

# NEATECH™




**DYNA**

**USER MANUAL**

**2021-06**



<b>PRODUCT</b>	DYNA
<b>OTHER NAMES</b>	DYNA 45 – DYNA 45° – DYNA FREE SHOCK
<b>PART NUMBER / MODEL</b>	S304
<b>CE CONFORMITY</b>	 <p><b>Regulation EU 2017/745 - Class I medical device - Rule I Annex VIII</b></p>
<b>MAIN STANDARDS APPLIED</b>	ISO 14971:2012 UNI EN 12182:2012 UNI EN 12183:2014
<b>MANUFACTURER</b>	<b>Neatech.it SRL</b> via A. de Curtis 4/A, 80040, Cercola (NA), Italia Tel. +39 081 555 1946 <a href="http://www.neatech.it">www.neatech.it</a> – <a href="mailto:info@neatech.it">info@neatech.it</a>
<b>INTENDED USE</b>	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.

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**WARNING**

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

**PINCH HAZARD**

This symbol means presence of pinch hazard.

**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.



### **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.



Service manual is intended for technical personnel to maintain and repair wheelchairs. It is important to follow the instructions contained in this manual in order to professionally work with the product. The qualified personnel who works with the product must comply with all provisions of occupational safety and common sense in order to preserve his own safety. The manufacturer declines all responsibility for any accidents occurring during the working with the product.



#### **TIPPING HAZARD**

Tipping hazard is strongly reduced because of the design of the product according to UNI EN 12183. 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 safety 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. **IT IS NOT POSSIBLE TO HAVE THIS WHEELCHAIR WITHOUT ANTITIP DEVICES.**



Center of balance of the wheelchair and so its stability can be affected by user position, use of a backpack, tilting of the seat



### **TEMPERATURE**

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



### **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.



### **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 wheelchair if it is behaving abnormally or erratically.



The wheelchair may come to a sudden stop at any time during operation.



Do not stand on the product. Always use caution when transferring in or out of the seat. Every precaution should be taken to reduce the transfer distance. Also be certain the wheel locks are engaged to prevent the wheels from moving. Do not let children use the wheelchair without supervision.



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



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.



### USE OF THE WHEELCHAIR WITH SEATING SYSTEM NOT IN DEFAULT POSITION

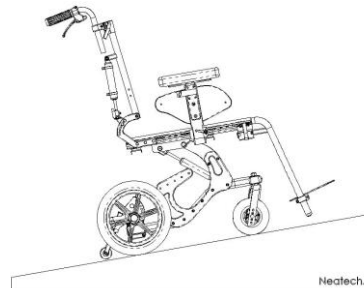
Seat tilt, backrest recline or legrest elevation may vary the center of gravity of the system wheelchair + user and increase tipping risk.



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 with the exception of seat angle. It is preferable to have a seat angle as major as possible (seat forward).



**MAX 10°**

**Figure 1**

### Dealing with downhill

When facing a downhill road it is recommended to set the seating system to default position.



MAX 10°

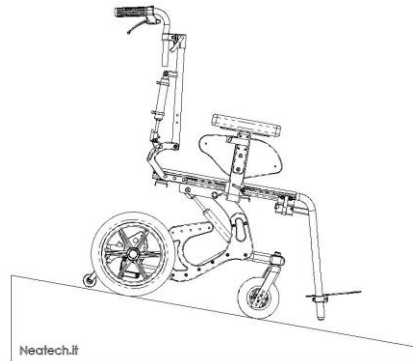


Figure 2



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.



MAX 10°

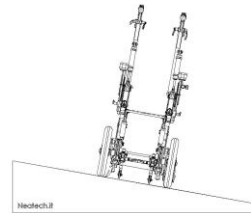


Figure 3



### Turning with the wheelchair

When turning with the wheelchair, always use great caution.

### **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 antitip bar to tip the wheelchair. It is also possible to lightly pull the washer and rise the tubular to overcome higher obstacles.



**Figure 4**



### Pelvic belt

The wheelchair has the predisposition for a pelvic belt. Pelvic belt is only design to position the user and not for any protection in case of accident. In order to mount the pelvic belt please follow instructions below.

#### Version with dynamic seat



**Average needed time:**

<5 min



**Difficulty level:**

Easy

**ALLEN WRENCH**



5 mm

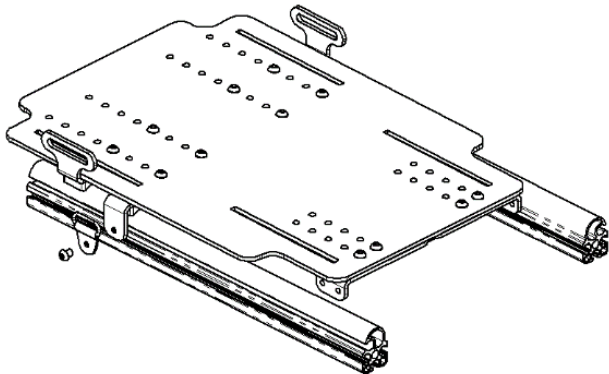


Figure 5

- Place the pelvic belt fixing it to the lower bracket of the seat plate as shown in figure.
- Repeat operation for both left and right side of the wheelchair.

## Version without dynamic seat



**Average needed time:**

<5 min

**ALLEN WRENCH**

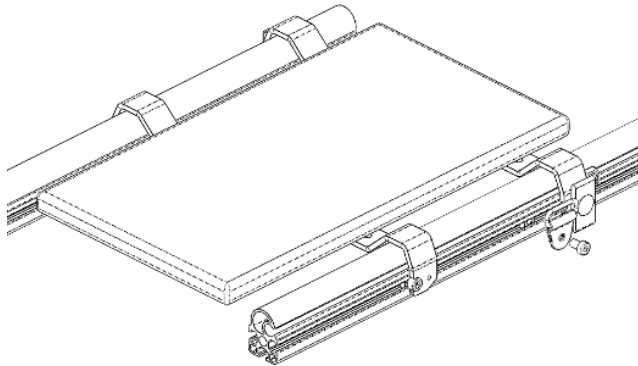


4 mm



**Difficulty level:**

Easy



**Figure 6**

- Place the square nut inside the seat extruded tube.
- Place the pelvic belt as shown in figure.
- Repeat operation for both left and right side of the wheelchair.



### **Transfer into and out the wheelchair**

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



## Lift of the wheelchair

Do not lift the wheelchair with a user on board. Do not lift the wheelchair grabbing the legrests. If you really need to lift the wheelchair, it is suggested to grab it with the help of at least one other people. Grab the wheelchair using the seat tube as shown in figure.



Figure 7



### WARNING

**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. PREPARATION FOR FIRST USE

## 1.1. Unpacking

Inside the box there are:

- Wheelchair DYNA
- 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. It should be better if first set-up is performed by an authorized service center.

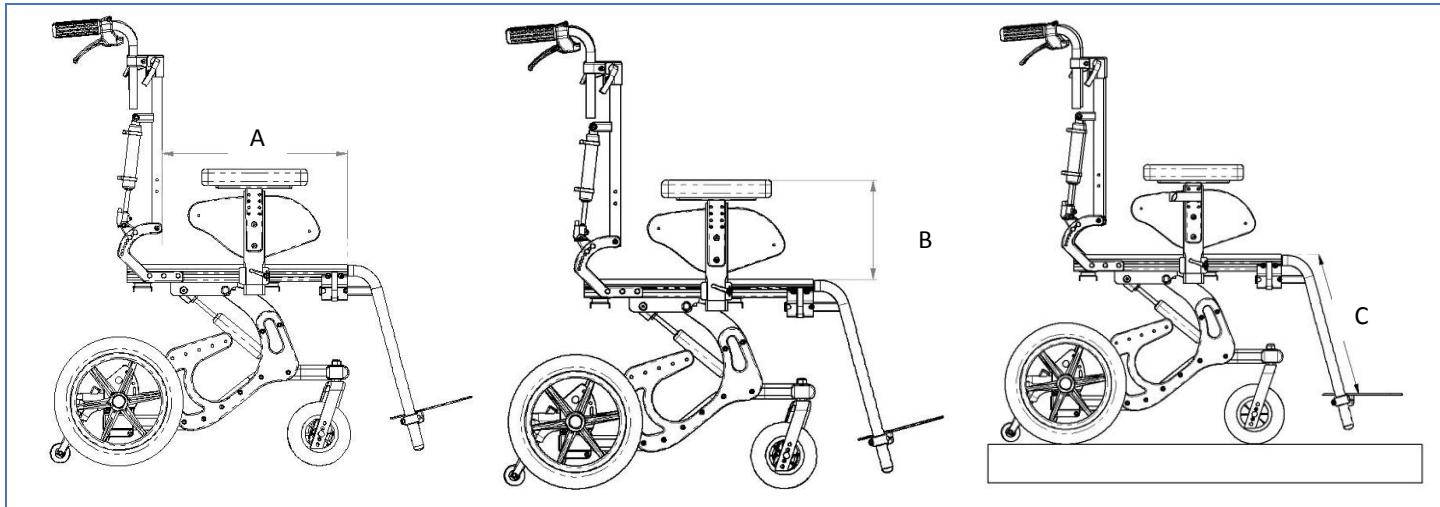
## 2. ADJUSTMENTS

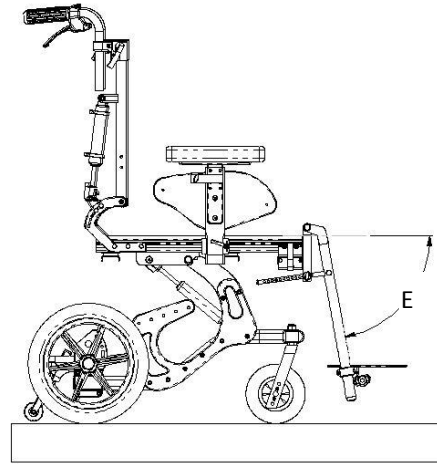
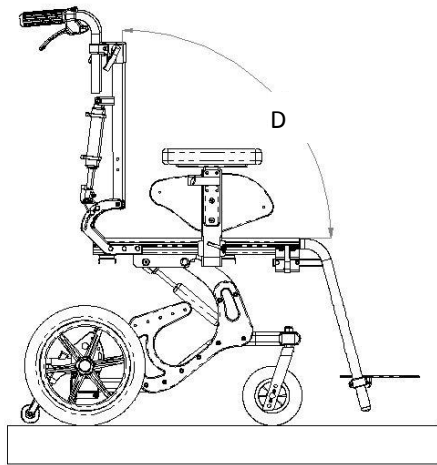
Type of operation	
A	Operation intended to be performed by the user.
B	Operation intended to be performed by an assistant.
C	Operation intended to be performed by an authorized service center.

Adjustment	Type of operation	Dimension* * see drawings in next pages	Default position
Seat angle	B - Assistant	ND	0°
Seat depth	B - Assistant	A	ND
Armrests depth	B - Assistant	ND	ND
Armrests height	B - Assistant	B	ND
Sidepad height	B - Assistant	ND	ND
Footplates height	B - Assistant	C	ND

Footplates depth and angle	B - Assistant	ND	ND
Backrest angle	B - Assistant	D	90°
Push handle height	B - Assistant	ND	ND
Legrest angle	B - Assistant	E	90°

**Table 1**





DIM.	Configuration	Range
<b>A</b>	Dynamic seat - width 30 cm	POS. A 34 cm POS. B 36 cm POS. C 38 cm POS. D 40 cm POS. E 42 cm
	Dynamic seat - width 34 cm	POS. A 34 cm POS. B 36 cm POS. C 38 cm POS. D 40 cm POS. E 42 cm
	Dynamic seat - width 34 cm	POS. A 42 cm POS. B 44 cm POS. C 46 cm POS. D 48 cm POS. E 50 cm
	Dynamic seat - width 38 cm	POS. A 38 cm POS. B 40 cm POS. C 42 cm POS. D 44 cm POS. E 46 cm
	Dynamic seat - width 38 cm	POS. A 46 cm POS. B 48 cm POS. C 50 cm POS. D 52 cm POS. E 54 cm



Dynamic seat - width 42 cm	POS. A 42 cm POS. B 44 cm POS. C 46 cm POS. D 48 cm POS. E 50 cm
Dynamic seat - width 42 cm	POS. A 50 cm POS. B 52 cm POS. C 54 cm
Non dynamic seat - width 30 cm	MIN 30 cm – MAX 36 cm
Non dynamic seat - width 30 cm	MIN 34 cm – MAX 42 cm
Non dynamic seat - width 30 cm	MIN 42 cm – MAX 48 cm
Non dynamic seat - width 34 cm	MIN 34 cm – MAX 42 cm
Non dynamic seat - width 34 cm	MIN 42 cm – MAX 50 cm
Non dynamic seat - width 38 cm	MIN 38 cm – MAX 46 cm
Non dynamic seat - width 38 cm	MIN 46 cm – MAX 54 cm
Non dynamic seat - width 42 cm	MIN 42 cm – MAX 50 cm

	Non dynamic seat - width 42 cm	MIN 50 cm – MAX 54 cm
	Non dynamic seat - width 42 cm	MIN 54 cm – MAX 60 cm
	Non dynamic seat - width 46 cm	MIN 46 cm – MAX 52 cm
	Non dynamic seat - width 46 cm	MIN 52 cm – MAX 58 cm
	Non dynamic seat - width 46 cm	MIN 58 cm – MAX 64 cm
<b>B</b>	Standard armrest support	MIN. 18 cm - MAX 27 cm
	High armrest support	MIN 27 cm – MAX 36 cm
<b>C</b>	Fixed angle	MIN 11 cm – MAX 40 cm
	Angle adjustable	MIN 3 cm – MAX 45 cm
	Angle adjustable - Dynamic legrest	MIN 8 cm – MAX 47 cm
<b>D</b>	Fixed angle 90°	90°
	Fixed angle 95°	95°
	Fixed angle 100°	100°
	Fixed angle 105°	105°
	Fixed angle 110°	110°

	Angle adjustable with fixed position	90° or 110° 95° or 115° 100° or 120° 105° or 125° 110° or 130° 115° or 135°
	Dynamic backrest with pistons	90° - 130°
	Dynamic active backrest with spring	90° - 110° 95° : 110° 100° : 115° 105° : 115° 110° - 120° 120° - 125°
	Dynamic active backrest with spring	90° - 125° 95° : 110° 100° : 115° 105° : 115° 110° - 120° 120° - 125°
<b>E</b>	Fixed angle	75°
	Angle adjustable	MIN 20° - MAX 90°
	Angle adjustable Dynamic legrest	MIN 20° - MAX 90°

**Table 2**

## 2.1.Seat angle

	 <p><b><u>Average needed time:</u></b> &lt;1 min</p>  <p><b><u>Difficulty level:</u></b> Easy</p>	
		<ul style="list-style-type: none"><li>• In order to tilt the wheelchair use the levers as described in section 3.2.</li></ul>







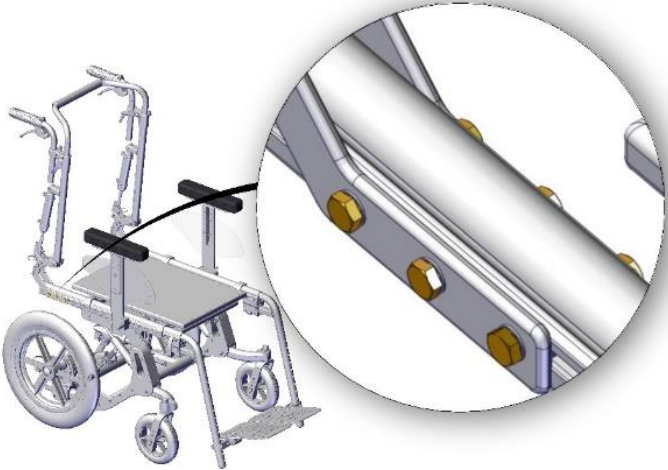
### **RANGE**

It is not easy to provide a range for adjustment of seat angle because there are too many configuration and possibilities. **In any case maximum tilt is 45°.**



## 2.2.Seat depth

### 2.2.1. Version with dynamic seat

	 <p><b>Average needed time:</b> 20 min</p>  <p><b>Difficulty level:</b> Easy</p>	<p><b>OPEN-END WRENCH</b></p>  <p>10 mm</p> <p><b>ALLEN WRENCH</b></p>  <p>4 mm</p>
 <p><b>Figure 8</b></p>		<ul style="list-style-type: none"><li>• Loosen the 6 screws shown in figure.</li><li>• Repeat operation for both left and right side of the wheelchair.</li></ul>

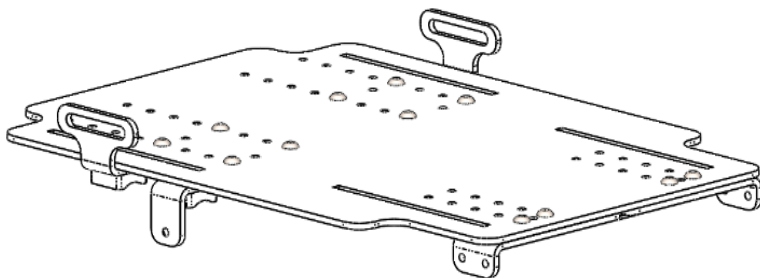
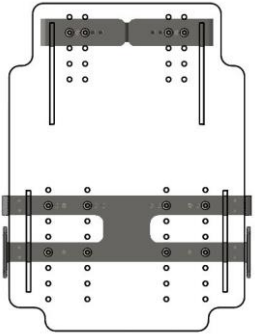
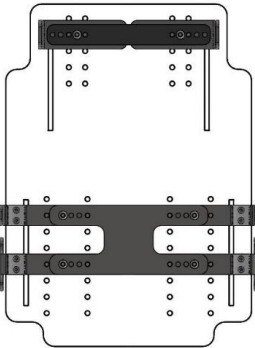


Figure 9

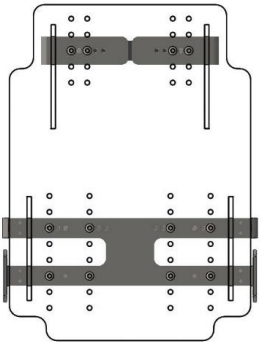
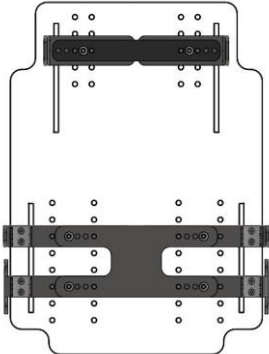
- Remove seat cushion.
- Unscrew the 12 screws shown in figure.
- Put the metal sheets at the desired seat depth.
- Screw again the 12 screws following instructions in reverse order.
- Mount again the cushion.
- Tighten again the 12 screws of the backrest paying special attention to put left and right side at the same position.

	BOTTOM	TOP
POS. A		

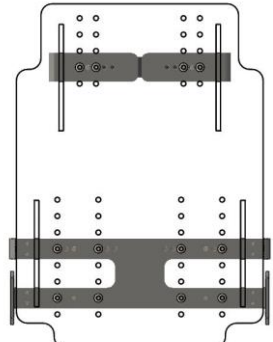
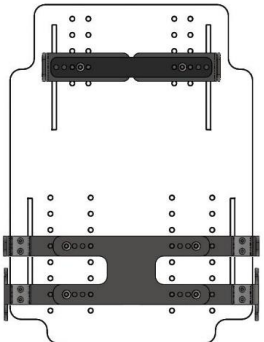
**POS. B**



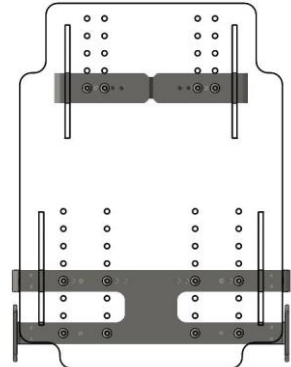
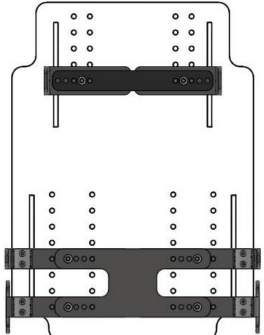
**POS. C**






**POS. D**



**POS. E**



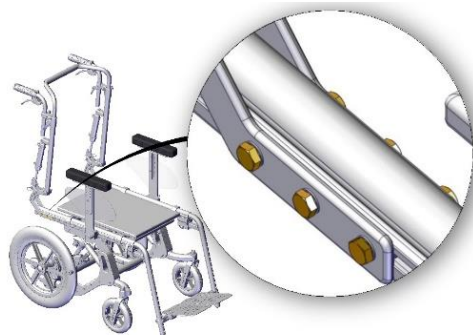
## 2.2.2. Version without dynamic seat

	 <p><b><u>Average needed time:</u></b> 5 min</p>  <p><b><u>Difficulty level:</u></b> Easy</p>	<p><b>OPEN-END WRENCH</b></p>  <p>10 mm</p>
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### **WARNING**

It is needed to set separately left and right seat depth. Always set them at the same manner.



**Figure 10**

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

## FIXED BACKREST

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

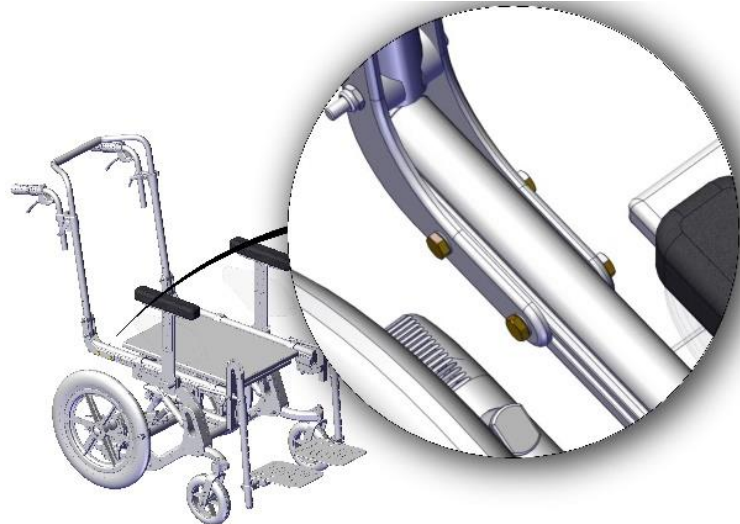





Figure 11

## 2.3.Armrests depth

	 <p><b>Average needed time:</b> &lt;5 min</p>  <p><b>Difficulty level:</b> Easy</p>	<p><b>ALLEN WRENCH</b></p>  <p>4 mm</p>
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### RIGHT AND LEFT SIDE

It is possible to adjust separately left and right side.

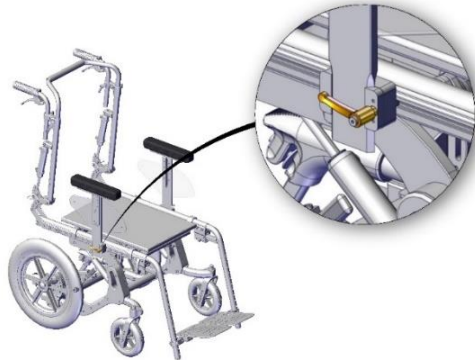
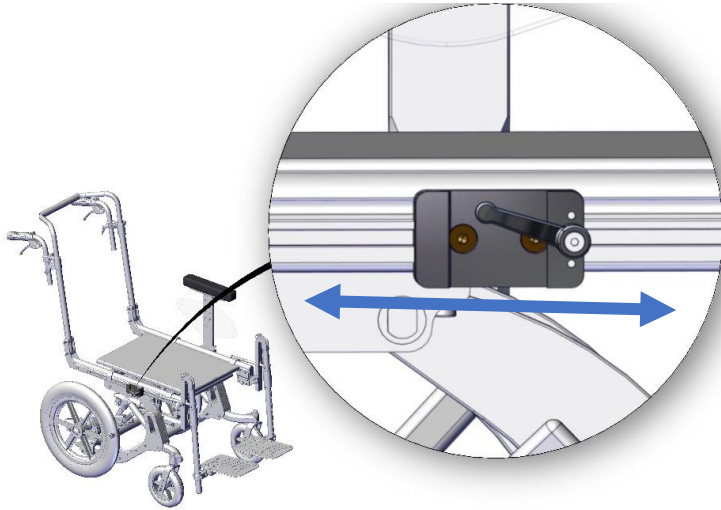


Figure 12

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






**Figure 13**

- 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. Tighten the lever



## 2.4. Armrests height

	 <p><b>Average needed time:</b> &lt;5 min</p>  <p><b>Difficulty level:</b> Easy</p>	<p><b>ALLEN WRENCH</b></p>  <p>4 mm</p>
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### RIGHT AND LEFT SIDE

It is possible to adjust separately left and right side.

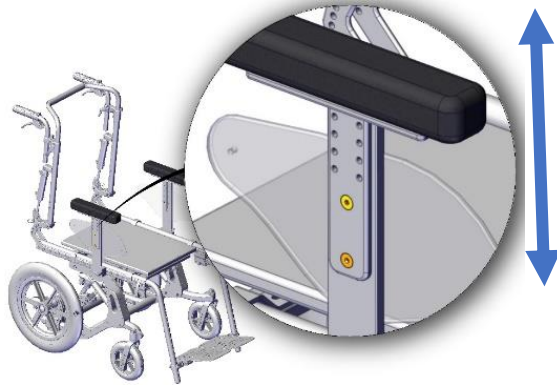





Figure 14

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

## 2.5.Sidepad position

	 	<b>Average needed time:</b> <5 min  <b>Difficulty level:</b> Easy	<b>ALLEN WRENCH</b> 	3 mm
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### RIGHT AND LEFT SIDE

It is possible to adjust separately left and right side.



### SIDEPAD AND ARMREST HEIGHT

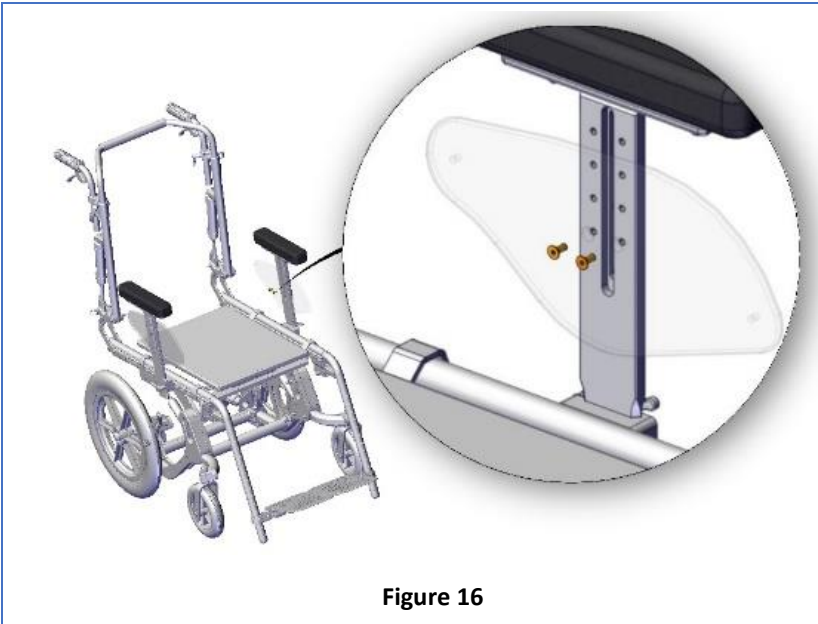
It is better to adjust first armrest height, then the sidepad.

### RANGE

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







Figure 15



**Figure 16**

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

## 2.6. Footplates height

		<b>Average needed time:</b> 5 min	<b>ALLEN WRENCH</b> 	6 mm
		<b>Difficulty level:</b> Easy	<b>OPEN-END WRENCH</b> 	13 mm



### RIGHT AND LEFT SIDE

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

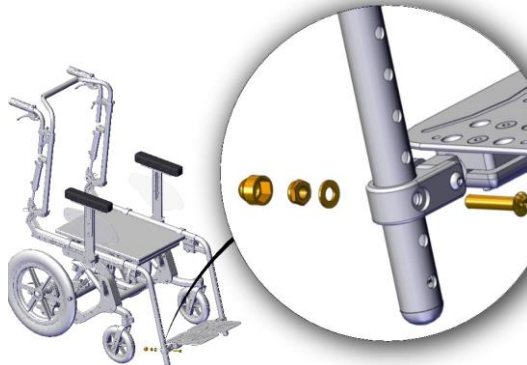





Figure 17

- Unscrew the screw shown in figure with the 6 mm allen wrench while holding the nut behind with the 13 mm open-end wrench.
- Set the position of the footplate according to desired height.
- Screw again the screws.

## 2.7. Footplates depth and angle

	 	<p><b><u>Average needed time:</u></b> &lt;5 min</p> <p><b><u>Difficulty level:</u></b> Easy</p>	<p><b>ALLEN WRENCH</b></p>  <p>4 mm</p>
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### **RIGHT AND LEFT SIDE**

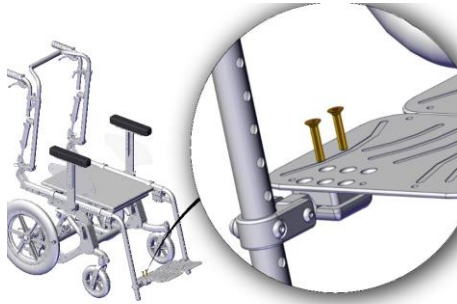
It is possible to adjust separately left and right legrest if you have splitted footrest.



### **INFORMATION**

This operation is not possible with active dynamic footrest. See section 3.5.

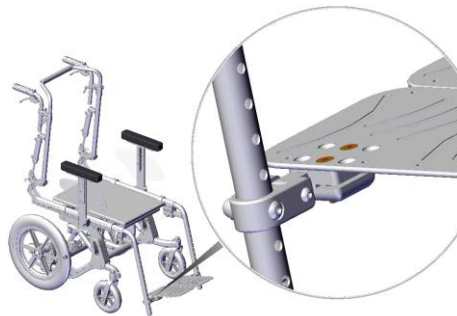
### 2.7.1. Depth adjustment



**Figure 18**

- Unscrew the 2 screws shown in figure.
- Set the position of the footplate according to desired depth.
- Screw again the 2 screws.

### 2.7.1. Angle adjustment



**Figure 19**

- Loosen the 2 screws shown in figure.
- Set the position of the footplate according to desired angle.
- Tighten again the screws.

## 2.8.Backrest angle

### 2.8.1. Angle adjustable with pistons

- Use the lever located on the push bar to move the backrest. See section 3.2.

### 2.8.2. Dynamic active backrest with spring

- Use the lever located on the push bar to move the backrest. See section 3.2.






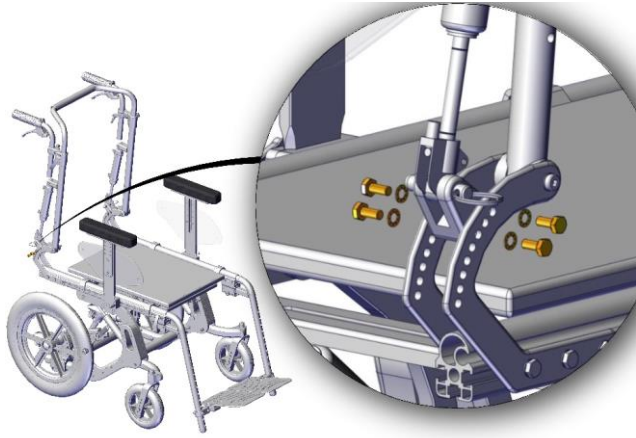
Moreover, it is possible to further adjust the backrest angle following instructions below.



#### **WARNING**

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

	 <p><b>Average needed time:</b> 5 min</p>  <p><b>Difficulty level:</b> Easy</p>	<p><b>OPEN-END WRENCH</b></p>  <p>10 mm</p>
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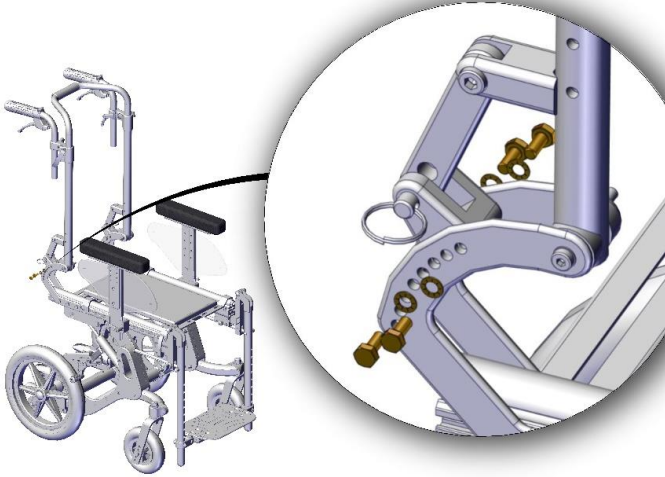
- Remove the backrest.
- Unscrew the 4 screws shown in figure.
- Set the position of the hardware highlighted in figure according to the desired backrest angle.
- Screw again screws.
- Repeat operations for both left and right side of the wheelchair.
- Put back the backrest.

**Figure 20**



### 2.8.3. Angle adjustable with fixed position

	 <p><b><u>Average needed time:</u></b> 5 min</p>  <p><b><u>Difficulty level:</u></b> Easy</p>	<p><b>OPEN-END WRENCH</b></p>  <p>10 mm</p>
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------



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

**Figure 21**



### WARNING

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

### ADDITIONAL ADJUSTMENT

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

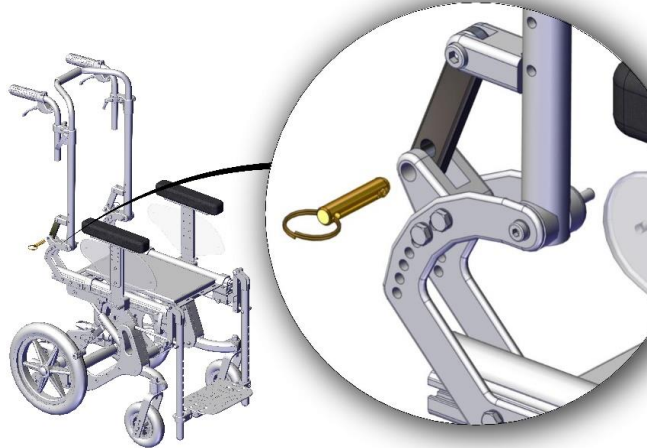




Figure 22

## 2.9.Push handle height

	 <p><b><u>Average needed time:</u></b></p> <p>&lt;5 min</p>  <p><b><u>Difficulty level:</u></b></p> <p>Easy</p>	
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### RIGHT AND LEFT SIDE

It is possible to adjust separately left and right side.





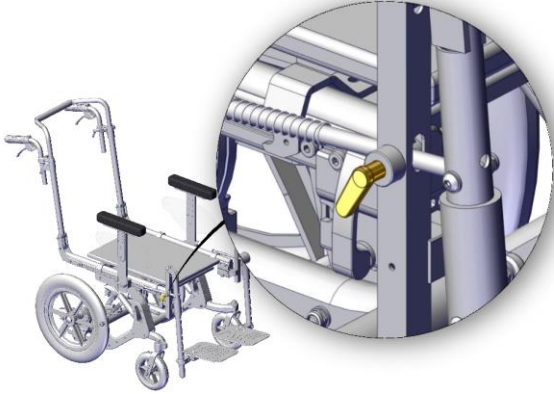
Figure 23

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

## 2.10. Legrest angle

### 2.10.1. Angle adjustable - Angle adjustable dynamic legrest

	 <p><b><u>Average needed time:</u></b></p> <p>&lt;1 min</p>  <p><b><u>Difficulty level:</u></b></p> <p>Easy</p>	
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

 <p><b>Figure 24</b></p>	<ul style="list-style-type: none"><li>• Loosen the lever shown in figure.</li><li>• Set legrest angle as desired.</li><li>• Tighten again the lever.</li></ul>
-----------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------



### RIGHT AND LEFT SIDE

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

### DYNAMIC FUNCTION

It is possible to use the legrest with springs as dynamic legrest, simply losing 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.

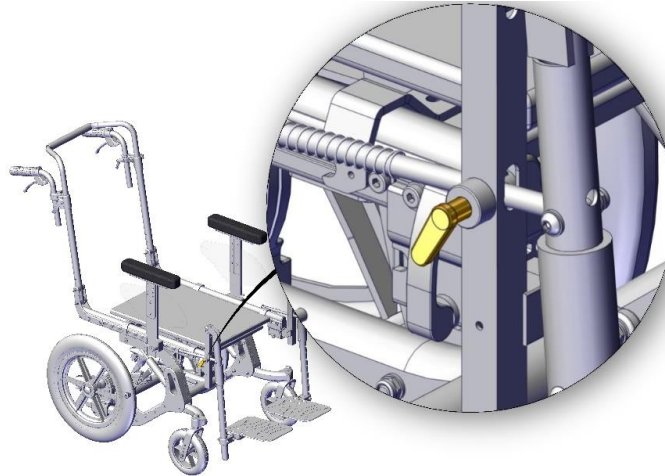


Figure 25

### DYNAMIC FUNCTION LOCK

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

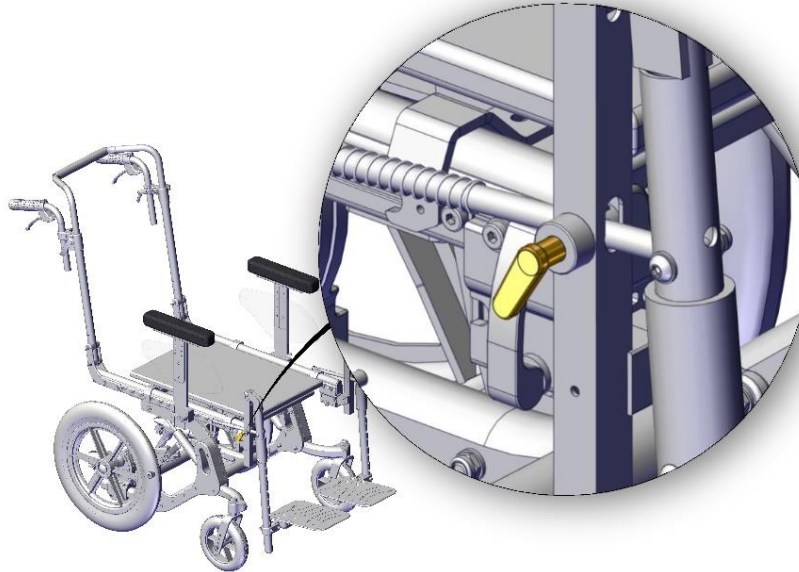


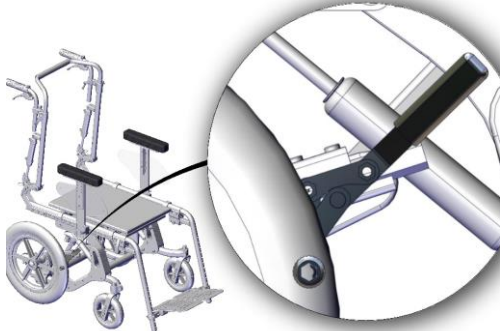


Figure 26

### 3. USE OF THE PRODUCT

#### 3.1. Use of parking brakes

	 <p><b>Average needed time:</b> &lt;1 min</p>  <p><b>Difficulty level:</b> Easy</p>	
 <p><b>Figure 27</b></p>		<ul style="list-style-type: none"><li>• To lock the wheelchair use the lever shown in figure.</li></ul>



**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.




When brakes are activated it should not be possible to move the wheelchair.

### 3.2.Lever operated functions

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

- Seat tilt operated
- Dynamic backrest with pistons
- Dynamic active backrest with gas springs

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

A	B	C
 <p>This lever is located on the upper part of push handle. Press and hold it to operate the related function.</p>	 <p>This lever is located on the lower part of push handle. Press and hold it to operate the related function.</p>	 <p>This level is located on the lower part of push handle. This lever is used for dynamic active backrest. When the black level is completely down, the gas spring is locked. In order to unlock it pull the black lever up. In order to lock it 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.</p>



Functions	A	B	C
1 - Seat tilt 3 - Dynamic backrest with pistons	<b>3</b>	<b>1</b>	
1 – Seat tilt 4 – Dynamic active backrest with gas spring	<b>1</b>		<b>4</b>
1 - Seat tilt		<b>1</b>	

### 3.3.Dynamic seat

Movements of backrest and seat are linked with a certain ratio. In other words, when the backrest moves of a certain angle, the seat moves of a definite angle.

It is possible to lock the system of dynamic movements or leave it free to move.

To do this, act on levers located on push handles. For more information see section 3.2.

Dynamic seat can be used as a base for other seating systems.

Dynamic seat can be equipped with adhesive strips in order to facilitate positioning and fixing of seating system.



#### **PINCH HAZARD**

Do not bring hands near the seat during dynamic movements in order to reduce pinch risk.



#### **WARNING**

It is not possible to use the dynamic seat as a seat.

### INFORMATION

It is possible to unbind the movement of the backrest and of the seat. In order to do that operation, remove the two parts shown in figure. Repeat operations for both side of the wheelchair.

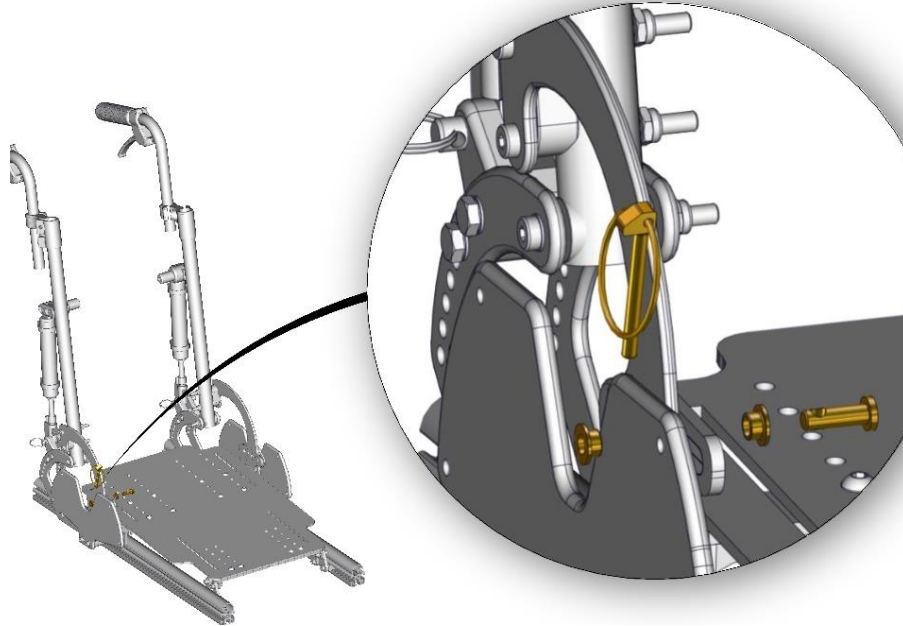


Figure 28



### INFORMATION

It is possible to lock the movement of the backrest (or the movement of the backrest and of the seat if they are binded) adding the locking mechanism shown in figure.

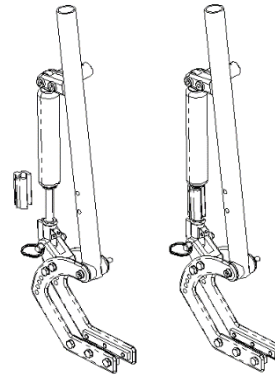


Figure 29





### INFORMATION

In order to facilitate user positioning, it is possible to lock the gas spring acting on levers as shown in section 3.2.

### 3.4. Use of angle adjustable legrest with spring

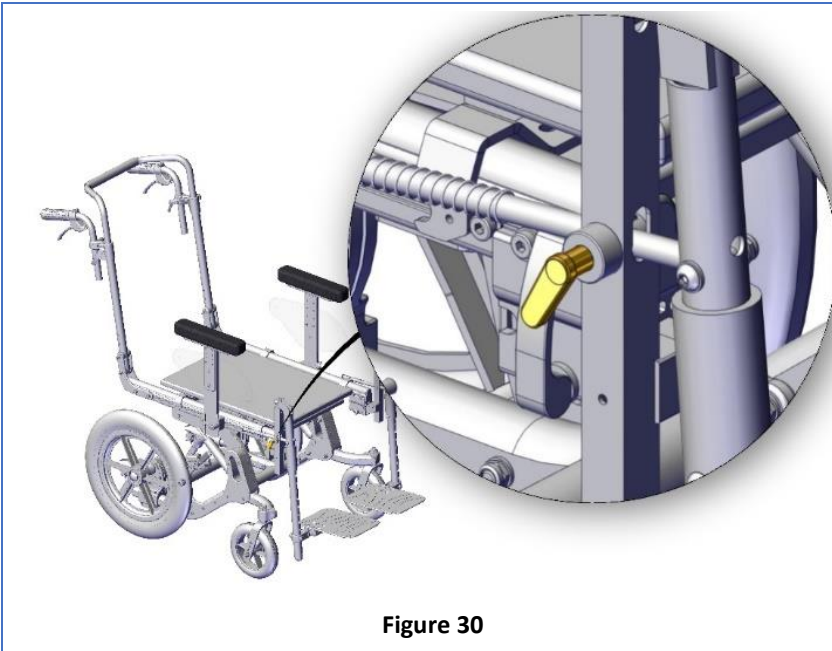
It is possible to choose if to leave free the dynamic movement of legrest or to block it in a certain position simply acting on a lever.

	 <p><b><u>Average needed time:</u></b> &lt;1 min</p>  <p><b><u>Difficulty level:</u></b> Easy</p>	
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#### **RIGHT AND LEFT SIDE**

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



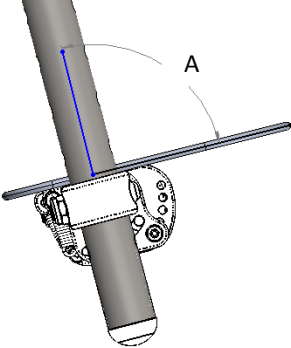
**Figure 30**




- 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.

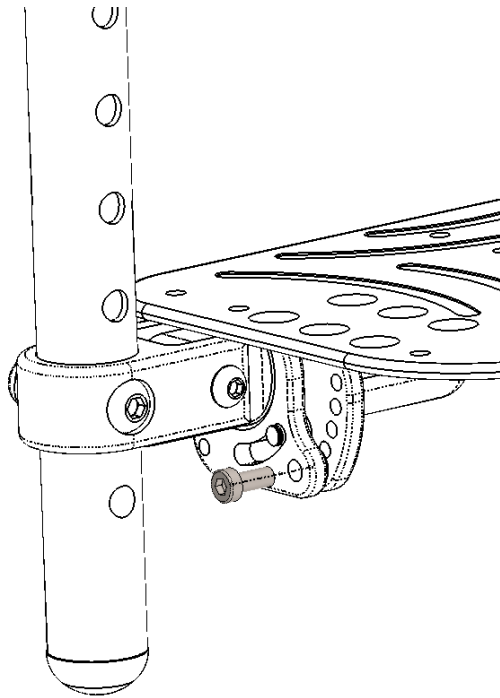
### 3.5. Use of active dynamic footrest

The footrest allows you to accommodate foot movements.

It is possible to choose if leave free the dynamic movement of footrest or block it in a certain position.

	<b>(A)</b> <b>POSSIBLE VALUES</b>
	90°
	101°
	113°
	124°
	135°

	<b><u>Average needed time:</u></b> <5 min	<b>ALLEN WRENCH</b> 	4 mm
	<b><u>Difficulty level:</u></b> Easy		




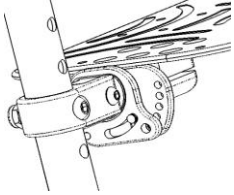
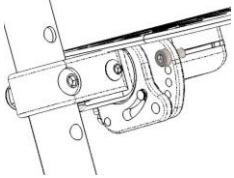
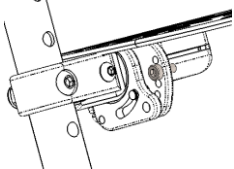


**Figure 31**

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



When the footrest is free to move, the range of movement is 45°. It is possible to limit this range screwing the screw shown in figure.

	 <p><b>Average needed time:</b> &lt;5 min</p>  <p><b>Difficulty level:</b> Easy</p>	<p><b>ALLEN WRENCH</b></p>  <p>4 mm</p>
	<p>RANGE: 45° 90°-135°</p>	
	<p>RANGE: 25° 90°-115°</p>	
	<p>RANGE: 13° 90°-103°</p>	





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.



### **WARNING**

- 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 take the combined weight of the occupant, the wheelchair and accessories.
- 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.
- 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 7176-19:2008 for forward facing transport and head collisions. The wheelchair has not been tested for other directions in a vehicle. Compliance with this standard does not preclude using the wheelchair facing rearward in large accessible vehicles such as autobus.
- The wheelchair has been dynamically tested in a forward-facing orientation with the ATD restrained by both pelvic and shoulder belts.



**WARNING**

The wheelchair is crash tested according ISO 7176-19. This standard considers users with a minimum weight of 22 kg. If your weight is below 22 kg you should pay special attention about the fitting of your wheelchair before using it as a seat in a motor vehicle.



**WARNING**

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



**WARNING**

The wheelchair was crash tested according ISO 7176-19 with the seating system set in the DEFAULT POSITION. Particularly the wheelchair was tested with the seat horizontal, the legrest completely down and backrest completely up. Please pay special attention if you use the wheelchair in a car with a different positioning.



**WARNING**

In any case when using the wheelchair as a seat in a motor vehicle the seat height must be at the lowest position.

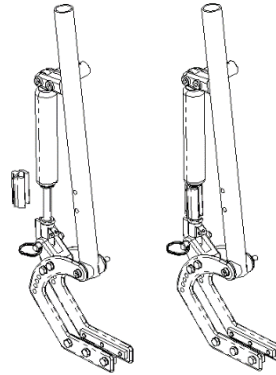


**WARNING**

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**

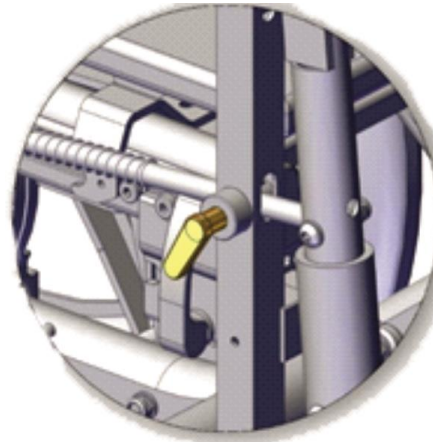
**If the backrest is with dynamic gas springs, when using the wheelchair as a seat in a motor vehicle, it is necessary to lock the movement of the gas springs with the locking system shown in the picture. Always repeat the operation for the left and right side of the wheelchair. WARNING: Safety of wheelchair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



**Figure 34**

**WARNING**

If the legrest is with dynamic type, when using the wheelchair as a seat in a motor vehicle, it is necessary to lock the movement of the legrest acting tightening the lever 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 legrest is not correctly locked while using the wheelchair as a seat in a motor vehicle.



**Figure 35**

**WARNING**

When possible other auxiliary wheelchair equipment, such as attendant bracket, tables 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.



### 3.6.1. Securing the wheelchair with a strap restraint system

#### WARNING



- Standard ISO 10542-1 approved 4-point WTORS (Wheelchair Tie Down and Occupant Restraint Systems), are only tested to 85 kg.
- For wheelchairs heavier than 85 kg it is recommended to use an ISO 10542 compliant WTORS (Heavy Duty System), which is rated for the total weight of the wheelchair including any options. If using a Heavy-Duty System, use 4 straps to secure the wheelchair, 2 straps at the front and 2 straps at the back. If using a standard 4-point WTORS for securing a wheelchair heavier than 85 kg, use 6 straps to secure the wheelchair, 2 straps at the front and 4 straps at the back.
- Never use equipment not labeled with ISO 10542.. .

#### WARNING



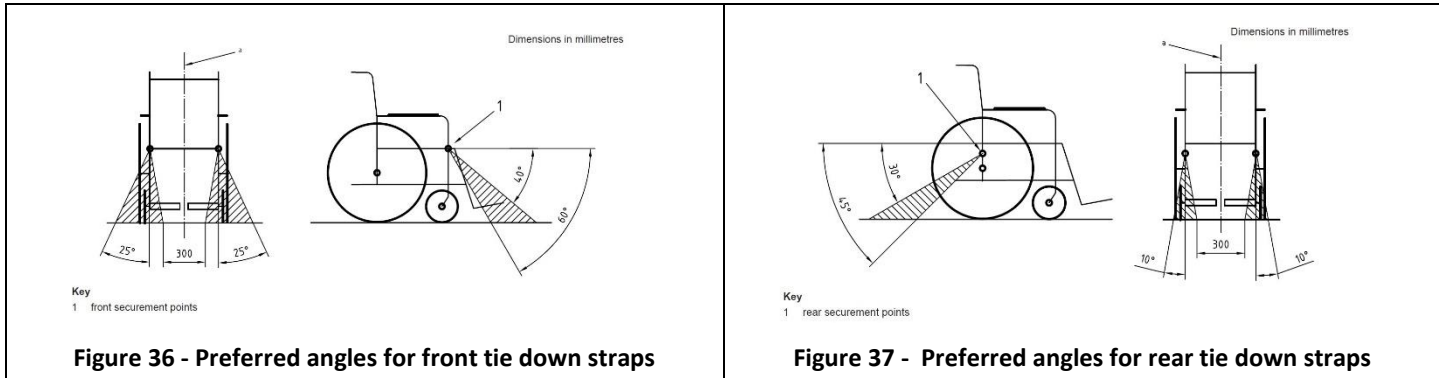
- Use WTORS (Wheelchair Tie-down Occupant Restraint System) in accordance with the WTORS manufacturer instruction.
- Always use ISO 10542-1 approved Wheelchair Tiedown and Occupant Restraint Systems, which are suitable for the weight of the wheelchair or Dahl docking.
- The wheelchair can only be secured by using the tie-down points on the wheelchair's frame.
- The wheelchair may not be secured onto any accessories (forks, armrests, anti-tip brackets etc.).
- No changes or replacements must be made to the anchorage points/car fastenings on the wheelchair for docking system or 4-point strap tie down systems, or to constructional elements or parts of the frame without consulting the manufacturer.

#### WARNING

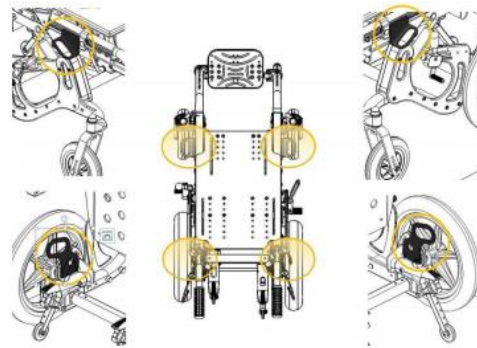


- Always use 4 tie down points.

## Tie-down strap angles



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 38**



## 3.6.2. Occupant restraint instructions

### WARNING



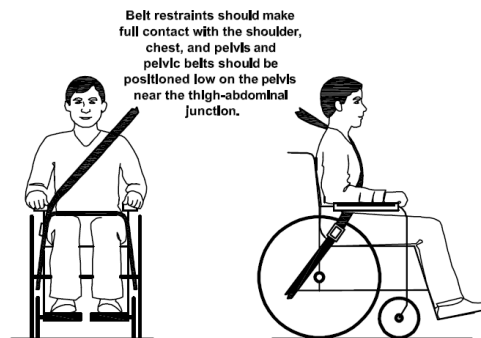
- Use a 3-point occupant restraint system to secure the occupant.
- Both pelvic and upper torso restraint belts must be used to restrain the occupant to reduce the possibility of head and chest impacts with the vehicle components.
- Any wheelchair anchored occupant restraint i.e. 3-point belt, harness or postural supports (lap straps, lap belts) should not be used or relied on for occupant restraint in a moving vehicle, regardless if labeled ISO 7176-19, SAE J2249 or any other equivalent one. Use a vehicle anchored and certified occupant restraint system instead.
- Use a suitable positioned headrest when being transported in a wheelchair.
- Belts and harnesses of the wheelchair have just a postural function. Never use them to protect the user when using the wheelchair as a seat in a motor vehicle.
- Occupant 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 (meeting the requirements specified in ISO 7176-19:2008).
- The upper torso restraint belt must fit over the midpoint of shoulder and across the chest
- Restraint belts must be adjusted as tightly as possible consistent with user comfort.
- Restraint belt webbing must not be twisted when in use.
- Care should be taken when applying the occupant restraint to position the seatbelt buckle so that the release button will not be contacted by wheelchair components while driving or during a crash.
- Belt restraints must not be held away from the body by wheelchair components such as armrests or wheels.

## IMPROPER BELT RESTRAINT FIT



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

## PROPER BELT RESTRAINT FIT



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

## Positioning the occupant restraint when using it with a 4 point strap 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.

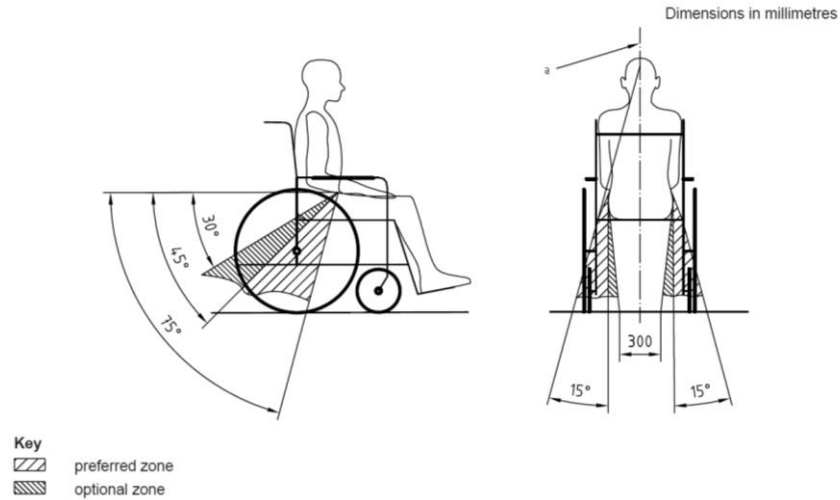


Figure 39

## Positioning the occupant restraint when using it with DAHL docking system

When using wheelchair with 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.

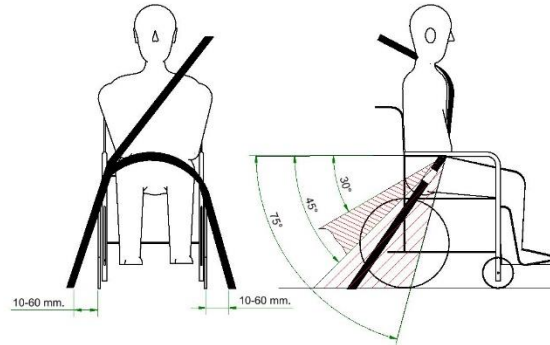


Figure 40

### 3.6.3. Description of the Dahl Docking system Mk II

- (1) Dahl Docking station
- (2) Lock plate and spacer
- (3) Lock pin
- (4) Red LED
- (5) Green LED
- (6) Control panel
- (7) Release button
- (8) Manual emergency release lever
- (9) Manual operating lever

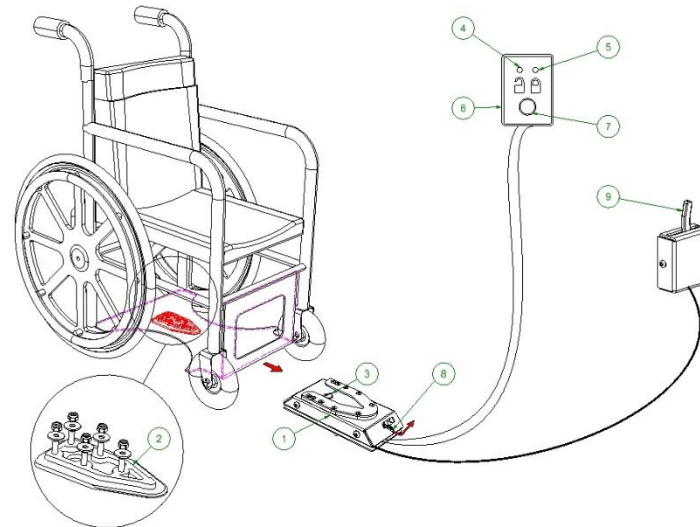


Figure 41

## Securing the wheelchair in the docking station



- Manoeuvre the wheelchair slowly and in a uniform direction over the docking station. The lock plate under the wheelchair helps to guide the wheelchair into place in the docking station. When the lock plate is fully engaged in the docking station, a spring-action locking pin automatically secures the lock plate.
- The docking station is equipped with a control switch that indicates whether the lock plate is correctly secured in the docking station. As soon as the lock plate comes into contact with the locking pin, a warning tone will sound (a high-pitched howl), and the red diode/lamp (LED) in the control panel 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 is properly secured, the warning tone will cease, the red lamp (LED) in the control panel will go out and the green lamp (LED) will light up.
- Do not forget to buckle up for driving.



### **WARNING**

#### **Do not move the vehicle:**

- Whilst the wheelchair is being manoeuvred 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 wheel chair 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).**

## 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. The locking pin will be triggered/ released for approx. 5 seconds, after which the locking pin is automatically locked/activated 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.



### WARNING

**Attempting to reverse the wheelchair before the red LED has been illuminated will result in blocking the docking stations locking mechanism, which makes it impossible to reverse. If this happens repeat above unlocking procedure.**

## Manual release in case of electric failure

A manual emergency release is located at the front edge of the docking station.

- Move wheelchair forward to remove the pressure on the lock pin and push the red release arm to one side and hold it there while the wheelchair moves away.
- A cable-activated manual operating lever can also be fitted (accessory). 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 fails, an emergency release tool made from red plastic comes with each docking station.**



- 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.



## 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 system 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 fitter.

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



### **CONTACT INFORMATION**

For more information contact the manufacturer of the wheelchair or the manufacturer of the docking station.

#### **Dahl Engineering**

Løvevej 3

DK-7700 Thisted

Tel. +45 96 18 00 77

<https://dahleengineering.dk>

[sales@dahleengineering.dk](mailto:sales@dahleengineering.dk)

### 3.7. Transport and storage

It is possible to store the product in a place with a temperature between -20 °C and +45 °C.

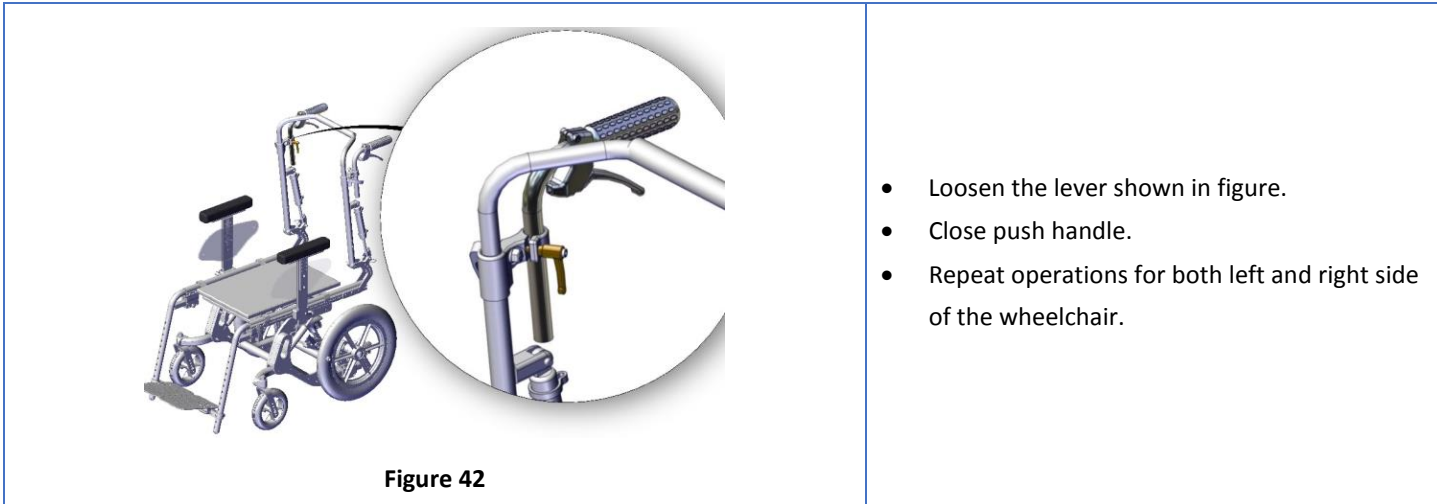
The product can be transported in the storage compartment of the vehicle even without any package. The product can be also shipped via air. If it is necessary to ship the product it is very important to protect it with an appropriate package.

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.

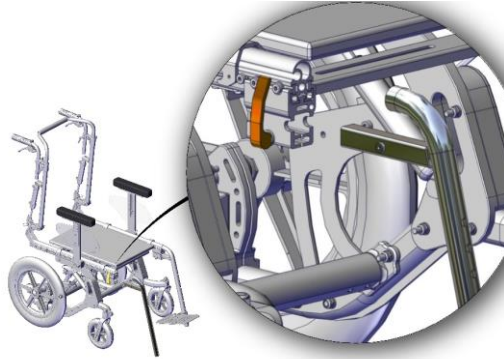
If you are not willing to use the wheelchair for a long period, keep it safe in a clean area and away from heat.

In order to facilitate the transport of the wheelchair, it is possible to perform following operations.

#### Close push handles



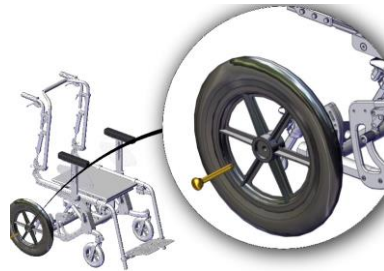
### Remove legrest



**Figure 43**

- Loosen the lever shown in figure.
- Remove the legrest.
- Repeat operations for both left and right side of the wheelchair.

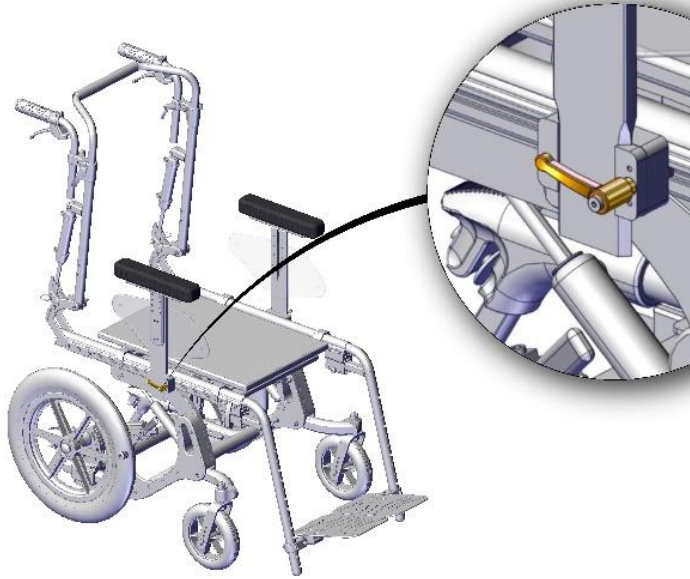
### Remove traction wheels



**Figure 44**

- Press the button shown in figure and pull away the axis and the wheel.
- Repeat operations for both right and left side of the wheelchair.





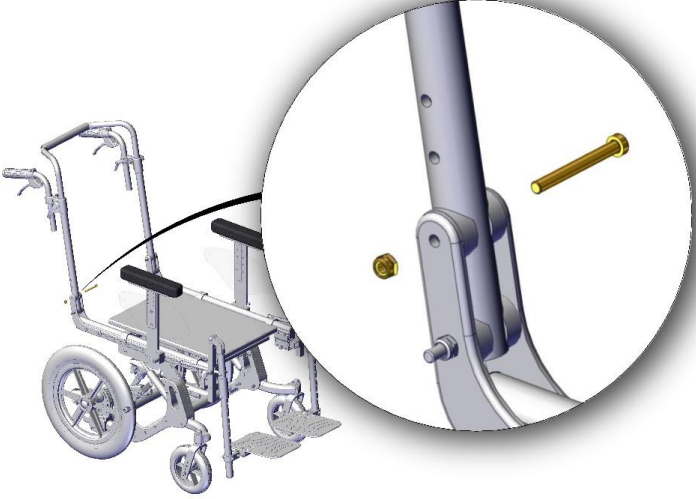
## Remove armrest



**Figure 45**

- Loosen the lever shown in figure.
- Remove the armrest.
- Repeat operations for both right and left side of the wheelchair.

## Low the backrest

	 <p><b>Average needed time:</b> &lt;5 min</p>  <p><b>Difficulty level:</b> Easy</p>	<p><b>OPEN-END WRENCH</b></p>  <p>10 mm</p> <p><b>ALLEN WRENCH</b></p>  <p>5 mm</p>
 <p><b>Figure 46</b></p>		<ul style="list-style-type: none"><li>• Remove the backrest.</li><li>• Unscrew the screw shown in figure with the 5 mm allen wrench while holding the nut behind with the 10 mm open-end wrench.</li><li>• Low the backrest.</li><li>• Repeat the operation for both left and right side of the wheelchair.</li></ul>

### NON FIXED BACKREST

To low down the backrest it is sufficient to remove the axis shown in figure. Repeat operation for both left and right side of the wheelchair.

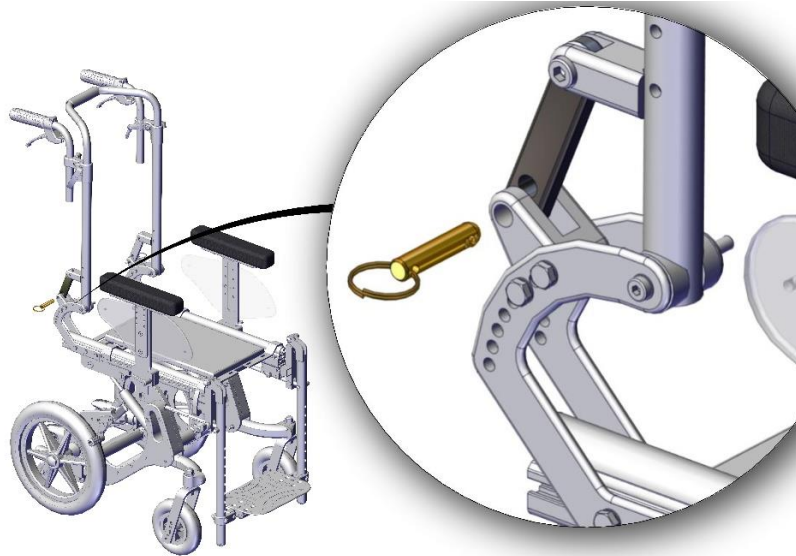


Figure 47

## 4. MAINTENANCE

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 wheelchair with water. It may cause oxidation of the metal parts. Avoid long exposure of the wheelchair to direct sunlight.



### WARNING

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

### 4.1. Cleaning



### WARNING

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

### PLASTIC AND METAL PARTS

Simply use a cloth moistened with a neutral detergent.

### UPHOLSTERY



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.

## 4.2. 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
Clean the wheelchair	Weekly	B - Assistant
Check the pressure of tires	Weekly	B - Assistant
Check tire usury	Monthly	B - Assistant
Check brake release lever	Monthly	B - Assistant
Check brake adjustment	Monthly	B - Assistant
Check all gas springs to verify any oil leakage.	Monthly	B - Assistant
Check all adjustment screws	6 months	B - Assistant






### WHY IT IS IMPORTANT TO REGULARLY CHECK THE PNEUMATICH WHEELS PRESSURE

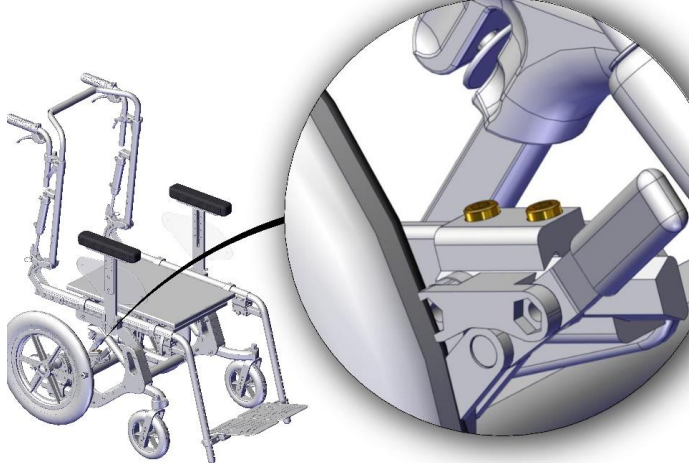
**LOW PRESSURE:** When tires are deflated the feeling of heaviness in the wheelchair increases; tread wear is irregular (and higher on the sides). Furthermore, the deformation of the tire can lead to sudden loss of grip.

**HIGH PRESSURE:** A too high inflation pressure involves several risks: less grip on the asphalt, danger of breakage in the event of an impact, limited ride comfort due to a worse absorption of roughness, uneven tread consumption, which is stressed above all in the center.



### 4.2.1. Brake adjustment

	 <p><b><u>Average needed time:</u></b> 5 min</p>  <p><b><u>Difficulty level:</u></b> Easy</p>	<p><b>ALLEN WRENCH</b></p>  <p>5 mm</p>
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------



**Figure 48**

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



**WARNING**

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



**WARNING**

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



**WARNING**

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

## 4.3. Tire puncture



### WARNING

This section refers only to wheelchair with pneumatic wheels.

### 4.3.1. User information

#### Traction wheels

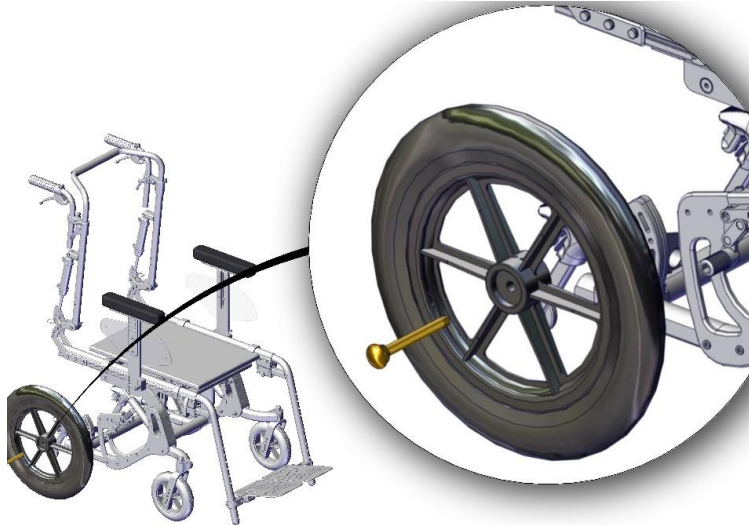




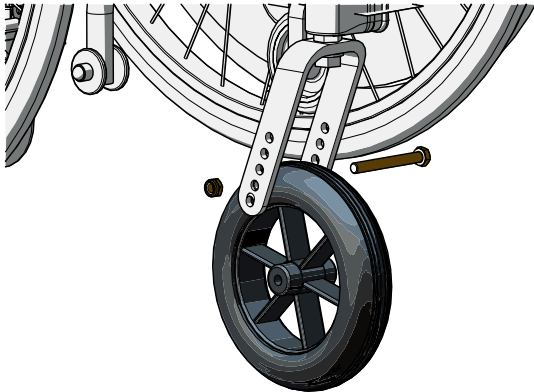


Figure 49

- Rise the wheelchair.
- Press the button shown in figure and pull away the pin.
- Remove the wheel.

## Castors wheel

	 <p><b>Average needed time:</b> &lt;5 min</p>  <p><b>Difficulty level:</b> Easy</p>	<p><b>OPEN-END WRENCH</b></p>  <p>13 mm</p> <p><b>OPEN-END WRENCH</b></p>  <p>13 mm</p>
 <p><b>Figure 50</b></p>		<ul style="list-style-type: none"> <li>• Rise the wheelchair.</li> <li>• Unscrew the screw shown in figure while holding the nut behind.</li> <li>• Remove the wheel.</li> </ul>



Contact an authorized service center for the repair or the substitution of the damaged wheel. When the authorized service center gives you back the repaired wheel or a new one, mount it following instructions in reverse order.

### 4.3.2. Service information

When the user requires assistance for a punctured wheel, according to the entity of damage, decide if it is better to repair or substitute the wheel.

### 4.4.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**

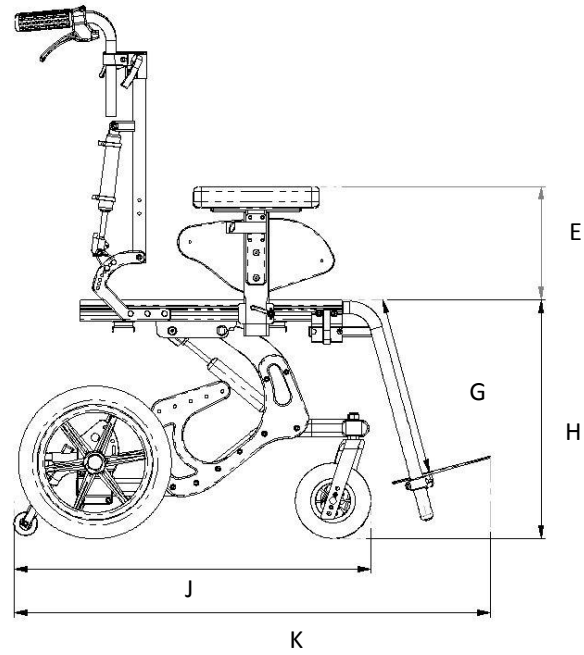
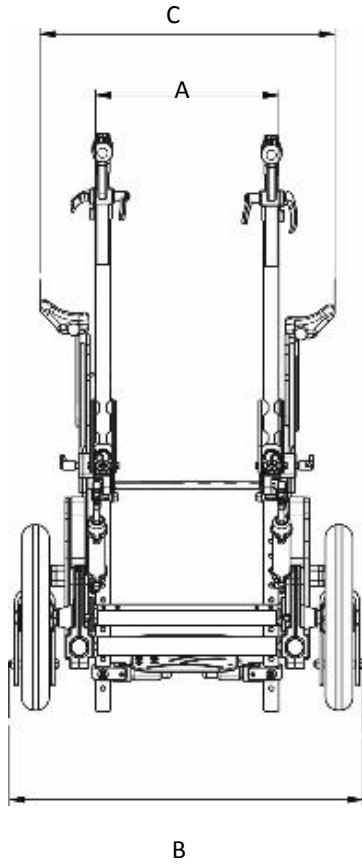
**This operation must be performed only at an authorized service center.**

## 5. TECHNICAL SPECIFICATION

<b>Mass of test dummy used in the test</b>	100 kg
<b>TotSeat width 42 cm: 100 kg al mass (min-max) [kg]</b>	MIN 13 kg – MAX 30 kg <b>Folded device</b> MIN 8 kg – MAX 20 kg
<b>The product conforms to requirements for resistance to ignition in accordance with ISO 7176-16 [yes-no]</b>	Yes
<b>Maximum user mass</b>	Seat width 30 cm: 50 kg Seat width 34 cm: 75 kg Seat width 38 cm: 100 kg Seat width 42 cm: 100 kg Seat width 46 cm: 100 kg
<b>Overall dimensions (width, length and height) ready for use and when folded or dismantled (mm) (min-max)</b>	Height: MIN: 1060 – MAX 1200 Width : MIN 470 mm – MAX 630 mm Length with legrest: MIN 910 mm – MAX 1070 mm <b>Folded device</b> Width : MIN 470 mm – MAX 630 mm Height: MIN 580 mm – MAX 590 mm Length: MIN 620 mm – MAX 705 mm
<b>Static stability downhill (min-max) [°]</b>	MAX 10°
<b>Static stability uphill (min-max) [°]</b>	MAX 10°

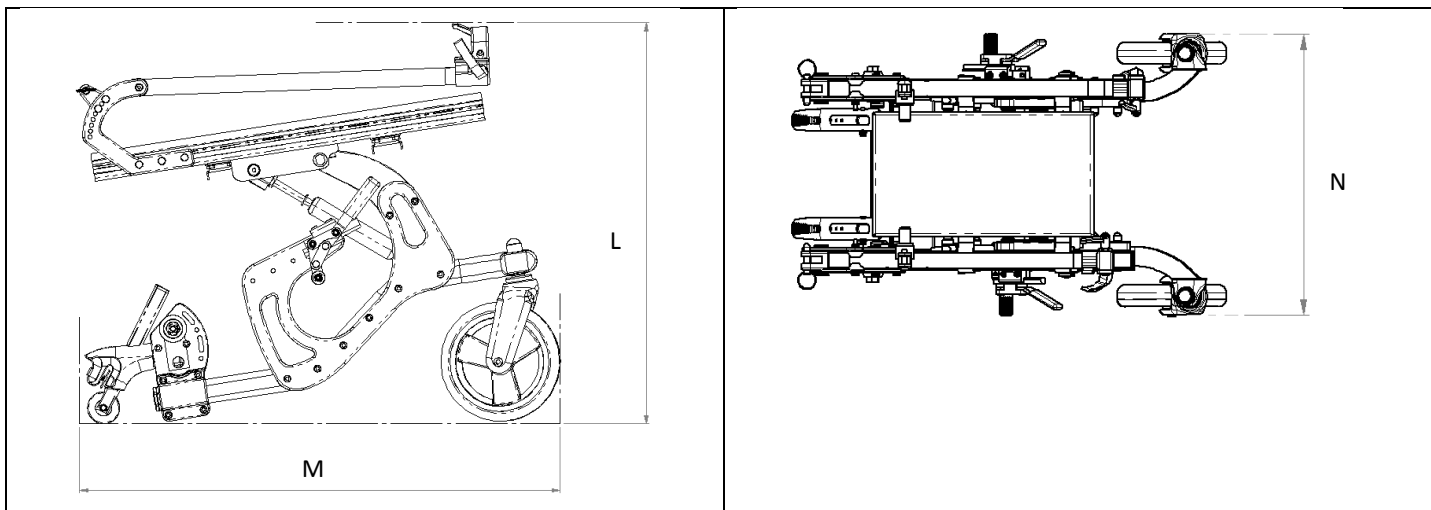
<b>Static stability sideways (min-max) [°]</b>	MAX 10°
<b>Obstacle climbing (min-max) [mm]</b>	6 cm
<b>Seat plane angle (min-max) [°]</b>	MIN 0° - MAX 45°
<b>Effective seat depth (min-max) [°]</b>	MIN: 300 mm – MAX: 640 mm
<b>Seat surface height at front edge (min-max) [mm]</b>	425 mm
<b>Backrest angle (min-max) [°]</b>	MIN 90° - MAX 135°
<b>Backrest height (min-max) [°]</b>	MIN 400 mm – MAX 550 mm
<b>Footrest to seat distance (min-max) [mm]</b>	MIN 30 mm – MAX 470 mm
<b>Leg to seat surface angle (min-max) [mm]</b>	MIN 20° - MAX 90°
<b>Armrest to seat distance (min-max) [mm]</b>	MIN 200 mm – MAX 340 mm
<b>The wheelchair conforms to requirement and test methods for static, impact and fatigue strengths (ISO 7176-8) [yes-no]</b>	Yes
<b>The wheelchair conforms to requirements for resistance to ignition in accordance with ISO 7176-16 [yes-no]</b>	Yes
<b>Expected lifetime of the assistive product [years]</b>	5
<b>Recommended tire pressure [kPa]</b>	Traction wheels: 280 kPa; Castors: 250 kPa.
<b>Operating temperature</b>	MIN -10 °C – MAX +40 °C
<b>Storage temperature</b>	MIN -20 °C – MAX +45 °C

## 5.1. Drawings





A	<b>300 mm</b>	<b>340 mm</b>	<b>380 mm</b>	<b>420 mm</b>	<b>460 mm</b>
B	470 mm	510 mm	550 mm	590 mm	630 mm
C	410 mm	450 mm	490 mm	530 mm	570 mm
E	MIN 180 mm MAX 270 mm MIN 270 mm MAX 360 mm				
G	MIN 30 mm MAX 470 mm				
H	470 mm				
J	$\varnothing$ 300 mm: MIN 610 MAX 720 $\varnothing$ 400 mm: MIN 665 MAX 770				
K	MIN 910 mm – MAX 1070 mm				



A	300 mm	340 mm	380 mm	420 mm	460 mm
L	MIN 580 mm – MAX 590 mm				
M	MIN 620 mm – MAX 705 mm				
N	470 mm	510 mm	550 mm	590 mm	630 mm



**WARNING**

Folded width overcomes 350 mm.

## 6. Assistance and warranty terms

### 6.1. 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)

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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
Wheelchair parts and accessories (excluding batteries)	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.

## 6.2. Serial number

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

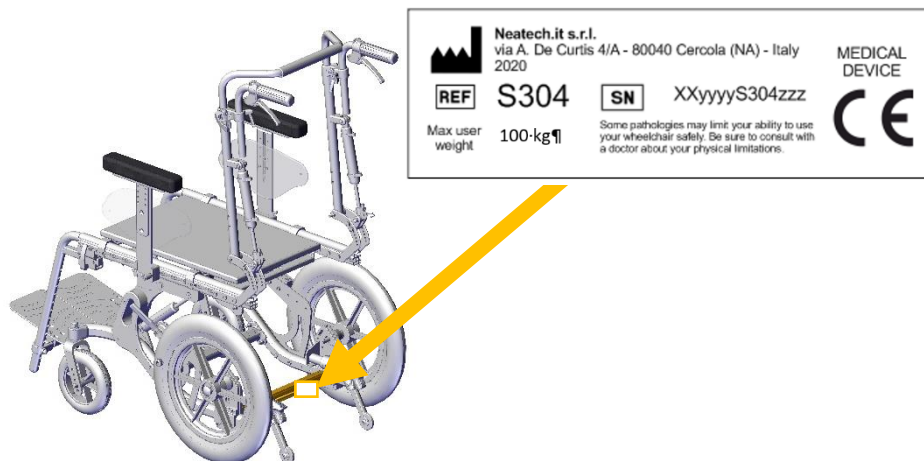


Figure 51

## Note




# DYNA

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