USER MANUAL

Netti III HD

ALU_REHAB™

Thinking ahead – moving forward

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

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1. INTRODUCTION

Netti III HD is a comfort wheelchair meant for both indoor and outdoor use. It is tested to DIN EN 12183:2009. The tests were carried out by TÜV SÜD Product Service GmbH in Germany.

In Alu Rehab we believe that wheelchairs should be chosen based on a thorough assessment focusing on the needs of the user and demands from the environment. Therefore it is important to know about the possibilities and restrictions of the wheelchair. Netti III HD is a wheelchair designed for users with the need for comfort and relief. The combination between the seating system and the ergonomical solutions in the frame construction, offers many possibilities for adaptation and adjustments.

The wheelchair is constructed for indoor and outdoor use, and offers the possibility to vary the sitting position from activity to rest using tilt and recline functions.

Max user weight: 160 kg.

⚠ When mounting accessories such as power kit etc, the weight of the accessories must be subtracted from the max user weight.

ⓘ Specifications varies between countries.

1.1 Areas of use/indications for Netti III HD

Netti III HD is a multi-function wheelchair for partially or fully immobile persons with physical and/or mental disabilities. These disabilities may have multiple causes. Netti III has an adjustable seat and back angle, thus facilitating for the user change of position, mobilisation or posture correction (stabilisation), wherever the following functional impediments with their multiple possible causes are present:

- limited or lacking mobility
- limited or lacking muscle power
- limited movement range
- lacking or limited trunk and body stability
- hemiplegia
- rheumatic-type disorders
- craniocerebral injuries
- amputations
- other neurological or geriatric disorders.

1.2 Contraindications

With strongly muscular spasticity we recommend the Netti III version with reinforced frame componente and foot support for this particular need. Ignoring this advice could in unfavourable circumstances lead to the deformation or fracture of metal parts in the area of the back tube, the leg rests or the arm rests

1.3 Quality and durability

The Netti III HD wheelchair is tested at TÜV SÜD Product Service GmbH in Germany, following the European Standard DIN EN 12183:2009. As manufacturer, Alu Rehab A.S evaluates the test to be equal to 5-6 years of normal use of the chair. The disability of the user as well as the level of maintenance done foremost decides the durability of the wheelchair. Thus, the durability will vary depending on these two factors.

1.4 The environment and waste disposal

Alu Rehab and its suppliers wish to protect the environment.

This means:

- That we avoid using environmentally harmful substances and processes to the greatest extent possible.
- That Alu Rehab's products are ensured a long service life and a high degree of flexibility - to benefit the environment and economy.
- That all packaging can be recycled.
- That the wheelchair was designed to be separated into its component materials - to make recycling easier.

ⓘ Contact your local recycling agent to get correct information how to handle in you area.

1.5 Information for re-use

All products from Alu Rehab are designed to give years of maintenance-free service. All products can be adapted for re-use by an authorised dealer. In order to guarantee performance and safety, Alu Rehab recommends the following tests prior to any re-use.

Please examine the following components for function, integrity etc and replace parts if necessary:

- Wheels (tyre tread)
- Wheelchair frame
- Cushions
- Hubs
- Brake function
- Directional stability of wheels
- Bearings and front castors

Please also note the contents of Section 10.2 Cleaning and care

Anti-tip

Correctly fitted, the anti-tip will secure the chair from tipping backwards. We strongly recommend use of the anti-tips.

1.6 About this manual

In order to avoid damages while using the Netti III HD wheelchair, please read this manual carefully before starting to use the chair.

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.

1.7 Vital measures

Netti III HD is a comfort wheelchair designed for both outdoor and indoor use.

ⓘ Specifications varies between countries.

Total weight: 36,5 Kg

(550 mm width chair)

Seat width:

350, 380, 400, 430, 450, 500, 550, 600 mm

Seat depth:

(From back rest cushion to front of seat plate)

400, 425, 450, 475, 500 mm

Seat height:

(From floor to top seat plate using 24" main wheels in upper hole position).

465 mm*

*By changing position of main wheels, it is possible to achieve seat height of 480 mm.

Backrest height:

500 mm*

* Using back rest extender gives 600 mm

Specification	min.	max.
Overall length with foot support	1100 mm	-
Overall width	790 mm	-
Folded length	760 mm	-
Folded width	710 mm	-
Folded height	510 mm	-
Total mass	36,2 kg	-
Mass heaviest part	3,8 kg	-
Static stability uphill	0°	15°
Seat plane angle	-9°	16°
Effective seat depth	400 mm	500 mm
Effective seat width	460 mm	710 mm
Seat surface height at front	435 mm	480 mm
Backrest angle	86°	133°
Backrest height	480 mm	-
Foot support to seat distance	280 mm	770 mm
Leg to seat surface angle	105°	182°
Arm support to seat distance	185 mm	325 mm
Front location of arm support structure	295 mm	455 mm
Push rim diameter	525 mm	-
Horizontal axle location	-10 mm	95 mm

Model width: 55 cm.
Measured without cushions.

2. QUICK REFERENCE

The content of this page is a summary of the whole manual. It gives you a brief introduction to the use and care of the Netti III HD wheelchair.

⚠ The quick reference is not a replacement for the manual, only a reminder/check list.

- Unpack the wheelchair (Chapter 6.1)
- Mount the main wheels (Chapter 6.2)
- Mount the front castors (Chapter 6.4)
- Put the back rest back, and mount the recline gas strut to the back rest using the locking bolt. (Chapter 6.7)
- Mount the arm supports (Chapter 6.11)
- Mount the cushions (Chapter 6.12)
- Mount the foot supports (Chapter 6.14)
- Adjust the push handles (Chapter 6.16)
- Mount the head support (Chapter 6.15)
- Mount accessory. (See chapter 5. for more information. Mounting descriptions will accompany the accessory.)

ⓘ For troubleshooting, see chapter 10. For adjustments see chapters 6.

⚠ Drive carefully!

⚠ Be aware that friction against push rims can create a warm surface.

⚠ Salt water can increase risk of corrosion. Further precautions related to environmental conditions not needed.

⚠ When the chair is tilted rearwards, the anti tips and brakes should always be in use.

⚠ Be sure to lock all handles properly.

⚠ The anti-tips should always be used for the safety of the user.

⚠ Surface temperature of metal parts in frame structure might increase when exposed to direct sunlight.

⚠ Never stand on the foot supports due to risk of tipping forwards.

⚠ Never lift the wheelchair by the foot supports or arm supports.

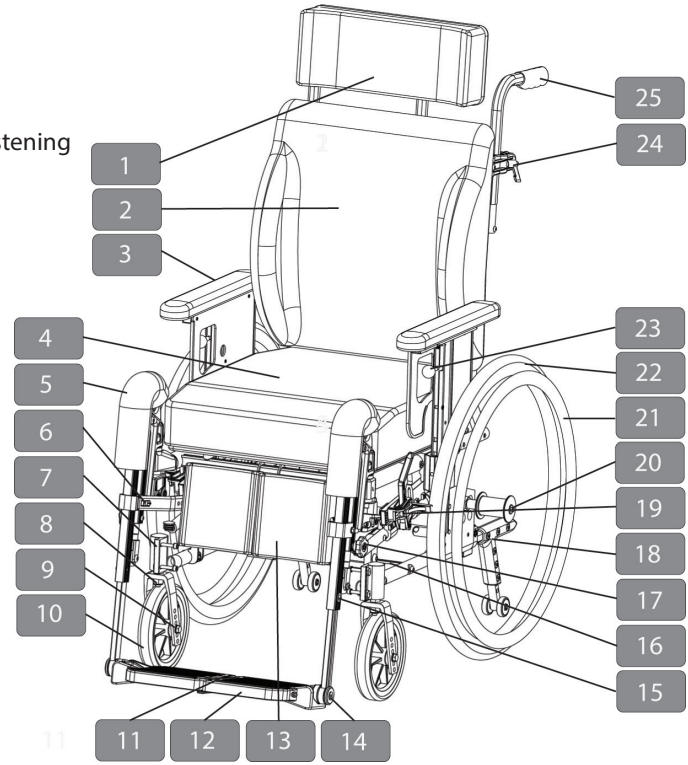
ⓘ Product configuration may vary between different countries.

ⓘ For visually impaired people, manuals and catalogues can be downloaded at www.alurehab.com

If in doubt - contact your dealer!

3. DESCRIPTION*

1. Head support
2. Back rest cushion
3. Arm support with pad
4. Seat cushion
5. Knee pad
6. Calf support bracket
7. Bearing house/front fork fastening
8. Quick release for front fork
9. Front fork
10. Front castors
11. Locking bolt for foot plates
12. Foot plate
13. Calf support
14. Angle adjustment screw
15. Height adjustment screw
16. Tie bar
17. Angle adjustment wheel
18. Anti tip
19. Brake
20. Quick release axle
21. Push ring
22. Main wheel
23. Release handle for arm support
24. Release handle for push handles
25. Push handle



* Be aware that specifications may vary between countries.

If any of these parts are missing, please contact your dealer.

For complete information, please contact your dealer.

4. FEATURES OF NETTI III HD

STANDARD

Seat
- Cushion with good pressure distributing properties
- Tilt -11° to +14°
- Adjustable height 40 cm to 48 cm
- Adjustable depth of 10 cm

Wheels*
- Main wheels: 24" x 1 3/8" aluminium, Puncture proof with quick release axle
- Push rim: Alumium
- Front castors: 7" wide. Puncture proof with quick release axle.

Back rest
- Angle: 88° - 130°
- Height: 50 cm
- The back rest cushion has integrated lumbar support and side support, and it can be adjusted in height.
- Height adjustable and removable push handles.

Foot support
- Angle adjustable foot support
- Height- and angle adjustable foot plates

Arm support
- Height adjustable and removable
- Depth adjustable wide pads

Head support
- Height, depth and angle adjustable
- Removable

ACCESSORIES/OPTIONS

Seat
- Sliding seat (See chapter 5)
- Trays & reading stand for trays (See chapter 5)
- Hip belts and 4 point belts (See chapter 5)

Wheels
- Main wheels with drum brake.
- Spoke protectors (See chapter 5)
- Push rims (See chapter 5)

Back rest
- Back rest extender (See chapter 5)
- Lumbar support and Wedge (See chapter 5)
- Back rest cushions

Foot support
- Universal foot support
- Amputation support
- Knee and thigh support (See chapter 5)

Arm support
- Different pads (See chapter 5)
- Hemi armrest and Hemi cushion (See chapter 5)

Head support
- Different models (See chapter 5)

5. ACCESSORIES

Belts
Several models:
Hip belts with or without uphoplstery and with plastic lock or car lock. (See chapter 5.1 for mounting.)

H-Belt attachment bar
To be mounted onto the push handles. Comes in two sizes with telescopic bar. (See chapter 5.2)

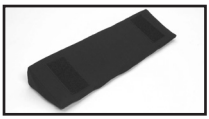
Trays
3 models:
Swingable, lockable and standard "push on" model.

Reading stand

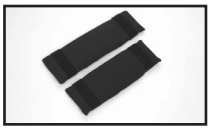
Upholstery for tray
Offers a soft base for the arm resting on the tray.

Half tray
Swingable upholstered half tray. The tray replaces the existing standard armrest.

Wedge
Increases side support.

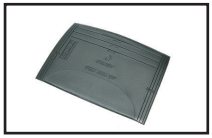


Lumbar support
Increases lumbar curvature.

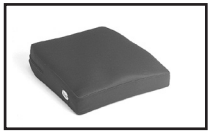


Brake extenders
90mm
120mm
250mm

Vital Base Integral
Pelvic stabilizer.



Seat Cushions
Many to choose from. Please contact your dealer.



Back rest Cushions
Many to choose from. Please contact your dealer.

Spoke protectors
For 20", 22" and 24". Black or transparent is optional.

Foot box
Upholstered

Foot supports:

Angle adjustable

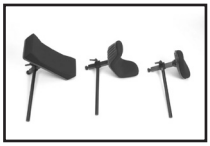
Universal
Adjustable in fixed positions between 33° to 105° using an adjustment wheel.

Amputation support

Knee / Thigh support
The support reduces adduction.

Abduction block
The block reduces abduction.
Small: 80 mm width
Medium 120 mm width
Large: 140 mm width

Head supports
Support C Large
Support A Side support
Support B Small

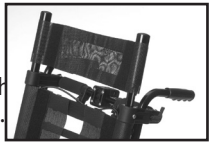


Hygiene cover
Protects the core of the head support.

Head cushion
40x40 cm cushion with Kospoflex filling and rubber band.

Head cushion Comfort
Cushion with Kospoflex filling to pull onto head rest.

Back rest extender
12 cm extender.
To be used together with 60 cm back rest cushion.



Arm support pads
Wide: 415x80 mm
Long: 445x70 mm
Long/Wide: 525x80 mm
Short: 333x58 mm
Standard: 385x58 mm
Arm support pad bended

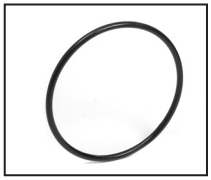
Hemi arm support
Offers extra support for the affected arm. Can be set in fixed positions.

Hemi cushion
A more accommodating support than the hemi arm support.

Comfort pads
To be attached to the skirt guard. Offers a pressure distributing effect. 2,5cm, 3,5cm and 4,5cm.

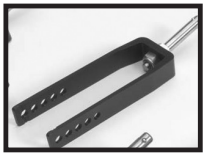
Main wheels
24”

Push rims
Aluminium:
24”,
Friction push rim
24”

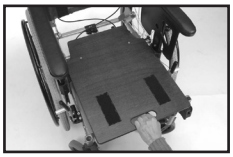


Front castors
7”

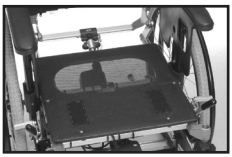
Front forks
Wide w/ axle



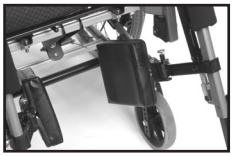
Sliding seat
The seat can be pulled out and pushed in while the user sits in the seat. This eases transfer and positioning of the user



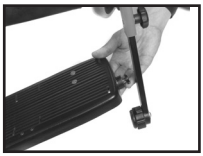
Comfort plate
The plate has a hole in the rear, which in co-operation with the seat cushion increases pelvic stabilization.



Calf pad hinged
The user doesn't have to lift the legs when mounting or dis-mounting the foot supports.



Foot board with lock
The foot supports can be swung to the side like standard foot supports.



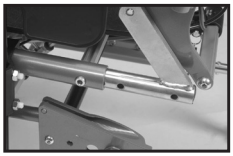
Side support Correction
Meant for correction of bad postures in the upper trunk. For optimal function use together with flip backrest.

Pad for side support
Correction

Side support Stable
Meant for users with de-creased stability of the upper trunk. For otimal function use together with Stable cushion.

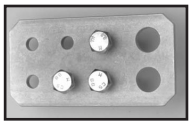
Pad for side support
Stable

Long back rest hinge
Covers seat depth: 54,5, 57 and 59 cm. Must be used with extra long locking head.



El. components
For tilt, back rest and foot supports seperate or complete.

Frame extender
Increases distance between main wheels and front castors. Reduces tipping risk.



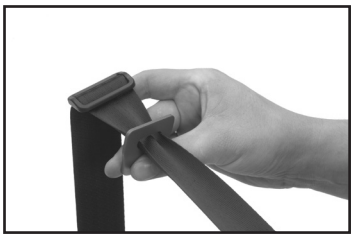
Upholstery for
calf support bracket
Reduces pressure.

Tool set

5.1 Mounting of hip belt

Picture 1.

• Pull the belt thorough the hole in the hip belt bracket.



Picture 1.

Picture 2.

• Thread the belt back through the belt clamp.

Picture 2.

Picture 3.

• Fix the hip belt bracket to the rearmost hole in the back hinge, using the enclosed screws and nuts.

Picture 3.

2pcs 13 mm open-end spanner.

5.2 Mounting of H-Belt bar

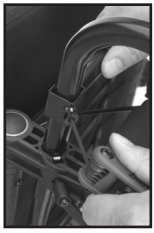
Picture 1.

• Remove the push handles, and pull the H-belt attachment bar onto the push handles from the lower end.

Picture1.

Picture 2.

• Fix the push handles in correct position and lock firmly. Then fix the bar at the right position/height. The height should be level with the shoulders of the user.



Picture 2.

Picture 3.

• Thread the belt through the rolls and lock the belt by pulling the belt through the belt clamp. Adjust to the requested length of belt.

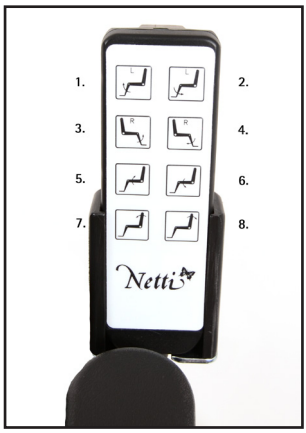
Picture 3.

5.3 Electrical components

Netti III is available with electrical operation of tilt, recline and foot supports. Functions can be mounted one by one, or all together, and are operated with a hand control.

⚠ Electrical components are to be mounted by Alu Rehab or certified personell.

Hand control functions.
1. Left foot support up
2. Left foot support down
3. Right foot support up
4. Right foot support down
5. Tilt back
6. Tilt forward
7. Recline forward
8. Recline back



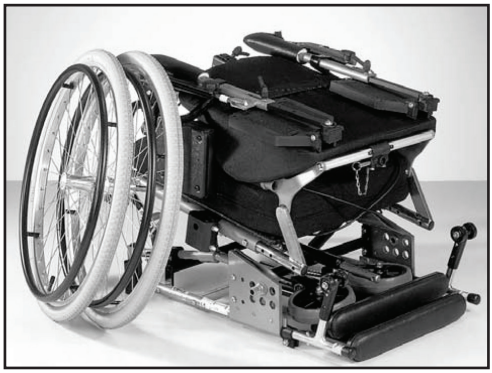
A holder for hand control can be mounted as accessory

Weight of components:
Control box: 1900 gram
Tilt actuator: 1650 gram
Recline actuator: 1610 gram
Foot support actuator: 984 gram each
Hand control: 240 gram
Cable for charger: 20 gram

Total weight all inclusive: 7388 gram

ⓘ An additional user manual describing maintenance, charging and handling will follow any Netti chairs mounted with electrical functions.

6. ASSEMBLING AND ADJUSTING



6.1 Unpacking (See chpt. 5 & 6)

1. Unpack all the parts, and check that everything is there according to the packing list.
2. Mount main wheels and front castors.
3. Mount back rest, arm supports, cushions and foot supports.
4. Mount accessories.

Weight of components (55 cm width chair):
Main wheels: 1,9 kg each
Front castors: 0,8 kg each
Foot support angle adj.: 2,5 kg each
Uno|Back: 1,25 kg
VB Sit: 1 kg
Head support A: 1 kg
Head support C: 0,9 kg

Necessary tools are described under each chapter. Accessories described in chapter 5 is a presentation of options, and will be delivered with separate mounting descriptions.

6.2 Main wheels

To mount the main wheel remove the quick release bolt from the hub bushing, lead it through the centre of the main wheel and into the hub bushing while pressing the knob in center.

⚠ To check that the main wheel is properly attached to the hub, remove the finger from the central knob and pull the main wheel.

⚠ If the main wheel doesn't lock, don't use the wheelchair but contact your dealer.

⚠ Sand and sea water (salt used for gritting in the winter) can damage the bearings of the main wheels. Clean the wheelchair thoroughly after exposure.

6.3 Front fork

Front forks come as standard with quick release axles. The front fork is easily removed by pressing the knob in centre above the wheel.

Chek angle of castor bearing house. (See chapter 6.5).

6.4 Front castors

To take of

- Press the release button under the front fork.

To mount

- Lead the quick release axle into the bearing house. Pull the fork slightly to ensure that the fork is fully locked.

⚠ Sand and sea water (salt used for gritting in the winter) can damage the bearings of the front castors. Clean the wheelchair thoroughly after exposure.

6.5 Seat height at the front

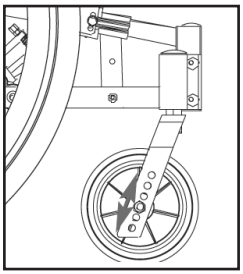
The seat height depends on:

- Size of front castors.
- Size of front fork.
- Check the angle of the castor bearing house.

In chapter 5 there is several models of both front castors and front forks to choose between. For to change the front castors or front fork - unfix the wheel and place it in the required position in the front fork.

Angle of bearing house

Correctly adjusted angle of the front fork is important to achieve proper manoeuvring qualities of the wheelchair. Unfix the two screws on the inside of the frame enough to adjust the the eccentric nuts. Angle the bearing house, so that it is 90° relative to the ground, tighten the screws with 16 Nm



🛠 1 pc 5 mm Allen key

⚠ The bearing house can not be adjusted in height.

⚠ Check the position of the anti tip.

6.6 Seat height at the rear

The seat height at the rear depends on:

- Size of main wheel.
- Position of main wheel.

Main wheel

Unfix the hub bushing, including washer and nut, and mount it in required position in the main wheel bracket.

🛠 2 pcs 24 mm open-end spanner

⚠ Make sure that the nut on inside of frame totally wreathes the wheel bushing.

⚠ When the seat heights changes ensure that the main wheels are placed such that the frame tube is parallel with the ground.

⚠ The risk for tipping increases when the main wheel is moved forward in the main wheel bracket.

⚠ Check the position of anti tip.

⚠ Readjust the brakes. (See chapter 6.17).

⚠ Readjust the angle of the bearing house. (See chapter 6.5)

6.7 Backrest

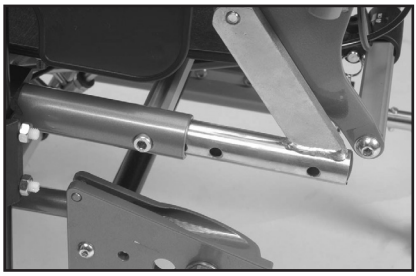
- Unfold and lift the back rest up and fit the gas strut into the bracket.
- Secure the back rest by pushing the locking bolt in from the side, through the bracket and gas strut head.

6.8 Adjusting seat depth at the rear

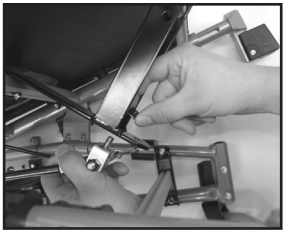
The seat depth can be adjusted 10 cm in the rear and 10 cm in front.

Adjusting seat depth in the rear:

- The back rest hinge has 5 holes with 2,5 cm distance between them.
- The seat depth can be adjusted from 40-50 cm (Measured from front of seat plate to back rest tube without back rest cushion).
- Onto the frame under the chair there is mounted an extra locking head for the gas strut.
- The short locking head covers seat depth 40 cm, 42,5 cm og 45 cm.
- The long locking head covers seat depth 45 cm, 47,5 cm og 50 cm.
  (There is also a long back rest hinge which covers longer seat depths. See chapter 5).



- When changing the position of the back rest hinge, also remember to change the position of the gas strut under the chair. The bracket has 3 holes. When the back rest hinge is set in the shortest position, the gas spring is placed in the front hole using the short locking head. For each position the back rest hinge is pulled out, the gas spring is moved one hole towards the rear. When the gas spring reaches the rearmost hole with short locking head, change to long locking head and start from the front hole again.



When using the comfort seat plate it is recommended to change seat plate when changing seat depth. The seat plate comes in depth: 40 cm, 43 cm & 46 cm.

By using the adjustment straps in the rear you can gain a few cm on the depth.

Seat depth in the rear is adjusted as follows:
- Release the tilt gas strut by tilting the seat all the way forward.
- Pull out the locking bolt for the backrest, and place the back rest forward in the seat.
- Remove the screws holding the back rest hinge, and set the backrest to the required position. Do both sides at the same time.
- Place the screws back and fix them.
- Also remember to move the gas strut as described earlier in this chapter.

When adjusting the seat depth at the rear the screw in the backrest hinge must be tightened with 14 Nm

6 mm Allen key
13 mm open-end spanner

If the user requires other back rest angles than what is standard, it is possible to change the position of the gas strut in three positions under the chair in front.

When changing seat depth, you also change the tipping point of the chair. This can be prevented by changing the position of the main wheel in the main wheel bracket. (See chapter 6.6).

6.9 Adjusting seat depth at the front

It is possible to adjust the seat depth up to 10 cm at the front. Do the following:

- Unfix the screw holding the pull out piece for the foot support.
- Set the pull out piece to the required position.
- Fix the screws, tighten them with 25 Nm

6 mm Allen key

By setting the pull out pieces to different positions, it is possible to compensate for a rotated pelvis or different length of thighs.

6.10 Anti tip

- Adjust the anti tip so that it doesn't stick outside the radius of the wheel.
- Pull the anti tip out / rearwards from chassis.
- Turn it down 180°.
- Lock it in position by moving forwards with spring tension.

The anti tips are delivered adjusted according to ordered main wheel size in standard position. If other adjustments are carried out, anti-tips have to be adjusted accordingly.

Adjusting anti tip

The anti tips must be adjusted whenever position or dimension of main wheels is changed.
Correctly adjusted anti tips should be positioned just on the inside of the radius of the main wheel. Anti tips are adjusted as follows:

- Unfix the locking clamp on the anti tip bar using an Allen key.
- Pull or push the bar to required position.
- Fix the locking clamp.
- Do the same procedure on the opposite side.

6 mm Allen key

Check that both anti tips have the same length. The gap between the anti tip wheels and the ground must be max. 3 cm.

If the anti tip is positioned on the outside of the main wheel radius, it will interfere with curbs and stairs.

The anti tip should always be used for the safety of the user.

6.11 Adjusting arm supports

- Turn the release handle to the side and hold.
- Adjust the armrest to the required height and release the handle. Lift or lower the armrest slightly until it locks.

The armpad and locking screw are set in the middle position. This can be adjusted to fit the user.

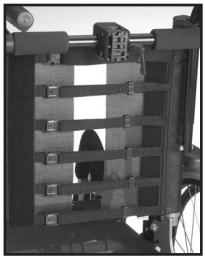
6.12 Cushions

Cushions are fixed and adjusted on the wheelchair using the velcro.

It is imperative to correctly set-up the cushion in order to ensure good seating comfort

The cushion covers are washable and thereby reuseable. Follow the instruction on the back of the cushion for correct maintenance and washing

6.13 Adjusting the velcro back



- Loosen the straps, and place the back rest cushion so that user gets room for the bottom and the integrated lumbar support in correct position.
- Tighten the straps so that they follow the curvature of the spine and gives a little extra support at the top of the sacrum.

6.14 Foot supports

The evelating foot support is angle adjustable, swingable and removable. It comes with height- and depth adjustable calf support. The foot plates are hinged, and can be angled in fixed positions. As a standard the foot plates come with a locking bolt which makes the plates stronger (See picture page 20) . The bolt can be removed by using a pair of circlip pliers.

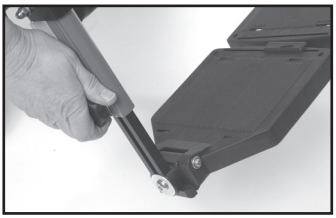
Netti III HD has the following foot support alternatives:
- Universal foot support
- Amputation support

See chapter 5 for pictures.

Mounting of the foot support:
- Raise the support a few degrees.
- Fold the foot plates up.
- Hold the foot support in the angle on top, and place it in the pull out piece in an angle as shown in picture below.
- Swing the foot support inwards and push slightly downwards until it goes into locked position.

When moving the foot support up or down, do not put the fingers in the adjusting mechanism between the moving parts.

Height of foot plate:
The foot plates are stepless height adjustable.
- Unfix the adjustment screw so that the adjustment bar moves freely.
- Adjust the foot plate to required height, then tighten the screw.

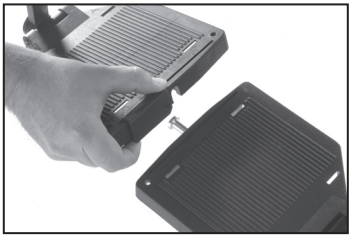


Angle of foot plate:
- Unfix the screw as shown below using an Allen key.
- Adjust the foot plate to the required angle and tighten the screw.

5 mm Allen key.

As accessory an adjustment wheel can be used instead of a screw.

Locking and releasing the foot plates
- The foot plates come with a locking bolt which makes the plates stronger
- To lock the foot plates pull the plastic lock on the right foot plate and place the lock over the bolt on the left foot plate.
- To release the foot plate pull the plastic lock and lift the right foot plate up.



While making the adjustment there must be no load on the foot plates.

For outdoor use, there should be a clearance of 4-5 cm between the foot plate and the ground.

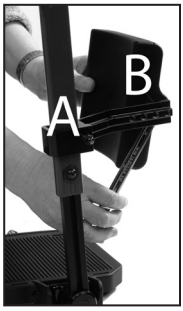
Never stand on the foot plates due to the risk of tipping forward.

When adjusting foot support in angle, be aware of squeeze hazard between moving parts.

Removing the foot support:
- Pull the plastic lock on the foot plate rearwards, so that the pin is released, and the foot plate can be folded up.
- Raise the foot support a few degrees.
- Release the foot support by pulling it slightly straight up.
- Swing the foot support outwards.
- Lift and remove the foot support. (see illustration next page).

Adjusting the calf support
The calf support is height and depth adjustable. To adjust height unfix the nut on the outside of the calf support bracket, find the required height and fix the nut again (Ill. 6.14 A).

10 mm open-end spanner



Ill. 6.14

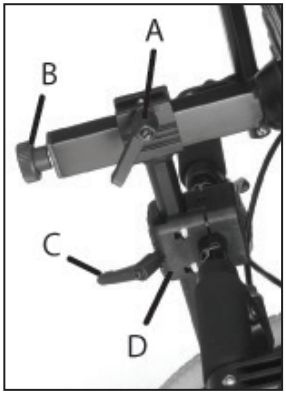
To adjust in depth, the calf pad is removed from the bracket by using an open-end spanner between the pad and the bracket. Find the required position and refix it (Ill.6.14 B)

13 mm open-end spanner

Never stand on the foot supports!

Never lift the wheelchair by the foot supports.

6.15 Head support



A - Lever for depth adjustment
B - Wheel for angle adjustment
C - Lever for height adjustment
D - Head support bracke

- Place the squared nut in the trace of the head support bracket as shown above.
- Place the head support in the head support bracket.
- The height and the depth of the head support is set to the required positions and tightened.

• The head support bracket is fixed by tightening the four screws two by two diagonally so the bracket is fixed with the same strength divided on the four screws.

Adjusting the head support in depth:
• Release the locking lever on top of the vertical bar (A).
• Adjust the head support and fix it in required position.

Adjusting the head support in height:
• Release the locking lever on the head support adapter (C).
• Adjust the head support and fix it in required position.

Adjusting the head support in angle:
• Release the adjustment wheel at the rear of the horizontal bar (B).
• Adjust the head support and fix it in required position.

Adjusting the head support sideways:
• The head support adapter can be moved both to the right and left, giving the possibility to accomodate special needs for head support.
• Untighten the four screws holding the adapter together.
• Move the adapter to the required position and fix the adapter by tightening the screws diagonally.

⚠ Remember to release the levers when adjusting the head support.

ⓘ If the head support stand does not fit the bracket perfectly the bracket is probably fixed too tight or unevenly.

ⓘ After fitting the head support fix it properly by tightening the little set screw in the centre on top of the head support bracket using an Allen-key.

If the head support seems to short in height, it can be turned 180° by releasing the adjustment wheel at the rear of the horizontal bar (B) .

6.16 Push handles

Adjustment of push handles:

- Release the lever on the side and lift the handle all the way up.
- Turn the handles into required position.
- Adjust height.
- Lock the handle in required position by tightening the lever.

⚠ Be sure to lock the handle properly.

⚠ Check that the safety screw is properly tightened.

ⓘ To remove the handles, the safety screw at the bottom also has to be removed.

6.17 Adjusting the brakes

- The brakes are freely adjustable along the frame tube.

- To activate the brake, push the handle forward (Ill. 6.17.1)

Ill. 6.17.1

- To release the brake, pull the handle rearwards (Ill. 6.17.2)

Ill. 6.17.2.

- To reposition the brake, loosen the two screws on the inside of the brake clamp

- For fine adjustment, loosen the upper screw on the inside of the brakes
- Adjust the brake position and tighten the screws.

🛠 5 mm Allen key

⚠ Check that the brakes are correctly adjusted by activating the brakes and be sure that the wheel-chair doesn't move.

⚠ The brakes are constructred as parking brakes and shall not be used as driving brakes

⚠ Be aware of potential squeeze hazard between brake and tyre.

Drum brake

If the wheelchair is mounted with 12" or 16" main wheels, these will be equipped with drum brakes.

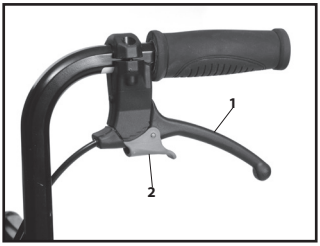
If the brake doesn't brake properly:
To adjust the wire on one or both sides, adjust the foot screw 2-4 rounds out. Then re-check the brakes.

If the wire is too loose:
Adjust the foot screw all the way in. Tighten the wire by loosening the wire clamp before pulling the wire further through it. Tighten the wire clamp, and adjust the foot screw out again

1 pc 10mm open-end spanner.

⚠ To ensure the correct functions of the wire, these must never be taut.

Operating and applying the brake
The wheelbase in drum brake is fitted with hand operated hub brakes to allow regulation of speed on hills and whilst travelling along. These are located on the push handles.



- To apply the brakes, pull the brake levers (1) evenly and smoothly towards handle and bring the wheel-base to a stop.
- For to put on and lock the parking brake (2) press the lever (1) against the push handle and lock the parking brake with the finger. Be sure that both parking brakes are locked.
- The parking brake will be released when you press the lever (1) against the push handle. It is locked with a spring and this will in this way be released.

⚠ It is extremely important that the parking brakes are locked when the user is left sitting in the wheelchair.

⚠ Don't leave the user in the wheel-chair wihout to put the parking brake in function.

6.18 Seat angle / tilt

The seat angle is regulated using the release handle mounted on the push bar.
The seat unit can be tilted from -11° to +14°.

6.19 Back rest angle

The back rest angle is regulated using the release handle mounted on the push bar. The angle can be regulated from 4° forward to 40° backwards.

⚠ To ensure correct function of the wires, these must never be taut.

⚠ The seat and back rest angle must not be adjusted without using the anti tips.

The release handle has the following label:

Tilt

Recline

⚠ Risk for tipping.
Check the position of anti tip.

7. TRANSPORT

Netti III HD is tested and approved to crash test ISO 7176-19.

7.1 Folding for transport

When wheelchair is unoccupied, fold as described below. Put wheelchair in trunk or back seat. When placed in back seat, secure frame using safety belt.

- Remove head support (chapt. 6.15)
- Turn anti tips up (chapt. 6.10)
- Swing push handles in (chapt. 6.16)
- Remove arm supports (chapt. 6.11)
- Remove foot supports (chapt. 6.14)
- Remove backrest cushion (chapt. 6.12)
- Release backrest and fold it (chapt. 6.7)
- Remove main wheel (chapt. 6.2)
- Remove front castor (chapt. 6.4)

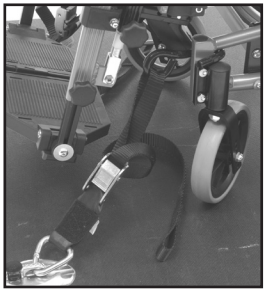
7.2 Transport in car

If the head support is mounted correctly it is very stable but does not replace the need for an external neck support mounted in the car.

The chair is marked with stickers in 4 positions, showing where to fix the straps

Netti III HD has been successfully tested according to the requirement of ISO 7176-19 using a combined wheelchair an occupant restraint system W120/DISR developed by Unwin Safety Systems. For furtherinformation:www.unwin-safety.com

In front: Use hook or strap attachment.



Mount an "eye-bolt" in one of the holes in the wheel frame bracket. Hook on a hook/ carabine hook in the "eye-bolt"

Item number 1 pair eye bolts with bushing: 21074

The angle of the straps should be 0-45°

⚠ Netti III HD has been crash tested without any power kit etc. If, at a later point of time a power kit, stair climber etc is mounted this must be dismounted if the wheelchair is to be transported in a car.

8. MANOEUVERING

8.1 General techniques

The weight and balance of the chair influences the manoeuvering ability of the wheelchair. The weight, size and sitting position of the user are also influencing factors. Also the position of the wheels will influence the driving ability. The more weight placed over the main wheels, the easier it is to manoeuvre. If heavy weight is placed over the front castors, the chair will be heavy to manoeuvre.

Companion:

If the user is left alone in the wheelchair, always lock the brakes and secure that the anti tips are turned down.

Parking:

Increase the underneath support of the wheelchair by moving the chair about 10 cm backwards making the front castors turn forward.

8.2 Driving techniques

- Step up -

Users, drive up a step forwards:

This technique is only for very experienced users.

- Check that the anti tip is turned up.
- Drive close to the step.
- Balance the wheelchair on the main wheel so that the front castors are lifted high enough to enter the step.
- Make a firm grip on the push rims and move the body forward while pushing.

⚠ Turn the anti tip down.

Companions, drive up a step forwards:
- Check that the anti tip is turned up
- Angle the wheelchair backwards.
- Lift the push handles while pushing the chair onto the step.

⚠ Turn the anti tip down.

Users, drive up a step backwards:
This technique is only useful if the step is very low. It also depends on the clearance between the foot plates and the ground.
- Check that the anti tip is turned up.
- Drive the chair backwards towards the step.
- Make a firm grip on the push rims and move the body forward while pulling.

⚠ Turn the anti tip down.

Companions, drive up a step backwards:
- Check that the anti tip is turned up
- Pull the chair backwards next to the step
- Angle the wheelchair backwards, moving the front castors slightly up in the air.
- Pull the wheelchair up the step and go backwards long enough to put down the front castors on the step.

⚠ Turn the anti tip down.

8.3 Driving techniques - Step down -

Users, drive down a step forwards:
This technique is only for very experienced users.
- Check that the anti tip is turned up.
- Drive towards the step.
- Make a firm grip on the push rims and push fast forward so that the wheelchair comes down on all four wheels at the same time.

⚠ Turn the anti tip down.

Companions, drive down a step forwards:
- Check that the anti tip is turned up
- Angle the wheelchair backwards, moving the front castors slightly up in the air.
- Drive carefully down the step and angle the wheelchair forward putting the front castors back on the ground.

⚠ Turn the anti tip down.

Users, drive down a step backwards:
This technique is only for very experienced users. This technique should not be used if the height of the step is more than 10 cm.
- Check that the anti tip is turned up.
- Move the wheelchair backwards to the step.
- Move carefully down the step backwards while moving the body forward to keep the balance of the chair.

⚠ Doing this increases the risk of tipping backwards.

⚠ Turn the anti tip down.

Companions, drive down a step backwards:
- Check that the anti tip is turned up.
- Move the wheelchair backwards to the step.
- Drive carefully down the step and move the wheelchair backwards on the main wheel until the front castors have come away from the step.
- Put the front castors down on the ground.

⚠ Turn the anti tip down.

8.4 Driving techniques - Slope -

Important advise for driving down and up hill avoiding the risk of tipping.

⚠ Avoid turning the wheelchair in the middle of a slope.

⚠ Always drive as straight as possible.

⚠ It is better to ask for assistance than taking risks.

Driving uphill:
Move the upper part of the body forwards in order to maintain the balance of the chair.

Driving downhill:
Move the upper part of the body backwards to maintain balance of the chair. Control the speed of the chair by clutching the push rims. Do not use the brakes.

8.5 Driving techniques - Up stairs -

⚠ Always ask for assistance.

⚠ Never use escalators, even if assisted by a companion.

With assistance, backwards.
- Check that the anti tip is turned up, and that the push handles are fixed properly.
- Pull the wheelchair backwards to the first step of the stairs.
- Angle the wheelchair backwards on the main wheels.
- Pull the wheelchair slowly up the stair, one step at the time keeping the balance on the main wheel.
- Reaching the top of the stair, pull the wheelchair backwards far enough to put the front castors safely down on the floor.

⚠ Turn the anti tip down.

If two companions are present, one person can assist lifting in the front of the frame.

Do not lift the wheelchair holding onto the foot supports.

Do not lift the wheelchair holding onto the arm support.

The companions should use the strength in their legs carrying the chair, avoiding unnecessary stress on the back.

8.6 Driving techniques - Down stairs -

Never use escalators, even if assisted by a companion.

With assistance, forwards
- Check that the anti tip is turned up and that the push handles are fixed properly.
- Drive the wheelchair forward to the first step of the stair.
- Angle the wheelchair backwards on the main wheels.
- Have a firm grip on the push handles, and keep the balance on the main wheel taking one step at the time
- Reaching the bottom of the stair, put the front castors safely down on the floor.

Turn the anti tip down.

If two companions are present, one person can assist lifting in the front of the frame.

Do not lift the wheelchair holding onto the foot supports.

Do not lift the wheelchair holding onto the armrests.

8.7 Transfer

Techniques for transfering to/from the wheelchair should be practiced well with the persons involved. Here, we give some important advices for preparation of the chair:

With or without companion - sideways.
Before transfer:
- The wheelchair should be placed as close as possible to the destination of the transfer.
- Pull the wheelchair backwards 5-10 cm in order to make the front castors turn forward.
- Lock the brakes.
- Remove foot support and arm support on the side of the transfer.

With or without companion – forwards.
Before transfer:
- The wheelchair should be placed as close as possible to the destination of the transfer.
- Pull the wheelchair backwards 5-10 cm in order to make the front castors turn forward.
- Lock the brakes.
- Tilt chair forward.

Using a lift:
Before transfer to chair:
- Tilt the chair back
- Remove the head support
- Remove the foot supports
- Open the back rest angle slightly
- Replace the components when transfer is finished.

⚠ Never stand on the foot plates without making sure that they are touching the ground due to the risk of tipping the chair forwards.

8.8 Point of balance

Adjust the point of balance by changing the position of the main wheel in the main wheel bracket.
- Move the main wheel hub and the main wheel. (Chapt. 6.6)
- Adjust the brakes. (Chapt. 6.17)

2 pcs 24 mm open-end spanner
5 mm Allen key

When the main wheels are moved forward, it will be easier to manoeuvre the wheelchair, but the risk of tipping backwards increases.

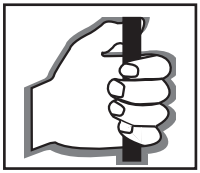
ⓘ The point of balance can also be changed by adjusting the seat angle and/or angle of backrest.

⚠ It is recommended to use the anti tip.

⚠ Check that the main wheel and quick release are locked properly. (Chapt 6.2)

8.9 Lifting the wheelchair

• The wheelchair should be lifted in the frame only and it is marked with symbol (ill. 7.8.1) where it should be lifted.



Ill. 7.8.1

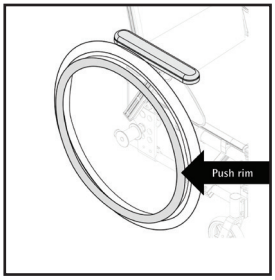
Never lift the wheelchair in the foot supports or arm supports

Never lift the wheelchair with a user in it.

8.10 Push rim

Netti wheelchairs are is delivered with aluminium push rims as standard. The material and distance to the main wheel influences the ability of the user to grip. Contact your dealer to get information about push rims that fit your chair.

Alternative push rims may give a better grip, but the friction may increase. When using the hands to stop the chair, the risk for burning of the hands increases.



A squeezing and trapping hazard of the fingers may occur when passing through narrow passages and if the fingers come between the spokes. To avoid this risk, we recommend spoke protectors as accessory.

If you want/need to change push rims or increase/decrease the distance between the push rims and the wheel, please contact your dealer

9. MAINTENANCE

9.1 Maintenance instructions

The Netti chairs are built of modules. Alu Rehab carries stock of all parts and is ready to supply these on short notice. Necessary instructions for mounting will follow the parts.
Parts to be handled by user are defined in spare part catalogues that can be downloaded at www.alurehab.com. These parts can, if needed, also be removed and sent to manufacutrer/distributor upon request.
Parts related to wheel frame construction must be handled by manufacturer or authorized sercvice facility.

⚠ You can order original paint from Alu Rehab to repair scratches and minor damages to the paint: Please contact your dealer to order.

⚠ If defects or damages occur, please contact your dealer.

⚠ Check/re-adjust screws and nuts at regular intervals.

⚠ Sand and sea water (salt used for gritting in the winter) can damage the bearings of the front castors and main wheels. Clean the wheelchair thouroughly after use.

ⓘ We recommend washing the wheel chair in washing chamber at >85°C.

ⓘ For small damages to the surface, original surface paint can be ordered from the manufacturer.

Frequency	Weekly	Monthly
Check defects/damages E.g. breakage/missing parts	X	
Washing of wheelchair		X
Oiling of bearings*		X
Washing of cushions		X
Check anti tip function		X
Check brake adjustment		X
Check tyre wear		X

* As a rule of thumb, use oil on movable parts and all bearings. Alu Rehab recommends use of ordinary bicycle oil

9.2 Cleaning and washing

1. Remove cushions before washing the wheelchair.
2. Clean cushions and covers according to instructions printed on cushions.

Cushion cleaning procedures

CORE	
Washing	Hand wash 40°C
Disinfection	Virkon S
	Auto clave 105°C
Drying	Squeeze
	Air dry standing edgewise
OUTER COVER	
Washing	Machine wash 60°C
Drying	Tumble dry max 85°C

3. Clean frame using water and a rag.
4. If jet water washing, avoid pointing directly towards gas springs, labels and back cushion.
5. We recommend using soft soap.
6. Wash the wheelchair well using clean water to remove all the soap.
7. Use methylated spirit to remove any dirt left.

10. TROUBLESHOOTING

Symptom	Reason/Action	Reference in manual
The wheelchair is going askew	• The angle of the bearing house might not be 90° • Check that the front castors are fitted in the same height • The main wheel hubs might be incorrectly mounted • One of the brakes might be too tight • The user are sitting very askew in the chair • The user might be stronger on one side than the other	6.5 6.4 6.6 6.17
The wheelchair is heavy to manoeuvre	• The main wheel hubs might be incorrectly mounted • Clean the front castors and forks for dirt • Too much weight over the front castors (Adjust the point of balance by moving the main wheels back)	6.6
The wheelchair is hard to turn	• Control that the front castors are not fixed too hard • Adjust the angle of the bearing house • Heavy weight over the front castors • Adjust the point of balance	6.4 6.5
The front castors are wobbling	• Too much weight over the front castors (Adjust the point of balance by moving the main wheels back). • The front castors are not fixed properly • Check that the front forks are fitted in the same height • The angle of the bearing house might not be 90°	6.4 6.4 6.3 6.5
The main wheels are difficult to take off and put on.	• Clean and grease the quick release • Adjust the length of the hub bushing	6.6
The brakes are not functioning well	• Adjust the brake	6.17
The wheelchair feels "shaky"	• Check screws and adjustment points in general	

ⓘ Please contact your dealer for information about authorized service facilities that can give support if solution is not reached in this form.

ⓘ When in need of spare parts, please contact your dealer.

ⓘ When making changes affecting frame construction, contact dealer / manufacturer for confirmation.

11. TESTS & WARRANTY

11.1 Tests

Netti III HD is tested and has been approved for usage both indoors and outdoors. The chair is CE marked.

Maximum user weight: 160 kg

It is tested by TÜV SÜD Product Service GmbH according to DIN EN 12183: 2009.

Crash tested at Millbrooke Proving Ground, Bedford UK, according to ISO 7176-19

Seating system is tested for fire resistance according to: ISO 7176-16

11.2 Guarantee

Alu Rehab is providing you with a 5-year guarantee on all frame components and on the cross-tube assembly. There is a 2-year guarantee on all other compo-nents except batteries. Alu Rehab is not responsible for any damage resulting from inappropriate or unprofessional installation and/or repairs, neglet, wear, from changes in wheelchair assemlies or instutions not approved by Alu Rehab or by use of spare parts delivered or produced by third parties. In such cases, this guarantee shall be considered null and void.

11.3 Claim

- Claim is to be addressed to the sales agent of the wheelchair. Please note that sales documentation has to be filled in and signed correctly in order to document time and and place of the purchase of the wheelchair.
- Generally, defects are accepted as reason for claims. The sales agent and Alu Rehab are to decide whether a defect has to be repaired, or the customer is entitled to a reduced prize due to the defect.
- This decision is based on an evaluation of defect. 14 days after receiving a claim, the customer receives a report from the sales agent and/or Alu Rehab are going to handle the defect.
- Claim are to be forwarded as soon as a defect is discovered.

⚠ Normal wear, incorrect use or incorrect handling is not a reason for claims.

⚠ The user is to use, maintain and handle the wheelchair as described in the user manual.

11.4 Spare part guarantee

- Alu Rehab offers a 5-year guarantee (as a minimum) for spare parts. The periode of guarantee is defined as beginning at the date, Alu Rehab cancels the production of a specified type of chair.
- During the periode of spare part guarantee, spare parts are delivered within 14 days.
- During the periode of spare part guarantee, Alu Rehab offers a 1 year guarantee for defect spare parts.

11.5 Special adjustment/ adaptations

Special adjustments/adaptations are defined as all adjustments that are not included in this manual. Wheelchairs that are especially adjusted/adapted by the customer can not keep the CE mark given by Alu Rehab A.S Norway. If this is the case, the warranty given by Alu Rehab A.S Norway will not be valid. If any uncertainty about special fitting and adaptations, please contact Alu Rehab A.S.

11.6 Combinations with other products

Combinations of Netti and other products not manufactured by Alu Rehab A.S Generally in these cases, the CE mark of all the products involved will not be valid. However, Alu Rehab A.S has made agreements with some manufacturers about some combinations.

ⓘ For further information, please contact your dealer or Alu Rehab A.S Norway directly.

11.7 Service and repair

Information about service and repair services in you area, please contact your local dealer.

ⓘ A unique identification number / serial number is to be found on the bottom frame on left side of the chair.

ⓘ A spare part catalogue for the wheelchair can be obtained through your local dealer or downloaded at www.alurehab.com

ⓘ A refurbisment manual for the wheelchair can be obtained through your local dealer or downloaded at www.alurehab.com

12. MEASUREMENTS & WEIGHTS

Size*	Seat depth Standard**	Back rest height*** (Extender)	Total with	Weight
50 cm	40-50 cm	50 (60) cm	74 cm	34,5 kg
55 cm	40-50 cm	50 (60) cm	79 cm	36,5 kg
60 cm	40-50 cm	50 (60) cm	84 cm	38,5 kg

* Measured between edges of frame tubes. For distance between skirt guards add 2,5 cm.
** Measured from front of seat plate to back rest hinge without cushion.
Using standard Uno back rest cushion subtract app. 3 cm.
*** Measured from seat plate to top of back rest velcro.

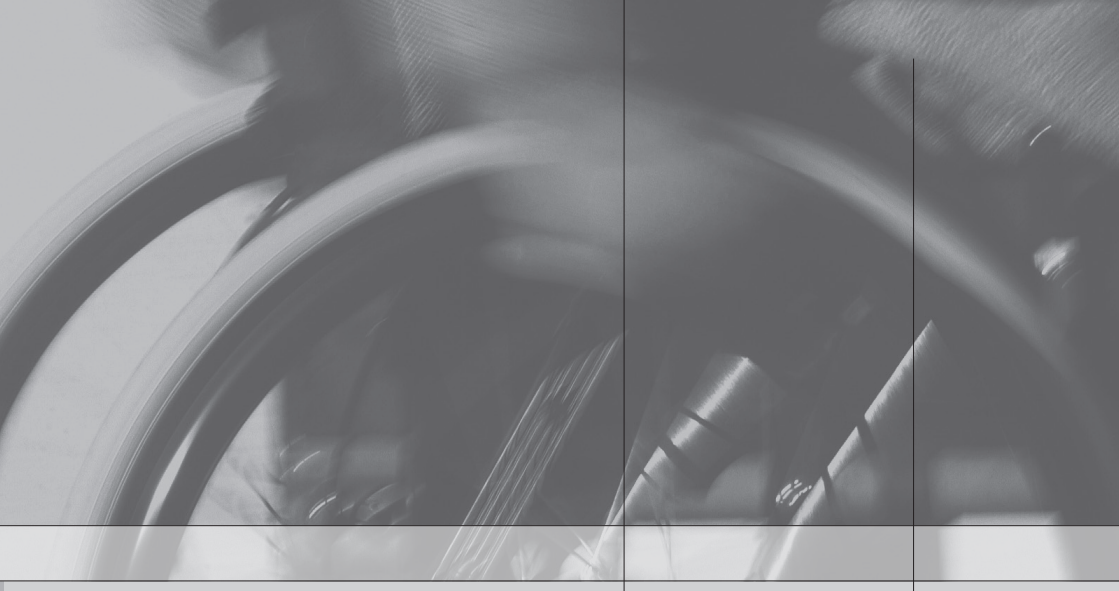
ⓘ The weight is including main wheels, front castors, foot supports and arm supports. No cushion.

ⓘ Recommended inflation pressure using air tyres is: 60-65 PSI.

ⓘ Max user weight is 160 kg.

⚠ When mounting accessories such as power kit etc the weight of the accessories must be subtracted from the max user weight.

Dealer:	
Serial no.:	
Date supplied:	
Dealer stamp:	



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