Netti DYNAMIC SYSTEM
COMFORT

Netti®
BY ALU REHAB

USER MANUAL AND MOUNTING DESCRIPTION

Netti Dynamic System Foot support
DUAL
PARALLEL

Enable joy of life

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CONTENTS

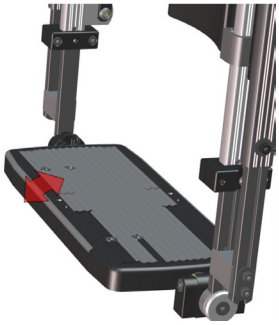
THE NETTI DYNAMIC SYSTEM CONCEPT

WHAT IS NETTI DYNAMIC SEATING?

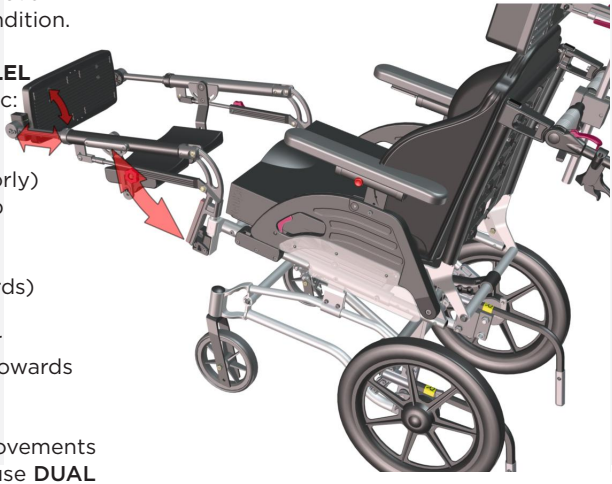
Netti Dynamic System is a tilt and recline wheelchair which allows controlled Open Kinetic Chain (OKC) movements of the user. Unlike static wheelchairs, the user's distal segments are supported but can move. This helps to gain control of the proximal segments especially when the user can not inhibit movements due to their medical condition.

1. DYNAMIC FOOT SUPPORT PARALLEL AND DUAL:

Functional overview



The Netti Dynamic foot supports allow controlled Open Kinetic Chain (OKC) movements of the lower extremities of the user. Unlike static wheelchairs, the user's distal segments are supported but can move. This helps to gain control of the proximal segments especially when the user cannot inhibit movements due to their medical condition.

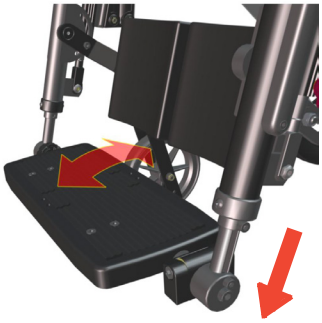


Netti Dynamic System **PARALLEL** foot support allows for dynamic:

- plantar flexion of the feet (foot support pivots anteriorly)
- Parallel extension of the hip (foot support goes down)
- Knee extension: (foot supports move forwards)

When tone decrease, the lower extremities will be supported towards their resting position

Warning: users with uneven movements of the lower extremities must use **DUAL** Netti Dynamic Foot Supports.



Netti Dynamic System foot support **DUAL** allows for dynamic:

- Plantar flexion of the feet (foot sup port pivots anteriorly)
- Unilateral extension of the hip (single foot support goes down)
- Knee extension: (foot supports move forwards)

When tone decrease, the lower extremities will be supported towards their resting position.

Foot support adjustments need to be adjusted for each user in order to meet the unique user needs.

Warning: the adjustment should be carried out by a trained professional

All Netti Dynamic foot supports come fitting to different seat widths.

Sizes and article numbers:
see table on last page

Netti Dynamic PARALLEL foot support is developed for persons pushing parallel with the same force with each leg. Parallel extension of the hip (entire foot support goes down)

Netti Dynamic DUAL foot support is specially developed to allow for uneven forces from the legs. Unilateral extension of the hip (single foot support goes down)

DUAL foot support comes in 2 different lengths.

DUAL **short** foot support lengths suits persons with lower leg length from ca 35cm up to approximately 50cm (measured when knees are 90° flexed, from underneath the thigh to under the heel - inclusive normal shoes).

DUAL **normal** foot support lengths suits persons with longer than 50cm lower legs. See size table on the last page.

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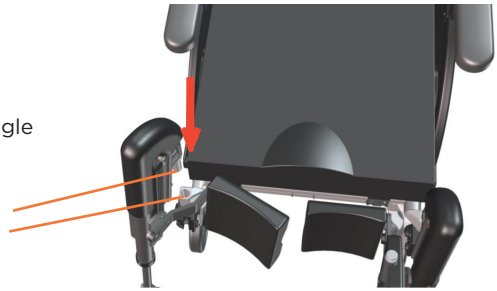
2. DAILY USE:

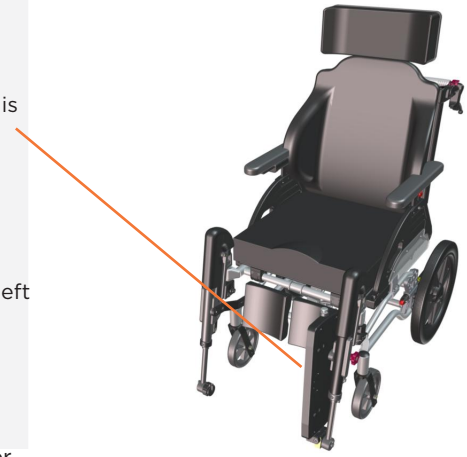
2.1 Mount the foot supports

to the wheelchair: Ensure an open angle of the foot support when inserting:



Position the bolt
vertical into the frame hole
turning it ca 30 degrees outward for it to enter easy. Turn it inward until it clicks into user position.

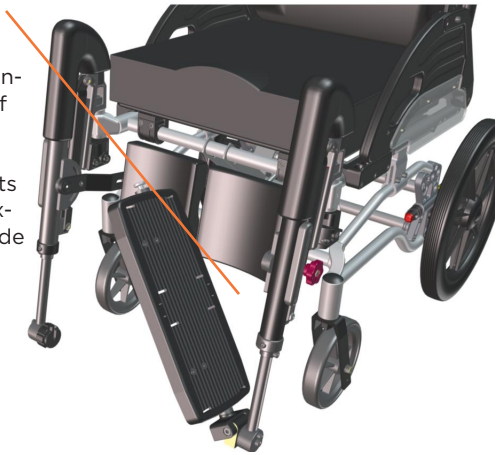
With the footboard folded up, there is free space for transfers.



The footboard folds down from the left and is locked to the right side; this gives a sturdy platform for the feet.

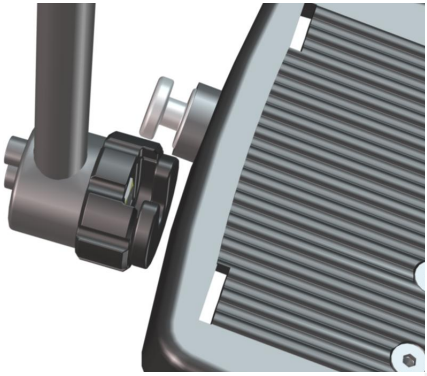
2.2 Ankle huggers

The footboard has holes prepared for ankle huggers or shoe shells to be mounted as accessories if required. Ankle huggers are useful when involuntarily leg movements slide the feet of the footboard.
Ankle huggers are mounted to the footboard by threading the fixing belts through the holes in the footboard fixing them with buckles on the underside of the footboard.

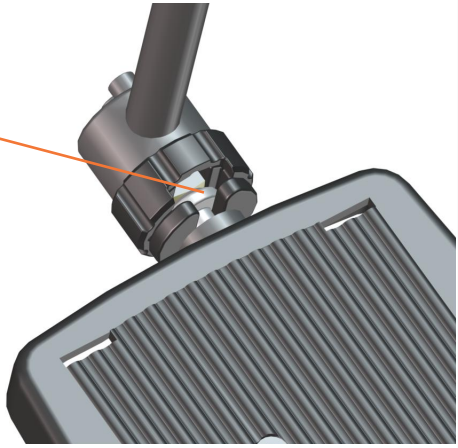


2.3 Footplate lock

With both foot supports in place, the footboard folds down into the lock on the right foot support.

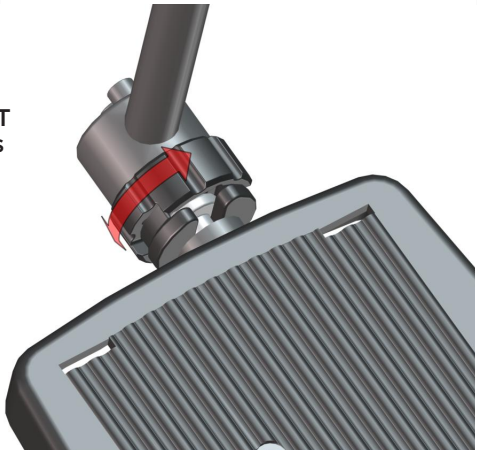


Open lock



⌘ The lock is closed by turning the outer ring 90 degrees forward!

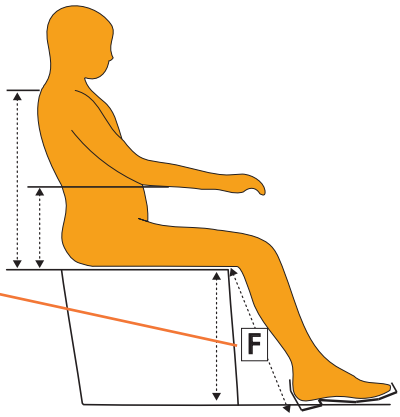
Warning: The footboard lock MUST always be closed when the chair is occupied.



3. ADJUSTING THE NETTI DYNAMIC FOOT SUPPORT TO THE USER

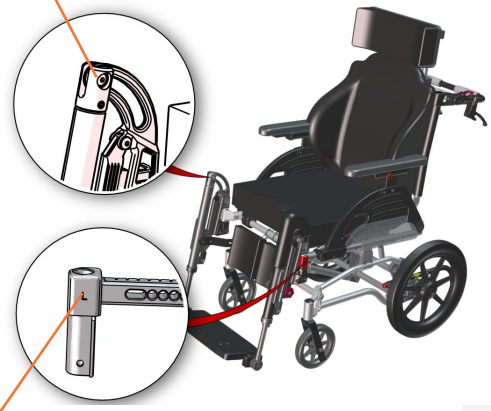
3.1 Foot support length adjustments

Measure the user's lower leg length **F** - 90 degrees bent knee - from underside thigh to underside heel of shoes.



The centre joint of the foot support is hidden under the knee-joint upholstery. The illustration with removed upholstery shows the centre position. Adjust the length of the foot support according to the leg length measured.

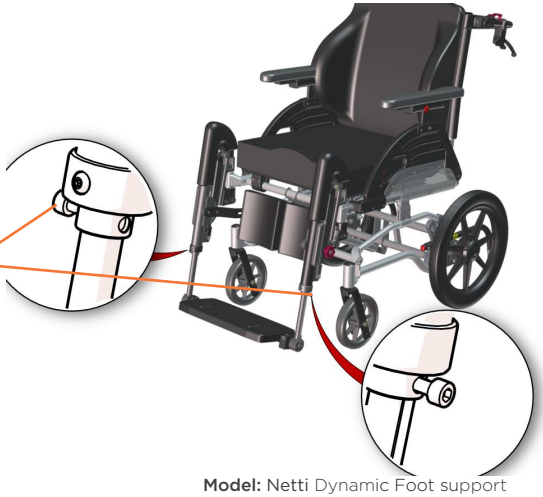
NB Correct seat depth:
Loosen the Velcro straps of the back support. Check that the user is getting into the chair firmly. Adjust the back support by pulling the straps of the Velcro. The knees of the user should align with the joint of the foot support both in height and in depth. This will ensure that the user gets a good support under the thighs.



Seat depth can be adjusted. Extension pieces allow for increasing the seat depth in the front. Chair-back hinge can be repositioned to adjust seat depth backwards. Consider wheelchair balance. See further information to seat depth adjustment in wheelchair user manuals.

3.2 Height adjustment of footboard DUAL

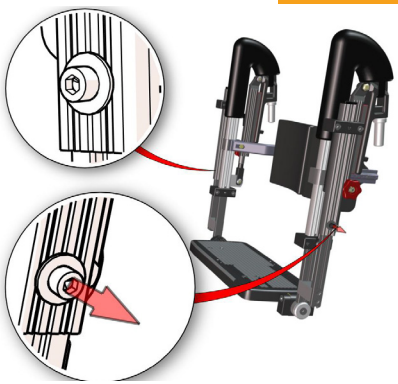
Loosen the M6 screws holding the foot support length-profile on the outside with 5mm Allen key. Adjust the footboard to a height from top of front edge seat cushion to the footboard equal to the lower leg length - **F** dimension.



Model: Netti Dynamic Foot support
Language: English **Version:** 2015-10

3.3 Height adjustment of PARALLEL Footboard

Loosen the M6 screws holding the foot support length-profile on the outside with 5mm Allen key. Adjust the footboard to a height from top of front edge seat-cushion to the footboard equal to the lower leg length - **F** dimension.



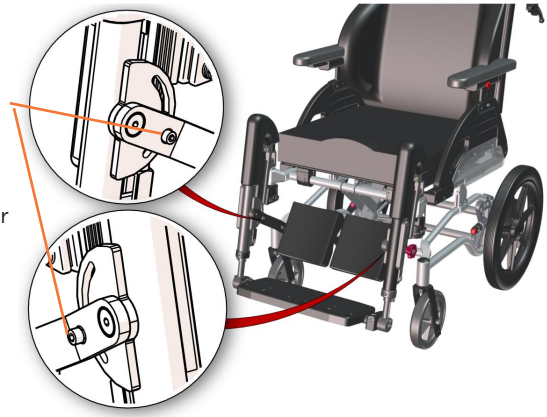
Make sure there is enough free space under the footboard for the wheelchair to pass minor obstacles. Slightly tilting the seating unit may help. If not sufficient, the chair height must be adjusted as described in the main user manual for the wheelchair.

4. CALF SUPPORTS ADJUSTMENT

With both foot supports in correct height, the calf supports must be adjusted:

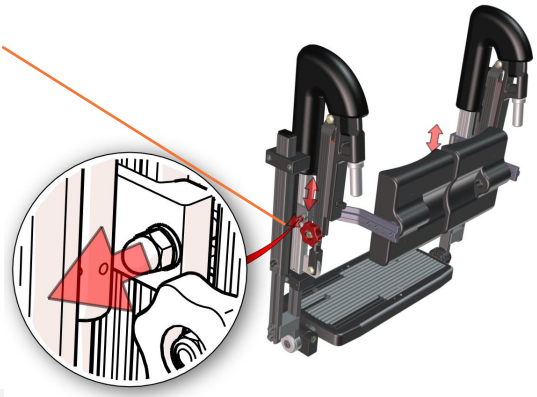
4.1 Foot support DUAL calf height adjustment:

Loosen the 2 M6 screws with 5mm Allen key - on the half-moon brackets - holding the calf pad arm. This allows the calf-pad-arm to swing up and down. Choose a height covering the middle and lower part of the user calf and tighten the screws.



4.2 PARALLEL foot support calf height adjustment

Loosen the 2 M6 screws holding the calf pad arm and slide each calf pad up or down to desired height. They should in addition to supporting the calf also help prevent the feet sliding backwards from the footboard.



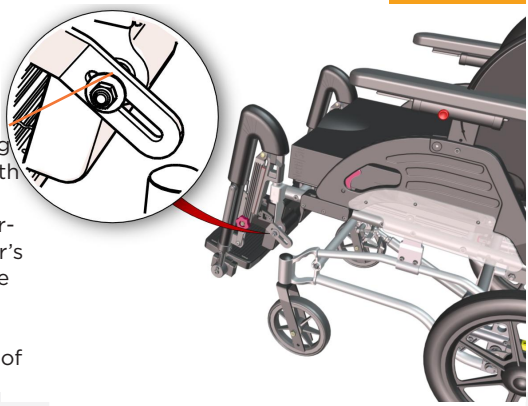
Twist the calf pads to an angle giving support for the leg when the foot support is angled. The calf pads can swing freely to follow the movements and adjust to the user's leg position.

Locking the Netti Dynamic System foot support

The red knobs allow locking the dynamic elevation of the foot plate. For the dynamic use of the Netti Dynamic System this should be kept loose to allow for the knee joint to move.

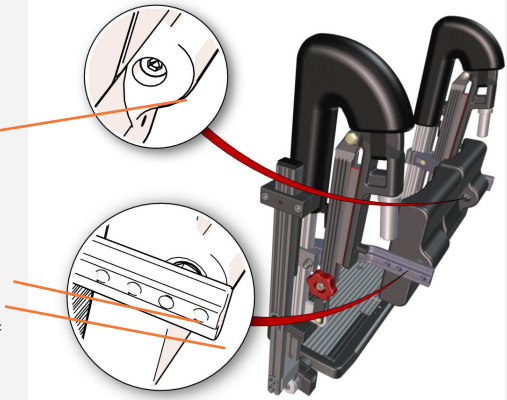
4.3 Netti Dynamic System DUAL foot support - calf depth adjustment:

Adjust the calf-pad depth by losing the M8 nut on the calf-pad arm with 2x13mm spanners.
Push the calf pad backwards or forwards till it barely touches the user's calf with his/her feet resting on the footboard.
The feet should stay on the footboard with the feet on the middle of the foot support.



4.4 Netti Dynamic System PARALLEL foot support - calf depth adjustment:

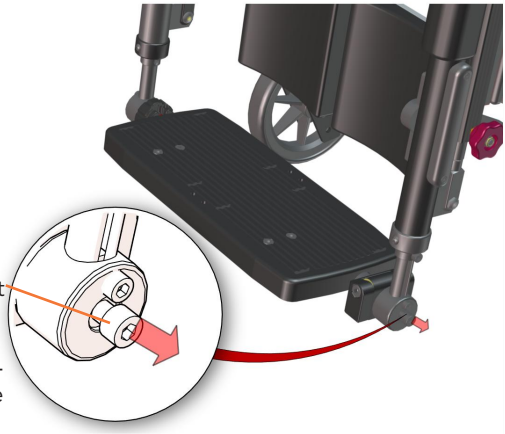
Adjust the calf-pad depth by losing the M8 screw sitting inside the calf pad.
Reposition the calf pad backwards or forwards till it barely touches the user's calf with his/her feet resting on the footboard.
The feet should stay on the footboard with the feet on the middle of the foot support.



5. FOOTPLATE ANGLE ADJUSTMENTS

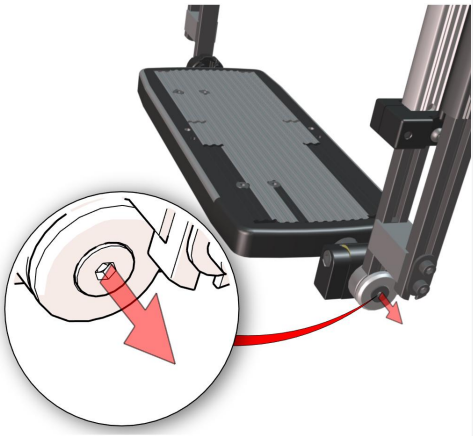
5.1 DUAL footboard - angle adjustment

Loosen the M8 screw on the left foot support with 6mm Allen key. This allows the footboard to rotate. Choose a footboard angle to accommodate the user's foot angle. Fix the screws tightly so that the footboard does not move.



5.2 PARALLEL footboard - angle adjustment

Loosen the M8 screw on the left foot support with 5mm Allen key. This allows the footboard to rotate. Choose a footboard angle most similar to the user's foot angle. Fix the screws tightly.



Please note that the footboard in both systems is still allowing for some rotation forward to flex when the user extends his/ her feet.

Please note - lubrication of the gliding length profiles with white Vaseline is important to ensure smooth function of the Netti Dynamic System Foot supports.

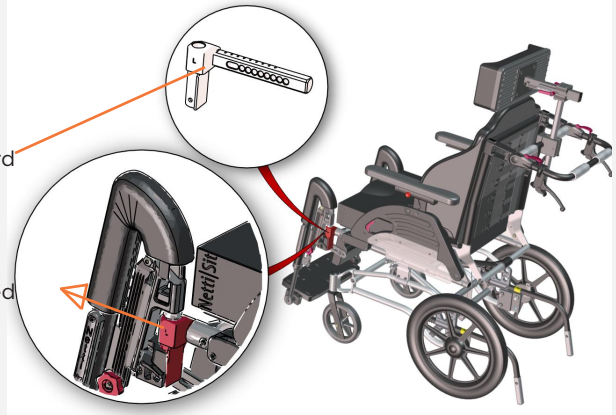
6. NETTI DYNAMIC SYSTEM FOOT SUPPORT FOR DIFFERENT LEG LENGTHS

6.1 One-sided footboard depth adjustment

By uneven leg length or leg position the foot support and footboard depth can be adjusted to compensate for this by the use of extensions pieces and extension bracket on the right foot support.

The extension piece is pulled forward and fixed in needed length on the side where the leg is longer.

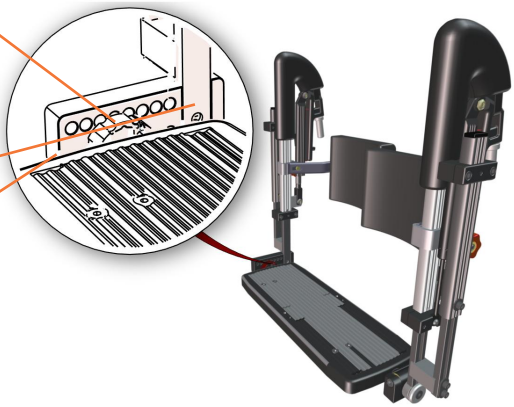
The foot support sits in the extension piece and is therefor also moved forward.



For the footboard to fall into the footboard lock after one sided extension piece adjustment, the footboard has to be repositioned.

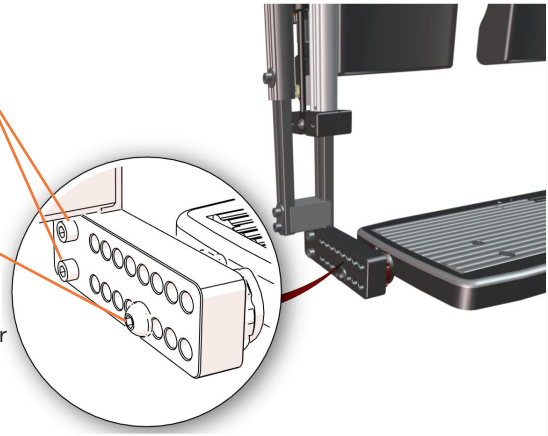
The footboard lock is removed from the length profile where it normally sits - and mounted to the extension bracket.

The extension bracket is mounted to the length profile where the lock was sitting.

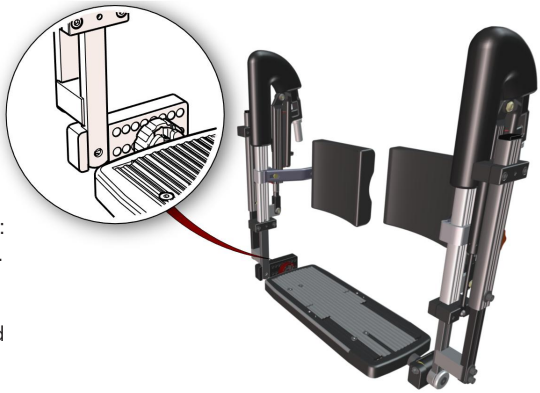


Fix the extension bracket with 2 M6 screws with 5mm Allen key through the length profile into 2 nuts.

Fix the footboard lock with one M8 screw with 6mm Allen key.



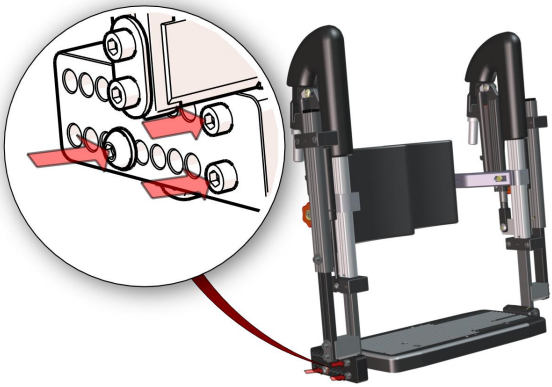
This picture shows the bracket reaching forward, allowing for longer left leg where the right foot support and calf pad has to go backwards:
- suiting a user with shorter right leg.



This picture shows the bracket reaching backwards, allowing for longer right leg where the right foot support and its calf pad go forwards:
- suiting a user with longer right leg.

All mounting illustrations are showed for PARALLEL foot support model. The mounting procedure for DUAL foot support is similar.

Fix the extension bracket with 2 M6 screws with 5mm Allen key through the length profile into 2 nuts.
Fix the footboard lock with one M8 screw with 6mm Allen key.



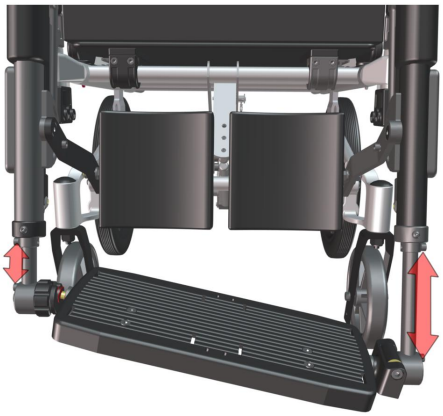
Extension platform kit for PARALLEL foot support: 82304

Extension platform kit for DUAL foot support: 82939

7. NETTI DYNAMIC FOOT SUPPORT DUAL FEATURES

Netti Dynamic foot support DUAL is especial designed for users pushing with uneven force with their lower extremities providing open kinetic chain.

The gas cylinders works independent and allows for the foot supports to be extended differently - tilting the footboard sideways and also tilting it forwards.



This multitude of possible flexible movements - gives the user freedom to perform voluntarily and involuntarily leg movements to very high degree.

When the extension forces are reduced, the gas cylinders gently brings the feet and legs back to the original foot position.

The wear and tear on the wheelchair is substantially reduced since the forces applied, are absorbed by the flexible system.

8. CHAIR WIDTHS, HEIGHTS AND FABRIC FOR NETTI DYNAMIC FOOT SUPPORT **DUAL:**

Chair width	Foot support adj. R 3D fabric	Foot support adj. L 3D fabric	Footboard *A (height 20cm)	Calf pad	Item no.
35cm	82856	82857	82872	82862	82907
38cm	"	"	82873	82863	82908
40cm	"	"	82874	82863	82909
43cm	"	"	82875	82864	82910
45cm	"	"	82876	84864	82911
50cm	"	"	82877	82865	82912
Chair width	Foot support adj. R 3D fabric	Foot support adj. L 3D fabric	Footboard *B (height 30cm)	Calf pad	Item no.
35cm	82856	82857	82880	82862	82915
38cm	"	"	82881	82863	82916
40cm	"	"	82882	82863	82917
43cm	"	"	82883	82864	82918
45cm	"	"	82884	84864	82919
50cm	"	"	82885	82865	82920

Chair width	Foot support adj. R Easy care fabric	Foot support adj. L Easy care fabric	Footboard *A (height 20cm)	Calf pad	Item no.
35cm	82858	82859	82872	82862	82923
38cm	"	"	82873	82863	82924
40cm	"	"	82874	82863	82925
43cm	"	"	82875	82864	82926
45cm	"	"	82876	84864	82927
50cm	"	"	82877	82865	82928
Chair width	Foot support adj. R Easy care fabric	Foot support adj. L Easy care fabric	Footboard *B (height 30cm)	Calf pad	Item no.
35cm	82858	82859	82880	82862	82931
38cm	"	"	82881	82863	82932
40cm	"	"	82882	82863	82933
43cm	"	"	82883	82864	82934
45cm	"	"	82884	84864	82935
50cm	"	"	82885	82865	82936

For definition of correct footboard height, measure lower leg length with normal shoes and reduce it with seat cushion thickness. If it is shorter than 45cm choose footboard height 20cm. If it is longer than 45cm choose footboard height 30cm.

*A) Footboard height 20cm:

The distance between footboard and seat plate is minimum 30cm up to 45cm

*B) Footboard height 30cm:

The distance between footboard and seat plate is minimum 45cm up to 60cm

CHAIR WIDTHS, FORCES AND FABRIC FOR NETTI DYNAMIC FOOT SUPPORT **PARALLEL:**

Chair width	Foot support adj. **R 3D fabric**	Foot support adj. **L 3D fabric**	Footboard	Calf pad	Gas spring force	Item no.
35cm	41960	41961	82266	27964	100N	82270
40cm	"	"	82267	27965	"	82271
45cm	"	"	82268	27966	"	82272
50cm	"	"	82269	27967	"	82273
Chair width	Foot support adj. **R EasyCare fabric**	Foot support adj. **L EasyCare fabric**	Footboard	Calf pad	Gas spring force	Item no.
35cm	41762	41763	82266	27964	100N	82799
40cm	"	"	82267	27965	"	82800
45cm	"	"	82268	27966	"	82801
50cm	"	"	82269	27967	"	82802

9. TRANSPORT

Wheelchairs with Netti Dynamic System Foot support can be used as seat in a car if the wheelchair has been tested and approved to ISO 7176-19. Please follow the description for fixing the chair and the user as described in the User manual for the wheelchair.

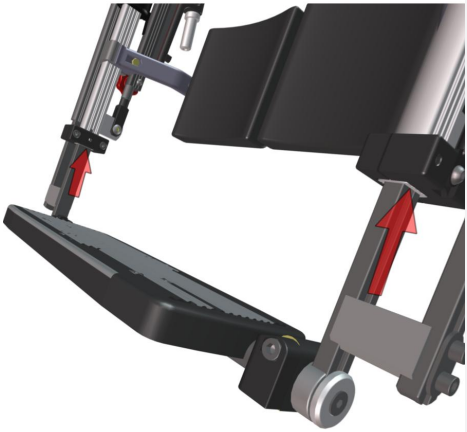
The Netti Dynamic Foot support has to be locked when the wheelchair is used as a seat in a car.

10. MAINTENANCE

All wheelchairs equipped with Netti Dynamic System will require special attention to maintenance compared with wheelchairs without dynamic system, due to the heavy and strong use.

Follow the wheelchair maintenance description in the wheelchair User Manual and pay special attention to tightening all screws and inspecting all joints.

Inspect the belts and harnesses on tear and wear. Replace if necessary.



Netti Dynamic System Foot support - Lubrication

Please note - lubrication of the gliding length profiles with white Vaseline - is important to ensure smooth function of the Netti Dynamic System Foot supports. In some cases sound can occure from the moving parts if they are not regularly lubricated.

11. TROUBLE-SHOOTING

Please study the recommendations in the User Manual for the wheelchairs where the Netti Dynamic System foot support is mounted.

12. TESTS & WARRANTY

The guarantee claims stated in the User Manual for the wheelchair also applies for wheelchairs with Netti Dynamic System when the Netti Dynamic System or parts are mounted and adjusted for the user under supervision of a Netti Dynamic System certified person. Contact your local dealer if you have questions regarding certified persons for Netti Dynamic System.

Updated data about the wheelchair and the Netti Dynamic System is found on www.My-Netti.com

IN DIALOGUE WE CREATE
SIMPLE SOLUTIONS AND
ENABLE JOY OF LIFE

CE This product conforms to
93/42/EEC for medical products.

2015-10
UM0115UK

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