




 **Netti<sup>®</sup> DYNAMIC SYSTEM**  
Patent EP 2836184

# User Manual and mounting description

 This product conforms to MDR  
2017/745/EU for medical products.

UM0143 UK 2025-04

*inspire  
joy of life*

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# 1. INTRODUCTION

The Netti Dynamic System Concept:

## What is Netti Dynamic Seating?


Netti Dynamic System is a tilt and recline system which allows controlled Open Kinetic Chain (OK-C) movements of the user in a wheelchair. Netti static comfort wheelchairs can be accommodated to dynamically support the user's distal segments. The controlled OK-C movement impact: The distal segments can move, with a moderate resistance. OK-C helps to gain control of the proximal segments, especially when the user cannot inhibit muscle movements due to their medical condition.

Netti Dynamic System is a modular system that can be customized and adjusted according to the user's need.

Typically the complete Netti Dynamic System or some of its components may be used for wheelchair users with involuntary movements.

## EXAMPLES OF INVOLUNTARY MOVEMENTS ARE:

- **Dystonia** – involuntary, sustained or intermittent muscle contractions that can cause twisting and repetitive movements, abnormal posture or both. Muscle tone varies from normal or hypotonia to hypertonia.
- **Athetosis** – slow, involuntary writhing movement.
- **Chorea** – brief, irregular jerking movements.
- **Tremor** – this is a rhythmic movement of part of the body.
- **Hemiballism** – these are wild flinging / throwing movements of one arm or leg, usually occurring as a result of a cerebrovascular event.
- **Clonus** – rapid muscle jerks that are frequently repetitive.

 Before using Netti Dynamic System (NDS) or any of its components, a seating assessment should be carried out by a trained professional.

## ABOUT THIS MANUAL

In order to avoid damages while using the Netti Dynamic System please study this manual carefully before starting to use the chair. A wheelchair with dynamic system must be adjusted and operated different than static wheelchairs.

Please also pay careful attention to the user manual for the wheelchair where the dynamic system has been mounted. The following symbols are used to point out important points:



**Symbol of forbidden actions.**  
No warranty can be claimed whenever these actions are implemented.



**Symbol of warning.** Whenever this symbol is used, caution has to be taken.



**Symbol for important information.**



**Symbol for useful tips.**



**Symbol for tools.**



**Symbol for:**  
Max safe slope for hand brake.



**Symbol for:** Max user weight.



**Medical Device**



**Manufacturer - Name and address**



**Date of manufacturing**



**Serial number**




**Read user instruction**





## WHICH TYPE OF NETTI DYNAMIC SYSTEM CONFIGURATION COULD BE INDICATED?

Before any product selection a seating evaluation should be conducted by a trained professional.

1. If your patient / user exhibits involuntary movements of the lower extremities only, the Netti Dynamic leg support system only could be considered, this will be a dynamic component added to a Netti III, Netti III HD, Netti 4U CED(S), Netti 4U Base, Netti V, Netti S, Netti AdaptPro, Netti III XHD ( max sw 600 mm).
  2. If your patient / user exhibits involuntary movements of the trunk only, the Netti Dynamic recline system only could be considered, this will be a dynamic component added to a Netti III, Netti III HD, Netti 4U CED(S), Netti 4U Base, Netti V, Netti S, Netti AdaptPro, Netti III XHD ( max sw 600 mm).
  3. If your patient / user exhibits involuntary movements of the head only, the Netti Dynamic head support system only could be considered, this will be a dynamic component added to a Netti III, Netti III HD, Netti 4U CED(S), Netti 4U Base, Netti V, Netti S, Netti AdaptPro, Netti III XHD (max sw 600 mm).
  4. If your patient / user exhibits involuntary movements of the head and trunk only, the Netti Dynamic recline system in combination with the Netti Dynamic head support could be considered, these will be two dynamic components added to a Netti III, Netti III HD, Netti 4U CED(S), Netti 4U Base, Netti V, Netti S, Netti AdaptPro, Netti III XHD ( max sw 600 mm).
-  If your patient / user exhibits involuntary movements of the head and trunk and lower extremities, the full Netti Dynamic System needs to be considered. Our full Netti Dynamic range consist of: Netti Dynamic III HD, Netti Dynamic 4U CED(S), Netti Dynamic 4U Base, Netti Dynamic S, Netti Dynamic AdaptPro.

## INTENDED USE

Netti Dynamic System is an advanced mobility aid for users affected by involuntary movements which causes discomfort / damage, loss of position / function, and or brakage of equipment - challenging the strength of the wheelchair.

The patented Netti Dynamic System allows and accommodates the user during the involuntary movement and helps to guide the user back into the correct position. The wheelchair is dynamic and will follow the user's movements of both upper and lower body.

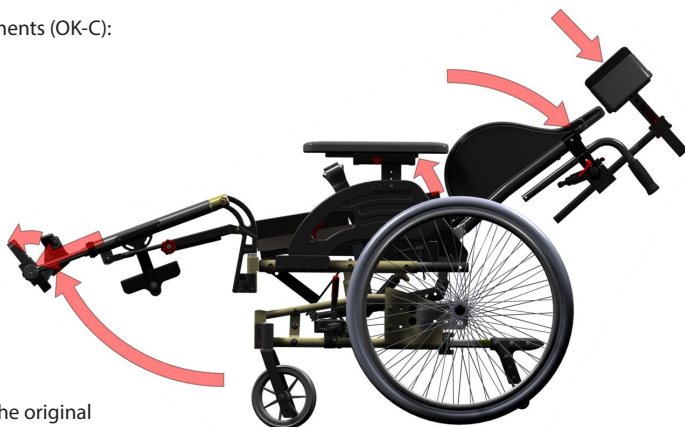
### NETTI DYNAMIC SYSTEM

allows for Open Kinetic Chain movements (OK-C):

- Leg movements
- Hip movements
- Back movements
- Head movements
- Foot movements

### IMPORTANT BENEFITS

- The wheelchair adapts to the movements of the user.
- The user will have less discomfort during spasm as the wheelchair supports the movement.
- After a spasm the user returns to the original sitting position securing a good position and pressure distribution.
- It prevents unintentional change of position.
- It prevents the user from sliding forward in the chair and thereby getting a bad sitting position and inadequate distribution of pressure.
- Extends the lifetime of the wheelchair.



### CONTRAINDICATIONS

Limitations of the Netti Dynamic system:

- when allowing movements leads to destructive postures.
  - when allowing movements increases extension tone and spasms.
  - when the client may not be able to return to a neutral position.
  - when the client weight is higher than 135 kg.
  - Max user weight is 135 kg.
- For Netti Dynamic S - max user weigh: 75 kg

## NETTI DYNAMIC SYSTEM

is a modular system that can be customized and adjusted according to the user's need. The Netti Dynamic System seat and back unit can be ordered with these chair models:

- 
- Netti Dynamic III and HD (2 models)
- Netti Dynamic 4U CED (S) (2 models)
- Netti Dynamic 4U BASE
  
- Netti Dynamic AdaptPro has the complete dynamic System adapted to this advanced chair.
- Netti Dynamic S has similar dynamic functions adjusted to the smaller chair.
- Netti V can be equipped with most dynamic moduls except dynamic seat plate.



Netti Dynamic III HD with Dynamic System with a pelvic stabilizer and ankle huggers

### USER REQUIREMENTS

\* If you choose a Netti III model, we recommend the reinforced frames Netti III HD due to hard use and uncontrollable muscle movements of the user. In order to get the right model, width, heights etc. a seating evaluation should be performed by a trained clinician.

### Netti Dynamic Components:

The Netti Dynamic head support and leg supports can be mounted on a range of our static comfort wheelchairs:

Netti III models, Netti 4U CED/S and BASE models and Netti V.

### HOW TO USE THIS MANUAL

This manual focuses on the adjustments and use of the Netti Dynamic System with Netti Dynamic Leg supports.



**This manual is to be used together with the user manual of the wheelchair.**

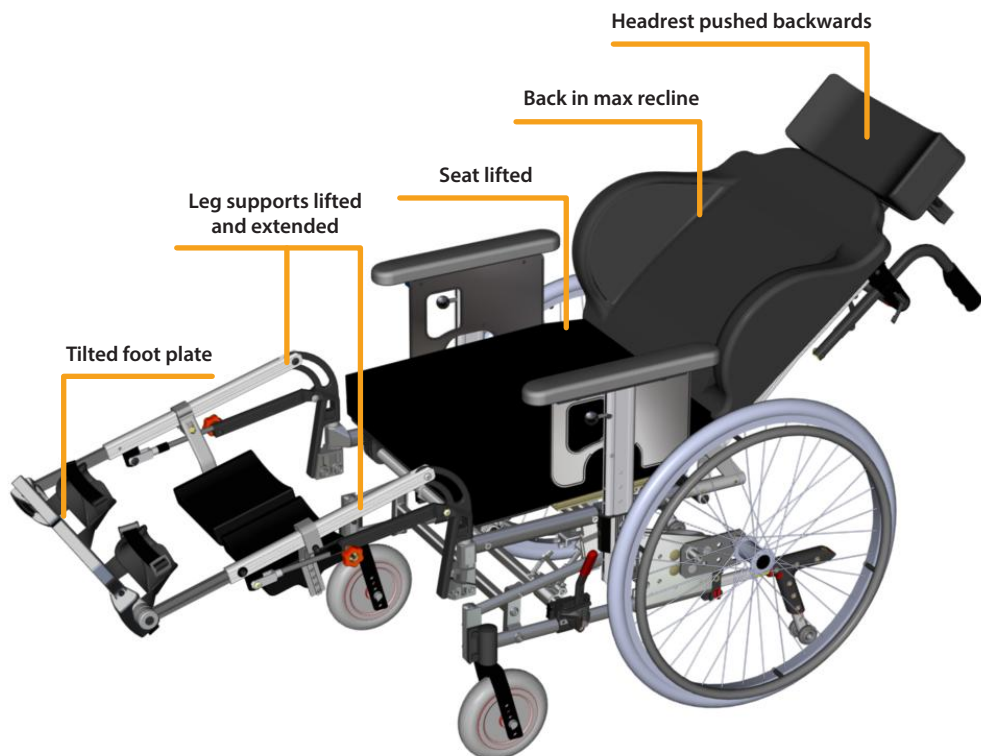
The user manuals for each relevant Netti static wheelchair model contains all necessary information about mounting, adjustments and use of the static wheelchair parts that serve as basis frame for the Netti Dynamic System. The wheelchair user manual is delivered as a part of the complete product.



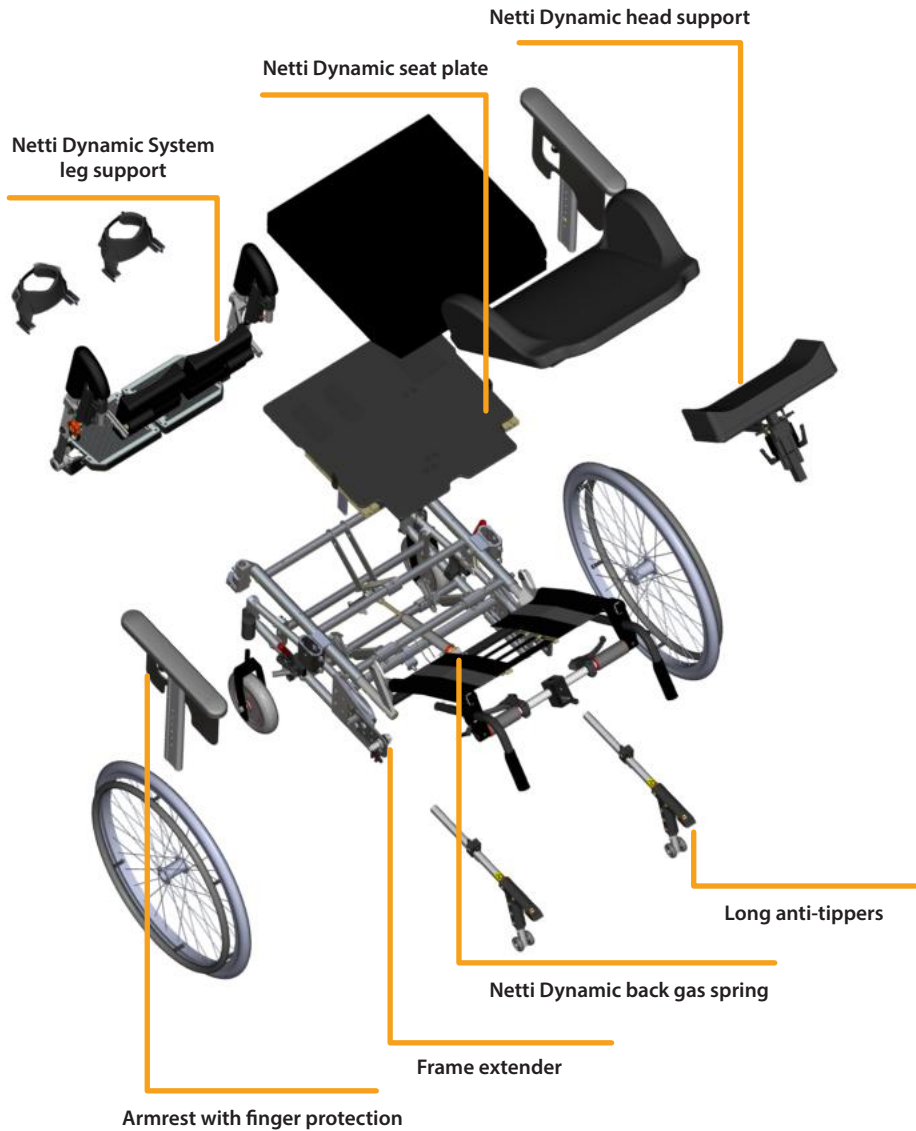
Netti Dynamic CED

## 2. NETTI DYNAMIC SYSTEM FUNCTIONS

The dynamic elements moved into max extension applied to a Netti III wheelchair.



## 2.1 EXPLODED VIEW OF NETTI DYNAMIC SYSTEM



## 2.2 NETTI DYNAMIC LEG SUPPORT FEATURES

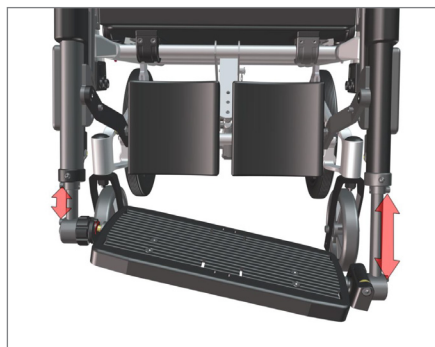
Netti Dynamic leg support is especially designed for providing an open kinetic chain for users who are pushing with uneven force with their lower extremities. Unilateral extension of the hip; (left or right part of the leg support goes down).

The gas cylinders on the leg supports work independently and allow for the leg 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 a very high degree.

When the extension forces are reduced, the gas cylinders gently bring 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.



## 2.3 NETTI DYNAMIC LEG SUPPORT FUNCTIONAL OVERVIEW

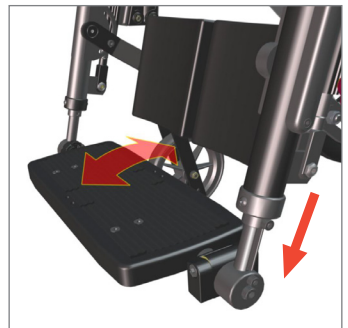
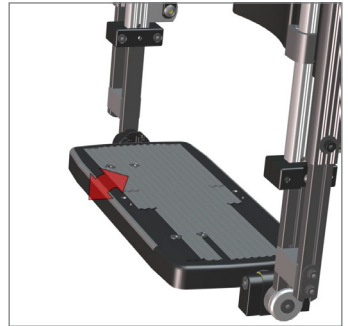
The Netti Dynamic leg supports allow controlled Open Kinetic Chain (OK-C) movements of the lower extremities of the user.

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.

Users with uneven movements of the lower extremities must use Netti Dynamic leg supports.

Netti Dynamic System leg support allows for dynamic:

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



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



## 2.4 LEG SUPPORT ADJUSTMENT

For each user adjustments are required in order to meet the unique user needs.

 The adjustment should be carried out by a trained professional

The Netti Dynamic leg support product range fits to different seat widths.

Available sizes: see table on page 22.

### NETTI DYNAMIC DUAL LEG SUPPORT

Netti Dynamic leg support is offered in two different lengths.

Netti Dynamic **short** leg support lengths suits persons with lower leg length from circa 350 mm up to approximately 500 mm (measured when knees are 90° flexed, from underneath the thigh to under the heel – inclusive normal shoes).

Netti Dynamic **normal** leg support lengths suits persons with longer than 500 mm lower legs. See table and sizes on page 22 of this User Manual.







### 3.2 SEAT DEPTH ADJUSTMENTS IN THE BACK:

When the chair is equipped with a main wheel larger than 12" or 16", remove the main wheels first.

#### Back hinge adjustment

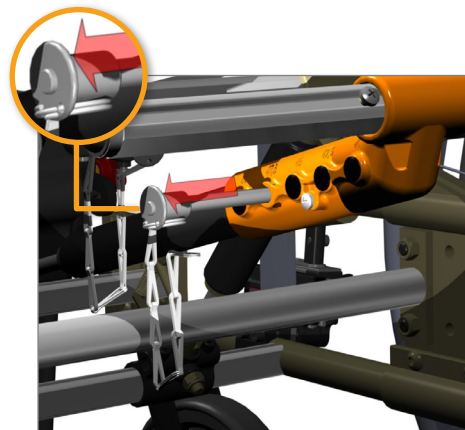
- Remove the screws on each side which are holding the back hinge.
- Pull the bracket on each side back or push it forward to desired position before the screws are fixed again.



#### Recline gas spring head position:

- Remove the bolt holding the recline gas spring head.
- Reposition it in the corresponding number hole as the previously adjusted chair back bracket.
- This will also have influence on the chair back angle.

**i** By choosing another hole you can change the angle of the back support which means that the back angle or hip angle will be more open or more closed.



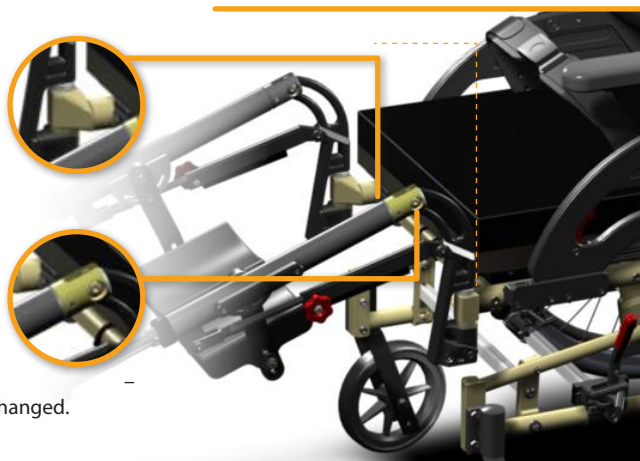
See separate table in the chapter:

"Technical specification and options of Netti Dynamic back support gas spring and separate mounting description MD0120UK.

### 3.3 SEAT DEPTH ADJUSTMENTS IN THE FRONT:

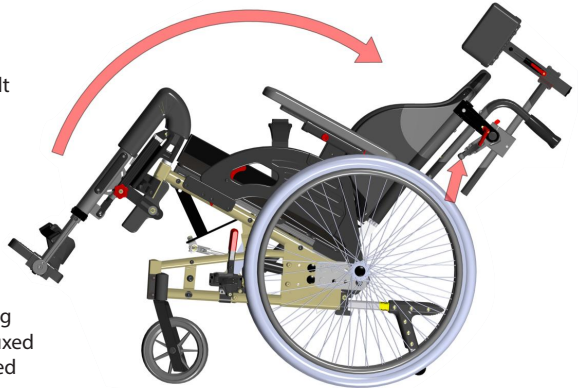
The extension pieces are adjusted by removing the screws holding them and pulling the extension pieces out to desired position.

The aim is to have the centre of the users knee joint aligned with the center of the leg support rotation centre – while the user at the same time is having good back support of his lower back also when the leg support angle is changed.



### 3.4 SEAT ANGLE ADJUSTMENT:

Can be adjusted at any time by the use of the tilt handles.

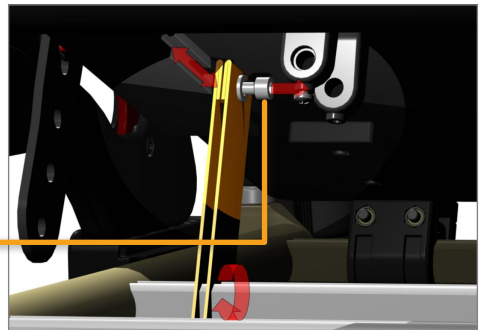


### 3.5 SEAT PLATE ADJUSTMENT:

The Netti Dynamic System seat plate is pivoted in the front of the seat and the pelvic stabilizer is fixed to the seat plate. This allows the seat to rise in the rear when the user is doing a hip extension having the pelvic stabilizer is fixed around the hip. The pelvic stabilizer must be used together with the dynamic seat plate.

**⚠** The pelvic stabilizer must be firmly tightened to minimize the risk of sliding.

To prevent the seat plate to pivot too high, there are seat plate limiters – belts – between the seat plate and the chair frame. The seat plate limiters can be adjusted to allow for max seat pivoting. Adjustment of the seat plate limiter is done by loosening the screw holding the seat plate limiter belt under the seat and sliding it back or forward to find the desired movement of the seat plate.

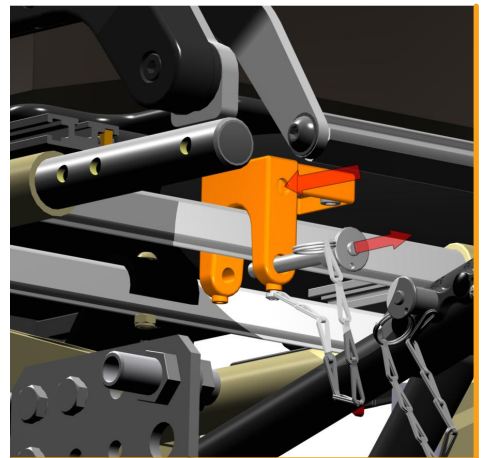


### 3.6 SEAT PLATE LOCK

In some cases it may be necessary for safety reasons to lock the movement of the seat. This is when the wheelchair is used as a seat in a car or when driving the chair on rough surface where a sudden spastic extension may cause the chair and user to become unstable.

The seat plate lock is easy to use; remove the QR-Axle by pressing the head to release it and move it from its upper position and push it into the lower position.

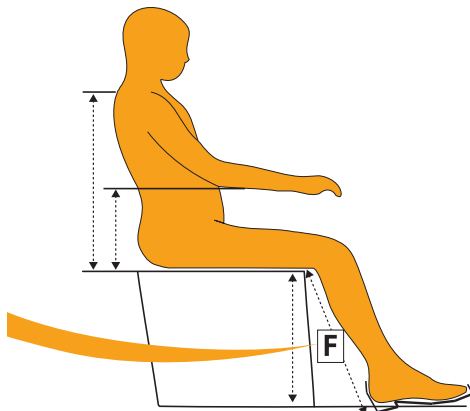
**i** Remember to unlock the seat plate when you are back in smooth areas, allowing the Netti Dynamic System to work.



### 3.7 LEG SUPPORT HEIGHT ADJUSTMENT

Measure the user's lower leg length  $F$  – 90 degrees bent knee – measure from underside thigh to underside heel of shoe.

The centre joint of the leg support is hidden under the knee-joint upholstery. The illustration with removed upholstery shows the leg support knee-joint centre. This shall be aligned both horizontally and vertically with the knee-joint of the user by adjusting both seat depth and footboard height.



#### NB! CORRECT SEAT DEPTH:

- Loosen the Velcro straps of the back support. Check that the user is sitting well into the chair leaning on the back cushion.
- Adjust the back support by pulling the straps of the Velcro. The knees of the user should align with the joint of the leg support both in height and in depth. This will ensure that the user gets a back good support and good pressure distribution under the thighs.
- Leave 30 – 40 mm free space between the users thigh and seat plate front.

**The seat depth can be adjusted by:** moving the leg support extension pieces and thereby increase the seat depth in the front and by repositioning the chair-back hinges to adjust the seat depth backwards.

Consider wheelchair balance.



### 3.8 FOOTBOARD HEIGHT ADJUSTMENT

- Loosen the M6 screws holding the leg support length-profile on the outside with 5 mm 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 model.**



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

### 3.9 CALF SUPPORT HEIGHT ADJUSTMENT

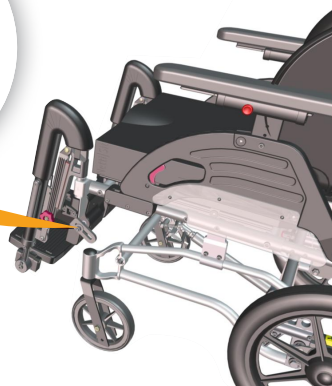
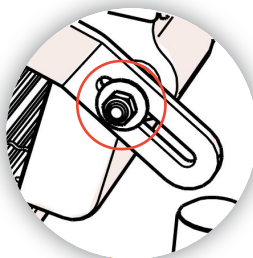
- Loosen the two M6 screws with 5 mm Allen-key – on the half-moon brackets – holding the calf pad arm. This allows the calf support-pad arm to move up and down. The calf supports should in addition to supporting the calf also help prevent the feet sliding backwards from the footboard.
- Choose a height covering the middle and lower part of the user's calf and tighten the screws.
- 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.




### 3.10 CALF SUPPORT DEPTH ADJUSTMENT

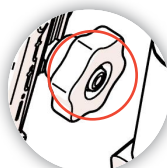
- Loosen the M8 screw holding the calf pad on the calf pad arm
- 2 pc 13 mm spanner and
- Slide the calf pad in or out to desired depth – the calf pad barely touching the calf while the feet are standing on the middle of the foot board.

They should in addition to supporting the calf also help prevent the feet sliding backwards from the footboard.



### 3.11 OPENING- LOCKING THE NETTI DYNAMIC DUAL LEG SUPPORT

-  The red knobs allow locking the dynamic elevation of the leg support plate.
-  For the dynamic use of the Netti Dynamic System (OK-C) this should be kept loose to allow for the knee joint to move ("OK-C movement" for the knee joint).
-  Locking the leg support may be required if sudden extension may lead the leg supports to hit persons or surrounding. It is also required if the wheelchair is being used as a seat in a car.

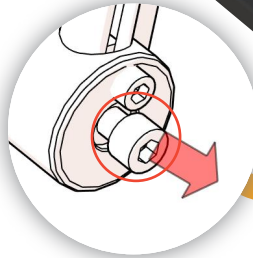


### 3.12 NETTI DYNAMIC FOOTBOARD – ANGLE ADJUSTMENT

- Loosen the M8 screw on the left foot board with 6 mm 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.



Please note that the footboard still allow 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 leg supports.





### 3.13 NETTI DYNAMIC LEG SUPPORTS FOR DIFFERENT LEG LENGTHS

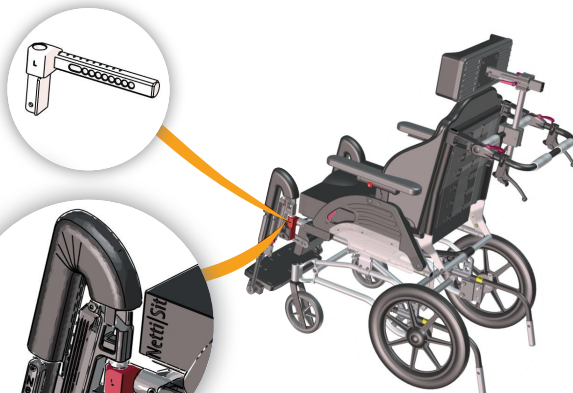
#### ONE-SIDED FOOTBOARD DEPTH ADJUSTMENT

**By uneven leg length or leg position:**

The leg support and footboard depth can be adjusted to compensate for this by the use of extensions pieces and extension bracket on the right leg support.

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

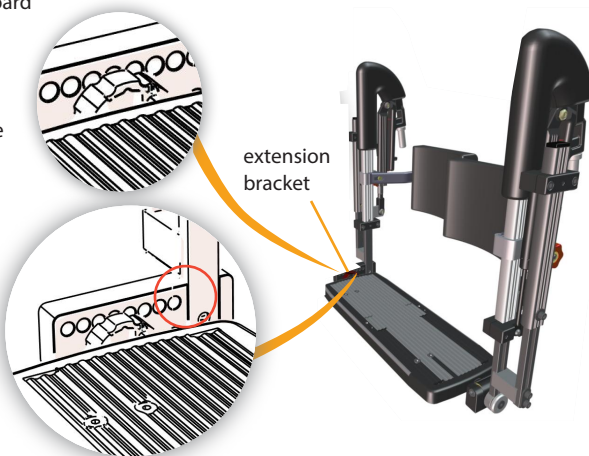
The leg support sits in the extension piece and is therefor also moved forward.



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

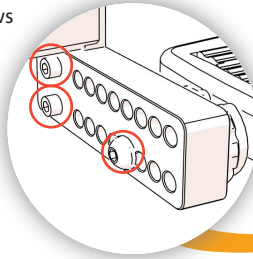
The footboard lock is removed from the length profile where it normally sits – and mounted to the extension bracket.

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



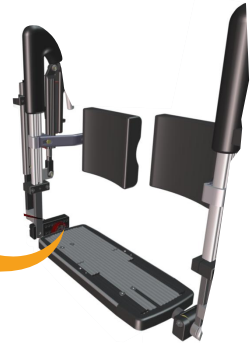
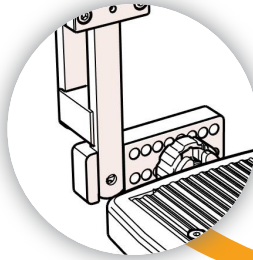


- Fix the extension bracket with 2 M6 screws with 5 mm Allen-key through the length profile into 2 nuts.
- Fix the footboard lock with one M8 screw with 6 mm Allen-key.



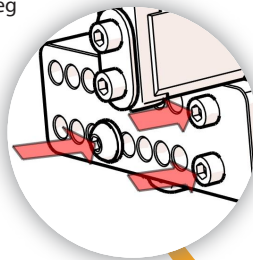
**i** The picture to the right shows the bracket reaching forward, allowing for longer left leg. The right leg support and calf pad have to be moved backwards – suiting a user with shorter right leg.

**i** The picture to the right shows the bracket reaching backwards, allowing for longer right leg. The right leg support and its calf pad have to be moved forwards – suiting a user with longer right leg.



Mounting illustrations for one-sided footboard depth adjustments are shown for Netti Dynamic PARALLEL leg support. The mounting procedure for one-sided footboard depth adjustment for Netti Dynamic DUAL leg support is similar.

**Extension platform kit for DUAL leg support: 82940 and 82941.**



### 3.14 CHAIR WIDTHS, HEIGHTS AND FABRIC FOR NETTI DYNAMIC DUAL LEG SUPPORT:

| CHAIR WIDTH IN MM | LEG SUPPORT ADJ. R 3D FABRIC        | LEG SUPPORT ADJ. L 3D FABRIC        | FOOTBOARD *A (HEIGHT 20 CM) | CALF PAD | ITEM NO. |
|-------------------|-------------------------------------|-------------------------------------|-----------------------------|----------|----------|
| 350               | 82856                               | 82857                               | 82872                       | 82862    | 82907    |
| 380               | 82856                               | 82857                               | 82873                       | 82862    | 82908    |
| 400               | 82856                               | 82857                               | 82874                       | 82863    | 82909    |
| 430               | 82856                               | 82857                               | 82875                       | 82863    | 82910    |
| 450               | 82856                               | 82857                               | 82876                       | 82864    | 82911    |
| 500               | 82856                               | 82857                               | 82877                       | 82865    | 82912    |
| CHAIR WIDTH IN MM | LEG SUPPORT ADJ. R 3D FABRIC        | LEG SUPPORT ADJ. L 3D FABRIC        | FOOTBOARD *B (HEIGHT 30 CM) | CALF PAD | ITEM NO. |
| 350               | 82856                               | 82857                               | 82880                       | 82862    | 82915    |
| 380               | 82856                               | 82857                               | 82881                       | 82862    | 82916    |
| 400               | 82856                               | 82857                               | 82882                       | 82863    | 82917    |
| 430               | 82856                               | 82857                               | 82883                       | 82863    | 82918    |
| 450               | 82856                               | 82857                               | 82884                       | 82864    | 82919    |
| 500               | 82856                               | 82857                               | 82885                       | 82865    | 82920    |
| CHAIR WIDTH IN MM | LEG SUPPORT ADJ. R EASY CARE FABRIC | LEG SUPPORT ADJ. L EASY CARE FABRIC | FOOTBOARD *A (HEIGHT 20 CM) | CALF PAD | ITEM NO. |
| 350               | 82858                               | 82859                               | 82872                       | 82862    | 82923    |
| 380               | 82858                               | 82859                               | 82873                       | 82862    | 82924    |
| 400               | 82858                               | 82859                               | 82874                       | 82863    | 82925    |
| 430               | 82858                               | 82859                               | 82875                       | 82863    | 82926    |
| 450               | 82858                               | 82859                               | 82876                       | 82864    | 82927    |
| 500               | 82858                               | 82859                               | 82877                       | 82865    | 82928    |
| CHAIR WIDTH IN MM | LEG SUPPORT ADJ. R EASY CARE FABRIC | LEG SUPPORT ADJ. L EASY CARE FABRIC | FOOTBOARD *B (HEIGHT 30 CM) | CALF PAD | ITEM NO. |
| 350               | 82858                               | 82859                               | 82880                       | 82862    | 82931    |
| 380               | 82858                               | 82859                               | 82881                       | 82862    | 82932    |
| 400               | 82858                               | 82859                               | 82882                       | 82863    | 82933    |
| 430               | 82858                               | 82859                               | 82883                       | 82863    | 82934    |
| 450               | 82858                               | 82859                               | 82884                       | 82864    | 82935    |
| 500               | 82858                               | 82859                               | 82885                       | 82865    | 82936    |

**i** 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 450 mm choose footboard height 200 mm. If it is longer than 450 mm choose footboard height 300 mm.

- \* A Footboard height 200 mm:  
The distance between footboard and seat plate is minimum 300 mm up to 450 mm.
- \* B Footboard height 300 mm:  
The distance between footboard and seat plate is minimum 450 mm up to 600 mm.

**i** Reinforced extension brackets for fixing the leg supports must be mounted.

### 3.15 CHAIR BACK HEIGHT

It can be extended by mounting a back extension.

For tall users the additional back height is giving better comfort.

When the chair is used as a seat in a car the tall users have additional safety benefit from the extended back height which is supporting the shoulder part firmly in case of an accident.



### 3.16 NETTI DYNAMIC HEAD SUPPORT

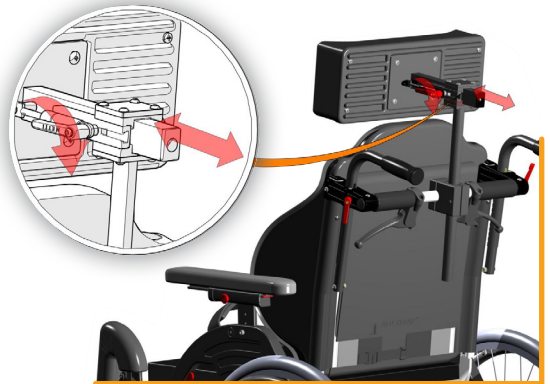
#### The Netti Dynamic System

is equipped with a dynamic head support. The head support follows the extension movement of the neck.

The depth of the head support should be adjusted to barely touch the back of the user's head when sitting relaxed.

#### For head support depth adjustment simply:

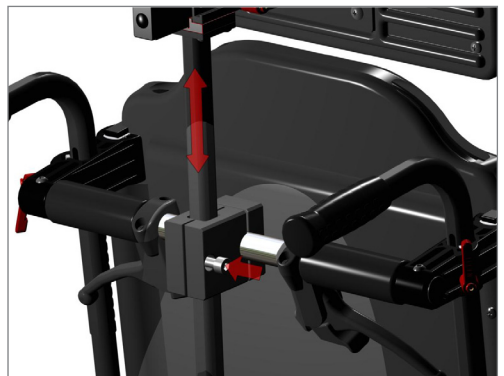
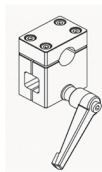
- Unlock the 2 two levers, one on each side of the head support holder.
- Move the head support forwards or backwards to desired position.
- Fix firmly the two levers.



#### The height of the head support needs to be adjusted to fit directly behind the head:

- Open the screw on the bracket holding the vertical pole of the head support.
- Pull the head support to desired height and fix the crew firmly.

The head support height bracket can be delivered with a lever instead of the screw.



### 3.17 ARM SUPPORT POSITION

Depending on the wheelchair model the arm support may vary.

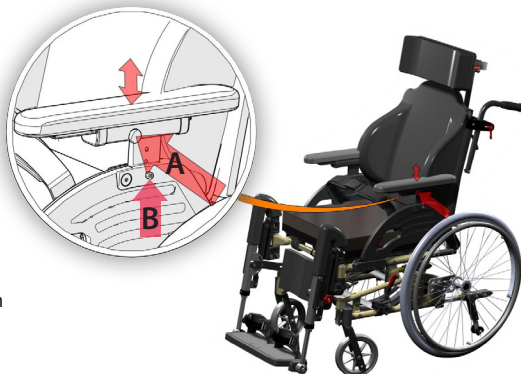
The arm supports are static and adjustable (no "Open Kinetic Chain movement concept"). The adjustments of arm support are described in the user manual of each type of static comfort wheelchair:

Netti III (Netti Dynamic III),

Netti 4U CED (Netti Dynamic CED),

Netti BASE (Netti Dynamic BASE) etc.

Arrow **A** points to depth adjustment knob on the arm support on a wheelchair with swing away arm support (Netti Dynamic CED). Height adjustment is done once loosening the screw **B** and fixing it in correct height.



### 3.18 MOUNTING, POSITIONING AND ADJUSTMENTS OF PELVIC SUPPORTS AND SUPPORTIVE HARNESSES

Netti Dynamic System can be equipped with several different types of pelvic stabilizer and supportive harnesses each type developed to give the user the best stabilization support depending on the conditions:

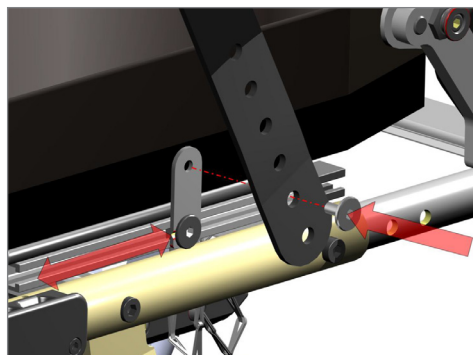
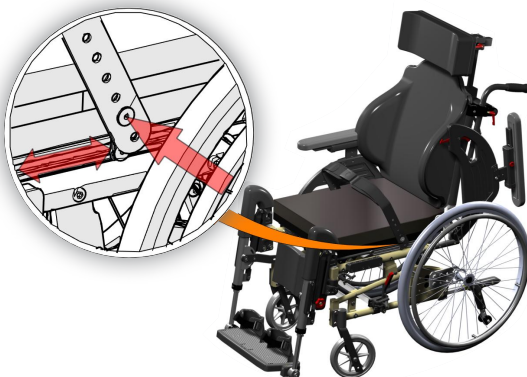
- Pelvic stabilizer – (included in Netti Dynamic System)
- Upper body harnesses
- Ankle huggers
- Shoe shells
- Pelvic stabilizer, mounted to the seat plate, helps the user to keep his position on the seat even under full spastic extension.


See separate Mounting Description for upper body harnesses.

#### HOW TO ADJUST THE PELVIC STABILIZER

The pelvic stabilizer is mounted on the guide-rail under the seating plate as shown on the illustration.

- Slide the pelvic stabilizer to a position where it crosses the upper thighs, angle: 70 – 90 degrees.
- Adjust the harness mounting point so that the harness can be tightened.



 Remember to shorten the stabilizer beneath the last used hole to avoid any conflict with chair frame.

### 3.19 ANKLE HUGGERS AND SHOE SHELLS

helps to keep the feet on the foot board not letting them slide of during an extension spasm.

The ankle huggers are mounted by threading them through the slots in the foot board on the leg support and fixing the belt on the underside of the foot plate, threading shown in the illustration – follow the numbers.



### 3.20 TABLE



Please do a user assessment to determine if a table is suitably. By special or extensive movement patterns a table may brake or cause danger to the user or 3rd parties because the table is statically fixed to the armrests while the movements of the user are dynamic.

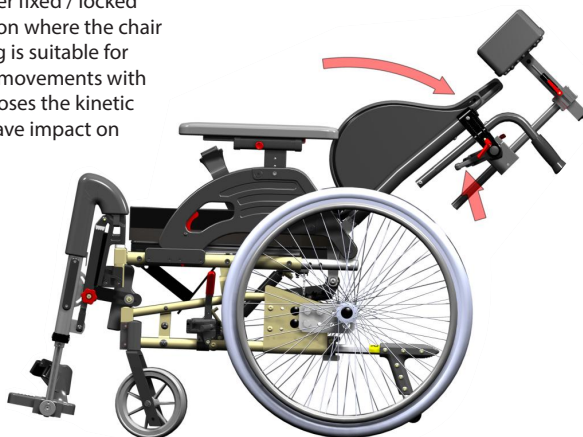



## 4. ASSESSMENT AND CHOICE OF NETTI DYNAMIC BACK SUPPORT GAS SPRING


The chair back position is defined by the chair back spring. There are two different type of springs available for the Netti Dynamic System:

### 4.1 OPTION 1: NETTI DYNAMIC 15° MOVEMENT


**THIS BACK SUPPORT SPRING** is never fixed / locked but allows for a 15° flex at any position where the chair back has been reclined to. The spring is suitable for users with open kinetic chain (OKC) movements with max extension less than 15°. If 15° closes the kinetic chain movement, more forces will have impact on the leg support.



 The leg support might break if it is not correct adjusted meaning that the user leg extension either reaches the end of the leg support dynamic area, or the user has slid forward.

 Netti Dynamic System wheelchair with Netti Dynamic 15° movement back support spring is not approved for being used as a seat in a vehicle.

 Netti Dynamic 15° movement back support springs are available in 80, 120 and 160 N force.

 The recline spring function is controlled by the recline handle on the bar behind the back support. This spring is NOT lockable.

## 4.2 OPTION 2: NETTI DYNAMIC FREE MOVEMENT

**THE FREE MOVEMENT BACK SUPPORT SPRING** allows the back support to move backwards to full recline, giving full support during extension movement. When the user starts to relax the spring move the back support to its original position.



**The strength of the full free gas spring has to be fitted individually according to body weight.**

**A spring that is too strong will not allow the back support to move. A spring that is too weak will not be strong enough to lift the back support to its original position.**

**Standard spring forces are: 600, 800, 1000 and 1200 N.**

### NETTI DYNAMIC FREE MOVEMENT BACK SUPPORT SPRING – LOCKING

The free gas spring is lockable in any reclined angle – when the recline handle on the back is in neutral position. This may be necessary / required, when the chair is used as seat in a car or driven on rough ground where a sudden spastic extension may make the chair unstable. Or when the user needs to lay back for a rest.



**If you recline the chair-back on a wheelchair with free gas spring, locking it in reclined position, it is only the Netti Dynamic Leg supports, seat plate and head support that will respond to spastic movements.**

**If you lock the free gas spring, it is important that the user is correct positioned and not sliding forward, to prevent skin damage and damage on the leg support.**

### NETTI DYNAMIC FREE MOVEMENT BACK- SUPPORT GAS SPRING – ACTIVATED

The dynamic back solution of Netti Dynamic System is activated by pulling the recline handle.

The back support gas spring should be assessed. It can be replaced by another spring (more / less Newton) if needed; either because of new or changed user needs, or if the weight of the user has changed.

Please contact your local dealer for advice on which new gas spring to choose. At the end of this manual the change of gas spring is described.

### ASSESSMENT OF DYNAMIC BACK SUPPORT GAS SPRING FORCES, SUITING USER STRENGTH AND MOVEMENT PATTERNS

An assessment of the user is needed to find the right strength/power of the spring.

#### **Correct solution:**

The back gas spring gives full support on a full, open kinetic chain movement during the user's extension pattern. When the user starts to relax, the gas spring move the back support to its original position.

### 4.3 HOW TO ASSESS AND CHOOSE THE RIGHT POWER OF THE DYNAMIC BACK SUPPORT GAS SPRING?

Main factors to be considered by a trained professional:

- The user's weight, width and height
- The character and strength of the body part extensions and movement patterns
- Goals and improvement regarding the user's "Activity daily life" and health condition.



**The user's movement pattern and muscle tone may also change over time. It is relevant to assess and monitor the fitting of the wheelchair and the power of gas springs according to the development of the user's movement pattern and muscle tone over time. If the gas spring is too strong, the user will not be able to make an extension. It will be a "closed kinetic chain", or a static position for the user.**



**If the gas spring is too weak, the user will not be lifted back to his / hers original seating position after an extension of the upper body part.**



#### 4.4 OVERVIEW OF AVAILABLE DYNAMIC RECLINE GAS SPRINGS AND SEAT WIDTHS

The **user's width** is an indicator to assess regarding the choice of minimum gas spring force.

The **user's weight** is an indicator to assess regarding the choice of minimum gas spring force:

| FREE MOVEMENT<br>BACK-SUPPORT GAS<br>SPRING MODELS –<br>LOCKABLE |           | USER<br>WEIGHT | SEAT WIDTHS   |           |           |           |           |           |           |           |           |
|--|-----------|----------------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|  |           |                | Minimum<br>kg | 250<br>mm | 300<br>mm | 350<br>mm | 380<br>mm | 400<br>mm | 430<br>mm | 450<br>mm | 500<br>mm |
| Newton (N)   |           |                |               |           |           |           |           |           |           |           |           |
| 200 N  |           | 20 kg          | ✓             | ✓         |           |           |           |           |           |           |           |
| 300 N  |           | 30 kg          | ✓             | ✓         |           |           |           |           |           |           |           |
| 400 N  |           | 40 kg          |               | ✓         | ✓         |           |           |           |           |           |           |
| 500 N  |           | 50 kg          |               |           | ✓         | ✓         |           |           |           |           |           |
| 600 N  |           | 60 kg          |               |           | ✓         | ✓         | ✓         | ✓         |           |           |           |
| 700 N  |           | 70 kg          |               |           | ✓         | ✓         | ✓         | ✓         | ✓         |           |           |
| 800 N  |           | 80 kg          |               |           |           | ✓         | ✓         | ✓         | ✓         | ✓         |           |
| 900 N  |           | 90 kg          |               |           |           |           | ✓         | ✓         | ✓         | ✓         |           |
| 1000 N   |           | 100 kg         |               |           |           |           |           | ✓         | ✓         | ✓         |           |
| 1100 N   |           | 110 kg         |               |           |           |           |           | ✓         | ✓         | ✓         |           |
| 1200 N   |           | 120 kg         |               |           |           |           |           |           |           | ✓         |           |
| 1300 N   |           | 130 kg         |               |           |           |           |           |           |           | ✓         |           |
| <b>FREE SPRING</b>   |           |                |               |           |           |           |           |           |           |           |           |
| 80 N – 15° back-support spring                                   | 82408 KIT |                |               |           |           |           |           |           |           |           |           |
| 120 N – 15° spring   | 82409 KIT |                |               |           |           |           |           |           |           |           |           |
| 160 N – 15° spring   | 82410 KIT |                |               |           |           |           |           |           |           |           |           |

#### 4.3 TECHNICAL SPECIFICATION AND OPTIONS OF NETTI DYNAMIC BACK SUPPORT GAS SPRINGS

##### FREE MOVEMENT BACK SUPPORT GAS SPRING:

**Combination of seat depths, front bracket hole and spring head – short and long.**

The recline angle range is approximately 40° and valid for all wheelchair-models with free movement gas spring lockable.

**Please note:** The separate Mounting Description MD0120UK NDS-Free solution – Back angle Matrix for Netti III, CED, BASE, gives a detailed description of how to adjust the gas springs and possible combinations.

**Model:** Netti Dynamic System

**Language:** English **Version:** 2025-04

**RECOMMENDED COMBINATIONS FOR GAS SPRING POSITIONS FOR NETTI III MODELS**

| SEAT DEPTH<br>IN MM | FRONT BRACKET HOLE<br>(A-B-C)<br>A IS UPPER HOLE | SPRING HEAD SHORT<br>38 MM | SPRING HEAD LONG<br>96 MM | STARTING ANGLE<br>IN DEGREES ° |
|---------------------|--|----------------------------|---------------------------|--------------------------------|
| 500                 | A  |                            | X                         | 98                             |
| 475                 | A  |                            | X                         | 87                             |
| 475                 | B  |                            | X                         | 97                             |
| 450                 | B  |                            | X                         | 85                             |
| 450                 | C  |                            | X                         | 95                             |
| 425                 | A  | X                          |                           | 92                             |
| 425                 | B  | X                          |                           | 101                            |
| 425                 | C  |                            | X                         | 85                             |
| 400                 | B  | X                          |                           | 91                             |

\* Orange colour is the standard adjustment for the chosen seat depth.

\* Grey colour could be an option. Other combinations of seat depths, front bracket holes and gas spring head sizes are not recommended.

**RECOMMENDED COMBINATIONS FOR GAS SPRING POSITIONS FOR NETTI III AND NETTI III HD MODELS**

| SEAT DEPTH<br>IN MM | FRONT BRACKET HOLE<br>(A-B-C)<br>A IS UPPER HOLE | SPRING HEAD SHORT<br>38 MM | SPRING HEAD<br>LONG<br>96 MM | STARTING ANGLE<br>IN DEGREES ° |
|---------------------|--|----------------------------|------------------------------|--------------------------------|
| 400                 | B  | X                          |                              | 91                             |
| 425                 | A  | X                          |                              | 92                             |
| 450                 | C  |                            | X                            | 95                             |
| 475                 | A  |                            | X                            | 87                             |
| 500                 | A  |                            | X                            | 98                             |

**STARTING RECLINE ANGLE FOR NETTI DYNAMIC CEDS**

| FRONT SPRING BRACKET HOLE (A-B-C). A IS UPPER HOLE. B IS THE POSSIBLE OPTION. A AND C WILL NOT WORK. | SEAT DEPTH (SD)<br>375 MM | SEAT DEPTH (SD)<br>400 MM | SEAT DEPTH (SD)<br>425 MM | SEAT DEPTH (SD)<br>450 MM |
|--|---------------------------|---------------------------|---------------------------|---------------------------|
| B: with first hole on spring hinge   | 92                        | 104                       | N/A                       | N/A                       |
| B: with second hole on spring hinge  | 83                        | 92                        | 104                       | N/A                       |
| B: with third hole on spring hinge   | N/A                       | 83                        | 92                        | 104                       |
| B: with fourth hole on spring hinge  | N/A                       | N/A                       | 83                        | 92                        |

**STARTING RECLINE ANGLE FOR NETTI DYNAMIC CED / BASE**

| FRONT SPRING BRACKET HOLE (A-B-C). A IS UPPER HOLE. B IS THE POSSIBLE OPTION. | SEAT DEPTH (SD)<br>425 MM | SEAT DEPTH (SD)<br>450 MM | SEAT DEPTH (SD)<br>475 MM | SEAT DEPTH (SD)<br>500 MM |
|---|---------------------------|---------------------------|---------------------------|---------------------------|
| B: with first hole on spring hinge  | 92                        | 104                       | N/A                       | N/A                       |
| B: with second hole on spring hinge   | 83                        | 92                        | 104                       | N/A                       |
| B: with third hole on spring hinge  | N/A                       | 83                        | 92                        | 104                       |
| B: with fourth hole on spring hinge   | N/A                       | N/A                       | 83                        | 92                        |

## 5. EVERYDAY USE OF THE NETTI DYNAMIC SYSTEM

A Netti wheelchair with Dynamic System is an advanced mobility aid. When delivered it has been adjusted and adapted by professionals to fit the user. The adjustments listed in chapter 3 must not be changed except from trained professionals. Change of adjustments will be necessary as the user grows or the movement pattern changes. Please contact your supplier for adjustments.

Please study this manual and become familiar with the wheelchair and all its possibilities.

**MAX USER WEIGHT for a wheelchair with DYNAMIC SYSTEM IS 135 KG  
FOR NETTI DYNAMIC S IS 75 KG**

After the wheelchair has been correctly adjusted to the user described in the previous chapters, you as an attendant need to learn how take advance of the dynamic functions and the tilt and recline features to give the user the most benefits of the chair.



**Make sure the belts and harnesses are fixed in the best way for the user.**

- **Practice opening and closing the dynamic functions and explore how the user reacts to the freedom for movement he / she becomes when the dynamic functions are open.**
- **Practice using the tilt function leaning the complete seating unit backwards and forward, experiencing and testing how the user react. The tilt function is recommended to be used for varying seating positions, leaning backwards for resting – see page 36-37 for details.**
- **Practice using the recline function by changing the back angle. This is used when applying a hoist to transfer the user in and out of the chair. Please return to dynamic back function after transfer.**

### 5.1 TRANSFER TO / FROM THE CHAIR

Techniques for transferring to / from the wheelchair should be practiced well with the persons involved.

#### **Some important advices for preparation of the chair:**

- The wheelchair should be placed as close as possible to the destination of the transfer.
- Pull the wheelchair 50-100 mm backwards in order to have the front castors turned forward.
- Make sure the anti-tips are turned downwards.
- Remove the leg support and revolve / remove the arm support on the side of the transfer.
- Make sure the brakes of the wheelchair are activated to prevent it rolling away.

### 5.2 USING A PATIENT HOIST

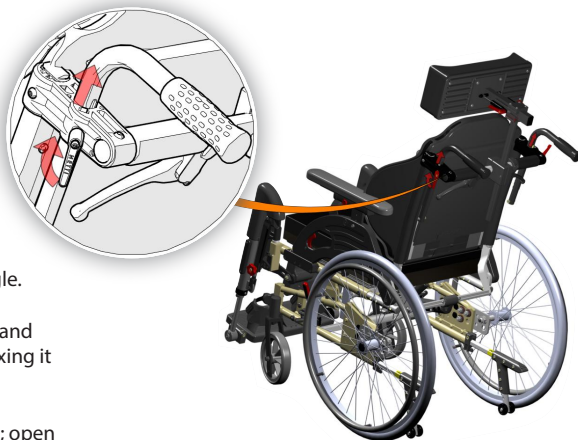
- Tilt the chair backwards.
- Open the back support angle slightly.
- **Option:** Remove the arm supports and get closer to the patient.
- Remove the leg support.
- Replace the components when the transfer is finished.

### 5.3 ATTENDANT USE

#### PUSH BOWS AND PUSH HANDLES

For safe manoeuvring the wheelchair, and preventing injuries for the attendant, the push bow or push handles should be adjusted according to attendants arm height when the elbow is in an 90 ° angle.

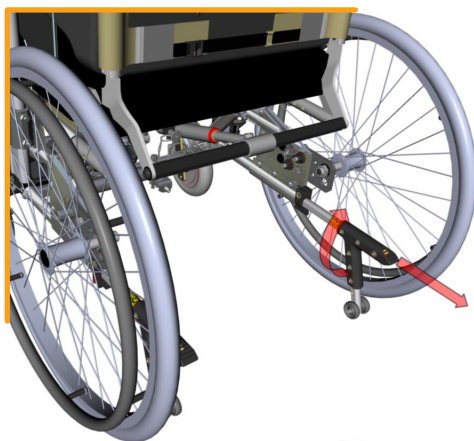
- Open the latch holding the push handle and push or pull it to desired height before fixing it again. Repeat on the other side.
- Adjusting the push bow is done similarly; open the latches, pull the push bow to desired height and lock the latches.




### 5.4 ANTI-TIPS

 Always use anti-tips to ensure a safe and stable wheelchair. When the “OK-C” Netti Dynamic System parts are active, it is essential to use the anti-tips at all times.

- The anti-tips are pulled and swung away when passing obstacles etc.



### 5.5 BRAKES

 Always use the brakes when the wheelchair is left without attendant standing behind.

- Push the red brake handle forward to lock the brake.



## 5.6 ARM SUPPORT

When the user is to leave the chair, the arm support can be removed or swung away, depending on which type of wheelchair you have. This makes the sideways transfer much easier.

Please, see the illustration of a chair with swing-away arm support.



## 5.7 LEG SUPPORTS

### Mounting Netti Dynamic leg supports:

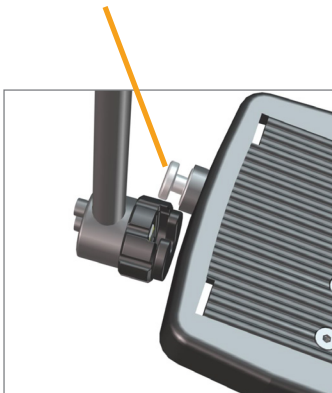
- Position the vertical bolt over the leg support bracket.
- Turn the leg support ca. 30 degree outwards and let it enter the bracket.
- Rotate it inwards with a little push. It will fall into place with a click.
- To remove the leg support:
- Unlock the foot plate and fold up.
- Pull the leg rest slightly upward and swing it outwards before lifting and detaching it from the chair.

When the foot board is folded up there is free space for transfer.



## 5.8 FOOT BOARD LOCK

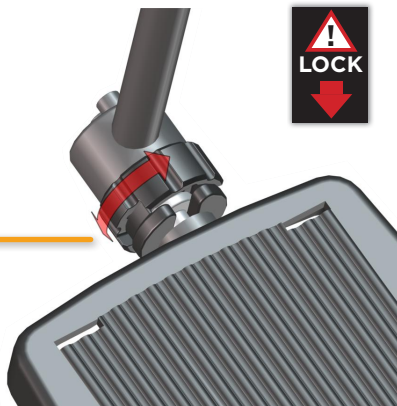
With both leg supports in place, let the foot board swing down and let the bolt enter into the lock, see picture below:



The foot board lock is operated by turning the ribbed wheel to open or closed position. Closed lock ensures a sturdy foot board for restless feet.

 Always lock the foot board to ensure it is stable!

The foot board folds down from the left and locks into the lock on the right side; this gives a sturdy platform for the feet.



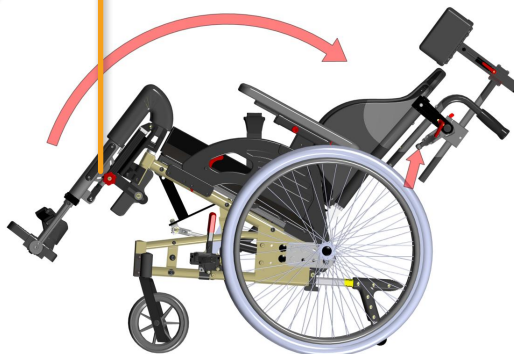
## 5.9 HEEL STRAPS

The foot board is prepared for heel straps - to be mounted as accessories. Heel straps are useful when involuntary movements let the feet slide off the foot board.




## 5.10 THE LEG SUPPORT ANGLE

The **Netti Dynamic System** leg support angle can be locked by tightening the red wheel on the outside of the leg support. See illustration:



## 5.11 HARNESSSES

are to be opened or closed with traditional car belt lock or by backpack clips. Use harnesses, heel straps and shoe shells to give the user stabilizing support when needed.

 A pelvic stabilization belt must always be used when using upper body harness.

## 6. RECOMMENDATIONS REGARDING TILT AND RECLINE OF STATIC COMFORT WHEELCHAIRS, AND COMMON FEATURES OF DYNAMIC WHEELCHAIRS

Tilt and recline are the basic benefits of a comfort wheelchair. It allows for varying seating positions during the time in the wheelchair.

We have reviewed the clinical evidences regarding tilt and recline, and found there are several studies or best practice guidelines suggesting that the tilt and recline sequence is important to reduce shear and sliding:


### FIRST TILT THEN RECLINE AFTERWARDS.

When bringing the client upright again, the sequence should be reduce recline first then reduce tilt. It would seem that the most shear would be induced when going upright from a recline and tilted position.




### DECREASE THE POSSIBILITY OF SLIDING, SHEAR AND PRESSURE SORES:

Use the tilt angle to achieve variation of the seating position for the user.

 It is common knowledge that recline should not be adjusted after the back angle is accommodated to the user's best seating position.

The muscle tone of the neck and back should be as low as possible for the user to prevent sliding, and a change of the recline angle from the original position will interrupt and destroy the correct body position, and cause an increased muscle tone in the neck.

 If the recline function is used during a transfer situation or other situations, it is very important that the recline angle is adjusted back to the correct, original position when the user is back to a normal seating position.

Wrong usage of recline causes an increased possibility of sliding, and this means an increased danger of shear (vertical and horizontal forces) and pressure sores.

### ASSURE THAT THE USER IS SAFE WHEN THE TILT OR RECLINE FEATURES ARE GOING TO BE ADJUSTED:

The tilt and recline functions of all Netti comfort wheelchair models is a «one hand operation», including the dynamic wheelchair models. This is a great benefit for the user: The care giver is able to establish eye contact with the user when the tilt or recline function is going to be used.

The care giver is also able to communicate with the user before the tilt or recline function is used. The user will feel more safe when he/she is aware that the tilt or recline function is going to be used.



## TILT AND RECLINE OF DYNAMIC COMFORT WHEELCHAIRS WITH «OK-C» MOVEMENT

The Dynamic System with free movement gas spring continues to be active if the chair is **tilted**, allowing full extension of the back- and the leg supports.

**i** If you recline and lock the chair back on a wheelchair with free movement gas spring, it is only the Dynamic leg supports, seat plate and head support that will respond to a spastic movement.

A wheelchair with Netti Dynamic 15° movement gas spring has a 15° flexing wherever the recline angle is positioned.

The functions recline and tilt are operated with the handles on the back of the chair. See details next page.

## 6.1 OPERATING TILT HANDLE: TILTING THE SEATING UNIT

Press the left handle on the push bar and put pressure to the push bar to tilt the seating unit with one of your hands, while you have eye contact with the user and put the other hand on the arm support.

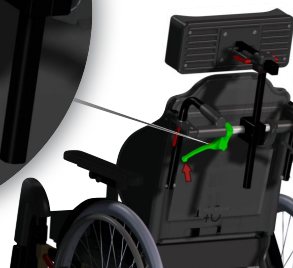
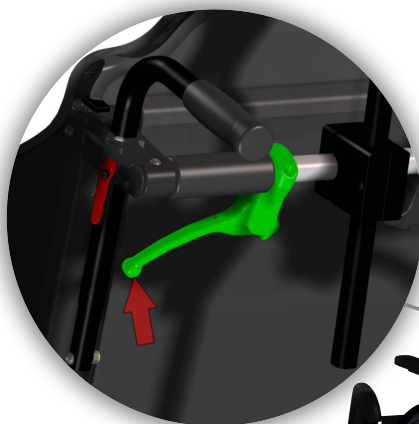
The correct relative angle between the body parts remain the same when the seating unit is tilted.

Wherever you let the handle loose, the seating unit will stay in this position.

To bring the seating unit up, press the handle and the tilt gas spring will assist you lifting the seating unit up.

A backward tilted seat unit gives a steeper seating angle in relation to the surface, and prevent sliding of the wheelchair user.

The tilt sign sits on the push bar, and it looks like this:





## 6.2 OPERATING RECLINE HANDLE: RECLINING THE CHAIR BACK

Press the right handle and put pressure to the push bar to recline the back with one of your hands, while you have eye contact with the user and put the other hand on the arm support.

Wherever you let the handle loose, the chair back will stay fixed and locked.

 **Wheelchair with Netti Dynamic 15° movement back support gas spring will however still allow for 15° degrees flexing. The illustration shows a recline handle position for a locked back.**

### DYNAMIC BACK:

To have the back behave dynamic, you have to activate the recline handle with the smaller, red handle attached to it.

Pull the recline handle tight to the push bar, the red handle automatically clics in. Let go. The handle stays close to the push bar and the back can be freely moved backwards.

To stop the dynamic recline, simply press the handle again; the little, red handle is released and the back is fixed.

**The recline sign sits on the push bar, it looks like this:**

On the recline handle there is a label reminding you that the back is behaving dynamic when the recline handle is activated and that the back is fixed when the handle is open.



## 6.3 SAFETY GUIDELINES WHEN LEAVING A USER IN THE WHEELCHAIR

If you are leaving a user in a wheelchair, make sure that the brakes are locked, the anti-tips are active and that harnesses (when used), are closed.

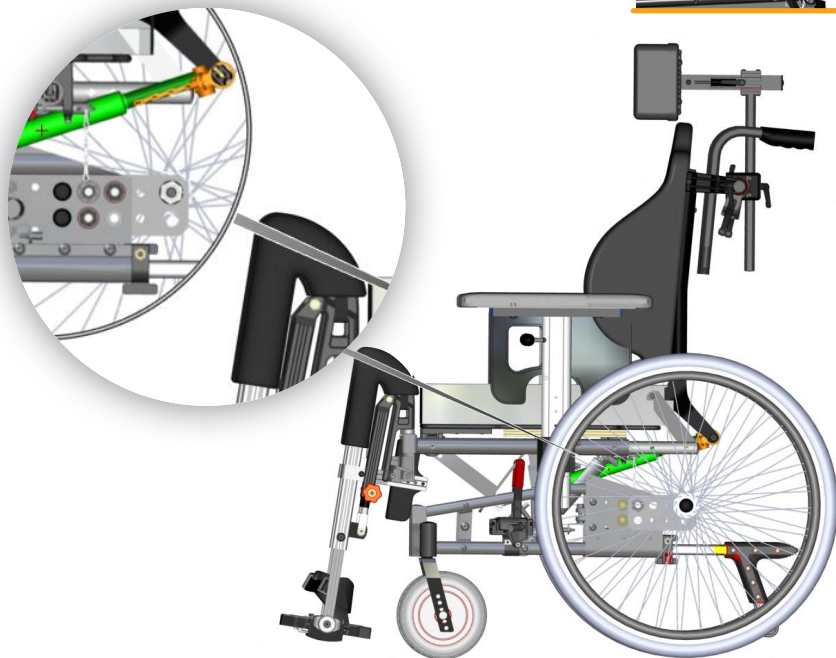
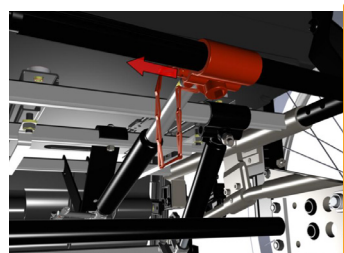
## 7. CHANGING THE CHAIR-BACK GAS SPRING

Described on hand of Netti III illustration

The functionality on other dynamic wheelchairs is the same.

- Recline the chair back backwards at least 15°.
- Disconnect the gas spring hinge from gas spring by pulling the quick release bolt (locking pin).
- Pull the gas spring hinge outwards. There may be different styles to the spring hinges, but the function is the same.

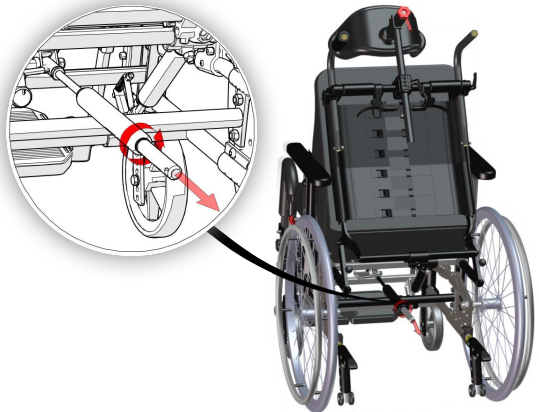
See the illustration below showing the spring hinge in orange and the spring in green.



- Fold the chair back forwards.



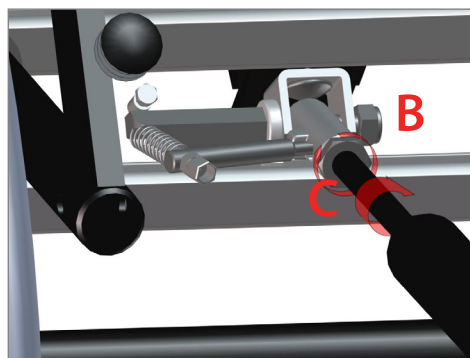
- Remove the old gas spring. Use a 17 mm open end spanner to open the nut C.



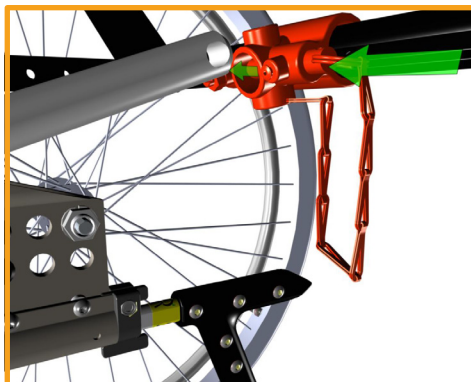
- Connect the gas spring locking head A, if not mounted, to the new spring.



- Screw the gas spring into the head until it touches the cross bolt **B**, no play. Leave the nut **C** loose till the spring has correct depth.
- If the spring sits too loose, you cannot release it with the operating handle; when it is too tight, the operating handle will not lock the gas spring.
- Tighten the nut **C** close to the head with the 17 mm open end spanner and fix the gas spring firmly.


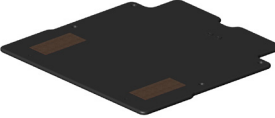
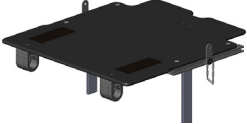
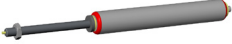


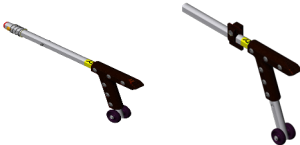


- Connect the gas spring locking head to the spring hinge, reconnect the quick release bolt.
- If the gas spring seems too long, use the lower cross bar on the chair back to press the spring shorter till it fits into the cspring hinge.





**TABLE FOR GAS SPRINGS  
MODEL SUITING USER STRENGTH AND WEIGHTS  
ON NEXT PAGE.**






## 8. NETTI DYNAMIC COMPONENTS AND ACCESSORIES

| COMPONENTS AND ACCESSORIES FOR NETTI DYNAMIC SYSTEM  |  | DESCRIPTION  | PICTURES   |
|--|--|--|--|
| <b>HEAD SUPPORTS</b>   |  |  |  |
| <b>Head Support Dynamic</b><br><b>Head Support lock</b>  |  | Flexes<br>Backwards                                    |    |
| <b>SEAT PLATE</b>  |  |  |  |
| <b>Seat Plate - fixed</b>  | Please study the spare part catalogue on our homepage for all alternatives | Seat widths:<br>35 – 38 –<br>40 – 43 – 45<br>and 50 cm |    |
| <b>Seat Plate Dynamic – hinged, with belt fixing, seat plate lock, seat plate angle stopper, and seat plate bumper</b>                                   | Please study the spare part catalogue on our homepage for all alternatives | Seat widths:<br>35 – 38 –<br>40 – 43 – 45<br>and 50 cm |    |
| <b>BACK ANGLE SPRINGS</b>  |  |  |  |
| <b>Netti Dynamic Free movement back support spring – lockable</b>  |  |  |    |
| <b>Netti with Dynamic 15° movement Back Support spring – not lockable</b><br><b>Please note: NOT approved for wheelchairs used as a seat in vehicles</b> |  |  |    |
| <b>FRAME EXTENDERS</b>   |  |  |  |
| <b>Frame Extender Kit Netti III family</b><br><b>Frame Extender Kit Netti 4U</b>   |  |  |  |
| <b>ANTI-TIPS</b>   |  |  |  |
| <b>Anti-tips long-long with spring – Netti III</b><br><b>Anti-tips 4U</b>  |  |  |  |

For complete and anytime updated overview, please see the product catalogue on our home page [www.My-Netti.com](http://www.My-Netti.com)

| COMPONENTS AND ACCESSORIES FOR NETTI DYNAMIC SYSTEM |  | DESCRIPTION                            | PICTURES   |
|---|--|--|--|
| <b>LEG SUPPORTS</b>                                 |  |  |  |
| <b>Netti Dynamic DUAL Leg Support</b>               | Please study the spare part catalogue on our homepage for all alternatives | Allows for uneven forces from the legs |     |
| <b>BELTS</b>  |  |  |  |
| <b>H-Belt Adaptor Kit – Mini</b>                    |  | Seat widths: 40 cm                     |     |
| <b>H-Belt Adaptor Kit – Medium</b>                  |  | Seat widths: 45 cm                     |   |
| <b>H-Belt Adaptor Kit – Large</b>                   |  | Seat widths: 60 cm                     |   |
| <b>Pelvic Support Evoflex – Medium</b>              |  | Medium                                 |  |
| <b>Pelvic Support Evoflex – Large</b>               |  | Large                                  |  |
| <b>4-Point Belt padded M</b>                        |  | Medium                                 |  |
| <b>4-Point Belt padded L</b>                        |  | Large                                  |  |

For complete and anytime updated overview, please see the product catalogue on our home page [www.My-Netti.com+](http://www.My-Netti.com+)

| COMPONENTS AND ACCESSORIES FOR NETTI DYNAMIC SYSTEM | DESCRIPTION           | PICTURES  |
|---|-----------------------|---|
| <b>HARNESSES</b>                                    |                       |   |
| Stayflex Vest w/o zipper                            | Medium                |    |
| Stayflex Vest w/o zipper                            | Large                 |    |
| Pivotfit M  | Medium Unisex         |    |
| Pivotfit L  | Large Unisex          |   |
| <b>LOWER EXTREMITIES</b>                            |                       |   |
| Calf Support  | Medium                |   |
| Calf Support  | Large                 |   |
| Ankle Huggers S                                     | Small<br>17 – 20 cm   |  |
| Ankle Huggers M                                     | Medium<br>19 – 23 cm  |   |
| Ankle Huggers L                                     | Large<br>22 – 29 cm   |   |
| Ankle Huggers XL                                    | X-Large<br>28 – 33 cm |   |

For complete and anytime updated overview, please see the product catalogue on our home page [www.My-Netti.com](http://www.My-Netti.com)

## 9. TRANSPORT

### 9.1 WHEELCHAIR USED AS SEAT IN A CAR

Please follow the description for fixing the chair and the user as described in the User manual for the wheelchair and the User manual UM0131 how to use a wheelchair as a seat in a car.

Wheelchairs with **Netti Dynamic System** can be used as seat in a car if the wheelchair has been tested and approved to **ISO 7176-19**.

**i** Max user weight when a wheelchair with Dynamic System is used as a seat in a vehicle: 135 kg. Netti Dynamic S has max user weight 75 kg.

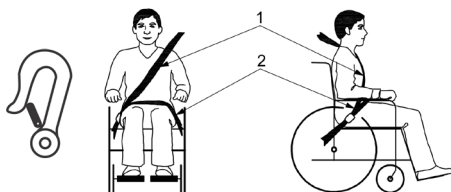
**!** The Netti Dynamic System functions has to be locked when the wheelchair is used as a seat in a car

- The leg supports are locked in vertical position.
- The seat plate is locked.
- The back support is locked in an upright position.

All to make sure the user does not hurt himself or others by sudden involuntary movements. Make sure the user is secured as described in the user manual for the wheelchair.

**i** The wheelchair is to be fixed in the car as described in the user manual for the static comfort wheelchairs (Netti III, Netti 4U CED, Netti 4U Base, Netti V, Netti AdaptPro).

**!** Netti Dynamic System wheelchair with Netti Dynamic 15° movement back support gas spring is not approved for being used as a seat in a vehicle.






## 9.2 LIFTING THE WHEELCHAIR


- Avoid lifting a wheelchair with the user in it.
- Always lift a wheelchair holding on to the marked lifting points on the frame.
- Keep a sturdy, well balanced stand lifting from your legs.
- Never lift alone.
- Never lift a wheelchair in its leg support or arm supports.

## 9.3 DRIVING A WHEELCHAIR WITH NETTI DYNAMIC SYSTEM

When driving a wheelchair with **Netti Dynamic System**, careful driving is mandatory. Watch out for obstacles that could be in the reach if the dynamic parts of the wheelchair is fully extended. Otherwise the user, third parties or surroundings may get hurt.


-  **Always obtain good balance of the chair as it may be challenged when suddenly full extension happens.**

# 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.

Pay special attention to tightening all screws and inspecting all joints regularly on a weekly basis.

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

# 11. TROUBLESHOOTING

Please study the recommendations in the User Manual for the wheelchairs where the **Netti Dynamic System** has been adapted to.

-  In some cases sound can occur from the moving parts if they are not regularly lubricated.

## 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.


**Netti wheelchair with Dynamic System has been tested according to EN 12183 at an accredited test laboratory in Germany.**


**Neti Dynamic System mounted to Netti III HD is acrash tested according to ISO 7176-19 and is approved for being used as a seat in a vehicle.**

**MAX USER WEIGHT for a wheelchair with DYNAMIC SYSTEM is 135 kg.**

**MD**  
Medical Device



 **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](http://www.My-Netti.com)**







Designed in Norway



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