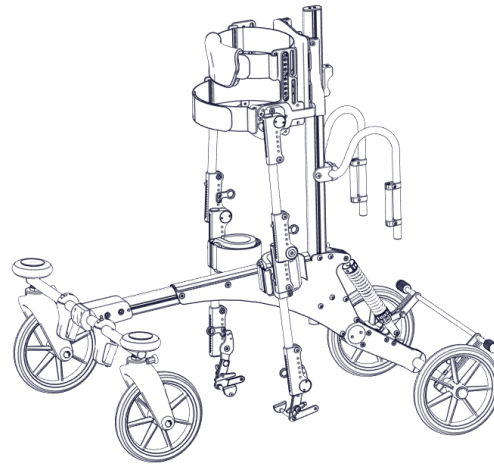
Warnings – continued

-  NF-Walker 2 is certified for both indoor and outdoor use
-  No modification of this equipment is allowed. Modifications may lead to dangerous situations and product breakdown
-  Do not fit other accessories to the product than what is described in this user's manual chapter 12. This will lead to non-compliance of the certification belonging to the NF-Walker 2
-  Make sure that there is always a piece of clothing between the user's skin and places on the body that are in contact with the product. This is important to minimise the risk of allergic reactions and to prevent blisters during use.

5. Technical description



Picture no. 1 Complete NF-Walker 2 size XS with small kit



Picture no. 2 Complete NF-Walker 2 size S

The NF-Walker 2 is delivered in two sizes:

XS extra small user size 70* – 110cm, max 30 kg

S small user size 100 – 140**cm, max 40 kg

* For the smallest users, a small kit with smaller wheels is necessary.

** Subject for individual evaluation

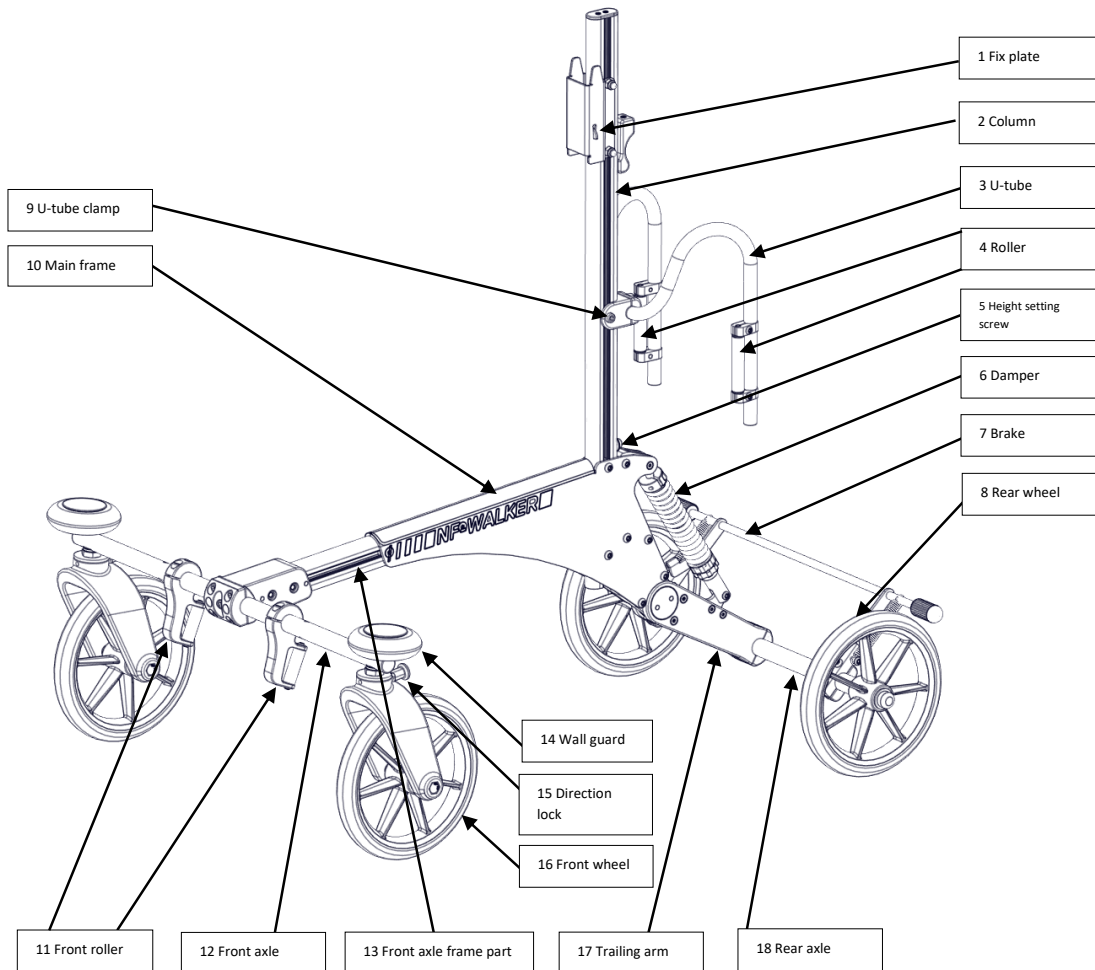
The NF-Walker 2 consist of two main parts: the undercarriage and the brace-system

The NF-Walker 2 is an individual adapted helping aid. Before delivery of the product, the actual user will have to be measured and the measures sent to Made for Movement for initial adjustment. This initial adjustment will adapt the NF-Walker 2 to roughly fit the actual user. A consultant from Made for Movement or its representatives, will make the last adjustments relative to the user and make sure she/he is having the best possible fitting of the product.

Serial number:

Each NF-Walker 2 is having its own unique serial number. This number is located at the back, under the rear frame.

5.1 Undercarriage (chassis):



Picture no. 3 NF-Walker 2 undercarriage (chassis) (this picture shows the undercarriage of NF-Walker 2 size S)

The undercarriage has an H-shape. The front axle (12) and rear axle (18) are connected by the main frame (10). When a user is using the NF-Walker 2, she/he will have one leg at each side of the main frame (10), between the front axle (12) and the rear axle (18). Having the main frame (10) between the user's legs will prevent the user of crossing hers/his legs while using the NF-Walker 2.

The undercarriage has four wheels (8 and 16) with 185mm diameter. The rear wheels (8) are fixed in direction, and a brake (7) can be activated to prevent the undercarriage from rolling. The front wheels (16) can freely rotate 360° or be locked in forward direction using the direction lock (15). The rear wheels (8) are assembled to the rear axle (18) which is having a fixed width. The front wheels (16) are connected to the front axle (12) which is fixed in width.

The front axle (12) is equipped with horizontal wheels (14) that will function as wall guards if the undercarriage is colliding into furniture or walls.

The rear axle (18) is connected to a trailing arm (17) which is suspended by a damper (6). The damper (6) is adjustable in length and stiffness. The damper (6) can be delivered with four different configurations:

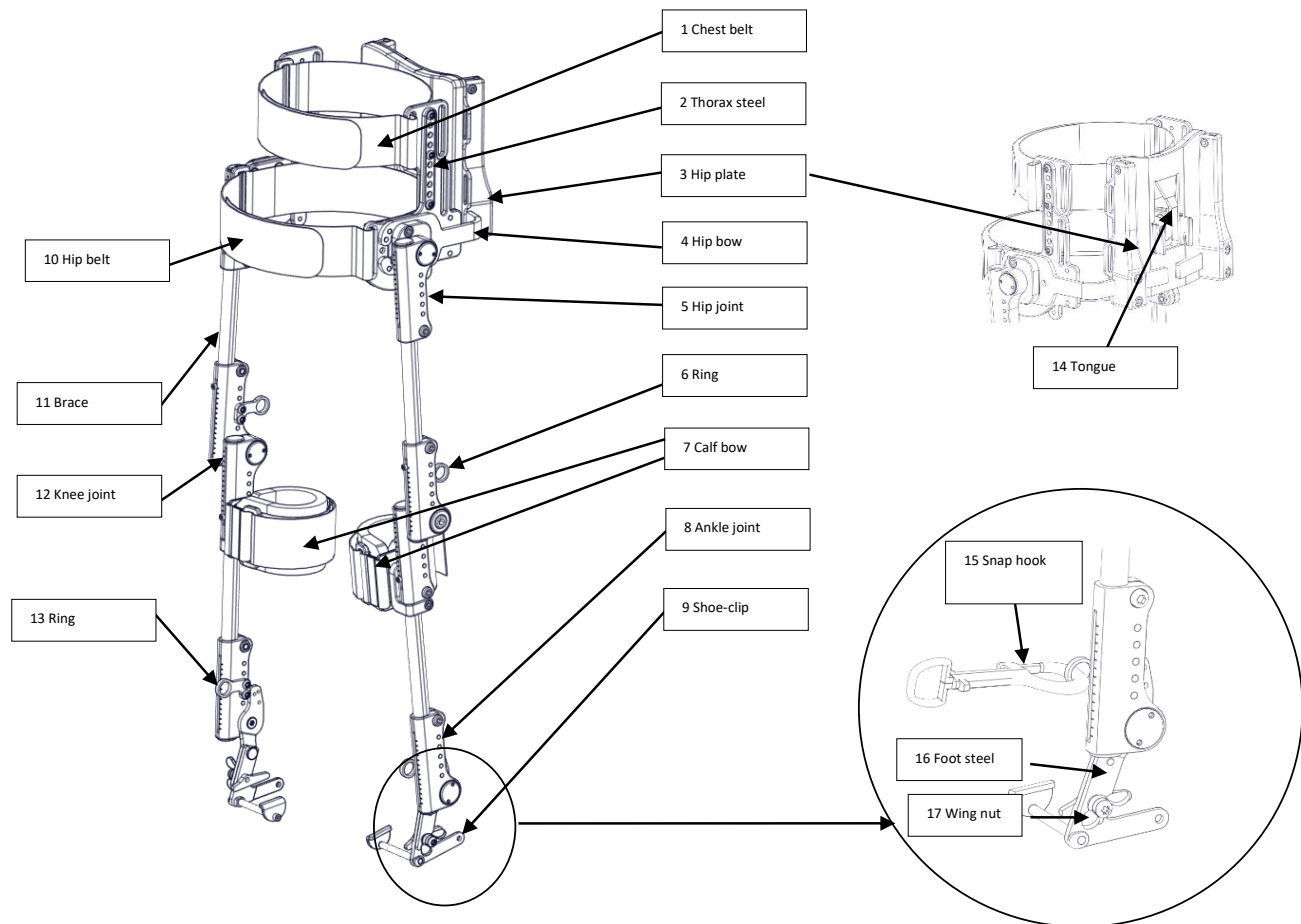
- soft
- medium soft
- medium hard
- hard

The front axle (12) is connected to the front axle frame part (13) which is clamped in place in the main frame (10). Underneath the front axle (12), there is two rollers (11) for guidance of the guide straps/elastics. The front axle of the NF-Walker 2 can be delivered in two widths. The front axle frame part (13) is adjustable in length totally 110mm. The main frame (10) is the connection point for all forces picked up by the undercarriage and is connecting the different parts of the undercarriage together.

A column (2) with a fix plate (1) is placed vertically in the main frame (10). The fix plate (1) is the fixation point for the brace-system. The column (2) is height adjustable. A height setting screw (5) is securing the height of the column (2) together with the clamping done by the main frame (10). The column (2) has a U-tube clamp (9) placed between the height setting screw (5) and the fix plate (1). The U-tube clamp (9) secures the position of the U-tube (3).

The U-tube (3) is fitted with two rollers (4) for guide straps/elastics.

5.2 Brace:



Picture no. 4 NF-Walker 2 brace

The brace has contact with the user's body at the chest belt (1), hip belt (10), calf bows (7) and at both of the user's shoes. The brace system has a chest belt (1), securing the upper body of the user. This belt is possible to adjust in width. The position of the user's upper body relative to the Thorax steel (2) can also be adjusted with the chest belt (1).

The Thorax steels (2) are suspending the fixation point for the chest belt (1) and are adjustable in height. The Thorax steels (2) are fixed to the hip bows (4).

The Hip bows (4) are connected to a hip plate (3) and are adjustable in width. There are 2 different sizes of the hip bows (4) to choose among in order to fit the brace to the user.

The hip plate (3) has upholstery in the front where it can come in contact with the user. At the back there are clamps that allows adjustment of the width of the hip bows (4) and are making a steady fixation point for the hip bows (4). The hip plate (3) is equipped with a tongue (14) that can be connected to the undercarriages fix plate (please refer to chapter 5.1, pos. no. 1).

The hip bows (4) are the fixation point for the hip belt (10) that is adjustable in width and depth. The hip belt (10) will secure the user's pelvic and will also place the user correct in the brace relative to the hip joints (5) turning point.

Hip joints (5) are placed at the outer of the hip bows (4), carrying each of the leg bracings. Each leg is built up of one hip joint (5), one knee joint (12) and one ankle joint (8).

The braces (11) connecting the joints allows telescopic adjustment of the length of the brace.

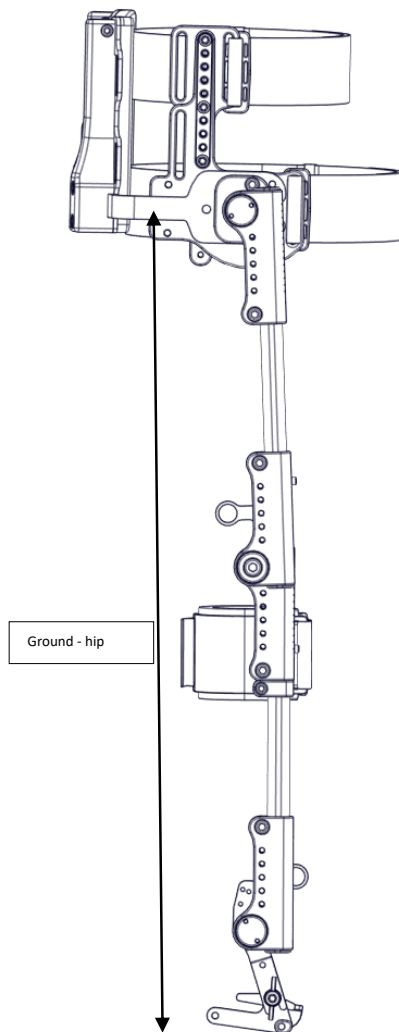
At each leg of the bracing, there are two rings (6 and 13). There is one at the knee joint (12) and one at the ankle joint (8). These are the connection point for the snap hook (15) of the guide strap/elastic that will run over the rollers at the front and back of the undercarriage. The height of these ring clamps (6 and 13) can be adjusted by moving the rings to the next free hole.

Underneath the knee joint (12), there is a calf bow (7) for fixation of the user's calf. The calf bows (7) are equipped with straps, securing the user's calf and are upholstered for comfort.

At each of the ankle joints (8), there is a foot steel (16). This foot steel is the bracket for assembling the user's shoe to the brace.

Shoe-clips (9) for fixation of the user's shoes are attached to the foot steel (16). A wing nut (17) is securing this shoe-clips (9) position. There are several different shoe-clips (9) to choose among. The shoe-clip that fits to the shoes the user will prefer, will be assembled onto the shoe. The shoe-clip will ensure that the shoe is held in the correct position while the user is standing in the NF-Walker 2 and provide an easy way of getting the feet out of the brace-system when the use of NF-Walker 2 comes to an end.

5.3 Adjustment range



Picture no. 5 NF-Walker 2 brace side view

NF-Walker 2

These are typical measures of a user of the NF-Walker 2:

Size Micro

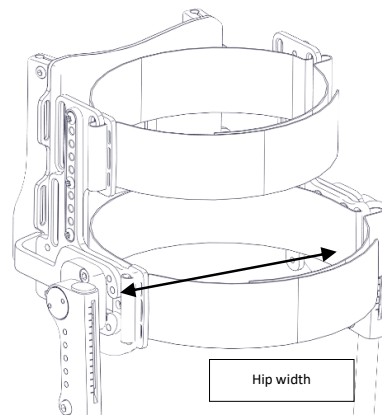
Distance	70cm user	85cm user
Ankle - knee	14cm	22cm
Knee - hip	13cm	22cm
Ground - hip	35cm	45,5cm
Hip width	15cm	23cm

Size XS (extra small)

Distance	80cm user	110cm user
Ankle - knee	16cm	26cm
Knee - hip	16cm	26cm
Ground - hip	40cm	55cm
Hip width	15cm	23cm

Size S (small)

Distance	100cm user	140cm user
Ankle - knee	21cm	34cm
Knee - hip	21cm	34cm
Ground - hip	51cm	70cm
Hip width	18cm	29cm



Picture no. 6 NF-Walker 2 brace hip width

5.4 Guide straps/elastics

There are two guide straps/elastics connecting the brace to the undercarriage. One guide strap/elastic is connected to the ring (6 (chapter 5.2)) near the knee joints (12 (chapter 5.2)) and is running over the rollers at the U-tube (3 (chapter 5.1)). The other guide strap/elastic is connected to the rings (13 (chapter 5.2)) at the ankle joints (9 (chapter 5.2)) and is running over the rollers at the front axle (11 and 12 (chapter 5.1)). The guide straps/elastics can be slacked or tightened according to each user's need.

The guide straps/elastics are having a number of functions:

- Stretching out the user
- Guiding the walking pattern
- Placing the legs under the user's body
- Ensuring weight-bearing through the user's body
- Pulling of the undercarriage while walking


It's possible to use either guide straps or guide elastics - or a combination of these. This will have to be assessed for the actual user of the product.

Elastics will give the user more freedom in movement and less correcting of the gait pattern, while the guide straps will decrease the freedom and increase the correction of the gait pattern.

Some users are using guide elastics for walking and guide straps for stretching in a standing position. This gives the NF-Walker 2 a possibility to be both a walking aid and a dynamic standing frame.

6. Adjustment to a user

When a NF-Walker 2 is ordered to a new user, measures needs to be taken of the user in order to decide the correct size of the product, make initial adjustments and for choosing the correct components for the NF-Walker 2. The user's physio/ergo-therapist is normally responsible for taking these measures, and will, together with a consultant from Made for Movement or its representatives, agree about the need for extra equipment.



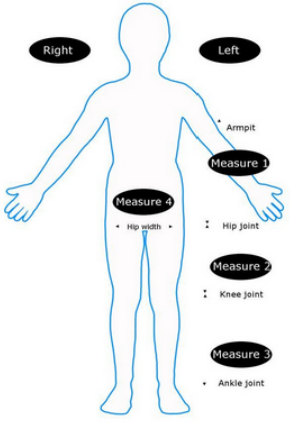
Measureform - NF Walker®

Made for Movement salesman					
Name of user		Physio-therapist		Physio-therapist	
Address		Address		Address	
Postal code/city		Phone/Mobil		Phone/Mobil	
Phone / Mobil		E-mail		E-mail	
E-mail				Date measured	
Shoesize		Address		Height	
Superior		Phone / Mobil		Weight	
		E-mail			

When the form is completed, (pls also remember the field below), you can either fax it or e-mail it to us. Fax: 35505121

Additional information of the user
 When you are measuring the hip-width, it is important that you measure the width not the circumference.
 In case of difference in length of legs please describe

Right		Left	
Measure 1	cm	Measure 1	cm
Measure 2	cm	Measure 2	cm
Measure 3	cm	Measure 3	cm
Measure 4	cm	Measure 4	cm



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Picture no. 7 Measuring form

6.1 Fitting the NF-Walker 2 to the user:

The fitting of the NF-Walker 2 will be done by the consultant from Made for Movement or its representatives where the user is sited: school, kinder garden, at home, training center or other.

- **Brace:** The consultant will take accurate measures of the user's legs and adjust one leg (hip-knee-ankle) of the brace to fit the user. If there is no difference in leg-length, the measures are copied to the opposite brace-leg. Accurate measures of the hip width will be taken and the distance between the hip bows will be adjusted according to this. The hip strap will be adjusted, ensuring correct position of the user in the brace. The height of the chest belt will be adjusted to fit the actual user. The shoes with shoe-clips assembled on to them, will be put onto the brace.
- **Undercarriage:** The brace will be put onto the undercarriage and the height of the column will be adjusted. When the height is adjusted correctly, the shoes shall almost touch the floor. The length of the undercarriage will be controlled and if needed, adjusted by extending the front axle frame part out of the frame. A tip for correct adjustment of the front axle, is that the ankle joint of the brace should not be allowed to touch the front axle. This is important for the stability of the NF-Walker 2 and security of the user. Small adjustments to the length of the damper may be done to compensate the change of angle caused by extending the front axle. The guide straps/elastics are put on the brace and adjusted in length so the brace is approximately in a vertical in position when connected to the frame
- **Try out:** The brace can now be put on to the user. Follow the description in chapter 8.5 – 8.8.

The user is now in the NF-Walker 2. The spring force of the damper can be adjusted so the user will be given the best possible dynamic and movement. The user is now having weight bearing in the shoes, but the pressure from the shoes against the floor may be adjusted by increasing or decreasing the height of the column and/or the force of the damper. The degree of stretching of the user while she/he is walking, can be adjusted by correcting the length of the guide straps/elastics. For stretching only, without walking, guide straps can be adjusted to a length where the user is standing in a vertical position, stretched out in the degree that is needed for her/him.

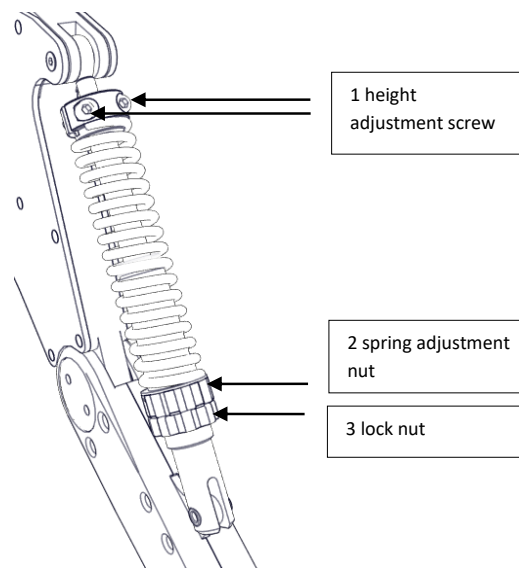


Important: NF-Walker 2 must not be adjusted by persons not qualified to do so.

7. How to adjust

7.1 Damper

- **Height of damper:** Loosen the two screws at the top (1), using a 4mm Umbraco key. Lift the frame up to the wanted height and tighten both screws securely.
- **Stiffness of damper:** Loosen, by hand, the lock nut (3) a couple of turns. If you want the damper to be harder, turn the spring adjustment nut (2) clockwise. Anti-clockwise will give a softer suspension. Tighten the lock nut (3) against the spring adjustment nut (2) after adjustment.



Picture 8 Damper on NF-Walker 2

7.2 Height of column

Loosen the screws (2) at both sides of the frame (6 screws in total). Loosen the height setting screw (3). Adjust the height of the column (1) and tighten all of the screws securely.

- **Adjustment range:** The column can be adjusted within a range of approximately 130mm.



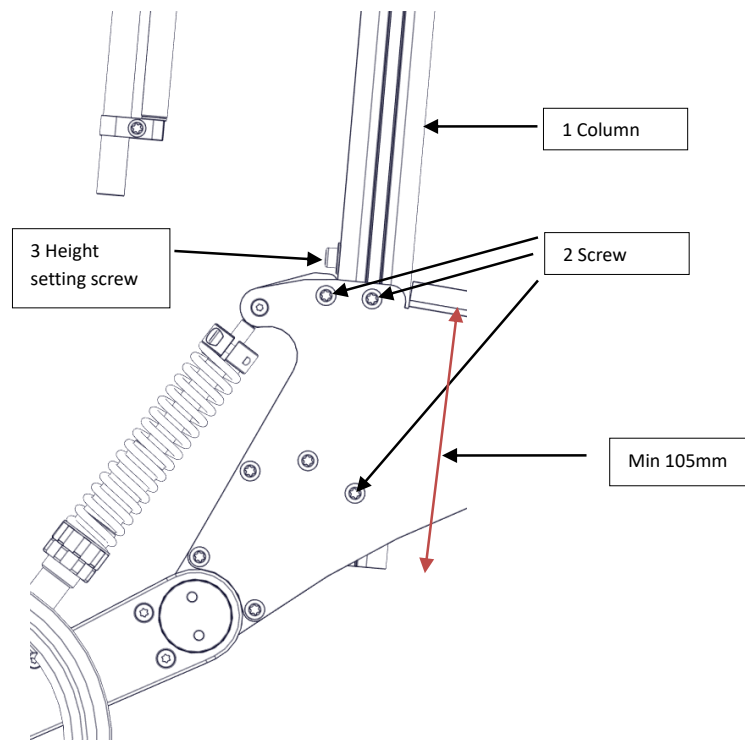
Important: Make sure that the column is at least 105mm down in the main frame. Less intervention between the main frame and column will cause instability in the undercarriage.



Important: NF-Walker 2 must not be adjusted by persons not qualified to do so.



Important: After adjusting the height of the column, please make sure that the column is not touching the floor when the suspension is fully compressed.



Picture no. 9 Adjustment of the NF-Walker 2's column



Important: After adjusting the height of the column, make sure that the guide strap/elastic are rolling freely over the roller at the U-tube. If not, correct the height of the U-tube by adjusting the height of the U-tube clamp.

8. Using NF-Walker 2

8.1. Duration of use

The amount of time the user should use the NF-Walker 2, must be assessed on the basis of physical condition and state of health. The user's therapist/doctor is responsible for assessing usage on a regular basis.

8.2. Getting the user into NF-Walker 2

The following section presupposes that NF-Walker 2 has been adjusted for the user by a consultant from Made for Movement or its representatives. The user's assistant should also have undergone the necessary training in using the product and read and understood this user's manual. The information below describes a number of methods for getting the user into and out of NF-Walker 2.

8.3. Shoes

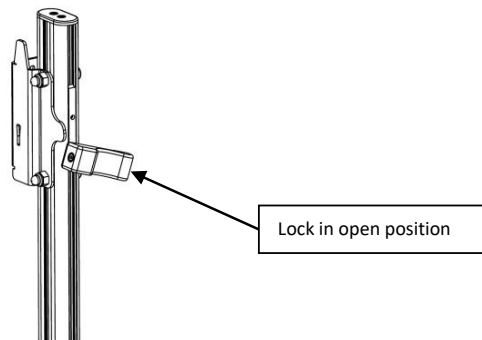
NF-Walker 2 must only be used with shoes compatible with the shoe-clips supplied by Made for Movement or its representatives. Check regularly to ensure that the shoes/sandals are having a good fit to the user's feet. Ensure to tighten the laces/Velcro so that the shoes fit well.



If you are in doubt if the user is having the appropriate type of shoe or shoe-size, please contact Made for Movement or its representative.

8.4. Preparatory steps

- Remove the brace from the undercarriage and place it on a mat or a firm surface
- Ensure that all the buckles are open before placing the user in the brace
- Activate the brake at the rear axle of the undercarriage
- Make sure the lock at the column is in open position



Picture no. 10 Open the lock at the column

8.5. Getting the user into the NF-Walker 2 (without lifting straps)



Picture no. 11 Remove the brace, open the buckles, lift the user into the brace



Picture no. 12 Fasten shoes



Picture no. 13 Attach calf bow



Picture no. 14 Close the chest belt

1. Remove the brace from the undercarriage and place it on a mat or a bench. Open all the buckles. Lift the user into the brace.

2. Bend the users knee and support the users heel towards the bench or mat. Bend the brace at the knee joint and attach the shoe to the brace.

3. Attach the calf bow. Avoid folding the trousers at the front of the leg before fastening the calf bow, to prevent pressure points.



If the assistant may put in one finger between the calf bow and the user's calf while she/he is in standing position, the strap is perfectly tightened.

4. Close the chest belt. If an upholster is used, position this underneath the chest belt before closing the buckle.



Picture no. 15 Close the hip belt

5. Make sure that the pelvic is horizontal according to the hip joint before closing the hip-belt.



Picture no. 16 Lift the user

6. Roll the user to the side close to the body of the helper. Hold on to the brace with one hand on the hip bow and one hand on the thorax steel.



Picture no. 17 Transfer the user into the undercarriage

7. Transfer the user into the undercarriage and close the lock at the column after the brace is attached.



Picture no. 18 Close the lock at the column

8. Close the lock at the column!



Picture no. 19 Attach the elastics/straps

9. Attach the elastics/straps at the front and back of the brace



Picture no. 20 Release the brake

10. Release the brake.

8.6. Getting the user into the NF-Walker 2 (with lifting straps)



Picture no. 21 Fasten the lifting straps onto the spreader

1. Place the lifting straps at the inside of the chest belt and in front of the shoulders of the user. Fasten the lifting straps onto the spreader at the hoist



Picture no. 22 Transfer the user, using the hoist

2. Transfer the user into the undercarriage with the hoist while supporting the head of the user. Close the lock at the column after the brace is attached. Release the lifting straps from the hoist.



Picture no. 23 Attach the elastics/straps

3. Attach the elastics/straps at the front and back of the brace



Picture no. 24 Release the brake

4. Release the brake.

8.7. How to transfer the user out of the NF-Walker 2



Picture no. 25 Activate the brake

1. Activate the brake.



Picture no. 26 Release the elastics/straps

2. Release the elastics/straps at the front and back of the brace

a. Without lifting straps



1. Release the lock on the column.

Picture no. 27 Release the lock



2. Stand face to face with the user. Take hold of the hip bow and thorax steel, support the user with your body and release the brace from the undercarriage. Transfer the user onto a bench.

Picture no. 28 Lift the user off the undercarriage

b. With lifting straps



This sub-chapter presupposed that the NF-Walker 2 is equipped with lifting-straps.



1. Attach the lifting straps to the hoist. Release the lock and the column and lift the user out of the undercarriage with the hoist. Control the user with a hand on the thorax steel. Transfer the user onto a bench. Support the head of the user when lowering down to the bench.

Picture no. 29 Lift the user off the undercarriage using a hoist

8.8. Release the user from the brace

Release the brace system on the user, from top and down:



Picture no. 30 Release the chest belt

1. Release chest belt



Picture no. 31 Release the hip belt

2. Release hip belt



Picture no. 32 Release the calf bows

3. Release calf bows



Picture no. 33 Release the shoes

4. Release shoe-clips

Roll the user to side and
remove the brace.

8.9. Transfer the user into the NF-Walker 2 – with a seat



Picture no. 34 Activate the brake

1. Activate the brake and open all buckles. Attach the seat as high as possible. Transfer the user onto the seat by lifting manually or by lifting with a hoist. Secure the chest belt.



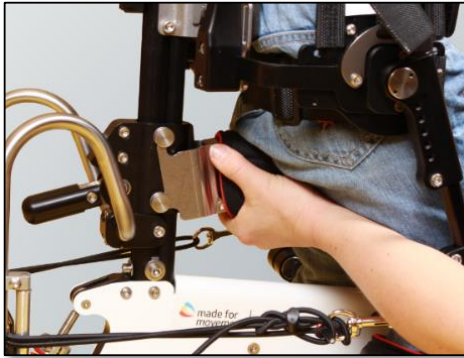
2. Place the user's feet on the front axle and attach the shoe-clips and calf bows. Avoid folding the trousers at the front of the leg before fastening the calf bow to avoid pressure points. Place both feet on the ground

Picture no. 35 Fasten calf bows and shoe-clips



3. Attach the elastics/straps at the front and back of the brace

Picture no. 36 Attach the elastics/straps



Picture no. 37 Remove the seat

4. Remove the seat. Assure that the pelvic is horizontal according to the hip joint before closing the hip-belt.



Picture no. 38 Release the brake

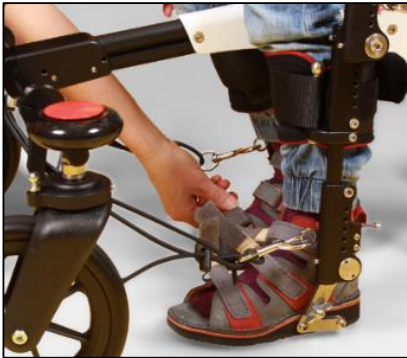
5. Release the brake.

8.10. Transfer the user out of the NF-Walker 2 – With a seat



1. Activate the brake.

Picture no. 39 Activate the brake



2. Loosen the Velcro on the shoes

Picture no. 40 Loosen the shoes



3. Loosen the elastics/straps at the front and back of the brace
4. Loosen the calf bows

Picture no. 41 Loosen the elastics/straps



Picture no. 42 Release the belts

5. Release the hip belt
6. Release the chest belt while supporting the user with your body



Picture no. 43 Lift the user off the seat

7. Lift the user off the seat



It's important for the assistant to bend the knees and use the large muscle groups while lifting the user.

9. Individual adjustments and aftercare

9.1. Individual adjusting

- NF-Walker 2 is a personal aid, and must only be used by the person for whom it has been specially adjusted to.
- NF-Walker 2 must only be adjusted by consultants from Made for Movement or its representatives.
- NF-Walker 2 requires regular follow-ups, normally three times a year to ensure correct adjustments according to growth and progress.
- NF-Walker 2 must only be used with shoes compatible with the shoe-clips belonging to the brace.

10. Transport

NF-Walker 2 can be disassembled for easier packing/transport without affecting the settings.

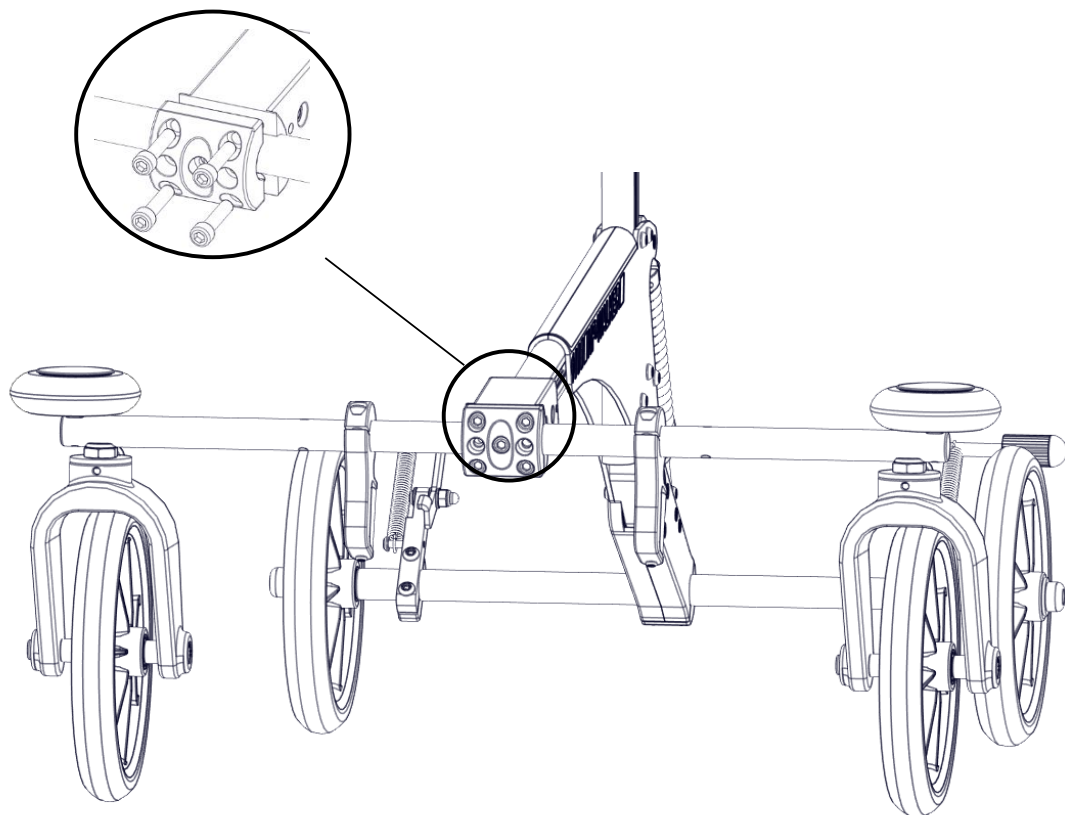
Disassembling/assembling of the front axle, rear axle and column requires

1 pcs. Unbraco 4mm key

1 pcs. Torx key size 30

Front axle:

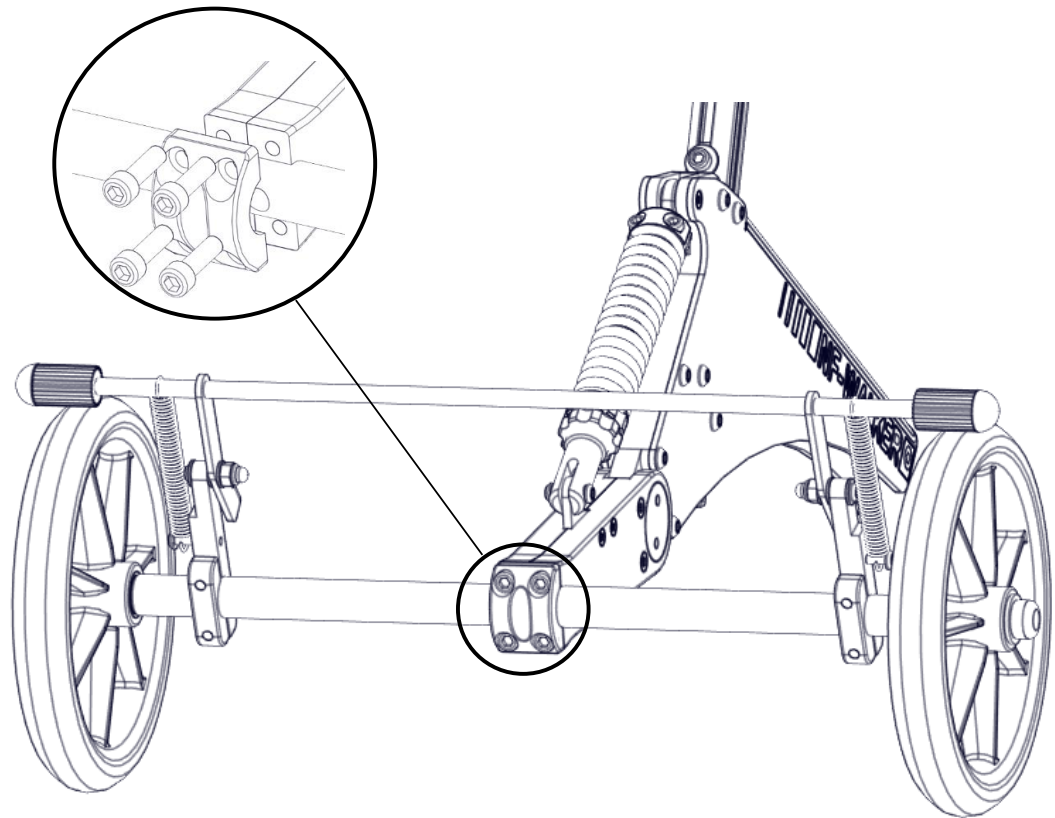
- Loosen the four Unbraco-screws at the front axle
- Remove the screws and the clamp
- Disassemble the front axle



Picture no. 44 Loosen the Unbraco screws at the front axle


Rear axle:

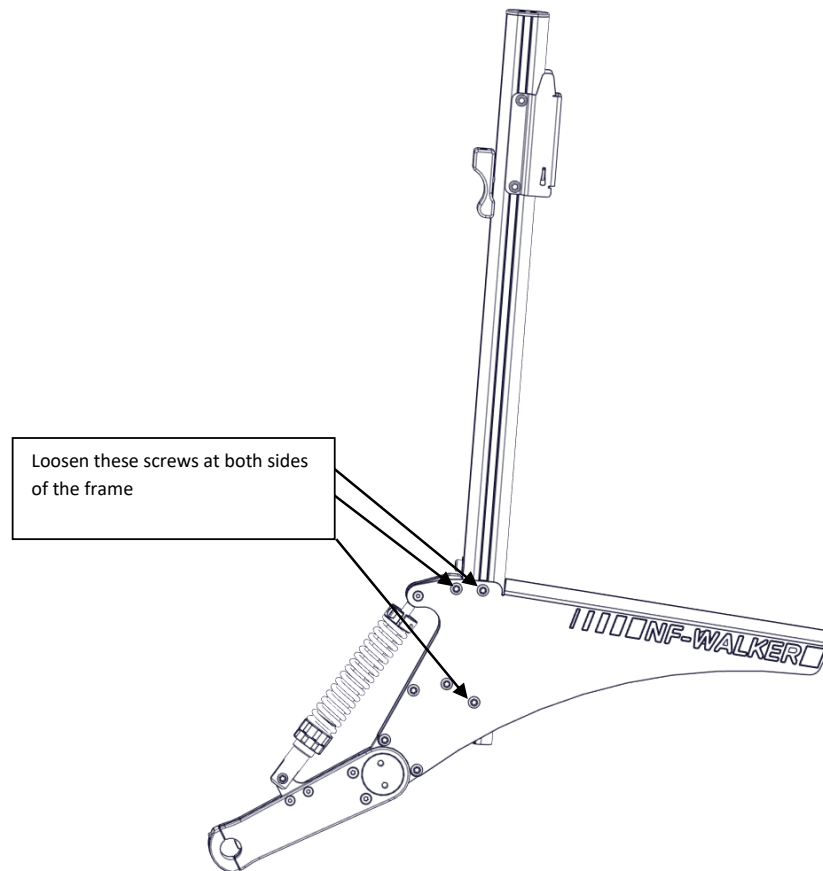
- Loosen the four Unbraco screws at the rear axle
- Remove the screws and the clamp
- Disassemble the rear axle



Picture no. 45 Loosen the Unbraco screws at the rear axle

Column:

- Loosen the marked screws at both sides of the frame approximately 2 revolutions
 -  Do not completely unscrew the screws
- Use a Torx key no. 30
- Pull the column out of the frame



Picture no. 46 Loosen the Torx screws at the frame

10.1. Assembling

Front axle:

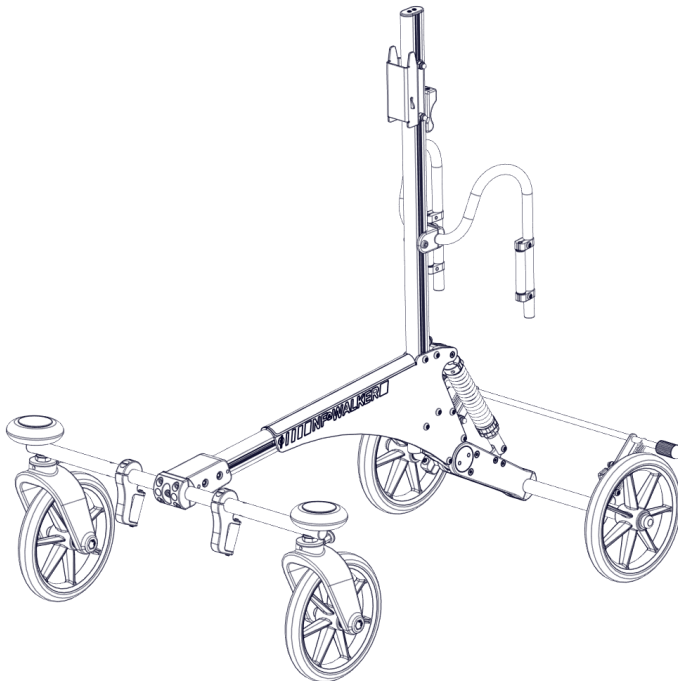
- Place the front axle at the front axle frame part
- Place the clamp over the front axle
 - Make sure that the guide screw falls into the hole in the clamp
- Insert the four Unbraco screws
 - Cross-tighten the screws securely, using a 4mm Unbraco key

Rear axle:

- Place the rear axle at the trailing arm
- Place the clamp over the rear axle
 - Make sure that the guide screw falls into the hole in the clamp
- Insert the screws
 - Cross-tighten the screws firmly, using a 4mm Unbraco key

Column:

- Insert the column into the frame
 - Make sure that the height-setting screw is in contact with the frame
- Tighten the 6 screws, 3 at each side of the frame securely, using a Torx key no. 30

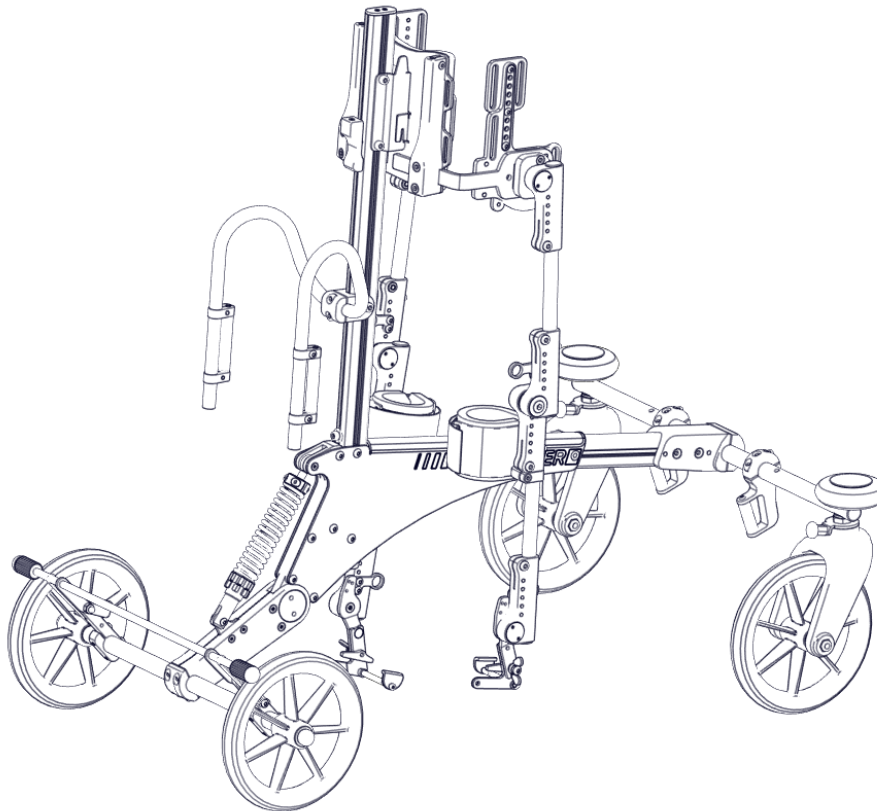


Picture no. 47 Complete assembled undercarriage

11. Technical information

11.1 Data and dimensions for the NF-Walker 2

Max. height :	1100mm (S) 920mm (XS)
Max. length:	900mm (S) 850mm (XS)
Max. width:	620mm (S) 530 (XS)
Wheels:	185 x 28 mm
Max. weight of user:	40 kg (S) 30kg (XS)
Height of user:	70 cm - 140 cm
Turn radius:	Depending on the user. Minimum r 120cm
Weight (Size XS):	10,9 kg
Weight (Size S)	12,4 kg



Picture no. 48 NF-Walker 2 Complete (shown without hip belt, chest belt and the guide straps/elastics)

12. Extra equipment



The following chapter will give you an overview over the available extra equipment for NF-Walker 2. The extra equipment can only be assembled to the NF-Walker 2 by Made for Movement or its representatives. There are adjustments and security-routines involved with all of the extra equipment that have to be performed by our trained technicians.

12.1 Knee anti-overstretch

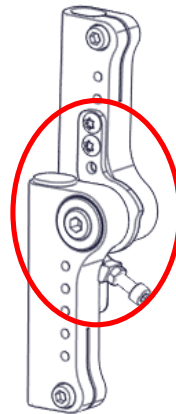
Knee anti-overstretch is a useful extra equipment for those user's that are overstretching their knees while walking or standing. The anti-overstretch will be assembled onto the knee joint. The angle in the knee joint can be adjusted to each user's needs.



The anti-overstretch is available for all sizes of NF-Walker 2



Picture no. 49 Anti-overstretch



Picture no. 50 Anti-overstretch assembled onto a knee joint

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 knee anti-overstretch left S	301139
NFW 2 knee anti-overstretch right S	301140
NFW 2 knee anti-overstretch left XS	301141
NFW 2 knee anti-overstretch right XS	301142

12.2 Lifting straps

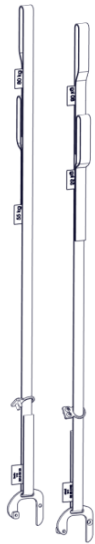
Lifting straps are a useful helping aid for lifting the user onto the undercarriage when she/he is in the brace-system. The lifting straps can be used together with most lifting-systems having a 2-point or 4-point spreader. Using the lifting straps together with a hoisting system, will prevent injuries at the assistant caused by heavy lifting and give the user of the NFW 2 a secure experience while being transferred to the undercarriage.

The lifting straps have a bracket that will be assembled to each hip bow at the brace. There are two loops for lifting at each of the straps. The upper loop is certified for lifting 80kg. The lower loop is certified for lifting 55kg.

Put the brace on the user while she/he is laying on the floor or a bench. Make sure that the lifting straps are put at the inside of the chest strap. Connect the spreader from the hoist to the lifting straps. Make sure to support the user's head while she/he is lifted from horizontal to vertical position. Lower the user over the fix plate at the undercarriage (please refer to chapter 5.1, picture 3) and connect the brace to the undercarriage. Please remember to secure the fix plate and put on the guide straps/elastic before disconnecting the spreader.



The lifting straps fits all sizes of NF-Walker 2



Picture no. 51 Lifting straps (pair)



Picture no. 52 Lifting straps in use

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 Lifting straps complete (pair)	301143

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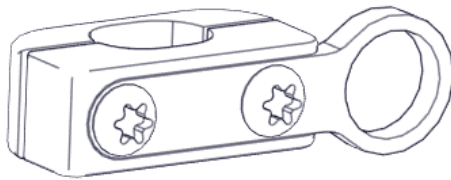
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12.3 Ring clamps

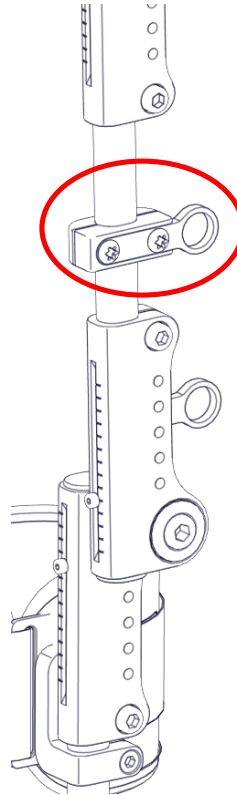
At the brace, there are four rings for attaching the guide straps/elastics. These four rings can be adjusted in height at the joints. In some cases, there is needed to make an attachment point for the guide straps/elastics above or under the joint. In these cases, the ring clamp can be used. The clamp will fit onto the brace and can be adjusted to the height the user needs.



The ring clamps are available for all sizes of NF-Walker 2



Picture no. 53 Ring clamp



Picture no. 54 Ring clamp assembled onto the brace

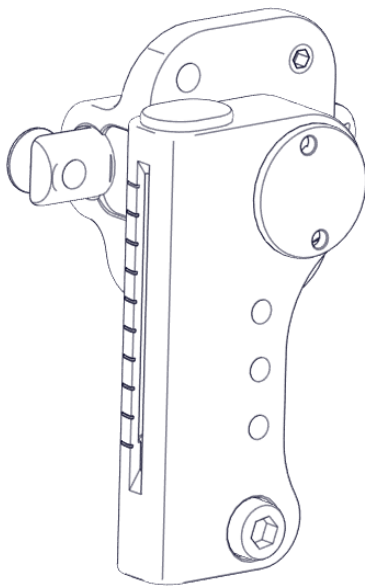
<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 S Ring clamp	301144
NFW 2 XS Ring clamp	301145

12.4 Abduction joint

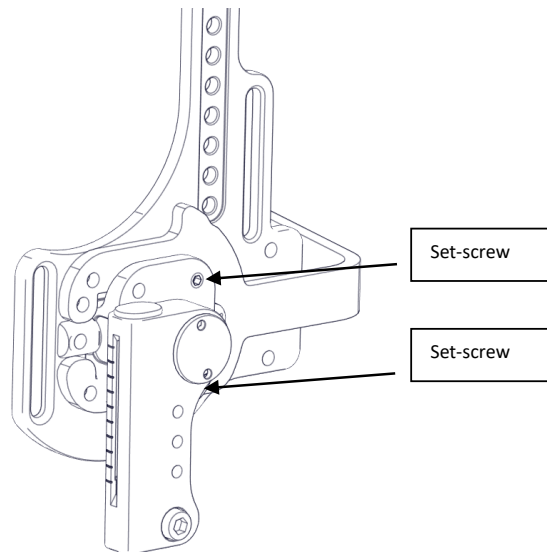
Abduction joint gives a possibility to spread the user's legs while walking or standing. This is especially useful if the user is having a cross pattern with great forces while walking or standing. The original hip joint can be replaced by the abduction joint. The abduction joint can be step-less adjusted to the angle needed for each user by changing the position of the set-screws. The abduction joint can also be set to allow the user to freely move her/his legs within the adjustment range of 12°.



The abduction joints are available for all sizes of NF-Walker 2



Picture no. 55 Abduction joint (left side)



Picture no. 56 Abduction joint assembled onto the hip bow (left side)

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 S Abduction joint left	301147
NFW 2 S Abduction joint right	301150
NFW 2 XS Abduction joint left	301154
NFW 2 XS Abduction joint right	301159

12.5 Dynamic knee stretcher

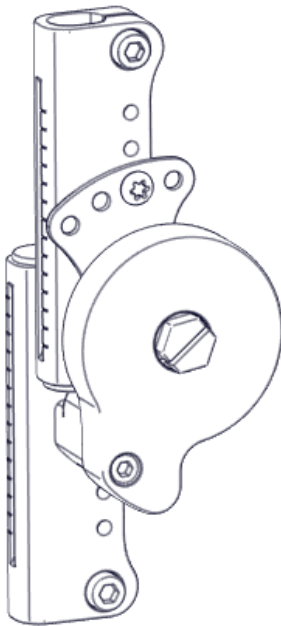
The dynamic knee stretcher is a knee joint with an adjustable spring-force. The spring-force will help the user to reach the chosen level of stretch in her/his knees while walking. The force of the spring can be adjusted to each user's needs. The direction of the spring may be turned around, helping the user to bend her/his knees.

The dynamic knee stretcher includes an anti-overstretch-function that can be step-less adjusted to the user.

The original knee joints at the brace will be replaced by the dynamic knee stretchers and adjusted to the user.



The dynamic knee stretcher is only available for NF-Walker 2 size S



Picture no. 57 Knee stretcher

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 S Dynamic knee stretch system left	301161
NFW 2 S Dynamic knee stretch system right	301163

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12.6 Brace rotation system

The brace rotation system offers a unique function for the user. The angle between the hip and knee joint can, using the brace rotation system, be adjusted to 0°, 5°, 10° of free to rotate between 0-10°. This will rotate the user's legs so that she/he is standing with her/his feet pointing outwards to the selected degree.

The Brace rotation system will replace the upper brace, connection the hip joint and knee joint.

The level of rotation can be adjusted by lifting the lid up, rotate it to the wanted degree of rotation and put back in place. The lid is secured with one screw.



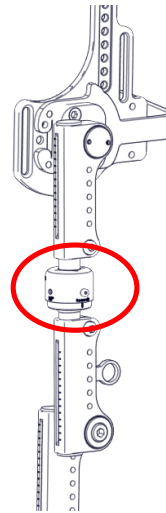
There is needed at least 30mm distance between the hip joint and knee joint to make room for the brace rotation system



The brace rotation system is only available for NF-Walker 2 size S



Picture no. 58 Brace rotation system



Picture no. 59 Brace rotation system assembled onto the brace

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 S brace rotation system left	301165
NFW 2 S brace rotation system right	301169

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12.7 Head-support

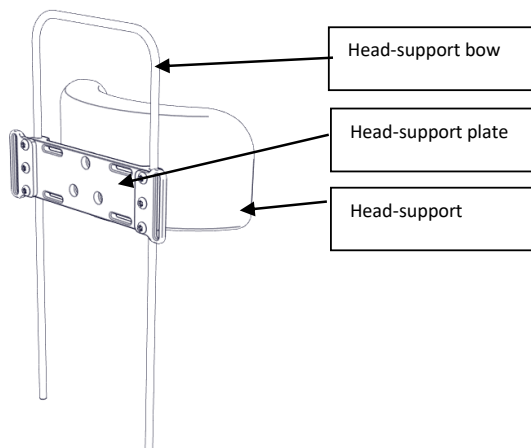
At the hip plate, belonging to the brace, there is a possibility to attach a Head-support bow. This head-support bow can be assembled to the hip plate in predrilled holes with a clamping-function. The height of the head-support bow can be adjusted in height, but in some cases there is a need to cut the head-support bow in order to adapt the head-support bow to the actual user of NF-Walker 2.

A head-support plate can be assembled onto the head-support bow. This plate can be adjusted in height on the head-support bow and provides a sturdy fixation point for both a head-support or straps needed to correct the position of the user.

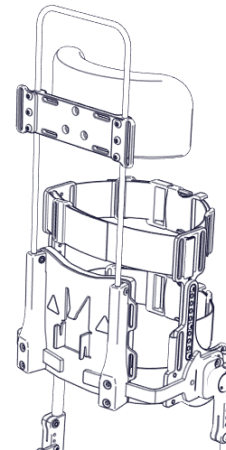
A head-support can be assembled onto the head-support plate, ensuring comfort and safety for the user



The head-support parts fit all sizes of NF-Walker 2. The head support bow can be bent to fit the user's anatomy if necessary.



Picture no. 60 Head-support



Picture no. 61 Head-support assembled onto the brace

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 XS/S Head-support plate	301171
NFW 2 XS/S Head-support bow	301181
NFW 2 XS/S Head-support, for head support plate	300605

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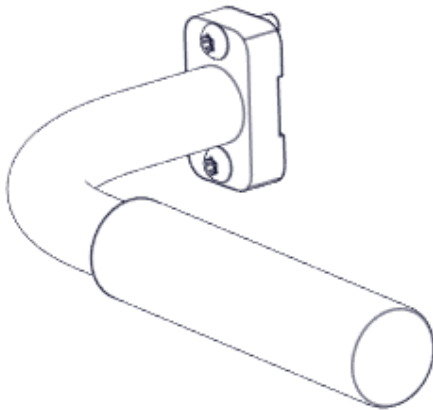
12.8 Side bars

Side bars can be assembled to the brace. This gives the user of the NF-Walker 2 a secure place to hold on to while using the NF-Walker 2 and is an alternative to the use of support-handle in front of the user. (please refer to chapter 12.15).

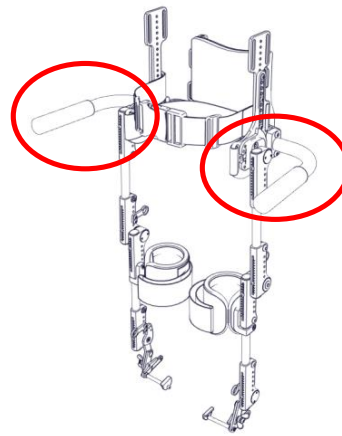
The side bars will be assembled at the outside of the brace.



The side bars fit all sizes of NF-Walker 2



Picture no. 62 Side bar



Picture no. 63 Side bars assembled onto the brace

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 XS/S Side bars complete (pair)	301208

12.9 Guide bars 70 and 90 cm

Guide bars is a useful helping aid for the assistant in order to manipulate the user's legs. A bracket is assembled to the knee or ankle joint and rods connected to a ball at the bracket with handles at the end can be used to move the user's legs. This may help the user to complete a step, stretch out or to get movement when she/he is in a standing position.

The guide bars can easily be dissembled from the brace by twisting the handle or moving it far out to one of the sides. When you want to connect the guide bars to the brace again, simply push the end of the guide bar onto the ball at the bracket.

The guide bars are available in two lengths: 70 and 90cm.



The guide bars fit all sizes of NF-Walker 2



Picture no. 64 Guide bar 70cm



Picture no. 65 Guide bar 90cm

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 XS/S Guide bar 70cm	301203
NFW 2 XS/S Guide bar 90cm	301204

12.10 Seat

The seat has multiple ways of being used:

- Transfer the user standing into the brace while it's assembled to the undercarriage
- Support for the user during use
- Easier transfer out from the NF-Walker 2 after use

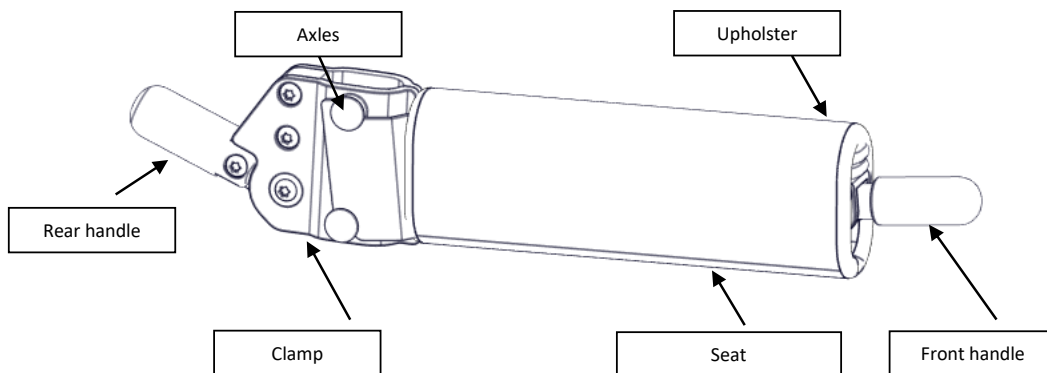
A clamp with fixation for the height of the seat will be assembled onto the column. This clamp has 4 axles where the seat can be hooked on. These two parts will interlock together for safe operation. The seat has an upholster to give the user comfort while sitting.

The seat can easily be disconnected from the clamp at the column by using one of your hands pressing the handle in the front of the seat down while lifting the front end of the seat with your other hand. This double-direction-action is a safety feature and makes it impossible for the user of the NF-Walker 2 to disconnect the seat while she/he is sitting on it.

The height of the seat can be adjusted while the user is sitting on it by releasing the handle at the back at the column and move it to its upper position and lift in both this handle and the handle in front of the seat. Secure the position of the seat with first letting go of the handle at the seat and then move the rear handle down. If the seat should slide down during use, the rear handle must be tightened harder after moving the seat.



The seat fits all sizes of NF-Walker 2, but it requires some free space at the column.



Picture no. 66 Seat complete

<i>MFM part name</i>	<i>MFM part no.</i>
NFW 2 XS/S Seat complete	301176

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12.11 Steering

The steering allows the user of the NF-Walker 2 to her/his-self steer the NF-Walker 2 where he/she wants to go. The steering will turn both wheels when the user is turning the support handle. It's a huge motivation for the user of the NF-Walker 2 to have this possibility!

The angle between the front axle and support handle and the height of the support handle can be adjusted to fit the user's needs.

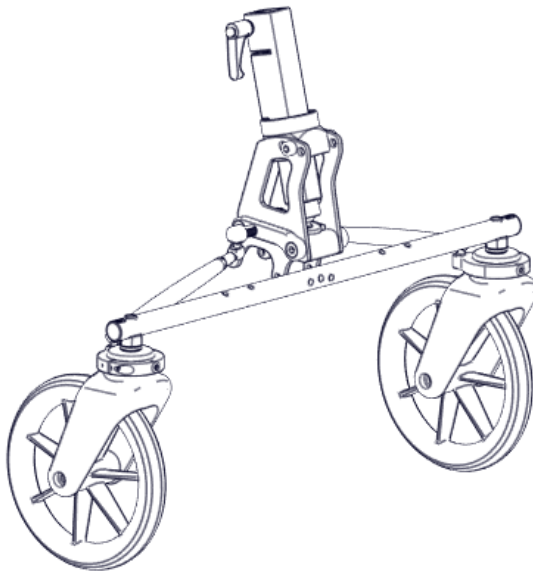
The steering can be locked in center position if needed by flipping the lock handle to the side. Center the steering while putting a little force at the lock handle. Then the steering reaches the center-position, the lock handle will move in place. If you want to unlock the steering, simply move the lock-handle to the opposite side, and the steering is free again.



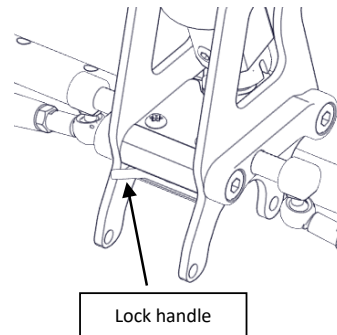
The steering must be completed with a support handle (please see chapter 12.15).



The steering fits all sizes of NF-Walker 2. N.B. the minimum width of the front axle at the steering is the same width as NF-Walker 2 size S is using.



Picture no. 67 Steering



Picture no. 68 Locking the steering

<i>MFM part name</i>	<i>MFM part no.</i>
NFW 2 XS/S Steering complete standard	301178
NFW 2 XS/S Steering complete wide	301192

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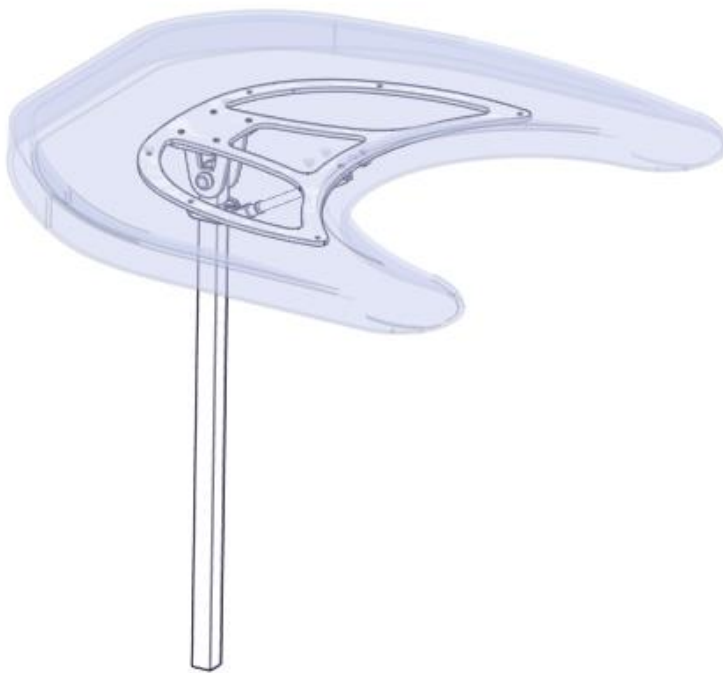
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12.12 Table

A table can be delivered to your NF-Walker 2. The table can be used both as a table-top and for support for the under-arms and hands while using the NF-Walker 2. The table can be adjusted in angle between the table-top and column underneath the table by moving the position of the bracket.



The table fits all sizes of NF-Walker 2.



Picture no. 69 Table complete

MFM part name

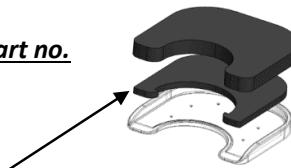
MFM part no.

NFW 2 XS/S Table complete

301193

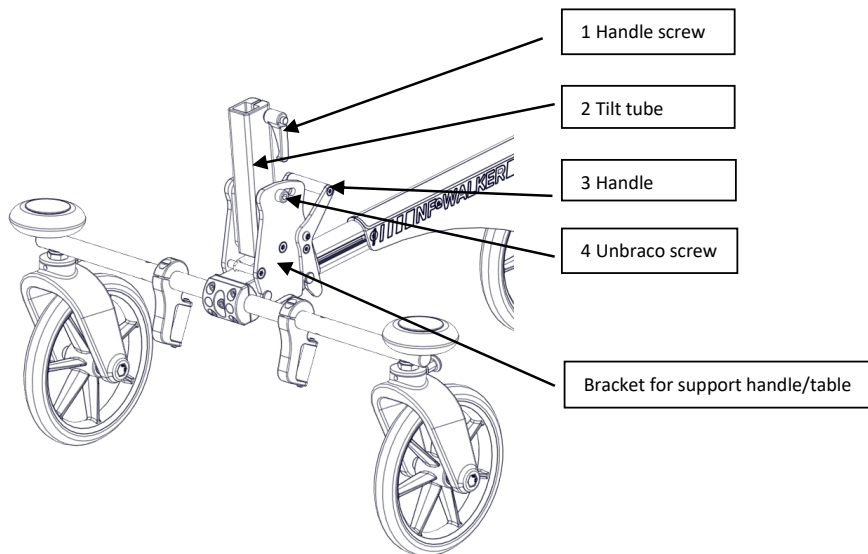
Table Padding 40mm

301148



12.13 Removable handle and table bracket

In order to assemble a support handle or a table to your NF-Walker 2, an universal bracket must be installed on the front axle frame part (chapter 5.1 – pos no. 13)



Picture no. 70 Bracket for table/support handle

The bracket can easily be removed from the undercarriage by pulling the handle (3)

The bracket allows height adjustment of the support handle/table of 115mm and tilting of 20°.

Height adjustment:

Loosen the handle screw (1), move the support handle/table to the wanted height and tighten the handle screw (1)

Angle adjustment:

Loosen the Unbraco screw (4), tilt the tube (2) to the wanted position and tighten Unbraco screw (4) securely.



The removable handle and table bracket fits all sizes of NF-Walker 2.

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 XS/S removable handle and table bracket	301194

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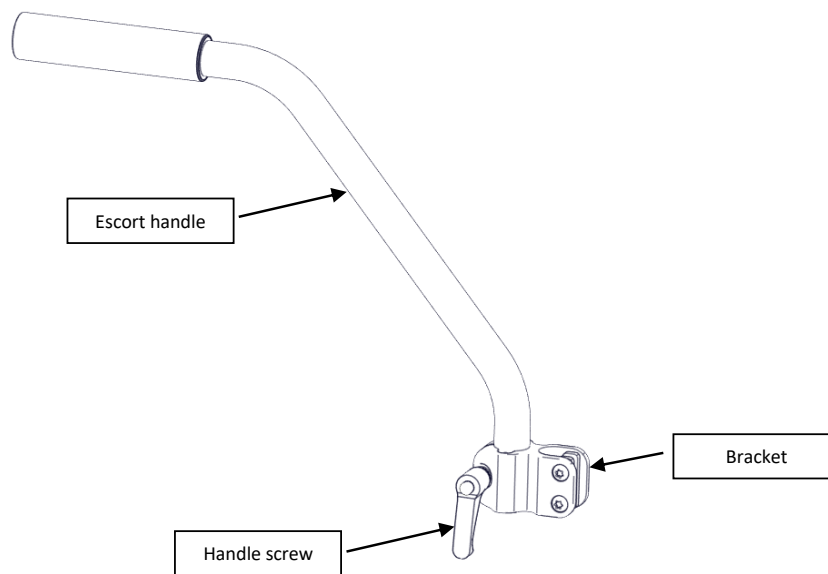
12.14 Escort handle

An escort handle can be fitted to the undercarriage. The escort handle is useful for moving the NF-Walker 2 around both with and without the user in it. The escort handle can also be useful for manipulating the undercarriage while the user is walking, making it easier for the user to start and complete the steps, change direction and give motivation to the user.

A bracket is assembled onto the column of the undercarriage. The escort handle fits into the rear of this bracket and can be secured in place by tightening the handle screw.



The escort handle fits all sizes of NF-Walker 2.



Picture no. 71 Escort handle

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 XS/S Escort handle complete	301195

12.15 Support handle

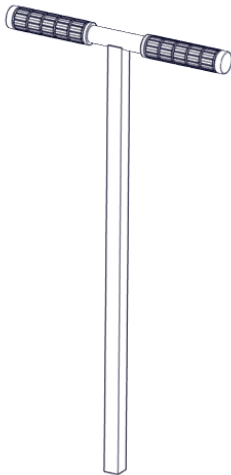
The support handle may be useful for those user's that want to/need to rest their hands on something in front of them or to complete the steering. There are two different sizes of the support handles: 310mm width (standard) and 410mm (wide) width.



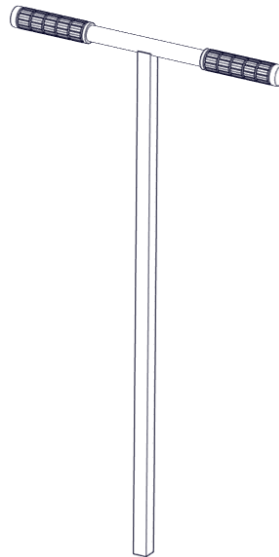
The support handle must only be used in combination with the removable handle and table-bracket (chapter 12.13) or steering (chapter 12.11). The support handle will be cut in length if needed to fit for the actual user.



The support handles fit all sizes of NF-Walker 2.



Picture no. 72 Support handle 310mm



Picture no. 73 Support handle 410mm

<u>MFM part name</u>	<u>MFM part no.</u>
NFW 2 Support Handle 310mm, for handle-bracket and steering	301196
NFW 2 Support Handle 410mm, for handle-bracket and steering	301197

13. Tests and approvals for NF-Walker 2

The NF-Walker 2 and its extra-equipment is CE marked in accordance with the following standards:

93/42-EEC Council directive of medical devices.

NS-EN 12182:1998

EN ISO 14971:2007

DIN EN ISO 11199-3:2005 (Chapter 4.3)

Please refer to declaration of conformity at the end of this user's manual.

14. Waste disposal

All parts of NF-Walker 2 are recyclable. The brace and undercarriage should be delivered to an approved waste disposal site. Straps, elastics, padding and buckles can be treated as ordinary waste.

15. Cleaning and maintenance

a. Cleaning

NF-Walker 2 should be cleaned using a cloth dampened in mild soapy water. Do not use high-pressure washers or other "aggressive" cleaning methods. The same applies to straps and padding. If NF-Walker 2 is transported outdoors, any sand and dirt should be brushed off or cleaned.

If needed, the NF-Walker 2 can be disinfected using alcohol-based cleaners.

Neoprene paddings used at the braces can be machine-washed, max. 40°C. Avoid use of dryer.

Mild detergent



b. Maintenance



Regular Maintenance:

Check regularly to ensure all buckles, elastics and straps are intact. Check that all the joints of the brace are moving freely, and that the wheels are rolling as they should. Check for loose screws, and tighten if necessary. Do not change the settings; this should only be done by Made for Movement or its representatives.

Periodic Maintenance:

Made for Movement develops and produces unique standing, training and walking aids for disabled persons. These products are designed with moving parts to enable smooth operation, and easy and safe use. Some of the moving parts and other key components will get worn down during use, as these are parts that need replacing when worn out. Typical wear parts are listed below. Other parts can also get worn out due to the user's use and/or movement pattern, and these will also need to be replaced if worn out.

Worn down parts will typically be replaced at the follow ups (normally three times a year) when wear is discovered using the product. Remember that cleaning and maintenance needs to be performed for the warranty to be valid.

Potential wear parts within the warranty period: Wheels, paddings, guide straps, shoes.

Potential wear parts between year 2 and 5*: On frame: Fork, damper, wall deflectors, strap rollers, brace-frame locking mechanism, frame plate. On brace: Shoe-clip, ankle joint with cam stop, calf-bow roller axle, joint bearings, brace rod, back plate padding, thorax support, hip bow. Extra equipment with paddings, moving parts, or prone to high force can also be subject to parts being worn out and that need replacing in this period.

* Normally most of these parts will last for many years, however MFM enable walking in the NF-Walker for users with a typical movement, weight-bearing, strength and/or walking pattern, and the pace of parts being worn down is highly individual due to the user's use.

16. Reuse

NF-Walker 2 may be reused of a new user after a period of use. The product will have to be delivered to Made for Movement or its representative. A reuse-service will be performed where worn parts will be replaced.

If the product is older than the expected service life, 5 years, parts that will have an influence at safe use will be assessed and if needed, replaced.

Following premises must be complied for reusing:

- Repairs during earlier use has been carried out by Made for Movement or its representative
- NF-Walker 2 has been treated normally and in compliance with this user's manual

17. Warranty

Made for Movement provides a two-year warranty on all new NF-Walker 2. The warranty does not cover additional equipment produced by any companies other than Made for Movement. Normal wear parts are not covered by the warranty (please see chapter 14b for details).

The following criteria must be satisfied in order for the warranty to be valid:

- Adjustment and servicing have been carried out by Made for Movement or its representatives
- Repairs under warranty must be approved in advance by Made for Movement or its representatives. Warranty claims should be sent Made for Movement within reasonable time (2 months). Claims put forward after this might lose the right to claim warranty.
- NF-Walker 2 has undergone regular safety checks and servicing, performed by Made for Movement or its representatives.
- NF-Walker 2 has been subjected to normal treatment and used as described in these instructions.

Should NF-Walker 2 not work satisfactorily, please contact Made for Movement or its representatives by calling +47 35 50 51 20 or e-mailing: info.no@madeformovement.com

18. Declaration of conformity

Declaration of conformity

Producer:	Made for Movement Group AS Roedmyrli 2 3735 Skien Norway Org. no. 991 237 615 MVA Revision: ver. B	
Address of manufacturing site:	Made for Movement Group AS Roedmyrli 2 3735 SKIEN Norway www.madeformovement.com	
Main product:	NF-Walker 2 XS NF-Walker 2 S	MFM Part no.: 301272 301274
Extra equipment:	NFW 2 knee anti-overstretch left S NFW 2 knee anti-overstretch right S NFW 2 knee anti-overstretch left XS NFW 2 knee anti-overstretch right XS NFW 2 Lifting straps complete (pair) NFW 2 S Ring clamp NFW 2 XS Ring clamp NFW 2 S Abduction joint left NFW 2 S Abduction joint right NFW 2 XS Abduction joint left NFW 2 XS Abduction joint right NFW 2 S Dynamic knee stretch system left NFW 2 S Dynamic knee stretch system right NFW 2 S brace rotation system left NFW 2 S brace rotation system right NFW 2 XS/S Head-support plate NFW 2 XS/S Head-support bow NFW 2 XS/S Head-support, for head support plate NFW 2 XS/S Side bars complete (pair) NFW 2 XS/S Guide bar 70cm NFW 2 XS/S Guide bar 90cm NFW 2 XS/S Seat complete NFW 2 XS/S Steering complete standard NFW 2 XS/S Steering complete wide NFW 2 XS/S Table complete Table Padding 50mm Table Padding 100mm NFW 2 XS/S removable handle and table bracket NFW 2 XS/S Escort handle complete NFW 2 Support Handle 310mm NFW 2 Support Handle 410mm Head Rest bow upholster Seat Padding Thorax Padding side Thorax Padding front Single belt padding Calf bow Padding small Calf bow Padding medium Calf bow Padding large 4 Point Thorax Strap Small	301139 301140 301141 301142 301143 301144 301145 301147 301150 301154 301159 301161 301163 301165 301169 301171 301181 300605 301208 301203 301204 301176 301178 301192 301193 301148 301146 301194 301195 301196 301197 301173 301172 301168 301167 301166 301164 301162 301160 100161

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Neck support small	105067
Neck support medium	105066
Neck support large	105065
4 Point Thorax Strap Medium	100160
4 Point Thorax Strap Large	100142
Thorax Plate Small	103587
Thorax Plate Medium	101788
Hand Fixation Small	301149
Hand Fixation Medium	301363
Hand Fixation Large	301364
Neck support small	105067
Neck support medium	105066
Neck support large	105065

Hereby, Made for Movement Group AS, declares that the above listed products with accessories are in risk class I and are in compliance with the essential requirements and other relevant provisions of Directive:

93/42-EEC Council directive of medical devices.

NS-EN 12182:2012

NS-EN ISO 14971:2007

EN ISO 11199-3:2005 (Chapter 4.3)

Skien, Norway
Location

07.09.2016
Date


Signature

Anders Ringsjø
Operations Manager

Made for Movement Group AS
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Org.nr.: NO 991237815 MVA

Version indication: Declaration of Conformity M6 rev B

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