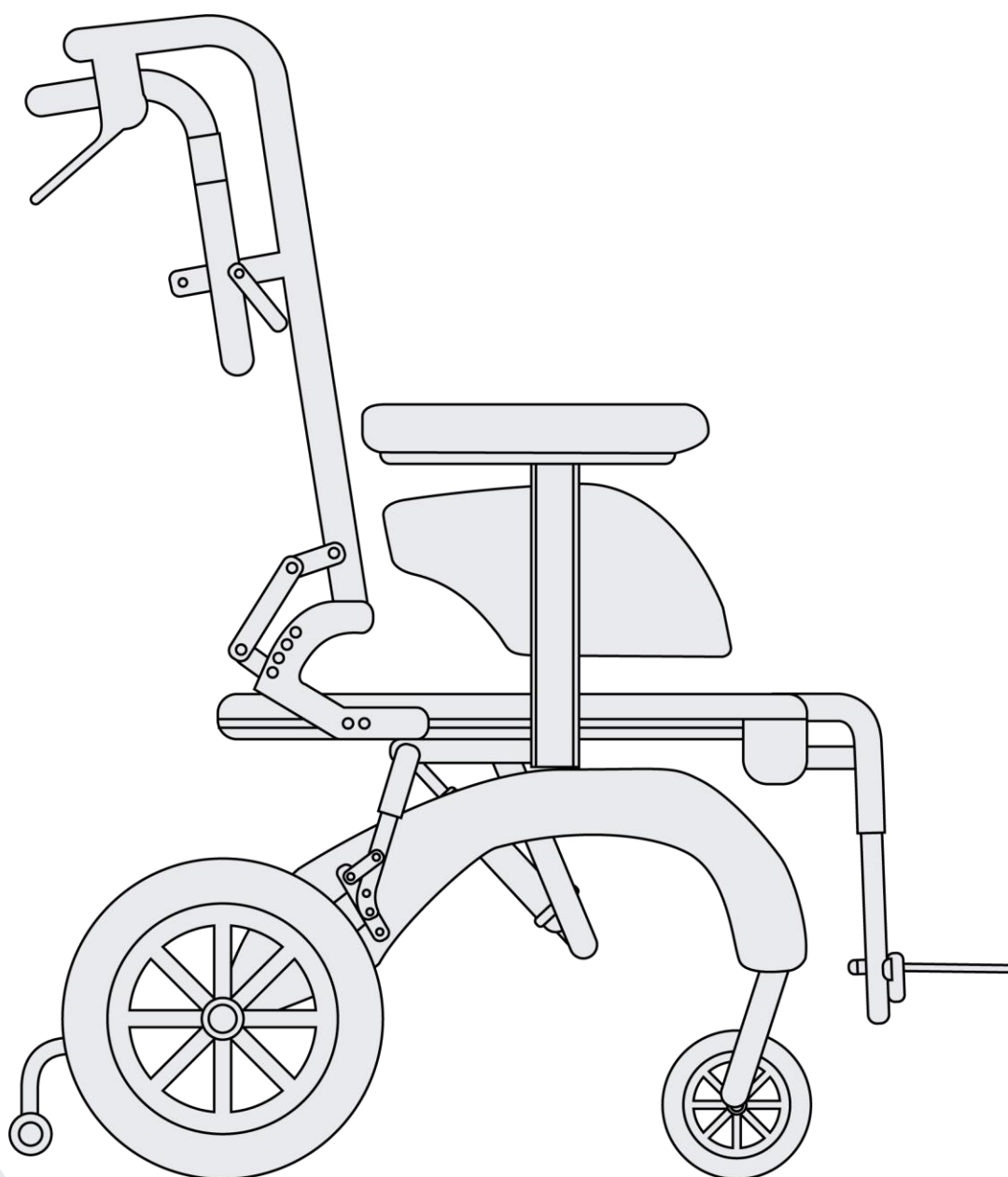




DICHIARAZIONE DI CONFORMITÀ UE / UE CONFORMITY DECLARATION



PRODOTTO / PRODUCT	LB LEVIA BASCULANTE – LEVIA KID – LEVIA BASCULANTE KID – LBK – LB DYNAMIC – TRIA	
CODICE FABBRICANTE / MANUFACTURER PART NUMBER		S080
EMDN	Y180939 MODULAR POSTURE SYSTEMS	
UTILIZZO PREVISTO / INTENDED USE	Il prodotto è destinato a essere impiegato per attenuazione o compensazione di una lesione o di una disabilità. In particolare la carrozzina è intesa per essere utilizzata da persone con difficoltà di movimenti temporanee o permanenti e che hanno la necessità di spostarsi in ambiente prevalentemente interni. The product is intended to be used for alleviation or compensation for an injury or disability. Particularly the wheelchair is intended to be used by those groups of users with temporary or permanent mobility difficulties confined to a sitting position who need to move in mostly indoor environments.	
FABBRICANTE / MANUFACTURER		Neatech.it s.r.l. via Antonio de Curtis 4/A – 80040 Cercola (NA) – Italia Tel. +39 081 5551946 – info@neatech.it – www.neatech.it P. IVA IT04812481218 – REA NA 715393 Eudamed actor ID/SRN IT-MF-000031601
UDI DI BASE / BASIC UDI DI NUMBER	805538493S080CM	
UDI DI		8055384930377 TELAIO RIGIDO LEVIA / LEVIA FIXED FRAME 8055384930391 TELAIO RIGIDO TRIA / TRIA FIXED FRAME 8055384930384 TELAIO CHIUDIBILE / FOLDABLE FRAME



We have great concerns about quality, safety and usability of our products. We are always working to improve them. Please download last version of this manual at this link.

<https://www.neatech-download.it/s080-manual/>

Index

1	PRODUCT INFORMATION	1
2	PREPARATION FOR FIRST USE	1
3	ADJUSTMENTS	2
3.1	List of adjustments.....	2
3.2	Seat depth.....	3
3.1	Seat angle	4
3.2	Armrests depth	5
3.3	Armrests height	7
3.4	Sidepad height	8
3.5	Footplates height.....	10
3.6	Footplates depth and angle	11
3.7	Backrest angle.....	13
3.8	Push handle height	15
3.9	Pushbar position	16
3.10	Legrest angle	17
3.11	Brake adjustment	19
4	USE OF THE PRODUCT	20
4.1	Use of parking brakes	20
4.2	Use as seat in a motor vehicle	21
4.2.1	Four points tie-down	25
4.2.2	DAHL docking station	27
	Securement of LB in a road vehicle using the Dahl docking system	30
	Positioning the occupant restraint when using it with the Dahl Docking	31
4.3	Type of chassis	35
4.3.1	Foldable chassis	35
4.3.2	Fixed chassis LEVIA.....	36
4.3.1	TRIA fixed chassis	37
4.4	Seating system	38

4.4.1	Removable rigid plane	38
4.4.2	Canvas.....	39
4.5	Lever operated functions.....	40
4.6	Footrest flip-up	42
4.7	Use of angle adjustable legrest with spring	42
4.8	Transport and storage	43
5	MAINTENANCE	43
5.1	Cleaning	43
5.2	Controls to be performed on the product	44
5.3	Reuse	45
5.4	Tire puncture	46
5.4.1	User information.....	46
6	SPECIFICATIONS.....	48
6.1	Maximum user weight	48
6.2	Dimensions	49
6.2.1	Wheels width	50
7	WARRANTY TERMS	51
7.1	Serial number	52

Symbols in this manual



WARNING

This symbol means presence of danger for the user or damage for the product. Always follow instructions when this symbol is present.



INFORMATION

This symbol means general information intended to simplify or best explain the use of the product.



CONTACT INFORMATION

This symbol means the need of contacting an authorized service center or the manufacturer.



PINCH HAZARD

This symbol means presence of pinch hazard.



INCIDENT REPORTING

If an incident occurs, please contact the manufacturer.



In order to obtain product safety notices and product recalls, for example by ensuring the supplier has up-to-date contact details visit the website of the manufacturer.



AUTHORIZED SERVICE CENTER

In order to obtain a list of authorized service center, please contact the manufacturer.



This product and all its components can not be treated as household waste. For more detailed information on how recycling and disposal this product contact your local waste disposal service.



Any unauthorized modification to the product may increase the risk of personal injury and damage to the product itself. All modifications should be done by an authorized service center. Do not use any unauthorized accessories or spare parts on the product.



Do not use the product in combination with other medical devices without first having considered any risk due to combination of more products. Please pay special attention to the combination of flame-resistant and non-flame-resistant materials.



WARNING: It is prohibited to use the product or its parts for any purpose other than that indicated. For a correct use please follow the instructions given in this manual. The manufacturer disclaims any responsibility for damages caused by improper use of the product.



Information in this manual may be subject to change without notice. All information, pictures and specifications are based on the product details that were available at the time of preparation of this document. They are representative examples and they are not intended to be exactly as the actual product.



TEMPERATURE

The temperature of some surfaces may increase when the product is exposed to external heat sources as direct sunlight.



INFORMATION

For information on how to obtain information and instructions in a format appropriate for use by visually impaired people please contact the manufacturer.



Do not operate the product if it is behaving abnormally or erratically.



Do not install, maintain or operate the product without reading all warnings and this entire manual.

Always keep this manual in connection with the product.



The product is not intended to be dismantled. There are no parts of the product expected to be handled during normal use of it

TIPPING HAZARD



Tipping hazard is strongly reduced because of the design of the product according to EN 12182.

In any case, please pay special attention during the adjustments and use of the product to prevent any damage to the user or product itself.

Any transport on a slope greater than the maximum security slope can be dangerous.

Please don't seat on armrests.

ANTI-TIP DEVICES



Using anti-tippers substantially reduces your risk of falling over, which can cause serious injury. The Anti-Tippers will keep you from falling over, but they will limit your ability to be pulled up curbs and some other maneuvers.



Center of balance of the wheelchair and so its stability can be affected by:

- User position
- Use of a backpack
- Tilting of the seat

SEATING SYSTEM NOT IN DEFAULT POSITION



Seat tilt, backrest recline or legrest elevation may vary the centre of gravity of the system wheelchair + user and increase tipping risk.

Always pay special attention when the seating system is not in the standard position and tilt the seat, recline backrest or elevate legrest only on a flat horizontal surface.



Transfer into and out the wheelchair

Users transfer is recommended with the presence of an assistant. Don't use footrests or armrests as support.



Do not smoke while using the wheelchair because lighted cigarettes could cause a fire.



PINCH HAZARD

Make sure your feet do not hang up or get caught in the space between the footrests. In general, make sure you have proper space in areas you will travel through to minimize pinching or entrapment of body parts.

WARNING



Do not carry passengers on the wheelchair independently of the age of the passenger. The wheelchair is not designed for weight training and is unsafe for use as a seat while weight training. Do not lean over the top of the back upholstery to reach objects from behind as this may cause the wheelchair to tip over. Do not shift your weight or sitting position toward the direction you are reaching as the wheelchair may tip over. Do not stand on the frame of the wheelchair.

Some pathologies may limit your ability to use your wheelchair safely. Be sure to consult with a doctor about your physical limitations.

Dealing with uphill

When facing an uphill road it is recommended to set the seating system to default position.

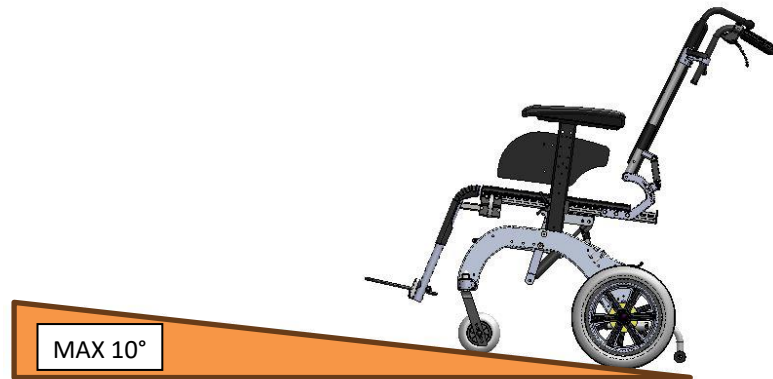


Figure 1

Dealing with downhill

When facing an uphill road it is recommended to set the seating system to default position with the exception of seat angle. It is preferable to have a seat angle as major as possible (seat rearward).



Figure 2

WARNING



Don't use the wheelchair up or down slopes with a gradient than indicated in specifications of this manual.

Don't use the wheelchair up or down ramps that are not equipped with proper edge protection to prevent the wheelchair from falling down.

Don't use the wheelchair down or up a hazardous incline if the surface is covered with snow, ice or the surface is uneven.

Dealing with side slopes

When facing with side slopes, always use the wheelchair with great caution and make sure the seating system is in the default position.



Figure 3

Turning with the wheelchair



When turning with the wheelchair, always use great caution and make sure the seating system is in the default position.

Obstacle climbing

When facing with an obstacle, always use great caution and make sure the seating system is in the default position. Always face an obstacle facing forward. To help yourself to climb an obstacle, an assistant can use the tipping lever or the antitip bar to tip the wheelchair. With antitip device, it is possible to lightly pull the tubular and rotate it.

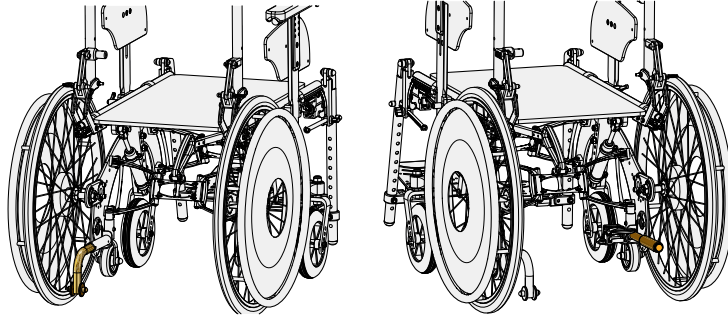


Figure 4



Use of the wheelchair in dark environments

Don't use the wheelchair in dark environments.



Safety belt

The wheelchair has the predisposition for a pelvic belt. **Pelvic belt is only designed to position the user and not for any protection in case of accident.**



Figure 5

It is necessary to grab the frame with both hands in the middle part of seat extruded tubes in order to avoid that the frame can tilt.

1 PRODUCT INFORMATION

LB is a manual tilting wheelchair that features a patented folding system that combines the advantages of a rigid frame to the comfort of the folding one. The unique structure with independent modules, resulting from a deep study that finds its origins in the aviation industry, it makes it a versatile tool for defining a good posture. It is in fact possible to move the backrest angle and modules, the seat and armrest, by sliding them on the prepared guides, offering the possibility of making asymmetrical arrangements. These adjustments are performed directly on the chassis so as to make semi-permanent positions. With LB is not only the postural system that adapts to the shape of the body but the frame itself can adapt to the anthropometric measurements of the user, in order to guarantee always the best positioning, while maintaining a compact size of the frame. Integrated perfectly with the postural Buddy Brace systems, it is able to offer endless positioning solutions.

2 PREPARATION FOR FIRST USE

Inside the box there are: • LB • Documents and manual	 PACKAGING DISPOSAL To properly recycle the packaging materials follow instructions provided by your local waste disposal service.
--	---

The product is delivered already mounted and ready to use. Before starting to use the product please check if all described components are present. **If not, please contact as soon as possible the vendor.** It should be better if first set-up is performed by an authorized service center.

3 ADJUSTMENTS

3.1 List of adjustments

Type of operation	
A	Operation intended to be performed by the user.
B	Operation intended to be performed by an assistant.
C	Operation intended to be performed by an authorized service center. Operation intended to be performed by an authorized service center.

Table 1

Adjustment	Type of operation	DEFAULT POSITION
Seat angle	B - Assistant	0°
Seat position	C - Authorized service center	ND
Seat height	C - Authorized service center	ND
Seat depth	B - Assistant	ND
Armrests depth	B - Assistant	ND
Armrests height	B - Assistant	MIN
Sidepad height	B - Assistant	ND
Footplates height	B - Assistant	MIN
Footplates depth and angle	B - Assistant	ND
Backrest angle	B - Assistant	MIN
Push handle height	B - Assistant	ND
Pushbar position	B - Assistant	ND
Legrest angle	B - Assistant	MIN
Brake adjustment	B - Assistant	ND

Table 2

3.2 Seat depth



WARNING

It is needed to set separately left and right part of the wheelchair. Always set two parts of wheelchair at the same manner.

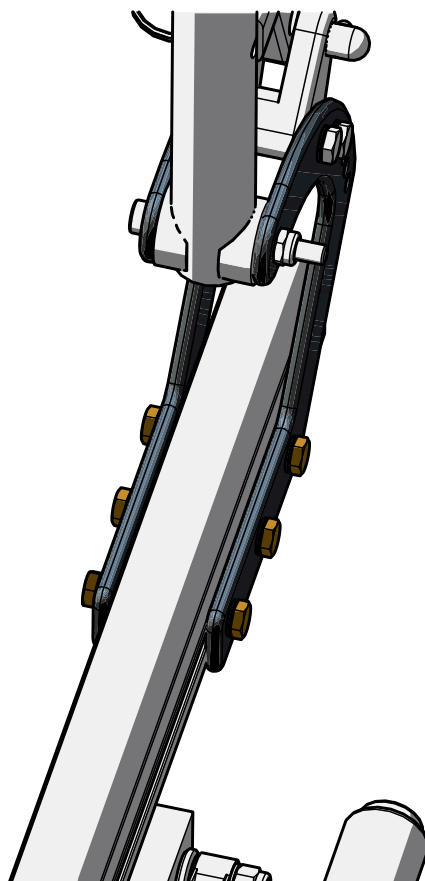


Figure 6



5 min

- Remove the backrest.
- Loosen the 6 screws shown in figure.
- Set the backrest according to the desired seat depth.
- Repeat operations for both left and right side of the wheelchair.
- Tight again the screws.
- Mount again the backrest.

OPEN-END
WRENCH



10 mm

FIXED BACKREST

With the fixed backrest there are only 4 screws per side.



Figure 7

3.1 Seat angle



RANGE

It is not easy to provide a range for adjustment of seat angle because there are too many configurations and possibilities. **In any case tilt range is between 30° and 20 °.**

In order to tilt the wheelchair use the levers as described in section 4.5.

3.2 Armrests depth



RIGHT AND LEFT SIDE

It is possible to adjust separately left and right armrest. It is possible to adjust separately left and right armrest.

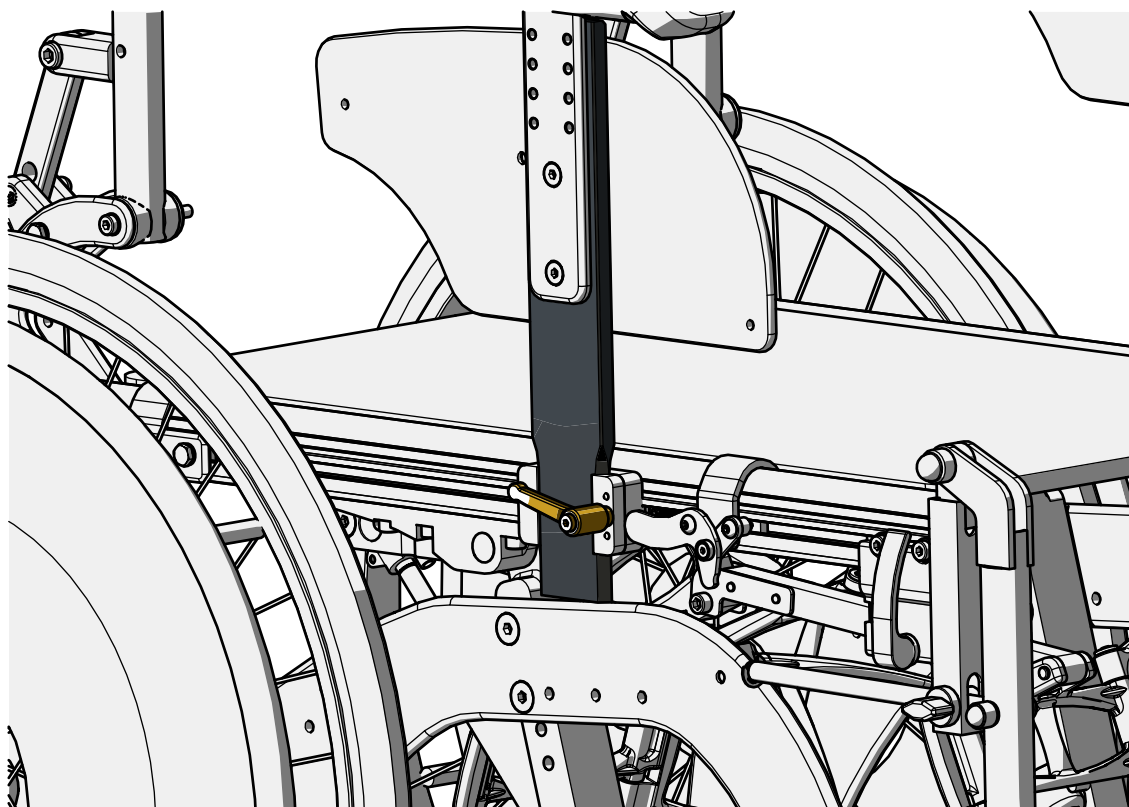


Figure 8



5 min

- Loosen the lever shown in figure and remove the armrest.

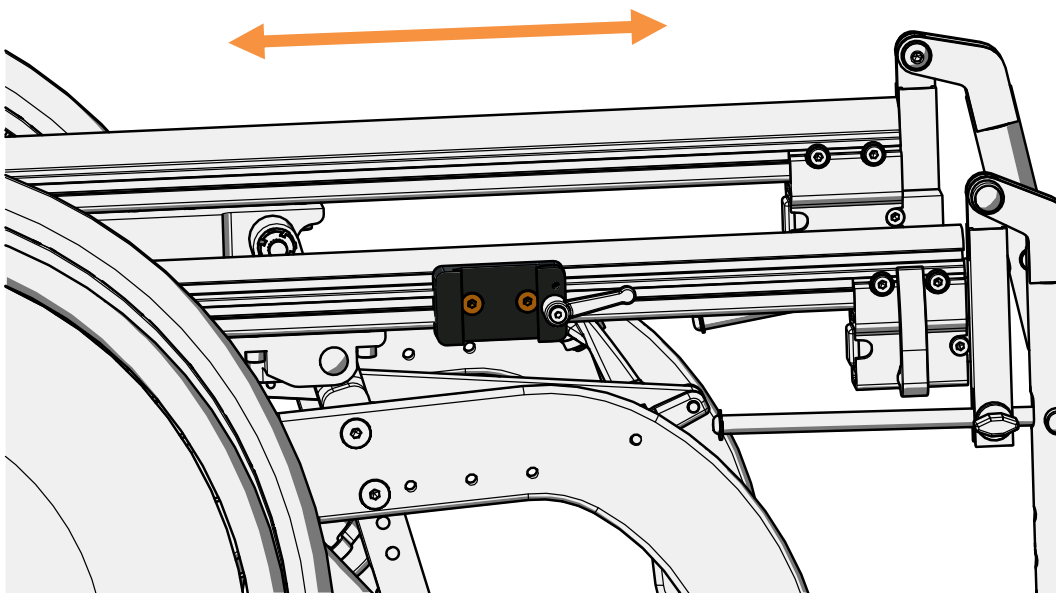


Figure 9

- Loosen the 2 screws shown in figure and set the depth of armrest clamp as desired.
- Tighten again the 2 screws and put back the armrest.

ALLEN WRENCH



4 mm

3.3 Armrests height



RIGHT AND LEFT SIDE

It is possible to adjust separately left and right armrest.



SIDEPAD AND ARMREST HEIGHT

It is better to adjust first armrest height and then the sidepad.

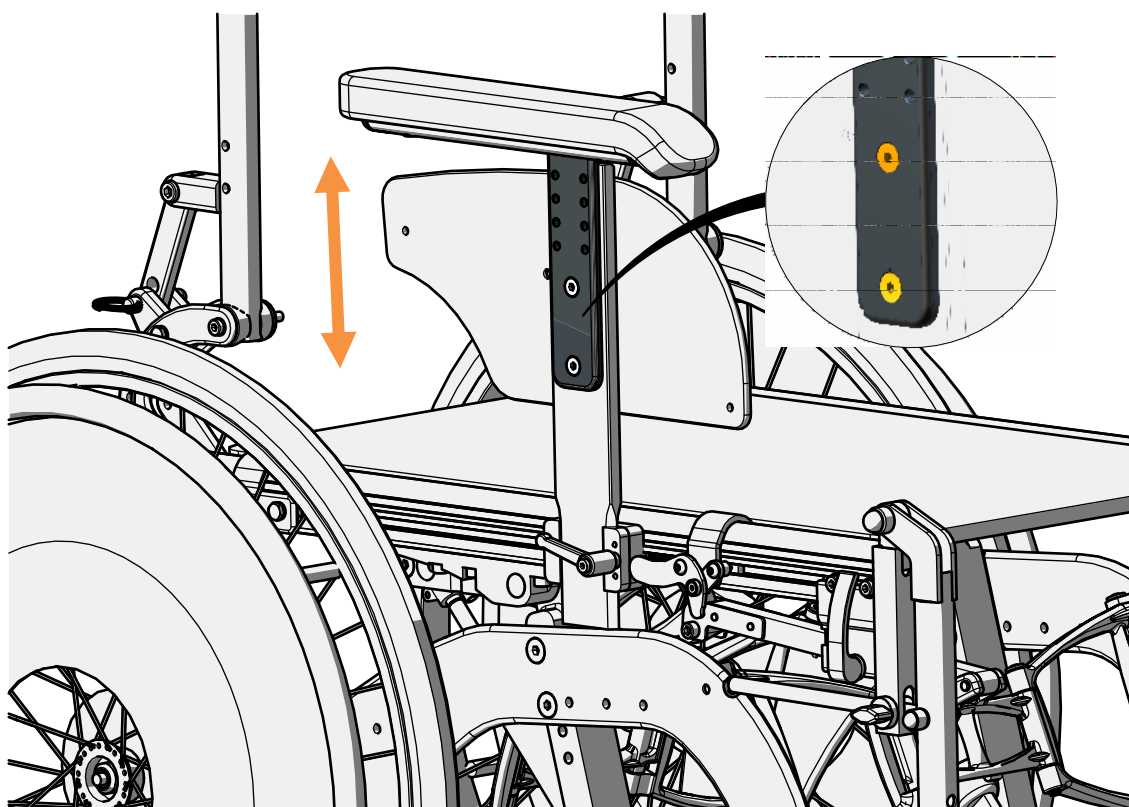


Figure 10



5 min

- Loosen the 2 screws shown in figure.
- Set the armrest according to the desired height.
- Tight again the 2 screws.

ALLEN
WRENCH

4 mm



3.4 Sidepad height



RIGHT AND LEFT SIDE

It is possible to adjust separately left and right armrest. It is possible to adjust separately left and right armrest.



SIDEPAD AND ARMREST HEIGHT

It is better to adjust first armrest height and then the sidepad.

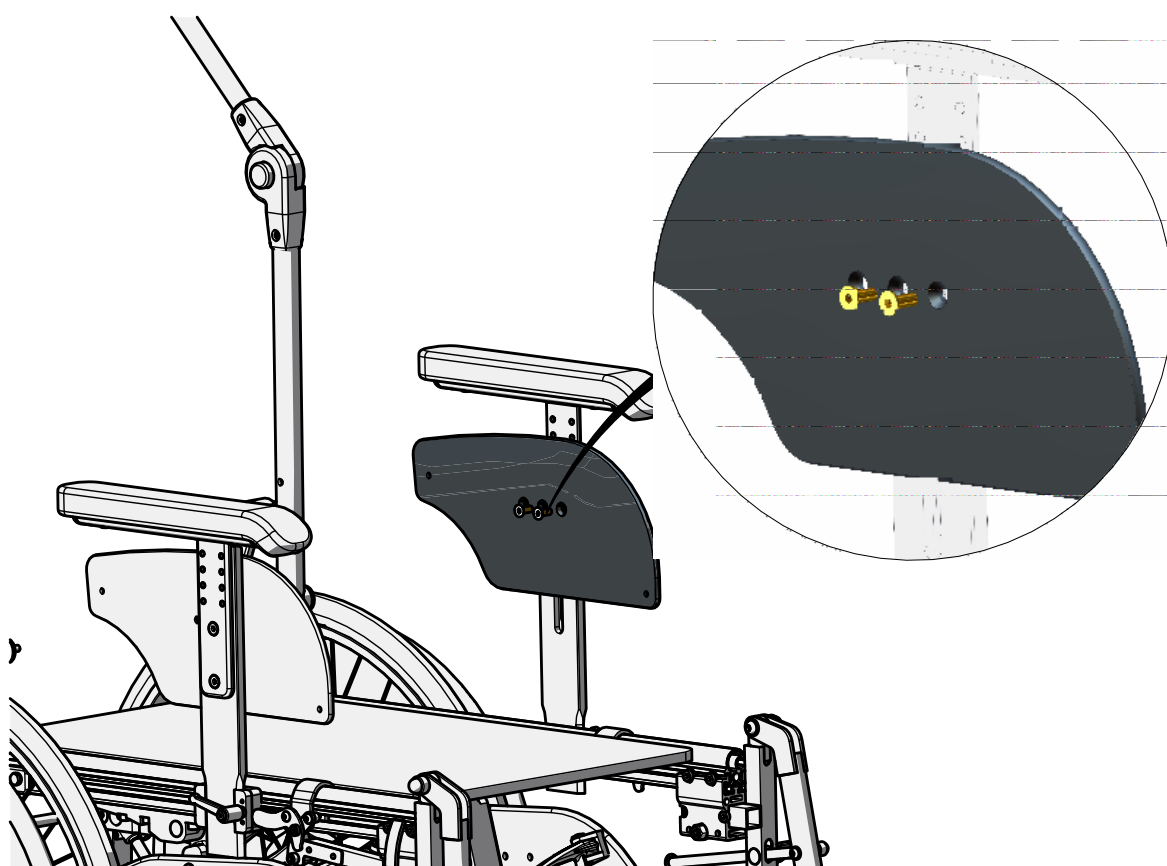


Figure 11



5 min

- Unscrew the 2 screws shown in figure and set the position of sidepad as desired.
- Screw again the 2 screws.

ALLEN
WRENCH



3 mm

Please be sure that the chosen position doesn't represent an obstacle.

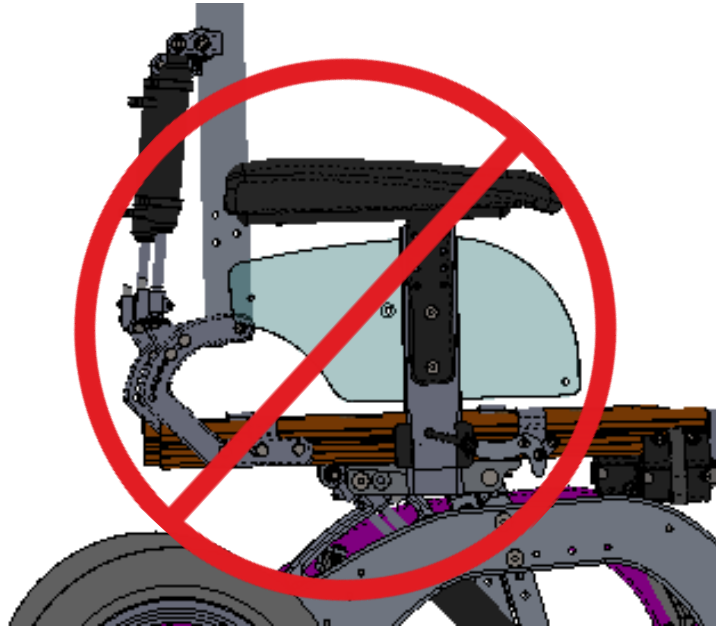


Figure 12

3.5 Footplates height



RIGHT AND LEFT SIDE

It is possible to adjust separately left and right legrest if you have splitted footrest.

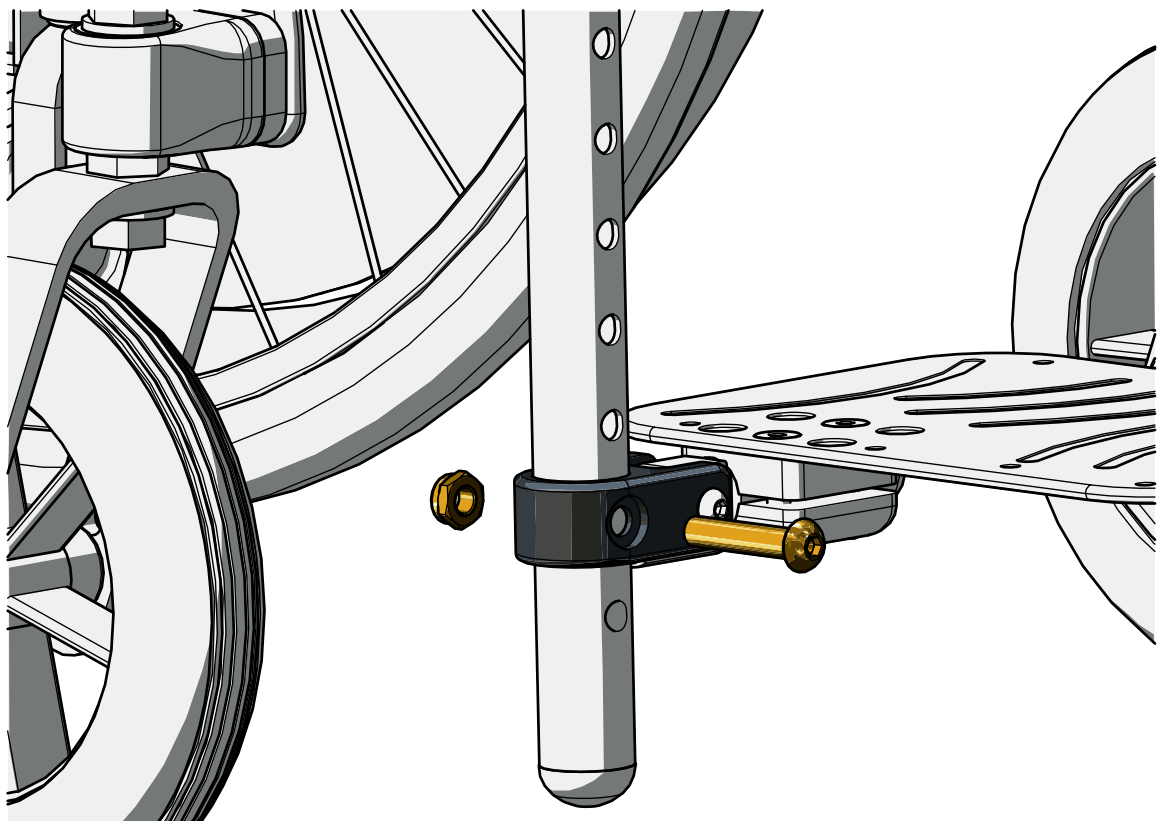


Figure 13



5 min

- Unscrew the screw shown in figure with the 6 mm allen wrench while holding the nut behind with the 13 mm open-end wrench.
- Repeat the operation for both left and right side of the wheelchair.
- Set the position of the footplate according to desired height.
- Screw again the screws.

**ALLEN
WRENCH**

6 mm



**OPEN-END
WRENCH**

13 mm



3.6 Footplates depth and angle



RIGHT AND LEFT SIDE

It is possible to adjust separately left and right legrest if you have splitted footrest.

Angle adjustment

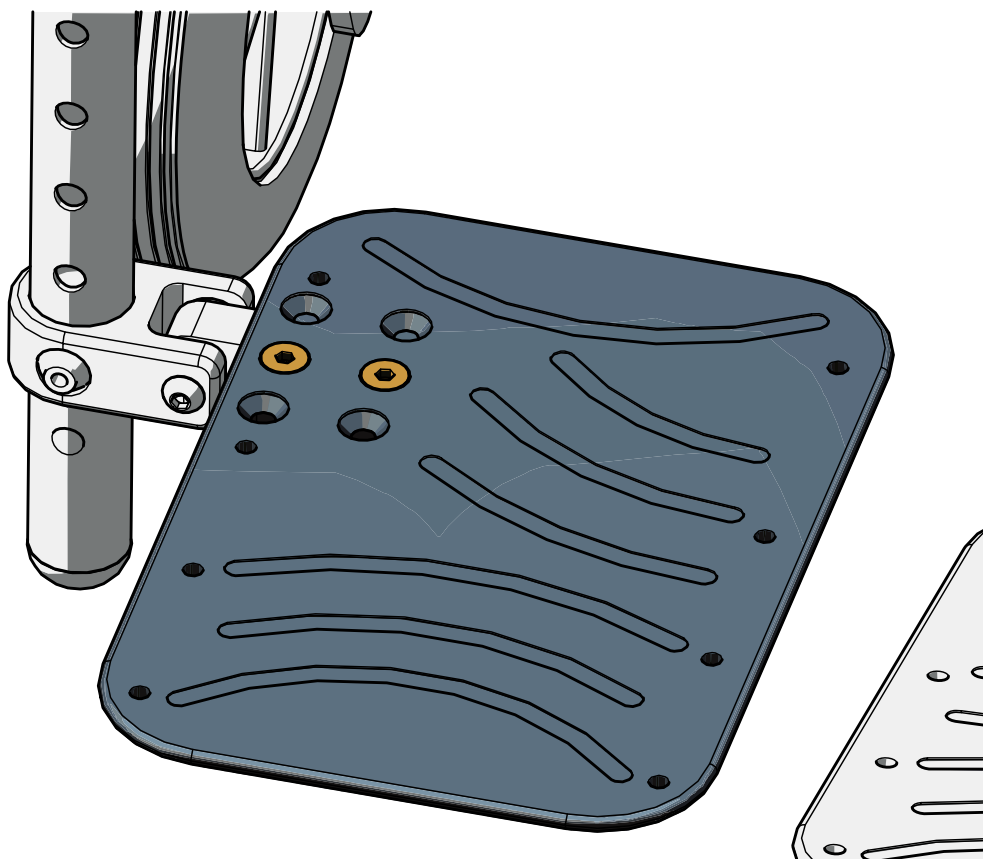


Figure 14



5 min

- Loosen the 2 screws shown in figure.
- Repeat operations for both left and right side of the wheelchair.
- Set the position of the footplate according to desired angle.
- Tighten again the screws.

ALLEN
WRENCH



4 mm

Depth adjustment

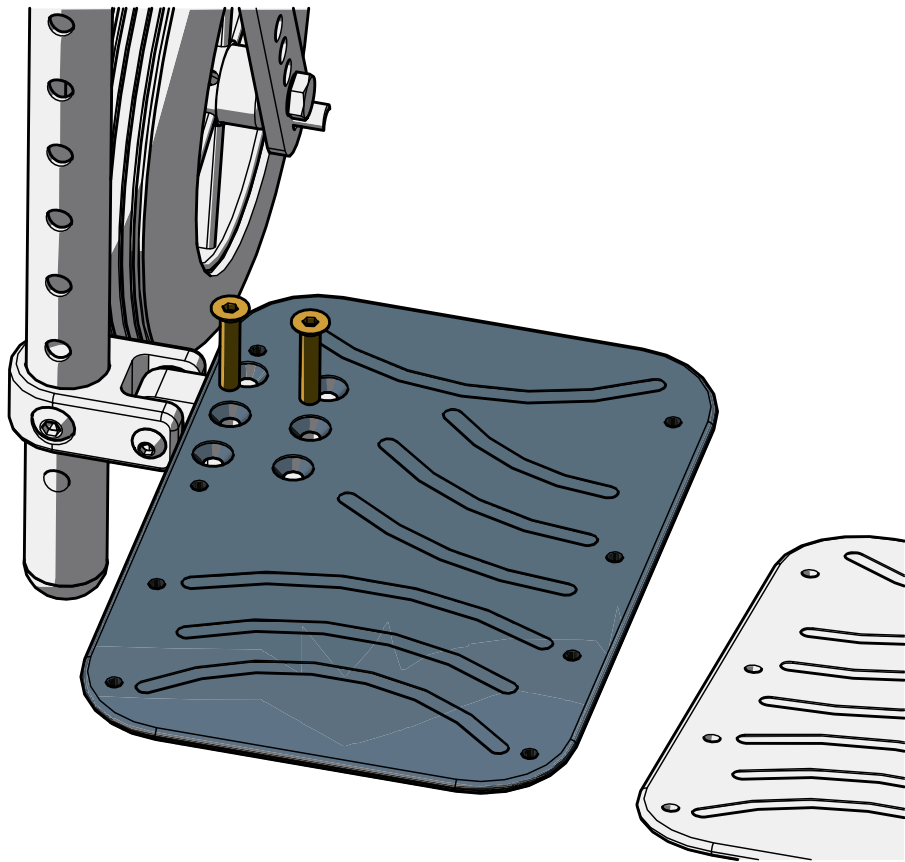


Figure 15



5 min

- Unscrew the 2 screws shown in figure.
- Set the position of the footplate according to desired depth.
- Repeat operations for both left and right side of the wheelchair.
- Screw again the screws.

ALLEN
WRENCH



4 mm

3.7 Backrest angle



WARNING

It is needed to set separately left and right backrest angle. Always set two parts of backrest at the same manner.

Angle adjustable with fixed position

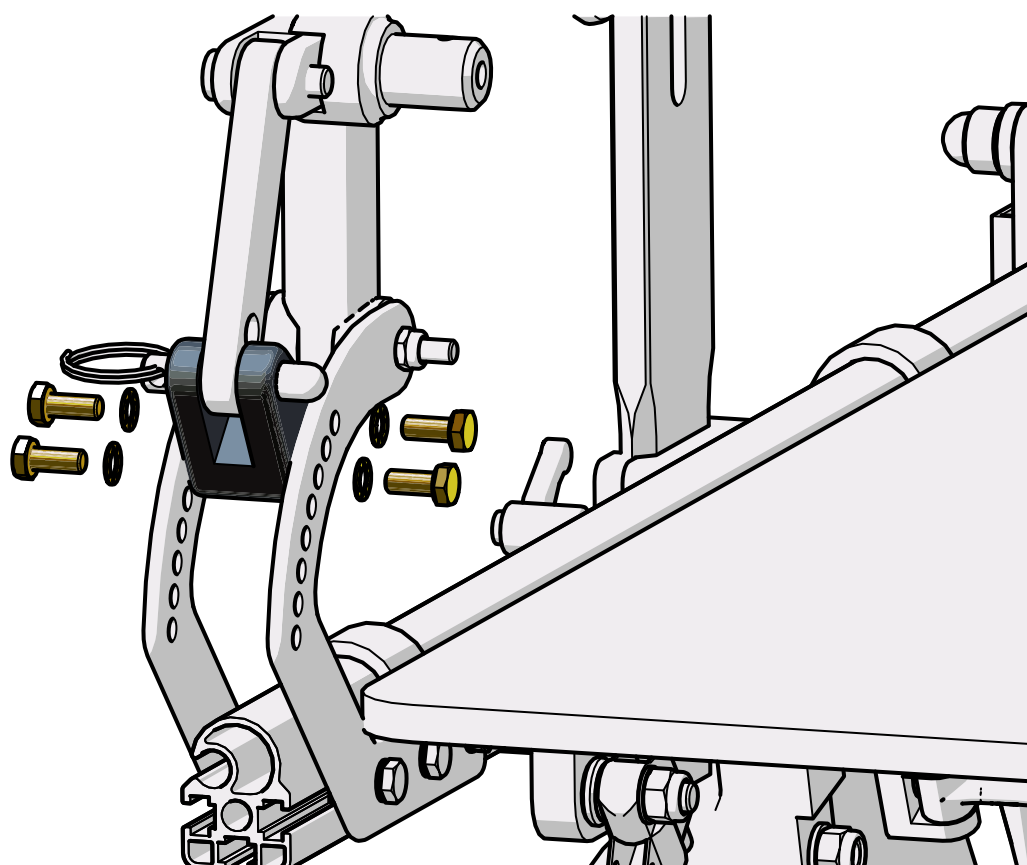


Figure 16



5 min

- Unscrew the 4 screws shown in figure.
- Repeat operations for both left and right side of the wheelchair.
- Set the position of the hardware highlighted in figure according to the desired backrest angle.
- Screw again screws.

**OPEN-END
WRENCH**

10 mm



ADDITIONAL ADJUSTMENT

After adjusting the angle of backrest as described above it is possible to adjust of more 20° simply acting on the axis shown in figure.

Repeat operations for both left and right side of the wheelchair.

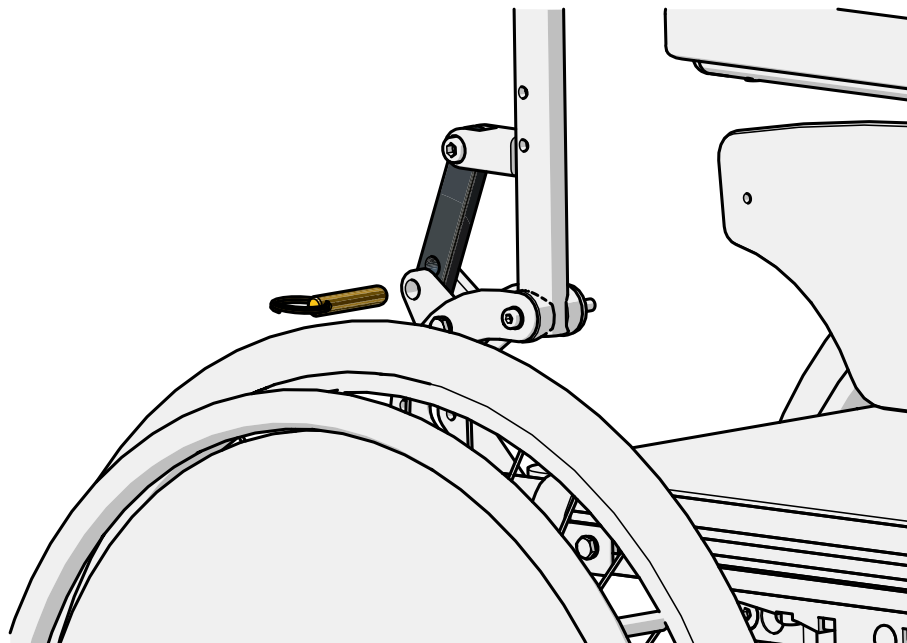


Figure 17

Angle adjustable with pistons - Dynamic active backrest with spring

In order to adjust the backrest use the levers as described in section 4.5.

3.8 Push handle height



RIGHT AND LEFT SIDE

It is possible to adjust separately left and right push handle.

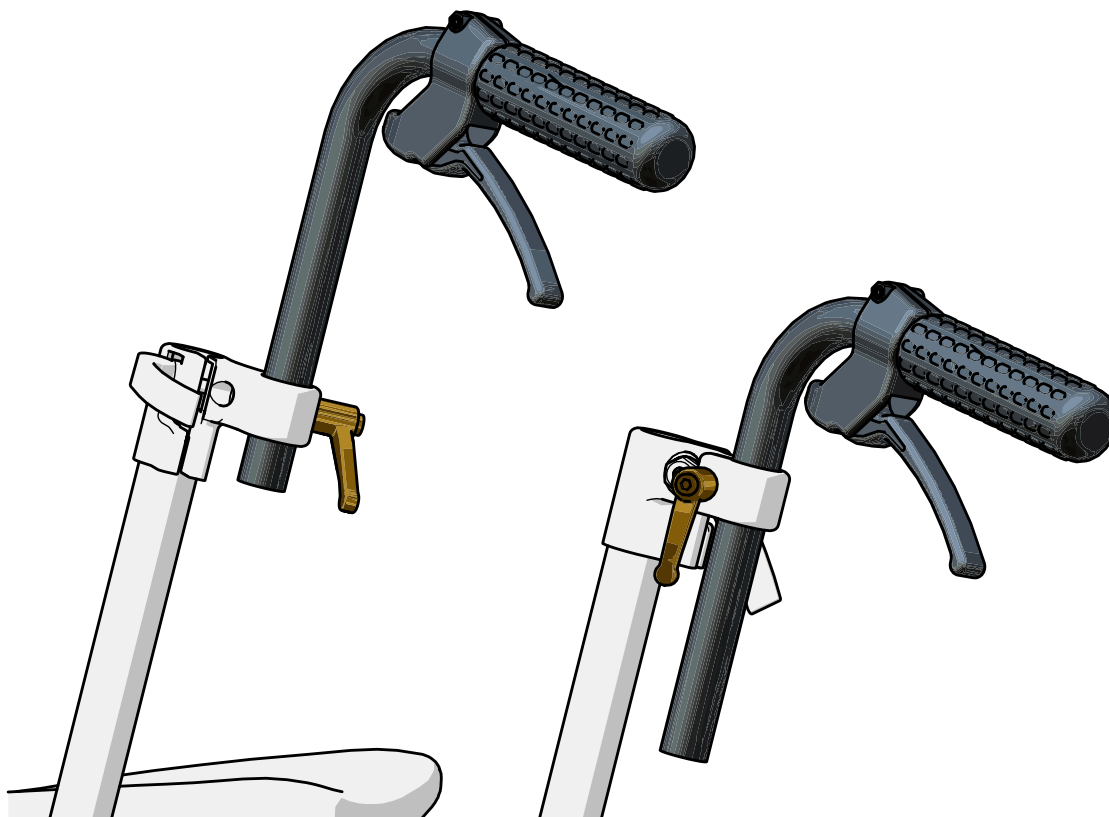


Figure 18



5 min

- Loosen the lever shown in figure and set the height of push handle as desired.
- Tighten again the lever.

3.9 Pushbar position

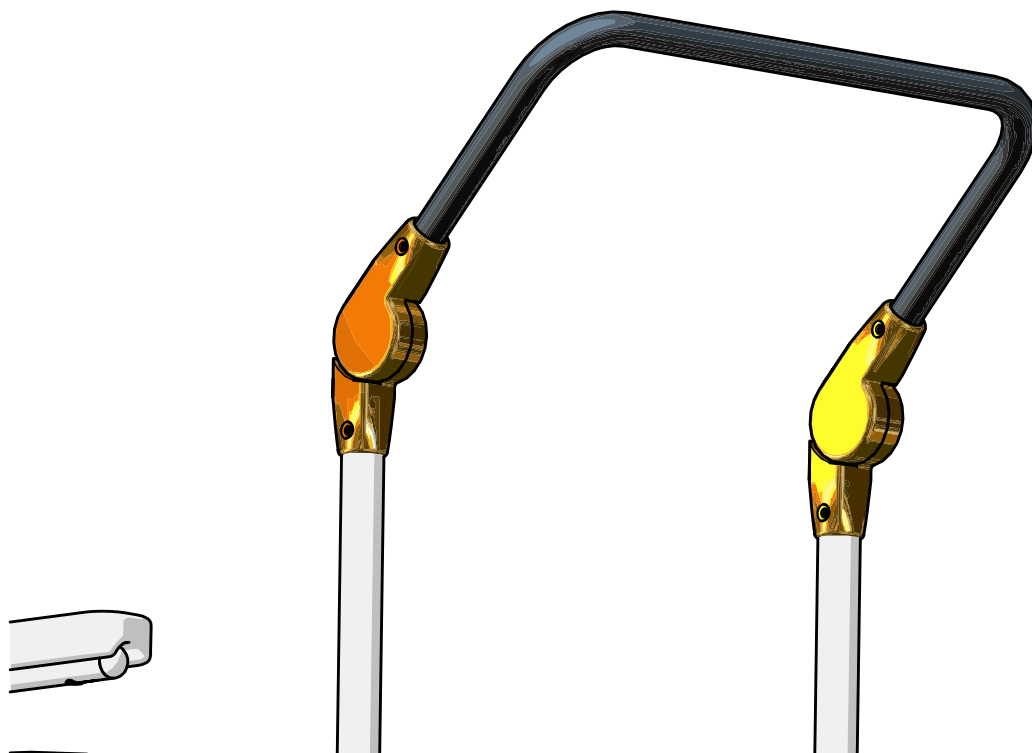


Figure 19



5 min

- Push the buttons shown in figure and set the position of pushbar as desired.

3.10 Legrest angle

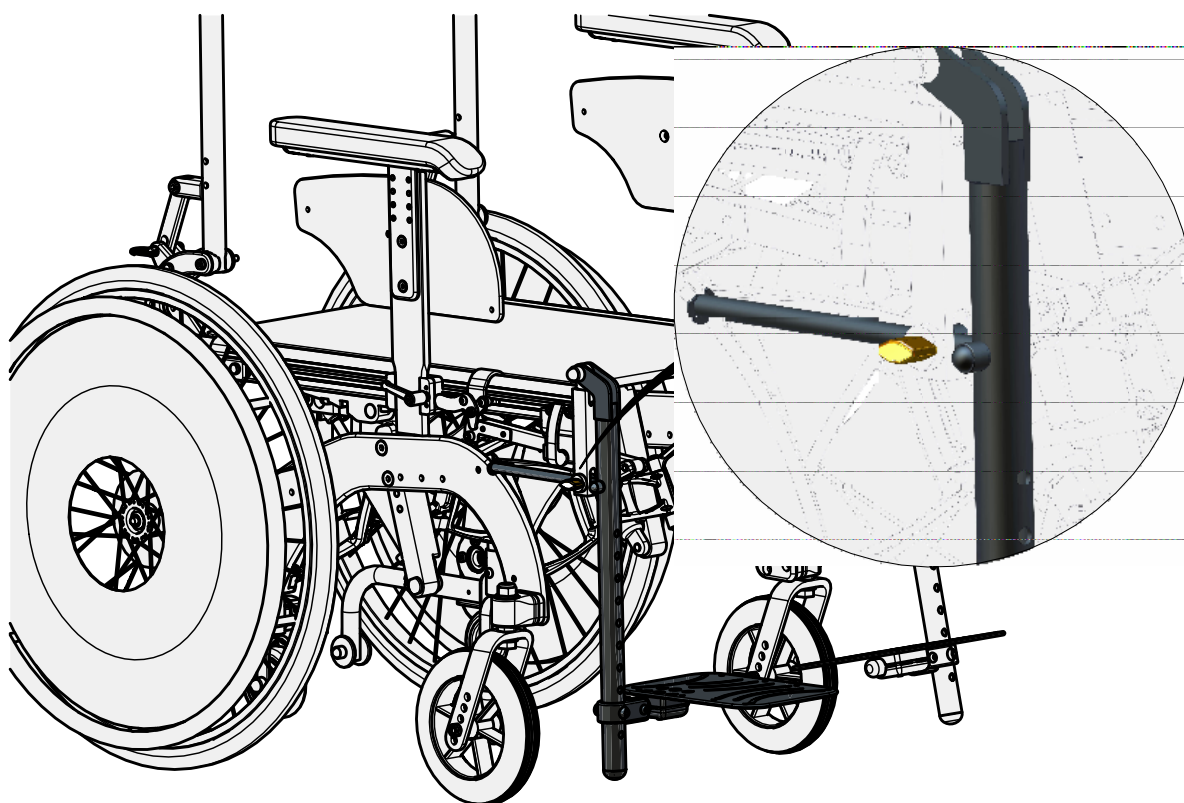


Figure 20



5 min

- Loosen the lever shown in figure.
- Set legrest angle as desired.
- Tighten again the lever.

DYNAMIC FUNCTION

It is possible to use the legrest with springs as dynamic legrest. Loosen the lever shown in figure. In this way the legrest tube will move together the leg of the user in case of unwanted movements of it.

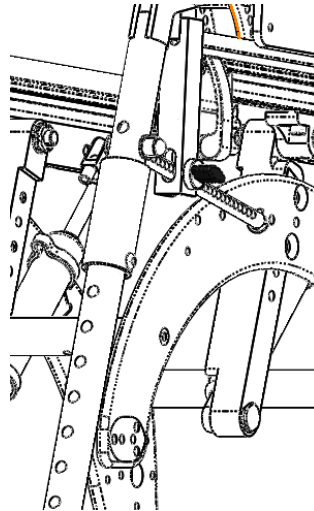


Figure 21

DYNAMIC FUNCTION LOCK

If needed, in order to unlock this movement, you have to simply tighten again the lever shown in figure.

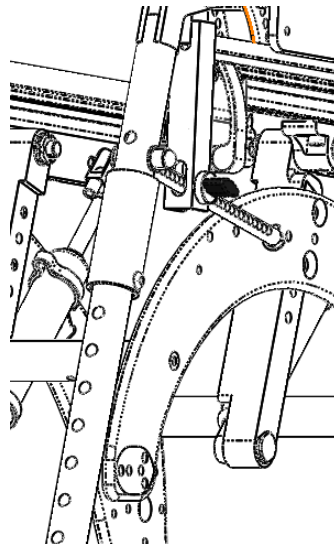


Figure 22

3.11 Brake adjustment

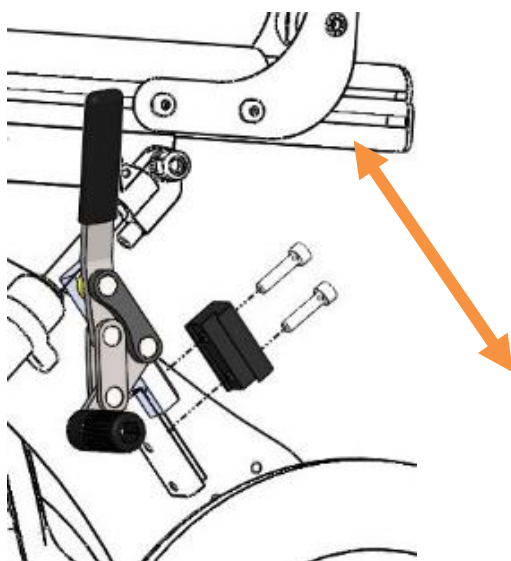


Figure 23



5 min

- Loosen the 2 screws shown in figure.
- Set the brake as desired.
- Tight again the 2 screws.
- Repeat operations for both left and right side of the wheelchair.

ALLEN
WRENCH



4 mm



WARNING

It is needed to set separately left and right brake position. Always set two parts of wheelchair at the same manner.



WARNING

Always check that it is possible to act on brake and that the brakes correctly lock the wheel.



WARNING

If you have pneumatic wheels, before adjusting the brake always check for their pressure and usury.

4 USE OF THE PRODUCT

4.1 Use of parking brakes

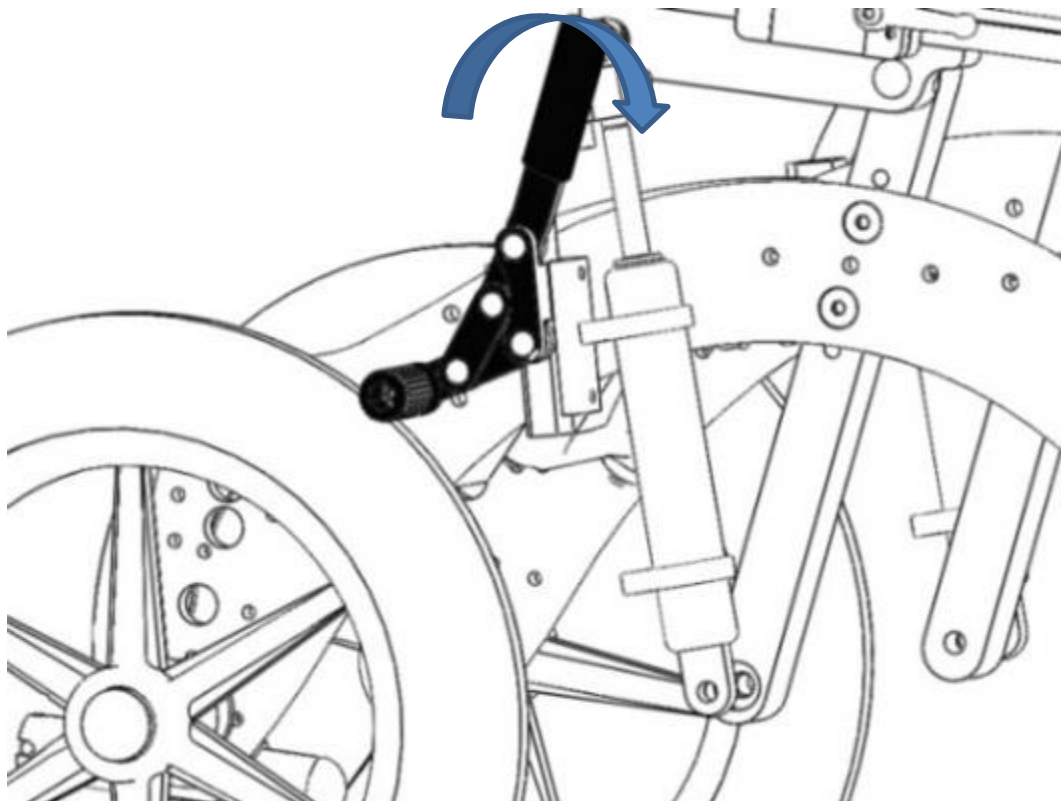


Figure 24

- To lock the wheelchair use the lever shown in figure.



WARNING

When you operate the brakes, operate always both left and right brake. The use of the wheelchair with only one wheel locked could be dangerous

Wheelchair with drum brake

In order to operate drum brake use the levers as described in section 4.5.

4.2 Use as seat in a motor vehicle



WARNING

The wheelchair is designed to be secured facing forward when used as a seat in a motor vehicle and it complies with the requirements of ISO 7176-19.

Ease of access to, and maneuverability in, motor vehicle can be significantly affected by wheelchair size and turning radius. Smaller wheelchairs or with a shorter turning radius will generally provide greater ease of vehicle access and maneuverability to a forward-facing position.

Any wheelchair anchored occupant restraint i.e. 3-point belt, harness or postural supports (lap straps, lap belts) should not be used or relied on for occupant restraint in a moving vehicle, regardless if labelled ISO 7176-19:2022, ISO 10542-1, SAE J2249 or any other. Use a vehicle anchored and certified occupant restraint system instead.

Wheelchair users should transfer to the vehicle seat and use the vehicle-manufacturer-installed restraint systems whenever it is feasible and the unoccupied wheelchair should be stored in a cargo area or secured in the vehicle during the travel.

Conformance with ISO 7176-19:2022 does not preclude using the wheelchair facing rearward in ATV-SS equipped with rear-facing wheelchair passenger stations.

For the correct positioning of occupant belt restraints on the user, please consider following.

IMPROPER BELT RESTRAINT FIT



Figure 25

BELT RESTRAINTS MUST NOT BE HELD AWAY FROM THE BODY BY WHEELCHAIR COMPONENTS SUCH AS ARMRESTS OR WHEELS

PROPER BELT RESTRAINT FIT

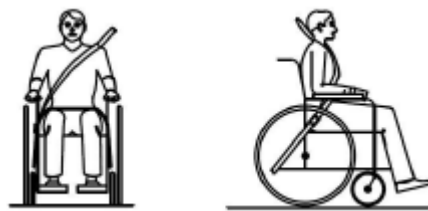


Figure 26

BELT RESTRAINTS SHOULD MAKE FULL CONTACT WITH THE SHOULDER, CHEST AND PELVIS AND PELVIC BELTS SHOULD BE POSITIONED LOW ON THE PELVIS NEAR THE THIGH ABDOMINAL JUNCTION

- Belt restraints should be adjusted as tightly as possible, consistent with user comfort.
- Belt should not be twisted during the use.
- Belt should not be twisted during the use. Use a suitable positioned headrest when being transported
- The upper torso restraint belt must fit over the midpoint of the shoulder and across the chest as illustrated.



WARNING

The seating system must be set in the **DEFAULT POSITION** when used in a motor vehicle. Particularly be sure that the seat is horizontal, legrest are completely down and backrest is completely up.



WARNING

The wheelchair has lots of configurations and accessories. The wheelchair safety when used as a seat in a motor vehicle is assured by the manufacturer if the specific configuration is mentioned in the order form and if all instructions in the manual are followed. Particularly it may exist some options or accessories that are not compatible with the use of the wheelchair as a seat in a motor vehicle, or it may exist some accessories that require some precautions.



WARNING

The wheelchair has been dynamically tested in a forward facing orientation with the ATD restrained by both pelvic and shoulder belts.



WARNING

Both pelvic and shoulder belt should be used to reduce the possibility of head and chest impacts with vehicle components.



WARNING

In order to reduce the potential of injury to vehicle occupants wheelchair tray should be removed and secured separately in the vehicle.



WARNING

Care should be taken when applying the occupant restraint to position the seatbelt buckle so that the release button will not be touched by wheelchair components during a crash.

TILT

When using the wheelchair as a seat in a motor vehicle, it is necessary to lock the movement of the tilt gas springs with the locking system shown in the picture. Always repeat the operation for the left and right side of the wheelchair. **WARNING:** Safety of wheelchair and user can't be assured when the movement of gas springs is not correctly locked while using the wheelchair as a seat in a motor vehicle.

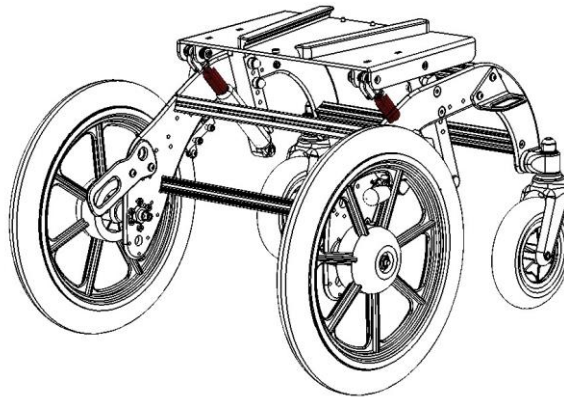


Figure 27

BACKREST

If the backrest is with gas springs, when using the wheelchair as a seat in a motor vehicle, it is necessary to lock the movement of the gas springs with the locking system shown in the picture. Always repeat the operation for the left and right side of the wheelchair. **WARNING:** Safety of wheelchair and user can't be assured when the movement of gas springs is not correctly locked while using the wheelchair as a seat in a motor vehicle.



Figure 28

LEGREST

If the legrest is with gas springs it is needed to unlock the movement. You have to simply tighten the lever shown in figure.

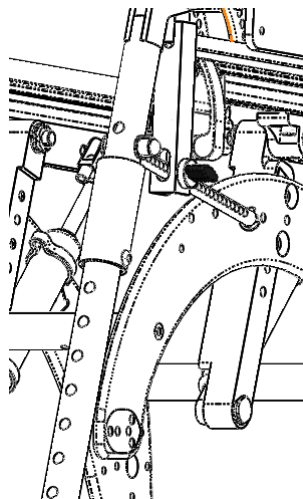


Figure 29

WARNING



In order to reduce the potential of injury to vehicle occupants, wheelchair-mounted trays not specifically designed for crash safety should be removed and secured separately in the vehicle

WARNING



When possible other auxiliary wheelchair equipment should be either secured to the wheelchair or removed from the wheelchair and secured in the vehicle during travel, so that it does not break and cause injury to vehicle occupants in the event of a collision.

WARNING



Postural supports should not be relied on for occupant restraint in a moving vehicle unless they are labelled as being in accordance with the requirements specified in ISO 7176-19.

WARNING



The wheelchair should be inspected by a manufacturer's representative before reuse following involvement in any type of vehicle collision.

WARNING



Alterations or substitutions should not be made to the wheelchair securement points or to structural and frame parts or components without consulting the wheelchair manufacturer.

4.2.1 Four points tie-down

Use the tie down points marked with the symbol shown in figure. Hook the wheelchair in 4 points: two in the front part and two in the rear part.



Figure 30

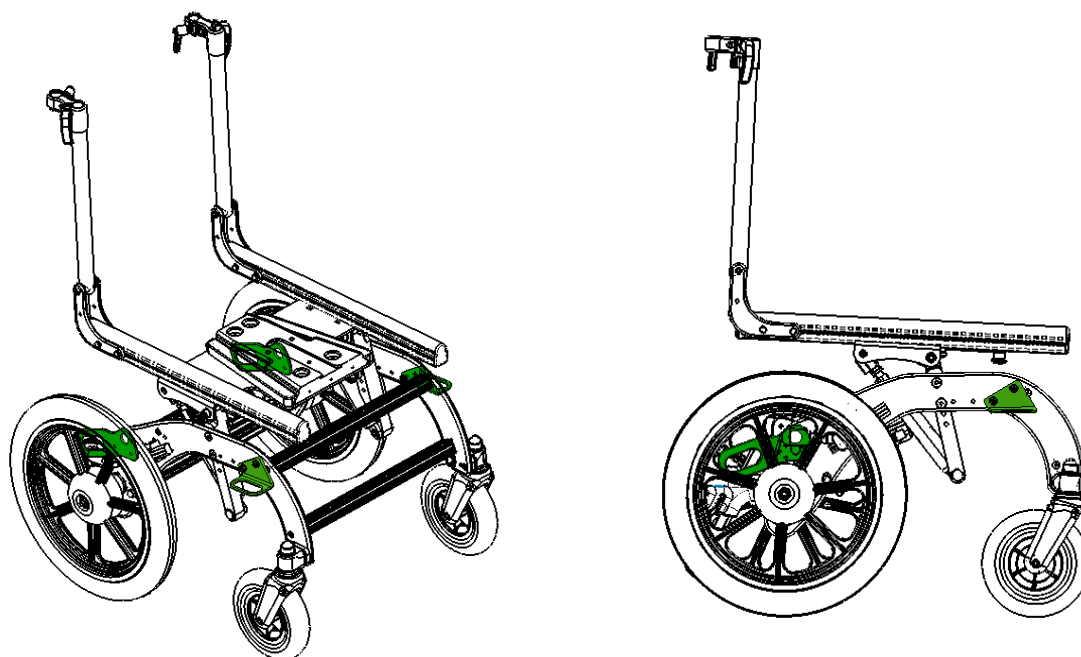


Figure 31



WARNING

Always use four tie down straps.

SECUREMENT IN ROAD VEHICLE WITH 4 POINT STRAP TYPE TIE DOWN SYSTEM

The pelvic restraint belt must be worn low across the front of the pelvis so that the angle of the pelvic belt is within the optional or preferred zone of 30° to 75° to the horizontal. A steeper (greater) angle within the preferred zone, 45° to 75° is desirable i.e. closer to, but never exceeding 75° degrees.

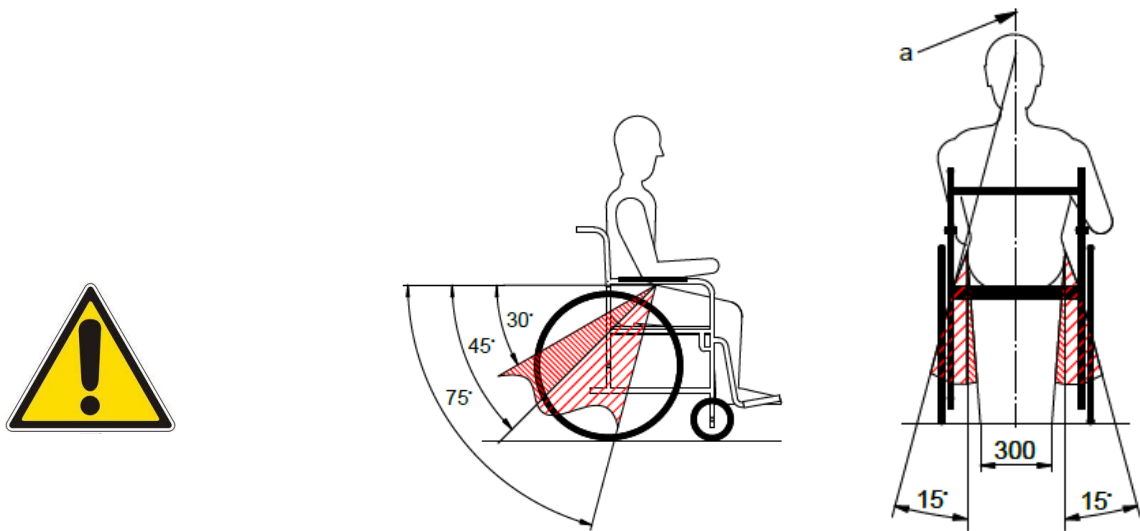


Figure 32 - Preferred and optional angles for location of the lap belt. - Dimensions in millimeters



Figure 33 - Preferred zone



Figure 34 - Optional zone

4.2.2 DAHL docking station

The wheelchair Neatech LB Fixed Frame has been tested and approved according to ISO 7176-19:2022 together with the Dahl MADS[®] wheelchair adaptation system designed for securement in the automated and power-height adjustable wheelchair docking stations - Dahl VarioDock[™] (part no. 503600) and the fixed height docking station Dahl MK II (part no. 501750).

Equipped with the Dahl MADS[®] adaption system the Neatech LB Fixed Frame can subsequently be secured in vehicles where a Dahl docking station has been installed. Securement with the Dahl MK II requires that its installed height corresponds with the exact height of the wheelchair locking plate to function whereas the power-height adjustable VarioDock[™] can be set to suit it upon entering the vehicle

TRANSPORT IN A ROAD VEHICLE



Ensure that the vehicle is suitably equipped to transport a passenger in a wheelchair and ensure the method of access /egress is suitable for your wheelchair type. The vehicle should have the floor strength to withstand the combined weight of the occupant and wheelchair in case of a collision. The wheelchair shall be secured in a forward-facing direction only. This wheelchair is tested according to ISO 7176-19:2022 for use in road vehicles and meets the requirements for forward facing transport and head on collisions. The wheelchair has not been tested for other directions in a vehicle

WARNING



Changes or replacements must not be made to the anchorage points/car fastenings on the wheelchair for docking systems or 4-point strap tie down systems, or to constructional elements or parts of the frame, without prior consulting the manufacturer.

IDENTIFICATION OF THE DAHL DOCKING SYSTEM



If your wheelchair is equipped with the locking plate for the Dahl Docking systems, the following label will be present on your wheelchair. The height noted on the label indicates the value that the height adjustable VarioDock[™] control panel display must be set to. For the MK II this is the height that the docking unit must be installed at. Failure to set/install the docking unit to the correct height might impede the locking plate from sliding smoothly into the docking unit or prevent the Docking station and wheelchair from connecting altogether.

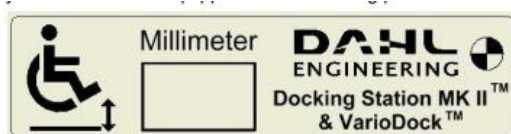


Figure 35

DAHL docking station MK II

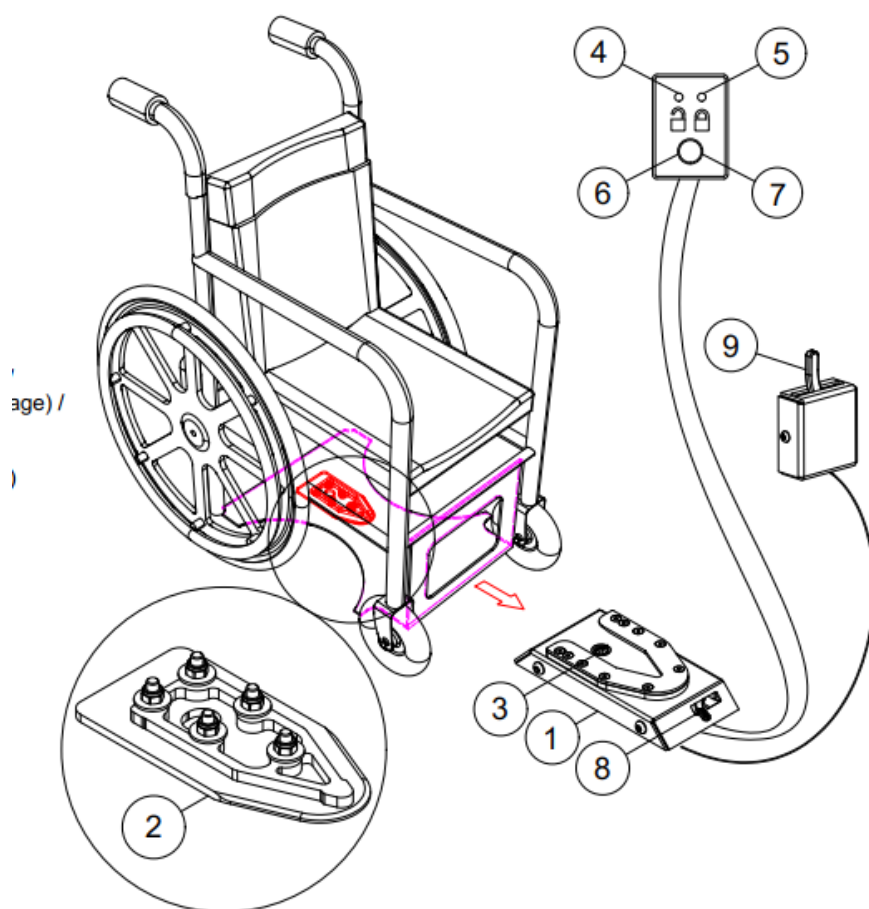


Figure 36

- 1 – Dahl Docking Station MK II
- 2 – Lock plate and spacer
- 3 – Lock pin
- 4 – Red indicator LED (wheelchair is not secured and can be removed from docking station)
- 5 – Green indicator LED (wheelchair is secured)
- 6 – Control panel
- 7 – Release button (red button)
- 8 – Manual emergency release lever
- 9 – Manual operating lever

DAHL VarioDock™

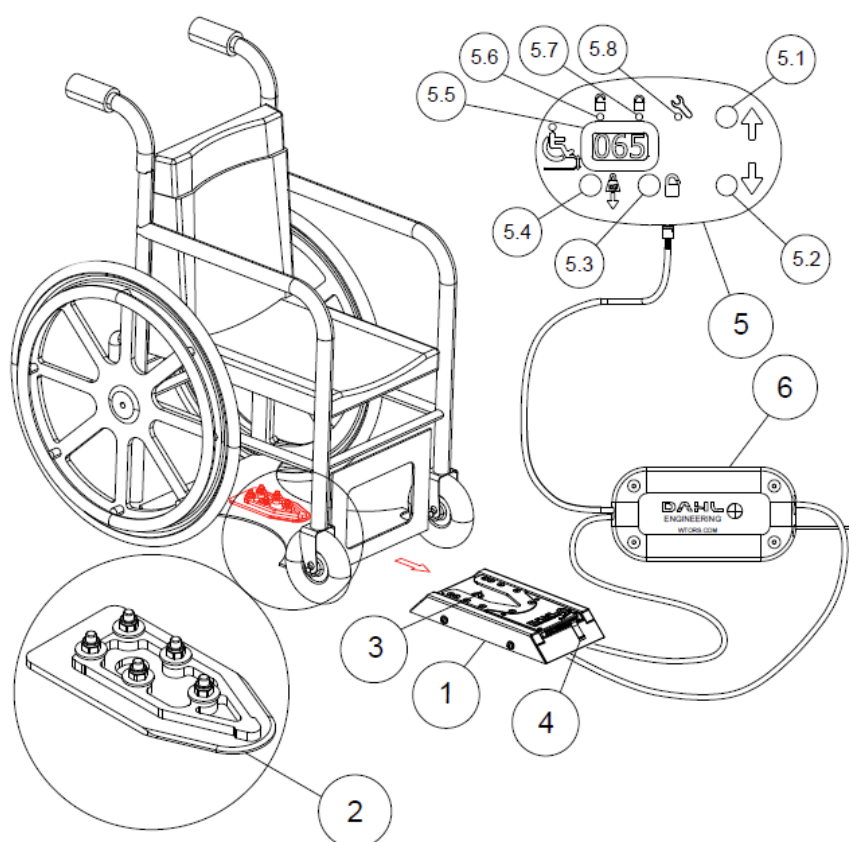


Figure 37

1 – Dahl Dahl VarioDock™

2 – Lock plate and spacer

3 – Lock pin

4 – Manual emergency release lever

5 – Control panel

6 – Control module

5.1 – Adjust upwards (yellow button)

5.2 – Adjust downwards (green button)

5.3 – Release button (red button)

5.4 – Pull down to remove slack (blue button)

5.5 – Current measurement display

5.6 – Red indicator LED (wheelchair is not secured and can be removed from docking station)

5.7 – Green indicator LED (wheelchair is secured)

5.8 – Illuminated when maintenance required

Securement of LB in a road vehicle using the Dahl docking system

The LB fixed frame can also be secured in a road vehicle using the Dahl Docking system if the Dahl MADS adaptation kit, part no. 504120, has been installed on the wheelchair.

Please see our separate service manual for the LB with the relevant instruction for the installation and use of the Dahl MADS system.

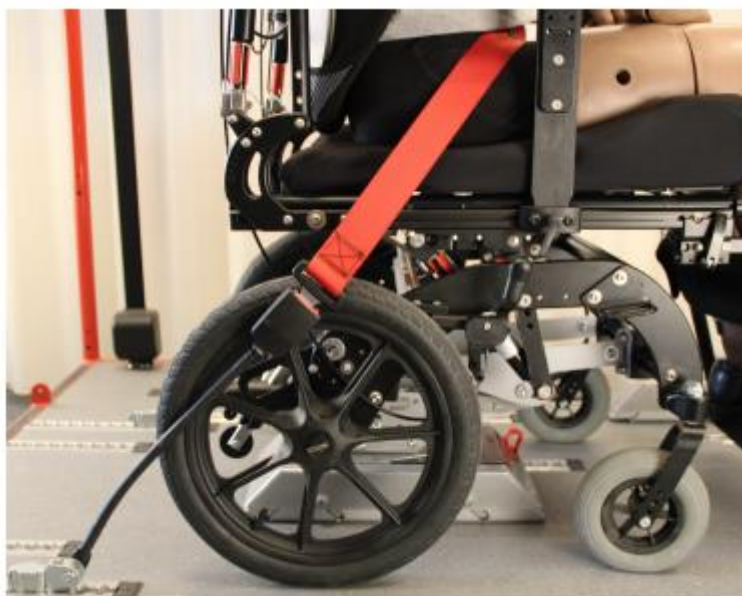


Figure 38



Figure 39

Positioning the occupant restraint when using it with the Dahl Docking

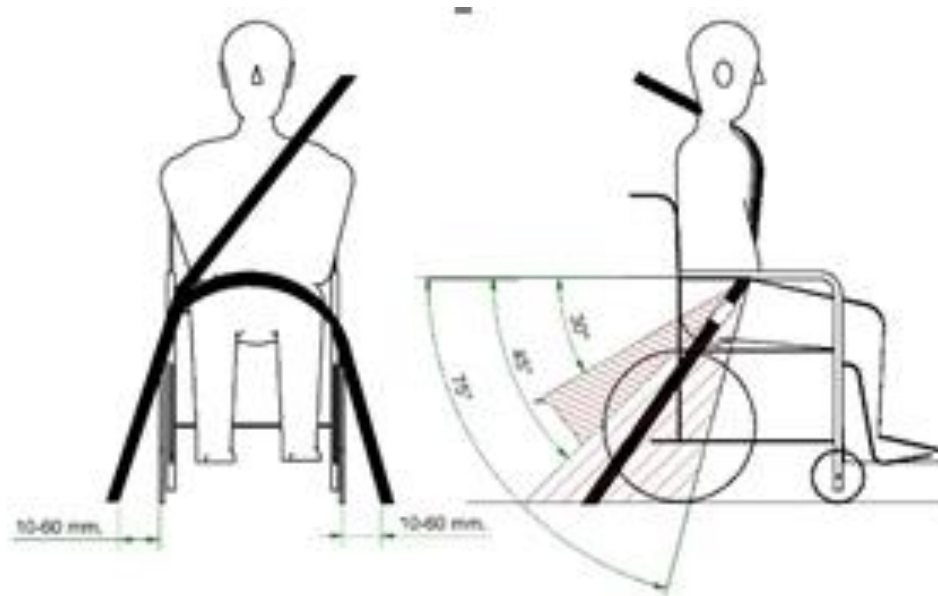


Figure 40

When securing the wheelchair with the Dahl Docking systems the floor anchorage points for the occupant restraint system shall be located 10-60 mm outside wheels, on each side.

The pelvic belt must be worn low across the front of the pelvis so that the angle of the pelvic belt is within the optional or preferred zone of 30° to 75° as shown. A steeper (greater) angle within the preferred zone, 45° to 75° is desirable i.e. closer to, but never exceeding 75° degrees.

Securing the wheelchair in the MK II and VarioDock(TM) docking stations

- Maneuver the wheelchair slowly and in a uniform direction over the docking station. The locking plate (2) positioned under the wheelchair helps to guide the wheelchair into place in the docking station. When the locking plate is fully engaged in the docking station, a spring-action locking pin (3) automatically secures the lock plate.
- The Dahl docking stations are equipped with a control switch that indicates whether the locking plate is correctly secured in the docking station. As soon as the locking plate comes into contact with the locking pin (3), a warning tone will sound (a high-pitched howl), and the red diode/lamp/LED, in the control panel, MK II (4) and VarioDock(TM) (5.6), will light up until the lock plate is either fully engaged or else the wheelchair is removed from the docking station.
- As an indication that the wheelchair locking plate is fully entered into the docking unit and properly secured, the warning tone will cease, the red lamp/LED in the control panel will go out and the green lamp/LED, MK II (5) and VarioDock(TM) (5.7) will light up.

	WARNING Do not move the vehicle: - Whilst the wheelchair is being maneuvered into position in the docking station; - If the wheelchair and user are not correctly secured; - If the warning tone sounds and/or the red warning lamp (LED) in the control panel flashes or is lit!
	WARNING Always check if the lock plate is properly engaged in the docking station by trying to reverse the wheelchair out of the docking station before moving the vehicle. It must not be possible to reverse out of the docking station without pressing the red release button in the control panel.
	WARNING Buckle up seat belt before driving!
	WARNING Use a Dahl 3-point occupant restraint system to secure the occupant;

Release from the docking station

- When the vehicle has been brought to a halt, remove the safety belt;
- To unlock commence by driving the wheelchair forward to release pressure on the lock pin;
- Press the red release button in the control panel VarioDock(TM) (5.3) and MK II (7). The locking pin will be triggered/ released for approx. 5 seconds, after which the locking pin automatically locks again;
- Move the wheelchair away from the docking station within this 5-second period. Do not attempt to reverse out of the docking station until the red LED on the control module, which indicates the unlock position, has been illuminated.

Manual release in case of electric fault

A manual emergency release lever VarioDock™ (4) and MK II (8) is located at the front edge of the docking unit

- Move wheelchair forward to remove the pressure on the lock pin and the release lever should be pushed sideways and held in order to release while the wheelchair is being moved away;
- A cable-activated manual operating lever (9) can also be installed (available for MK II only). The red release arm is also pushed to one side and should be held there whilst the wheelchair moves away

If the described manual release procedures fail, a red emergency release tool comes with each docking unit.

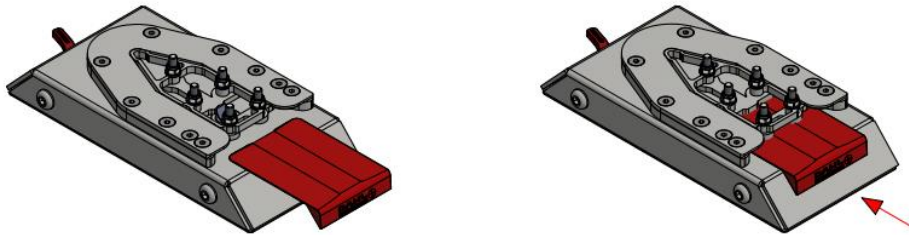


Figure 41

- Move wheelchair forward to remove the pressure on the lock pin
- Place the emergency release tool in the gap between the locking plate and the docking station.
- Push the release tool and wheelchair forward until the locking pin has been forced down
- after which the wheelchair can reverse out of the docking station.

Please also refer to the instructions for installation, use and maintenance of the docking system being used. Downloads are available at: www.dahlengineering.dk

Removal of the console

In order to facilitate use and transport of the wheelchair when non used as a seat in a motor vehicle it is possible to remove the console from Dahl MADS.



Figure 42

- To unlock the console, the red spring-loaded locking mechanisms must be disengaged from their housings in the locking brackets by sliding them inward towards each other.

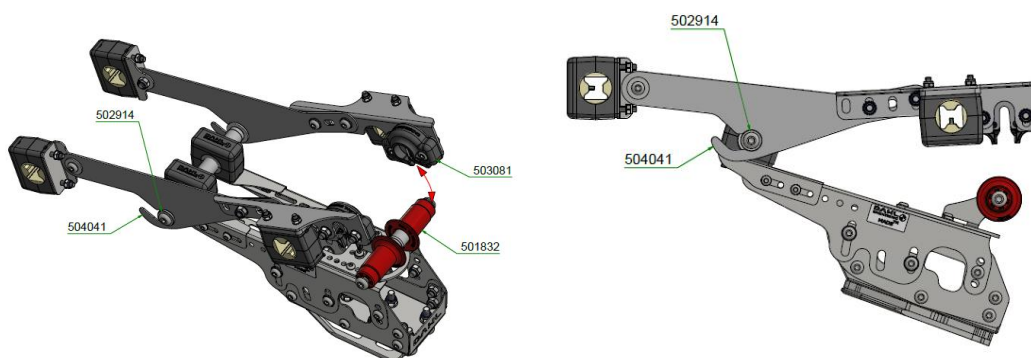


Figure 43

- Pull down the two red tubular blocks 501832. and push forward the plastic rollers 502914.



Figure 44

Installation of the Dahl Docking stations in the vehicle

Only professional companies in the business of converting or building wheelchair accessible vehicles can order the docking systems from Dahl Engineering. A qualified and experienced technician must carry out the installation. Dahl Engineering can provide vehicle specific installation instructions for a large range of vehicles, which must be respected by the installer.



Please contact Dahl Engineering for further information about approved vehicles and installation positions.

Dahl Engineering contact details are available at: www.dahlengineering.dk

4.3 Type of chassis

4.3.1 Foldable chassis

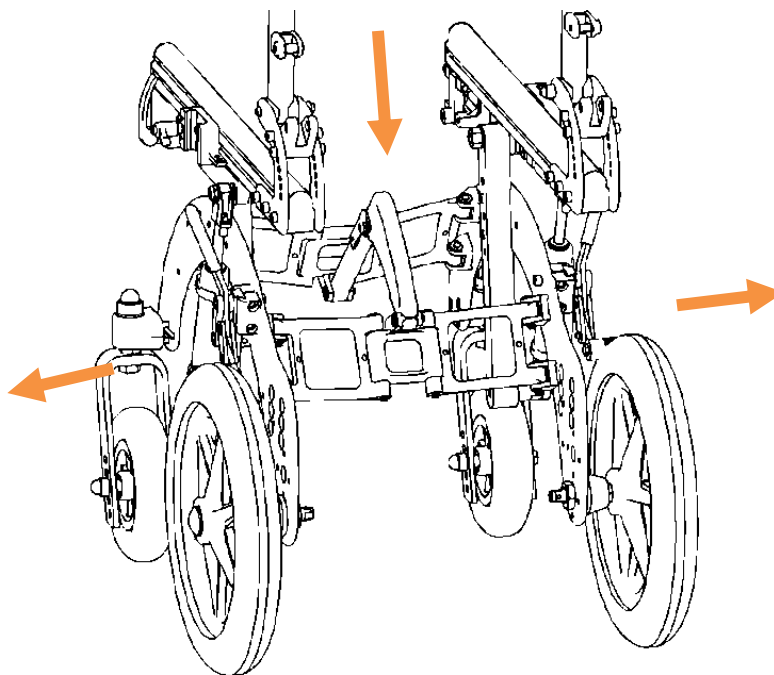


Figure 45

- To open the frame, firstly unlock the fixing clip on the right side. Fix the floating clip on the fixing point on the left side of the frame.
- Then it will be sufficient to space the side panels and apply a light pressure on the handle shown in figure.
- The wheelchair has reached the maximum opening to the completion of a click.

To close the wheelchair it is sufficient to pull the handle and bring together the side panels of the seat. **When you close the chassis remember to position the belt with two clips one on the left side and the other on the right side to keep it closed.**



PINCH HAZARD

An incorrect handgrip of the handle might cause hand injuries.

4.3.2 Fixed chassis LEVIA

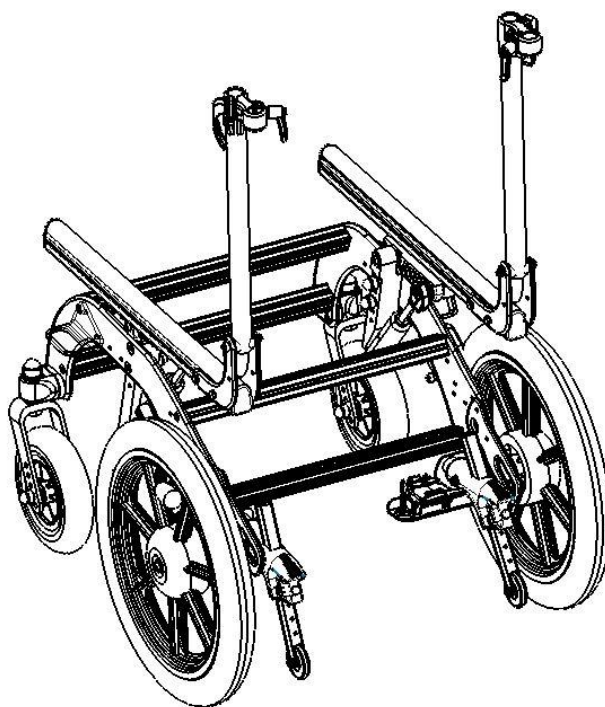


Figure 46

- With LEVIA rigid chassis it is possible to have maximum ease of use, stability and strength.

4.3.1 TRIA fixed chassis

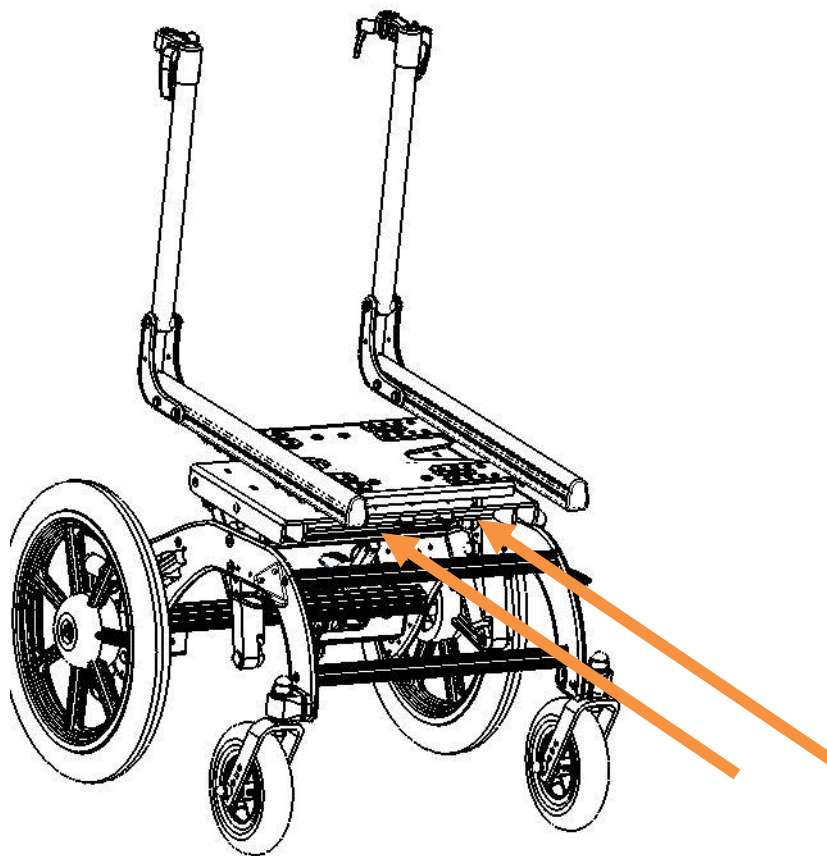


Figure 47

- With TRIA fixed chassis it is possible to easily remove the seat system from the wheelchair.
- To remove the seat, unscrew the screws shown in figure.
- To fix the seat, screw the screws shown in figure.

4.4 Seating system

According to different needs, the wheelchair can be equipped with different type of seating systems.

4.4.1 Removable rigid plane

Removable rigid plane can be used as a base for other seating systems.

Removable rigid plane can be equipped with adhesive strips in order to facilitate positioning and fixing of seating system.

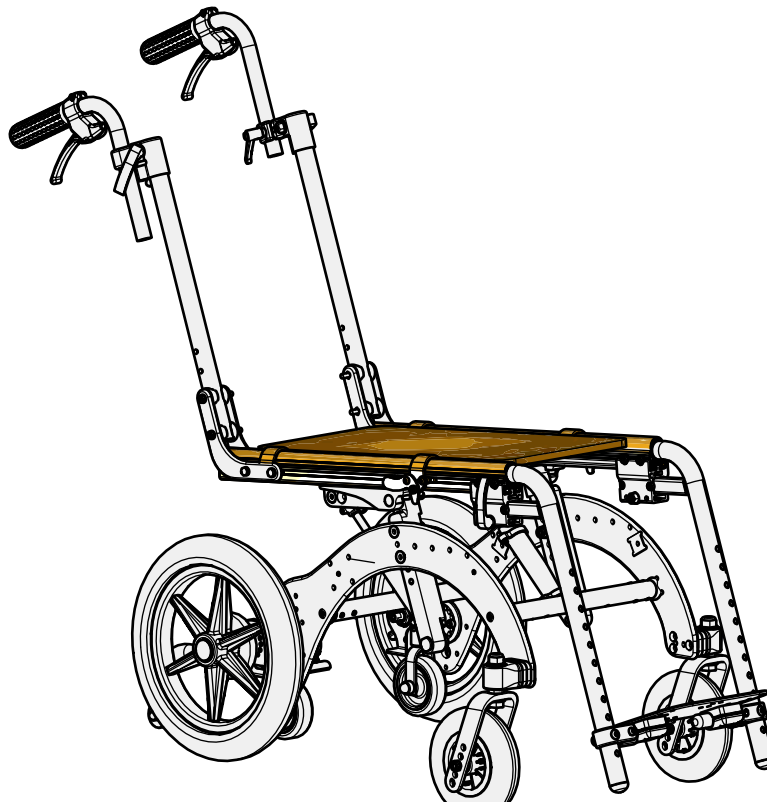


Figure 48



WARNING

It is not possible to use the removable rigid plane as a seat.

In order to remove the rigid plane, please act as described following.

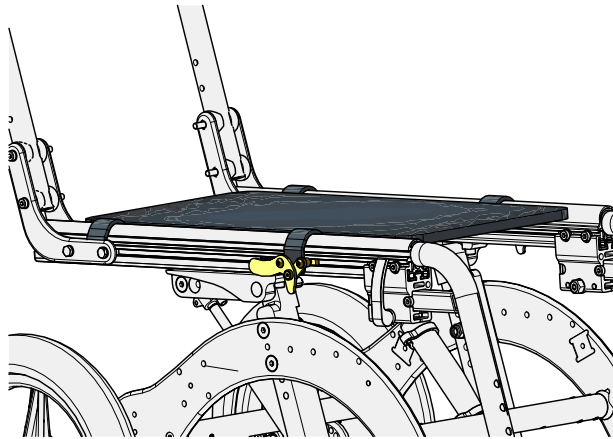


Figure 49

- Act on the lever shown in figure. Repeat operation for both left and right side of the wheelchair.
- Pull toward up the plane

4.4.2 Canvas

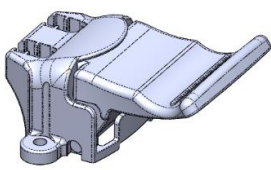
Canvas can be used directly as a seat or equipped with adhesive strips in order to position and fix another seating system.

4.5 Lever operated functions

Wheelchair has the possibility to be equipped with some functions operated with levers. These functions are:

- Seat tilt operated with a foot lever or a hand operated lever.
- Drum brake
- Dynamic backrest with gas springs
- Dynamic active backrest with gas springs

According to the configuration of the wheelchair, each of these functions can be operated with one of following levers.

A  This lever is located on the upper part of push handle or push bar. Press and hold it to operate the related function.	B  This lever is located on the lower part of push handle or push bar. Press and hold it to operate the related function.	C  This level is located on the lower part of push handle or push bar. This lever is used for dynamic active backrest. When the black level is completely down, the backrest is locked. In order to unlock it pull the black lever up. In order to lock the backrest in a certain position: pull the black lever up, put the backrest in the desired position, pull the red lever up and push the black lever down.
D  This lever in on the lower part of push handle or pushbar. This lever is used to operate drum brake. In order to operate the brake pull the black lever up. It is possible to lock the brake pulling the black lever up and pushing the red lever down. In order to unlock the brake slightly pull the black lever up.	E  This lever is located on the lower part of chassis. Press and hold it with your foot to operate the related function.	SPLITTER  This is used to operate two gas springs with one lever. It is needed in some configuration.

FUNCTION	LEVER A	LEVER B	LEVER C	LEVER D	LEVER E	SPLITTER
1 - Seat tilt - foot 2 - Drum brake 3 - Dynamic backrest	3			2	1	
1 - Seat tilt - foot 3 – Dynamic backrest 4 – Active backrest		3			1	
1 - Seat tilt - foot 2 - Drum brake 4 – Dynamic active backrest			4	2	1	x2
1 - Seat tilt - foot 4 – Dynamic active backrest			4		1	
1 - Seat tilt - foot 2 - Drum brake				2	1	
1 - Seat tilt - foot					1	
1 - Seat tilt - lever 2 - Drum brake 4 – Dynamic active backrest	1		4	2		x2
1 - Seat tilt - lever 3 - Dynamic backrest	3	1				
1 - Seat tilt - lever 2 - Drum brake	1			2		
1 - Seat tilt - lever 2 - Drum brake 3 - Dynamic backrest	1 - 3			2		x2
1 - Seat tilt - lever 4 – Dynamic active backrest	1		4			

4.6 Footrest flip-up

In order to flip up the footrest, push it toward up as shown in figure.

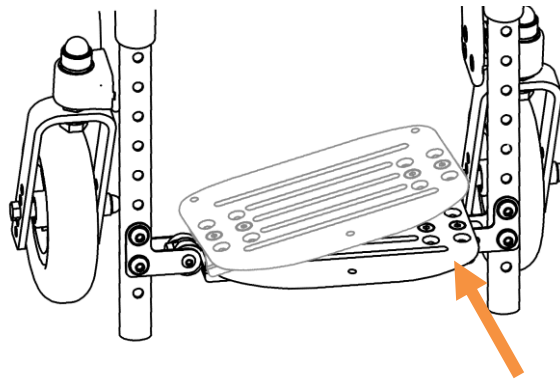


Figure 50

4.7 Use of angle adjustable legrest with spring

The legrest allows you to accommodate elevation movements (at knee joint level), of thrust along the tibial axis releasing the muscle contraction thanks to the Dynamic footboard which receives the flexion-extension of the lower arms.

It is possible to choose if leaving free the dynamic movement of legrest or block it in a certain position simply acting on a lever.

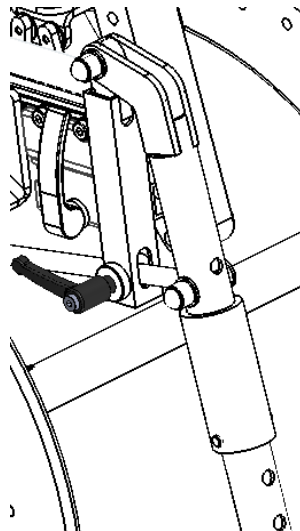


Figure 51

- Loosen the lever shown in figure to let the legrest free to move.
- Tighten the lever shown in figure to block the legrest in a certain position.

4.8 Transport and storage

The product can be transported in the storage compartment of the vehicle even without any package. The product can be also shipped via air. If it is necessary to ship the product it is very important to protect it with an appropriate package.

It is not possible to provide a universal package, so the user should provide himself for it. The used package must be water and dust resistant and strong enough to protect the product from any hurts. When inserting the product into the package protect any protruding parts with some foam or similar.

If you are not willing to use the wheelchair for a long period, keep it safe in a clean area and away from heat.

5 MAINTENANCE

Below there are some precautions for the use of the wheelchair, which it is recommend to follow, in order to ensure a safe use and a long duration.

Regular maintenance helps to keep intact the functionality and safety of the product. Inadequate or lack of care and maintenance may cause a limitation of the warranty.

- Avoid prolonged contact of the product with water. It may cause oxidation of the metal parts.
- Avoid long exposure of the product to direct sunlight.



WARNING

Any work on the product must be performed by an authorized service centre.

5.1 Cleaning

To clean the product do not use high-pressure water spray devices. Do not use stain removers, solvents, acids, etc.

UP HOLSTERY	 Machine wash in hot water at 60 °C	 Drip dry	 Do not wring	 Do not bleach
FOAM	First remove the upholstery. Simply clean the foam using a damp cloth. Do not use any type of soap or detergent. Do not put the foam directly into the water. Before putting back the foam, please be sure it is completely dry.			
OTHER PARTS	Simply use a cloth moistened with a neutral detergent.			

5.2 Controls to be performed on the product

Type of operation	
A	Operation intended to be performed by the user.
B	Operation intended to be performed by an assistant.
C	Operation intended to be performed by an authorized service center.

Operation	Frequency	Type of operation
If the frame is foldable, check correct opening of the frame. See section 4.3.1 .	Before each utilize	B - Assistant
Clean the product	Weekly	B - Assistant
If wheels are pneumatic, check if the pressure is the one indicated on tires and in section 6.	Weekly	B - Assistant
If wheels are pneumatic, check tire usury	Monthly	B - Assistant
Make sure that the brakes are working correctly. See section 4.1.	Monthly	B - Assistant

Check all gas spring to find any oil leaks

Monthly

B - Assistant

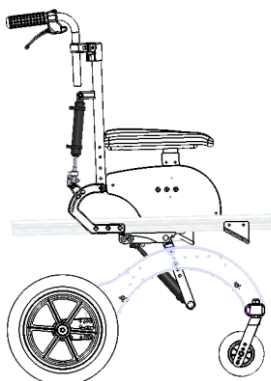


Figure 52

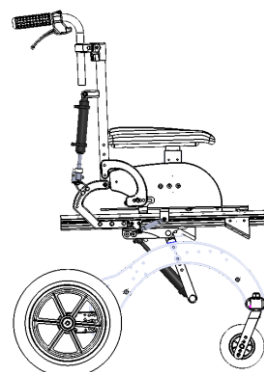


Figure 53



WARNING

In any moment, if you see any deformations of the chassis, please contact immediately an authorized service center to check the correct tightening of all the screws of the frame.

5.3 Reuse

The product is suitable for reuse. Before dispensing it, the product must be cleaned, and subjected to maintenance. The operating instructions are included in this manual and must also be provided when the product is passed on.



WARNING

This operation must be performed only at an authorized service center.

5.4 Tire puncture



WARNING

This section refers only to wheelchair with pneumatic wheels.

5.4.1 User information

Traction wheels

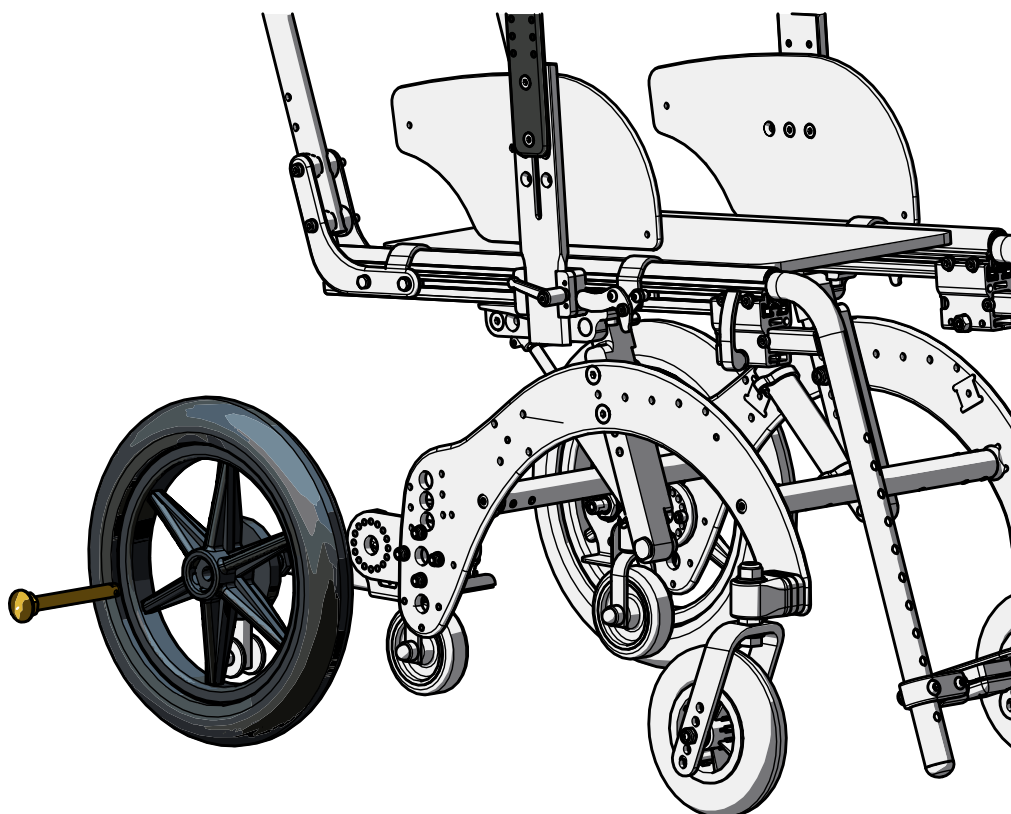


Figure 54



5 min

- Press the button shown in figure and pull away the wheel.

Castor wheel

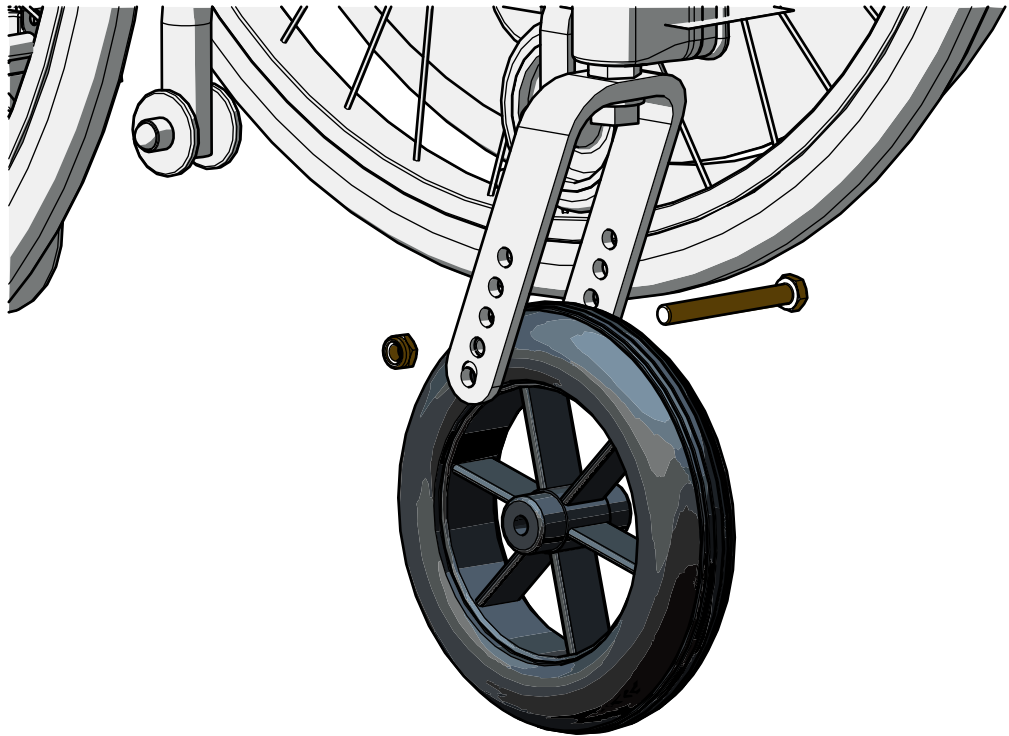


Figure 55

 5 min	• Unscrew the screw shown in figure with the open end wrench while holding the nut behind with the other open-end wrench. • Remove the castor.	OPEN-END WRENCH  10 mm
		OPEN-END WRENCH  10 mm



CONTACT INFORMATION

Contact an authorized service center for the repair or the substitution of the damaged wheel.

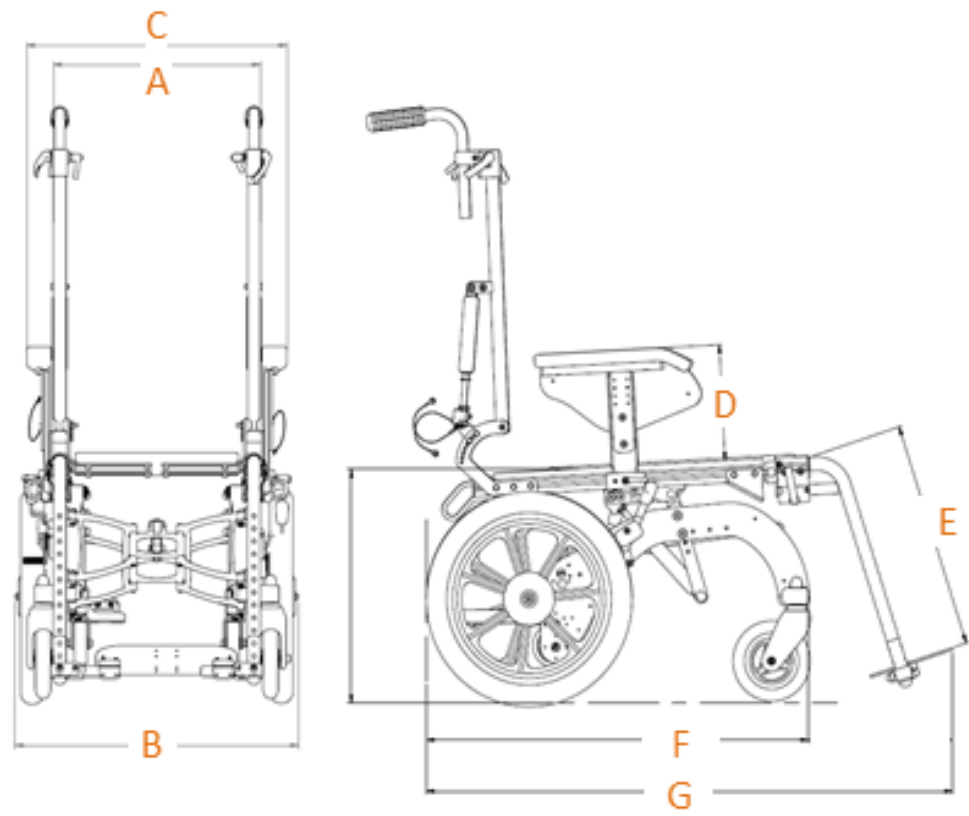
6 SPECIFICATIONS

Maximum safety slope (uphill, 10° downhill, lateral)	
Expected lifetime [years]	5
Wheel pressure	270 kPa

6.1 Maximum user weight

Seat width	 Max user weight when used as a seat in a motor vehicle	 Max user weight when NON used as a seat in a motor vehicle
26 cm	50 kg	50 kg
28 cm	50 kg	50 kg
30 cm	50 kg	50 kg
34 cm	75 kg	75 kg
38 cm	100 kg	100 kg
42 cm	136 kg	150 kg
46 cm	136 kg	150 kg
48 cm	136 kg	150 kg

6.2 Dimensions



A	260	280	300	340	380	420	440	460	480
B	see 6.2.1								
C	370	390	410	450	490	530	550	570	590
D	180:270 / 270:360								
E	150:400								
F	700:865								
G	1100:1200								

6.2.1 Wheels width

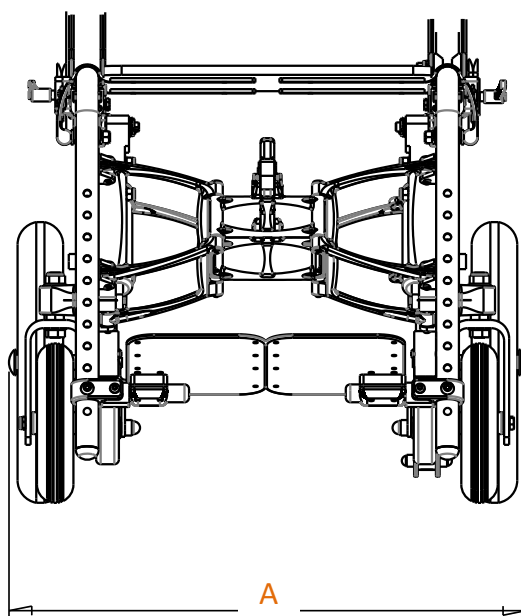


Figure 56

Seat width	A	A
	Ø300 mm – Ø400 mm	Ø20" mm – Ø22 mm – Ø24 mm
26 cm	47.5 cm	53.5 cm
28 cm	47.5 cm	53.5 cm
30 cm	49.5 cm	55.5 cm
34 cm	49.5 cm	55.5 cm
38 cm	53.5 cm	59.5 cm
42 cm	57.5 cm	63.5 cm
44 cm	59.5 cm	65.5 cm
46 cm	61.5 cm	67.5 cm
48 cm	63.5 cm	69.5 cm

7 WARRANTY TERMS

Definitions

- **MANUFACTURER:** Manufacturer means the legal person who manufactures a product. For the scope of the following document, the manufacturer is:

Neatech.it s.r.l.

via Antonio de Curtis 4/A – 80040 – Cercola (NA)

Tel. +39 081 555 1946 – info@neatech.it – neatech@pec.it – www.neatech.it

P.IVA IT04812481218 – REA NA715393

- **CUSTOMER:** Customer means the natural or legal person who buys a product from the manufacturer. For the scope of the following document, the Customer is the holder of the financial document issued by the manufacturer following the supply of the product.
- **PRODUCT:** Product is the good supplied by the manufacturer to the customer in execution of a purchase order

Scope of the guarantee

The manufacturer undertakes to remedy any defect, lack of quality or lack of conformity of the products related to him as a result of design, construction errors or defects in the material that occurred during the warranty period.

Period of application of the guarantee

The warranty period begins with the customer's billing date. The duration of the warranty period varies according to the type of product.

Type of product	Warranty period [months]
Manual wheelchairs	24

Table 3

Any repairs or replacements under warranty do not alter the original period of application of the warranty.

Exclusions

The warranty does not cover wearing parts.

Following there are some examples of parts subject to wear.

- Wheels
- Padded parts (polyurethane foams, viscoelastic)
- Upholstery (including canvas)
- Handles and knobs
- Fuses and bulbs
- Electric motor brushes
- Filters

The warranty is limited to damage related to the product and cannot under any circumstances cover damage caused to third parties as a result of product failure.

The warranty does not cover parts damaged by overload, inappropriate use, alterations and repairs made by unauthorized third parties. The warranty is not valid in the event of tampering, incorrect storage, incorrect or unauthorized maintenance.

7.1 Serial number

For any report or assistance request, please communicate the serial number mentioned on the label.

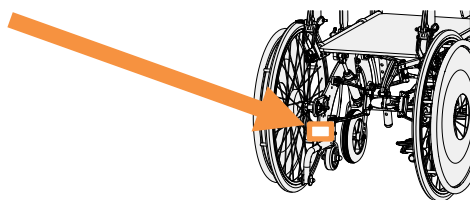


Figure 57

[illegible]

LB

Neatech.it s.r.l.
Via A. De Curtis 4/a
80040 Cercola (Na) Italy
ph. +39 081 5551946
fax +39 081 5552507
e-mail info@neatech.it
website www.neatech.it