

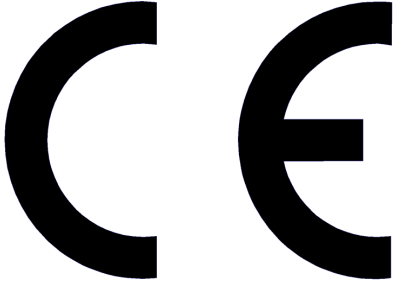







We have great concerns about quality, safety and usability of our products. We are always working to improve them. Please download last version of this manual at this link.

<https://www.neatech-download.it/s053-manual/>

PRODUCT		SPEEDSTAR
PART NUMBER / MODEL		S053
CE CONFORMITY		 Regulation EU 2017/745 - Class I medical device - Rule I Annex VIII
MAIN STANDARDS APPLIED		ISO 14971:2012 UNI EN 12182:2012 UNI EN 12184:2014 ISO 7176-21:2009 EN 1021-1:2014 EN 1021-2:2014
MANUFACTURER		Neatech.it SRL via A. de Curtis 4/A, 80040, Cercola (NA), Italia Tel. +39 081 555 1946 www.neatech.it – info@neatech.it
INTENDED USE		The product is intended to be used for alleviation or compensation for an injury or disability. The wheelchair is intended to provide mobility to users with temporary or permanent mobility difficulties, who are able to stay in a sitting position and who need to move in indoor and outdoor environments.

Index

1	PREPARATION FOR FIRST USE	1
1.1	Unpacking	1
2	ADJUSTMENTS	4
2.1	List of adjustments	4
2.2	Armrest height.....	6
2.3	Armrest depth	7
2.4	Joystick position.....	8
2.5	Footplates depth and angle.....	9
2.6	Footplates height.....	11
2.7	Seat depth.....	12
2.8	Backrest angle.....	13
2.9	Legrest angle.....	15
2.10	Default position.....	16
3	USE OF THE PRODUCT	17
3.1	Control system of the wheelchair	17
3.2	Manual brake release lever	19
3.3	Powered functions.....	20
3.4	Main switch	22
3.5	Battery charging	23
3.6	Transport and storage	25
3.6.1	Batteries removal	26
4	MAINTENANCE	29
4.1	Cleaning	29
4.2	Controls to be performed on the product.....	30
4.3	Tire puncture	31
4.3.1	User information	31
4.4	Batteries replacement.....	33
4.5	Reuse	33
5	SPECIFICATIONS.....	34
5.1	Maximum user weight.....	36

5.2	Dimensions	37
6	WARRANTY TERMS	38
6.1	Serial number	39

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.



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 centre or the manufacturer.

SYMBOLS ON THE PRODUCT

 <p>Neatech.it s.r.l. Via A. De Curtis 4/A - 80040 Cercola (NA) - Italy 2022</p> <p>SPEEDSTAR</p> <p>REF S053 SN SNS053*****</p> <p>MASSIMO PESO UTENTE / MAX USER WEIGHT 100 kg</p> 	<p>This label indicates the manufacturer, the part number, the serial number, the CE mark as medical device, the weight of the device and the max user weight.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>24 V </p> <p>2 x 12 V 86 Ah</p> <p>SEALED LEAD-ACID BATTERIES BATTERIE AL PIOMBO SIGILLATE</p> </div>	<p>This label indicates the type of power and the type of batteries.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>IP X4</p> </div>	<p>This symbol indicates the water ingress protection of the device.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;">  </div>	<p>This symbol means that the device is a class II device while charging.</p>
<div style="border: 1px solid black; padding: 10px; text-align: center;">  </div>	<p>This symbol means presence of danger for the user or damage for the product. Always follow instructions when this symbol is present.</p>
<div style="border: 1px solid black; padding: 10px;">  <p>DO NOT USE THE WHEELCHAIR ON A SLOPE UNLESS THE SEATING SYSTEM IS IN THE DEFAULT POSITION (SEAT LOW AND HORIZONTAL, LEGREST DOWN, BACKREST UP)</p> <p>NON USARE LA CARROZZINA SU UNA PENDENZA A MENO CHE IL SISTEMA DI SEDUTA NON SIA NELLA POSIZIONE DI DEFAULT (SEDUTA GIÙ E ORIZZONTALE, PEDANE ABBASSATE, SCHIENALE ALZATO)</p> </div>	<p>This label indicates the risk when using the wheelchair on a slope with the seating system not in the default position (seat down and horizontal, legrest down, backrest up).</p>



PAY SPECIAL ATTENTION WHEN CLIMBING OBSTACLE HIGHER THAN 5 CENTIMETERS. ALWAYS FOLLOW INSTRUCTIONS IN MANUAL. IN ANY CASE, NEVER FACE OBSTACLES HIGHER THAN 10 CENTIMETERS

PRESTARE PARTICOLARE ATTENZIONE QUANDO SI AFFRONTANO OSTACOLI PIÙ ALTI DI 5 CENTIMETRI. SEGUIRE SEMPRE LE INDICAZIONI SUL MANUALE. IN OGNI CASO NON AFFRONTARE MAI OSTACOLI PIÙ ALTI DI 10 CENTIMETRI

This label indicates the risk when using the wheelchair to face obstacles.



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 CENTRE

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



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



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.



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.**



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



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 centre. 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.



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 device without supervision.



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 safety slope can be dangerous.

Please don't seat on armrests.



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

Always drive at low speed when the seating system is not in the standard position and lift the seat, tilt the seat, recline backrest or elevate legrest only on a flat horizontal surface.



Do not carry passengers on the product independently of the age of the passenger. The product is not designed for weight training and is unsafe for use as a seat while weight training. Do not shift your weight or sitting position toward the direction you are reaching as the product may tip over. Do not stand on the frame of the product. **Some pathologies may limit your ability to use your device 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. It is better to use a drive profile with low speed.



Dealing with downhill

When facing a downhill road it is recommended to set the seating system to default position **but whit seat plane tilted rearward**. It is better to use a drive profile with low speed. Avoid strong braking when dealing with downhill.



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.



WARNING

The stopping distance on slopes can be significantly greater than on level ground



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.



When turning with the wheelchair, always use great caution.



Dealing with obstacles

When facing with an obstacle, always use great caution and make sure the seating system is in the default position. The wheelchair is able to climb an obstacle of 100 mm with a run up of minimum 500 mm. It is preferable to approach the obstacle with the presence of an attendant. Always face obstacles facing forward and being sure castors are exactly perpendicular to surface of the obstacle.



Dealing with obstacles

Pay special attention when facing an obstacle higher than 5 cm. Always follow these instructions when approaching this type of obstacle. Use a belt. Approach the obstacle with the presence of an attendant. Be sure batteries are fully charged. .



Driving in dark environments

Don't use the wheelchair in dark environments without lights turned on.



Transfer into and out the wheelchair

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



Respect the rules of the road and the applicable legislation for this type of product in the country where the wheelchair is used.



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.



ELECTROMAGNETIC RADIATION DANGER

The behaviour of the product may be affected by electromagnetic fields created by transceivers such as: Citizens band (CB) radios, walkie-talkies, fire and police radios, cellular phones, lap-top computers, commercial radio and television broadcast antennas. PLEASE USE CAUTION in the presence of these devices. All parts of the device should maintain a distance of at least 30 cm (12 inches) from any transceivers. Electromagnetic radiation can cause your product, without warning, to move by itself or to move in unintended directions. If any of these occur, it could result in severe injury to you or others. Electromagnetic radiation can damage the control system of your product. There is no way to know the effect on electromagnetic immunity if you add accessories or modify this product. Any change to your product may increase the risk related to electromagnetic radiation. Parts from other suppliers have unknown electromagnetic properties.

The product might disturb the operation of devices in its environment.



Regarding EMC safety the device can't be used close to other devices involved in any diagnosis or similar, such as NMR or similar. Moreover, the structure of the chassis can't be modified.



Regarding EMC safety the device can't be used close to other devices involved in any diagnosis or similar, such as NMR or similar. Moreover, the structure of the chassis can't be modified.



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



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



The wheelchair has IPX4 ingress protection. This means that all components are designed to work with splashing water from all directions. In any case avoid prolonged contact of wheelchair with water.



Wheelchair could suddenly stop due to lose electrical connections.



Turn off the wheelchair if you are willing to remain stationary in a place. This will prevent accidental movements due to accidental contact with the joystick or electromagnetic interferences.

Lift the product

Do not lift the product with the user on board. If you really need to lift the product, it is suggested to grab it with the help of at least one other person as shown in figure

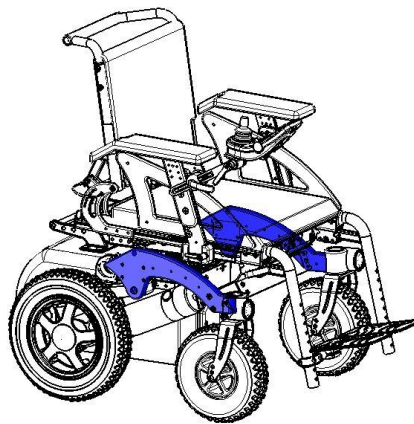


Figure 1

Do not lift the device with the user on board. If it is really needed to lift the product, always ask for the help of another assistant. Grab the product as shown in figure.



WARNING

It is not possible to use the product as a seat in a motor vehicle.



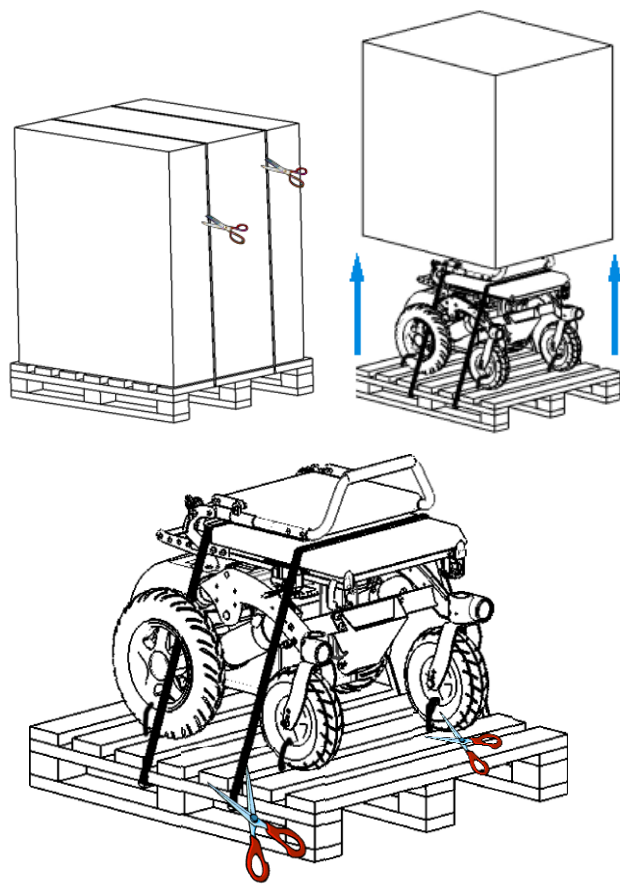

The weight of each battery is 24.2 kg. Please pay special attention when removing or replacing the batteries.

1 PREPARATION FOR FIRST USE

1.1 Unpacking

<p>Inside the box there are:</p> <ul style="list-style-type: none">• Product SPEEDSTAR• Charger• Manual	<p style="text-align: center;">PACKAGING DISPOSAL</p> <p style="text-align: center;"></p> <p>To properly recycle the packaging materials follow instructions provided by your local waste disposal service.</p>
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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 centre.

 <p style="text-align: center;">Figure 2</p>	<p style="text-align: center;"> Average needed time: 15 min</p> <ul style="list-style-type: none">• Be sure to put the package of the Speedstar on a stable and secure surface and remove straps with scissors.• Pull away the box as shown in Figure.• Use scissors to remove the straps and ties as shown in Figure.
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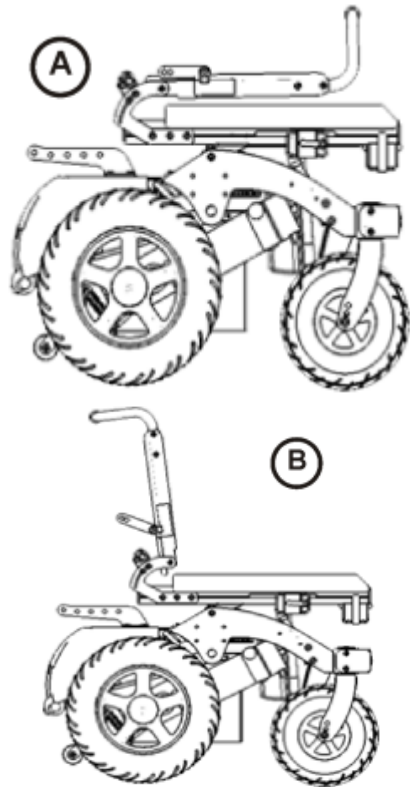
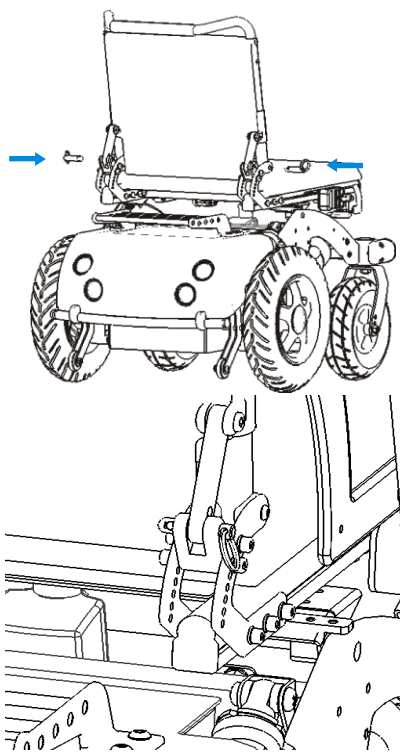


Figure 3

- Raise the backrest from position A to position B by gently pulling the backrest in an upright position.



4

- Make sure that the pins are inserted correctly as shown in Figure.

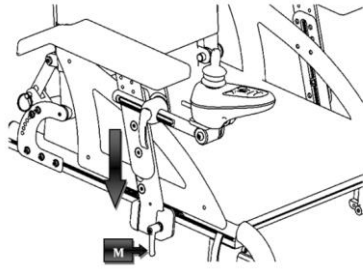


Figure 5

- As shown in Figure put the armrest into the holder and tighten the lever (M).



Figure 6

- Connect the cable of the joystick as shown in Figure. Make sure it is completely connected. If it appears difficult to insert the connector try to invert and reinsert.



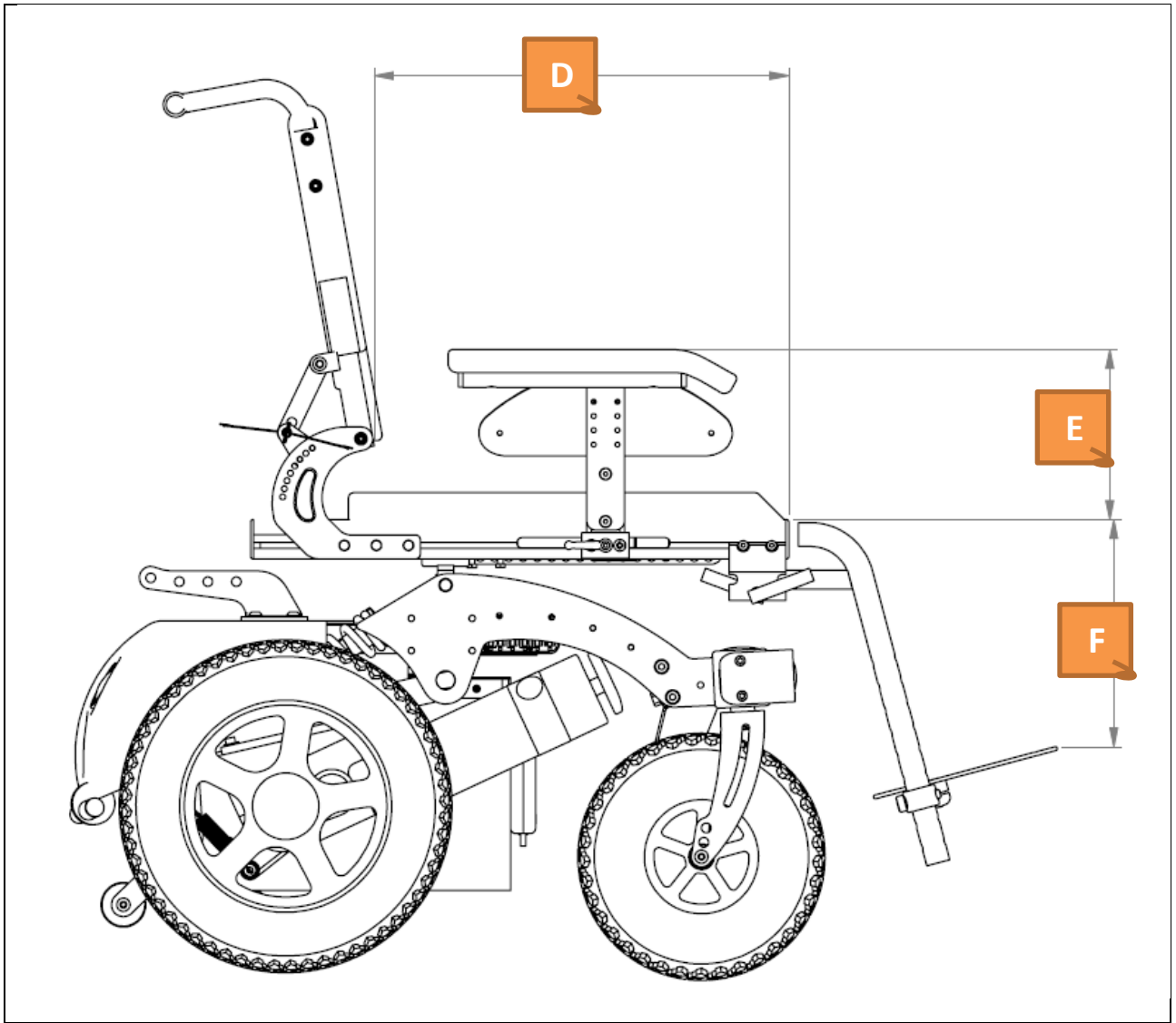
PACKAGING DISPOSAL

To properly recycle the packaging materials follow instructions provided by your local waste disposal service.

2 ADJUSTMENTS

2.1 List of adjustments

ADJUSTMENT		TYPE OF OPERATION	DIM RANGE	SECTION
Armrest height	B - Assistant	Operation intended to be performed by an assistant.	E 180 mm – 340 mm	2.2
Armrest depth	B - Assistant	Operation intended to be performed by an assistant.		2.3
Joystick position	B - Assistant	Operation intended to be performed by an assistant.		2.4
Footplates angle	B - Assistant	Operation intended to be performed by an assistant.		2.5
Footplates depth	B - Assistant	Operation intended to be performed by an assistant.		2.5
Footplates height	B - Assistant	Operation intended to be performed by an assistant.	E MANUAL LEGREST 160 mm – 280 mm POWERED LEGREST 225 mm – 250 mm	2.6
Seat depth	B - Assistant	Operation intended to be performed by an assistant.	D 300 mm – 540 mm	2.7
Backrest angle	B - Assistant	Operation intended to be performed by an assistant.	ND 90°-135°	2.8
Legrest angle	B - Assistant	Operation intended to be performed by an assistant.	90°-170°	2.9



2.2 Armrest height



RIGHT AND LEFT SIDE

It is possible to adjust separately left and right armrest.



Average needed time:
<5 min



Difficulty level:
Easy

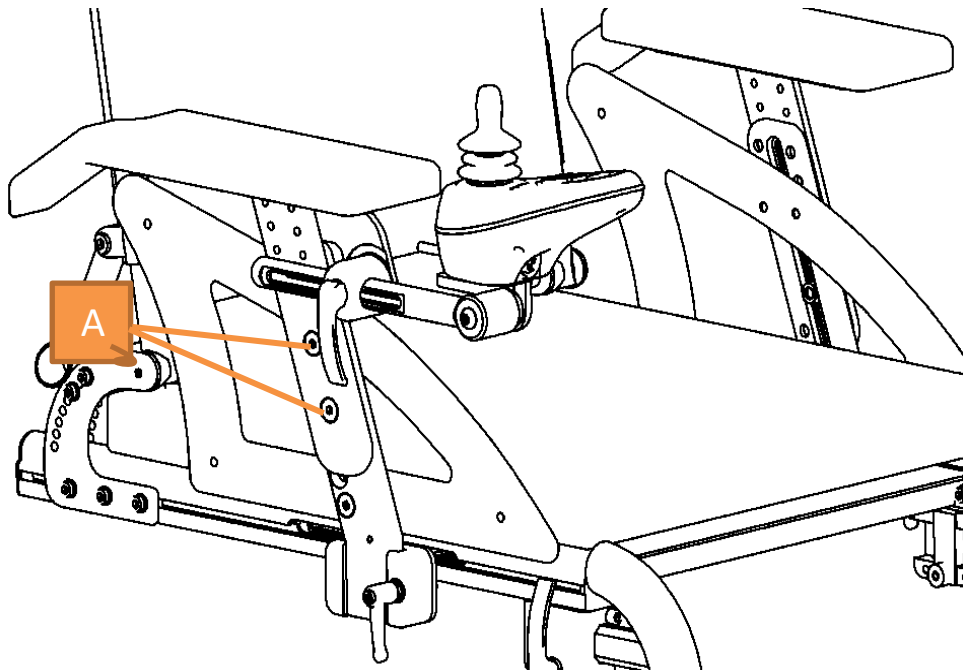


Figure 7

- Loosen the screws (A), and set armrests height to desired value and retighten the screws (A).

ALLEN WRENCH



4 mm

2.3 Armrest depth



RIGHT AND LEFT SIDE

It is possible to adjust separately left and right side.



Average **needed**
time:

<5 min



Difficulty level:

Easy

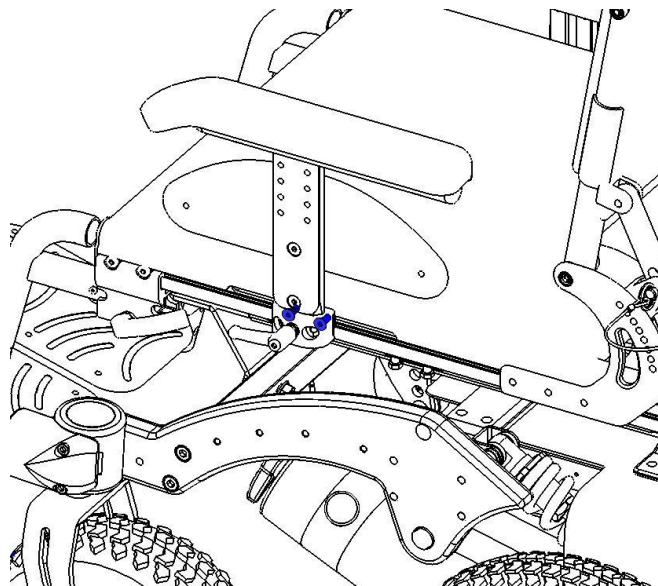


Figure 8

- Loosen the knob shown in figure and remove the armrest.
- Loosen the screws shown in figure.
- Adjust the armrest as desired.
- Tighten the screws shown in figure.
- Mount the armrest and tighten the knob shown in figure.

ALLEN WRENCH



4 mm

2.4 Joystick position



Average needed time:
<5 min



Difficulty level:
Easy

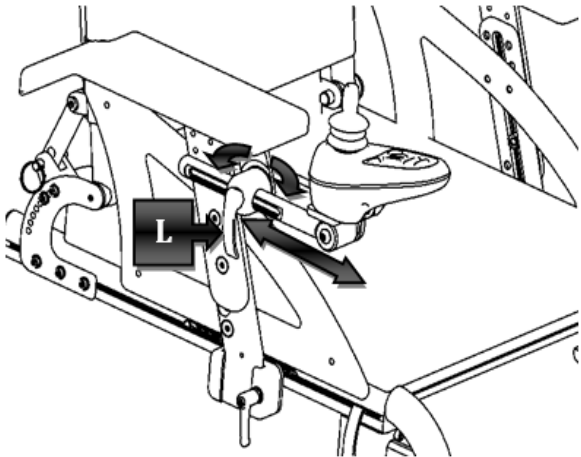


Figure 9

- Loosen the lever (L), as shown in Figure, so it is possible to move the joystick in accordance with the directions indicated to reach the desired position. Retighten the lever.

2.5 Footplates depth and angle



RIGHT AND LEFT SIDE

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



Average needed time:
<5 min



Difficulty level:
Easy

Angle adjustment

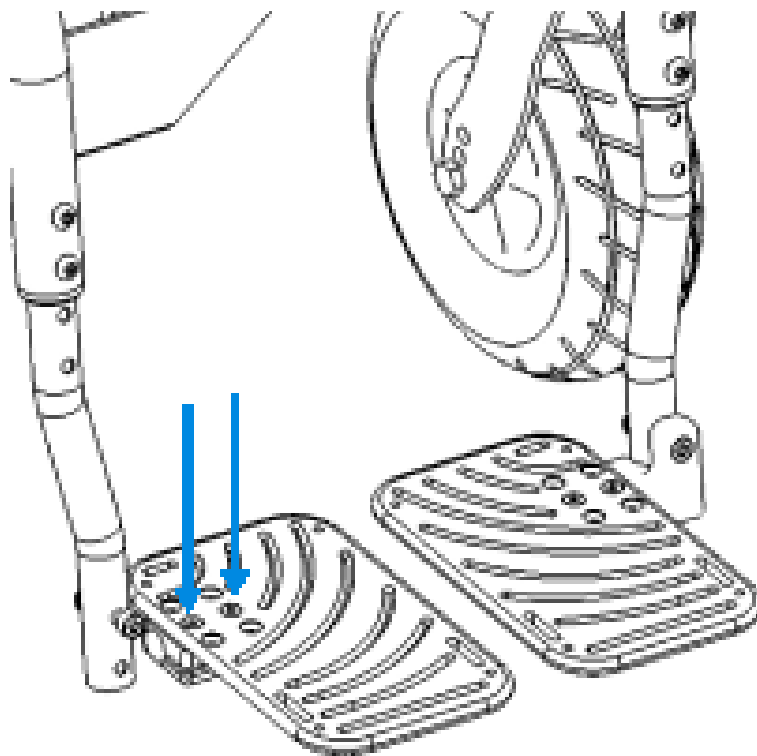


Figure 10

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

ALLEN WRENCH



4 mm

Depth adjustment

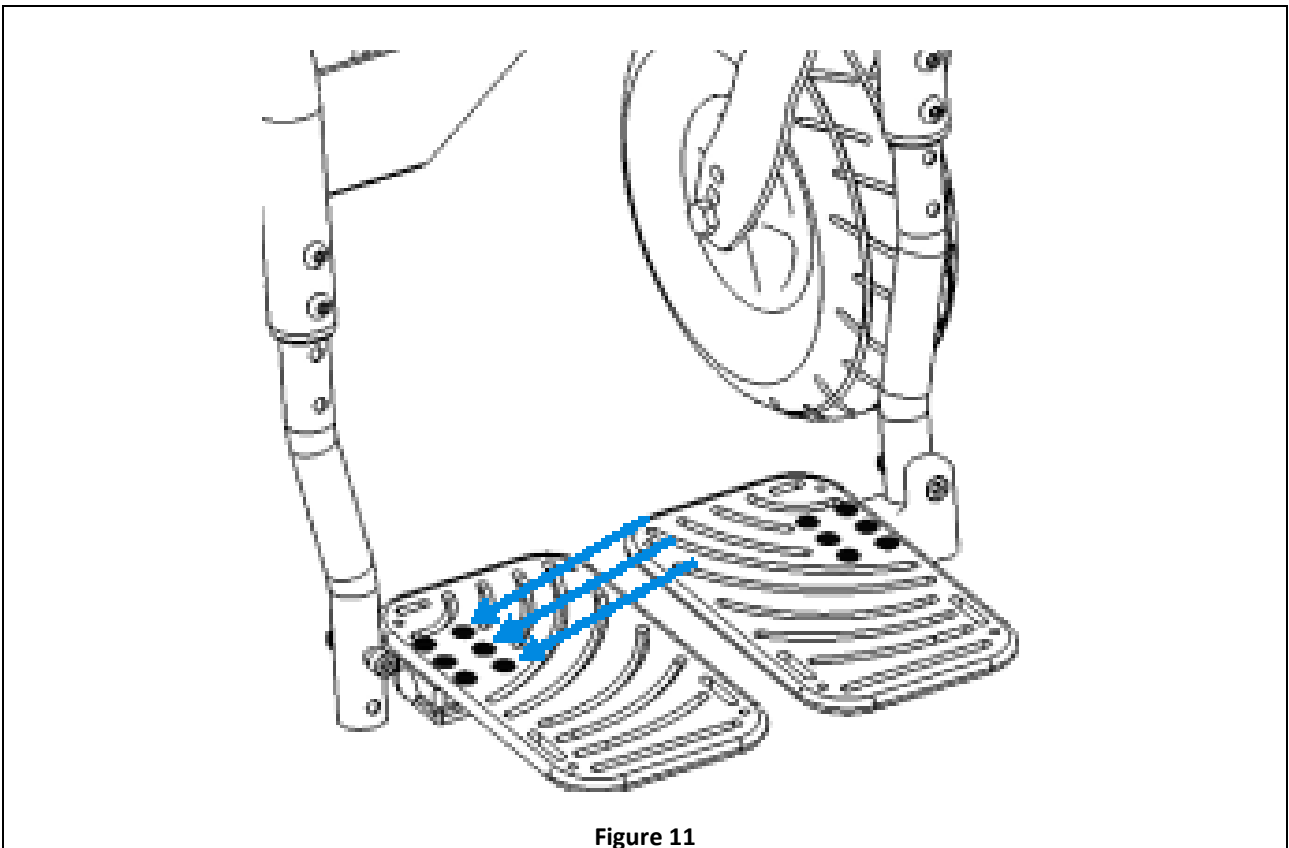


Figure 11

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

ALLEN WRENCH



4 mm

2.6 Footplates height



RIGHT AND LEFT SIDE

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



Average needed time:
<5 min



Difficulty level:
Easy

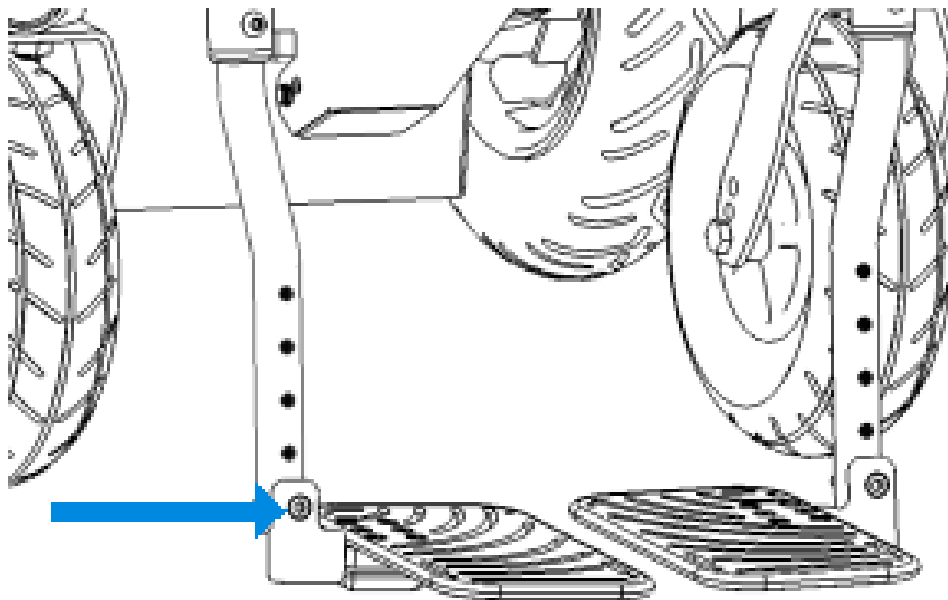


Figure 12

- Unscrew the screw shown in figure with the allen wrench while holding the nut behind with the 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

2.7 Seat depth



Table

WARNING

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



Average needed

time:

5 min



Difficulty level:

Easy

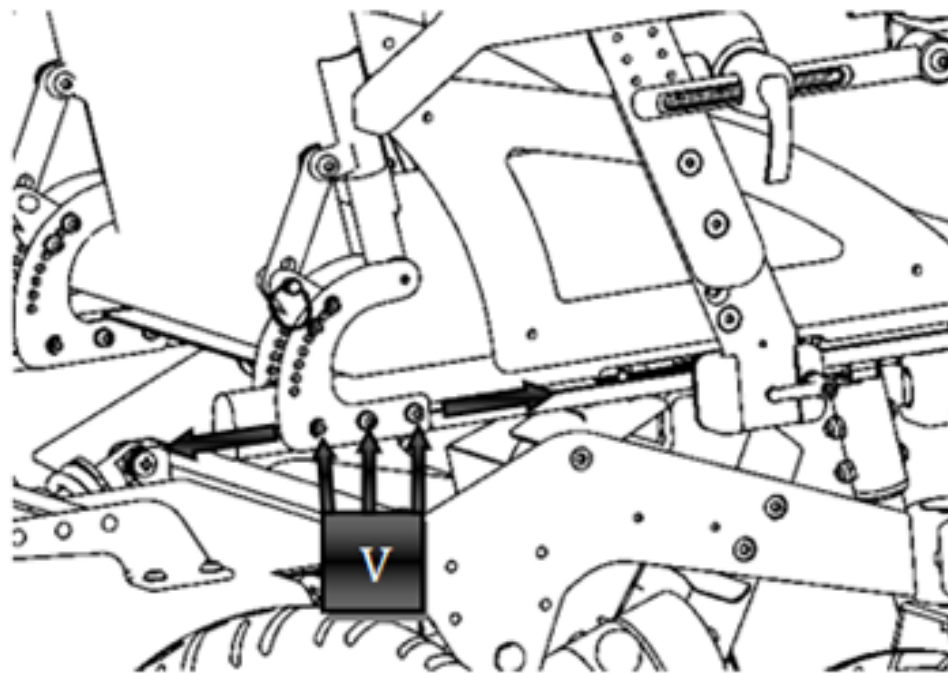


Figure 13

- Seeing Figure loosen the screws (V). Loosen also 3 screws on the opposite side of tubular. repeat operations for both left and right side of the wheelchair. Move the backrest to the desired position and tighten the screws again.

OPEN-END WRENCH

10 mm



2.8 Backrest angle



WARNING

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



Average needed time:

5 min



Difficulty level:

Easy

Powered legrest

- Act on the joystick as described in section 3.1.

Angle adjustable with pistons

Use the lever located on the push bar to move the backrest.

Angle adjustable with fixed position

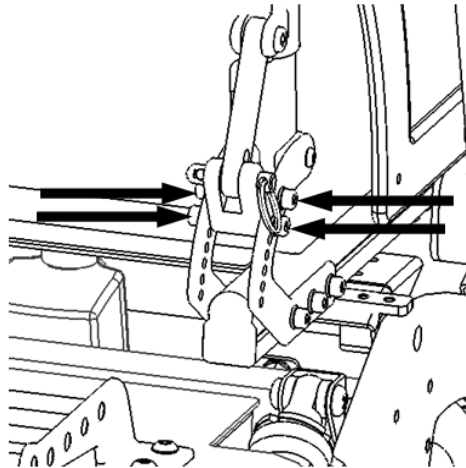


Figure 14

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

OPEN-END WRENCH



10 mm

2.9 Legrest angle



Average needed time:
<1 min



Difficulty level:
Easy

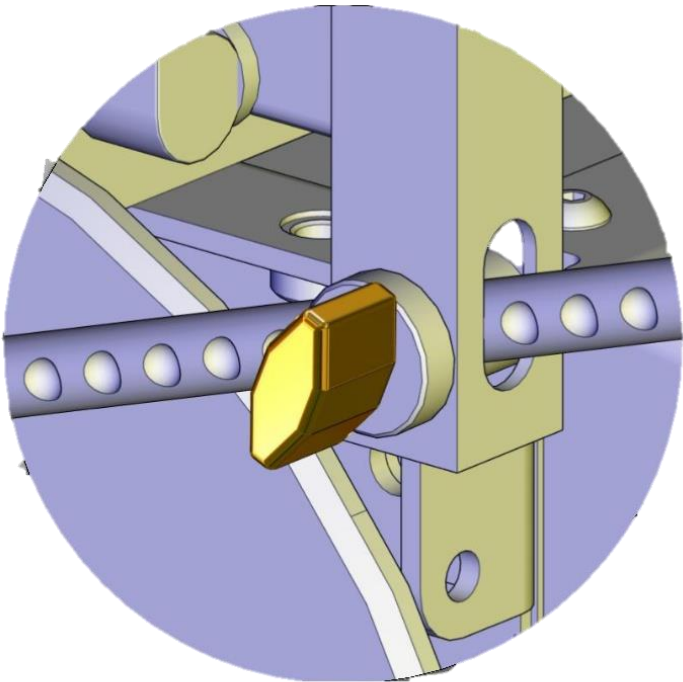


Figure 15

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

2.10 Default position

Default position means that all adjustable parts of the wheelchair are set in the most stable and safe configuration

ADJUSTABLE PARTS	VALUE	NOTES
Seat angle	0°	
Backrest angle	90°	
Legrest angle	75°	or the minimum possible value
Seat height	0 cm	

Table 1

3 USE OF THE PRODUCT

3.1 Control system of the wheelchair



Figure 16

FUNCTION	DESCRIPTION
On-Off	Use this function to turn on and off the wheelchair. Don't use this function to stop the wheelchair unless it is an emergency.
Horn	
MODE	Use this function to navigate all working mode of the wheelchair. For example it is possible to choose between drive and seat function.
PROFILE Speed increase/decrease	As default in the wheelchair they are saved some different drive profile for the use indoor and outdoor. Use the function PROFILE to change different types of profiles: they are sorted from the more indoor ones to the more outdoor ones. For each profile it is possible to change the speed.

Use the joystick to control the wheelchair.

DIRECTION: point the joystick into the direction you want to operate.

SPEED: the joystick is proportional. The further you deflect the joystick from the centre, the faster the wheelchair will act.

STOP: when you release the joystick, it will return to the centre causing the wheelchair to stop. If you are moving the joystick and you move it in the opposite direction and the release it, the wheelchair will stop immediately.



Before starting to use the wheelchair be sure the joystick goes back to the neutral position when released. Ensure the wheelchair operates smoothly and there is no unusual noise, vibrations or any other difference.

3.2 Manual brake release lever

In case of necessity it is possible to manually move the wheelchair.

First of all, you have to turn off the wheelchair.

Then you can act on the release lever shown in Figure.

When the brakes are released. it is not possible to drive the wheelchair.

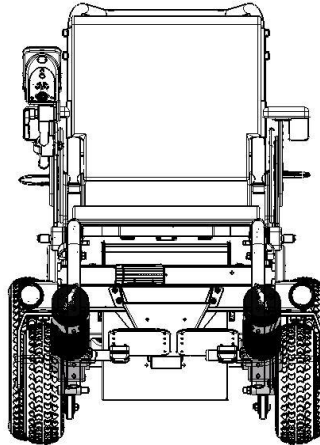


Figure 17



WARNING

When the brakes are released never use the wheelchair on a slope or a wet surface.

Don't operate the brake release without the presence of an assistant.



WARNING

The drive system should be re-engaged before an occupant is left unattended or attempts to operate the wheelchair.



WARNING

Always act on both left and right manual release levers.

3.3 Powered functions



WARNING

Operating these functions changes the centre of gravity and increases the risk of tipping over.

Always drive in low speed when the seating system is not in the default position. Use these functions only on horizontal plane.


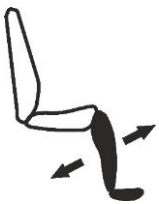
To enter seating mode use MODE function of the joystick.


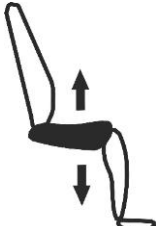
With VR2 system a led will turn on to indicate the seat function in use.

With Rnet system a wheelchair will appear on the screen of the joystick.

To select the desired function move the joystick left or right.

The number and the type of available function may change according to the specific customization of each wheelchair.

	MOVE UP Move the joystick forward while you are in seating mode and the desired function is selected	MOVE DOWN Move the joystick rearward while you are in seating mode and the desired function is selected
BACKREST 	Move forward the backrest	Recline the backrest
LEGRESTS BOTH 	Low both legrests	Elevate both legrests

<p>TILT</p> 	<p>Move forward the seat</p>	<p>Tilt the seat</p>
<p>LIFT</p> 	<p>Rise the seat</p>	<p>Lower the seat</p>

3.4 Main switch

Use the main switch to connect and disconnect the batteries from the power module. The switch also has the function of protecting the wheelchair from overloaded current and short circuit.

If the power chair suddenly stops, use the switch to connect again batteries to the power module and turn on again the wheelchair. **If the problem still continues, it means that there is some electric fault.**

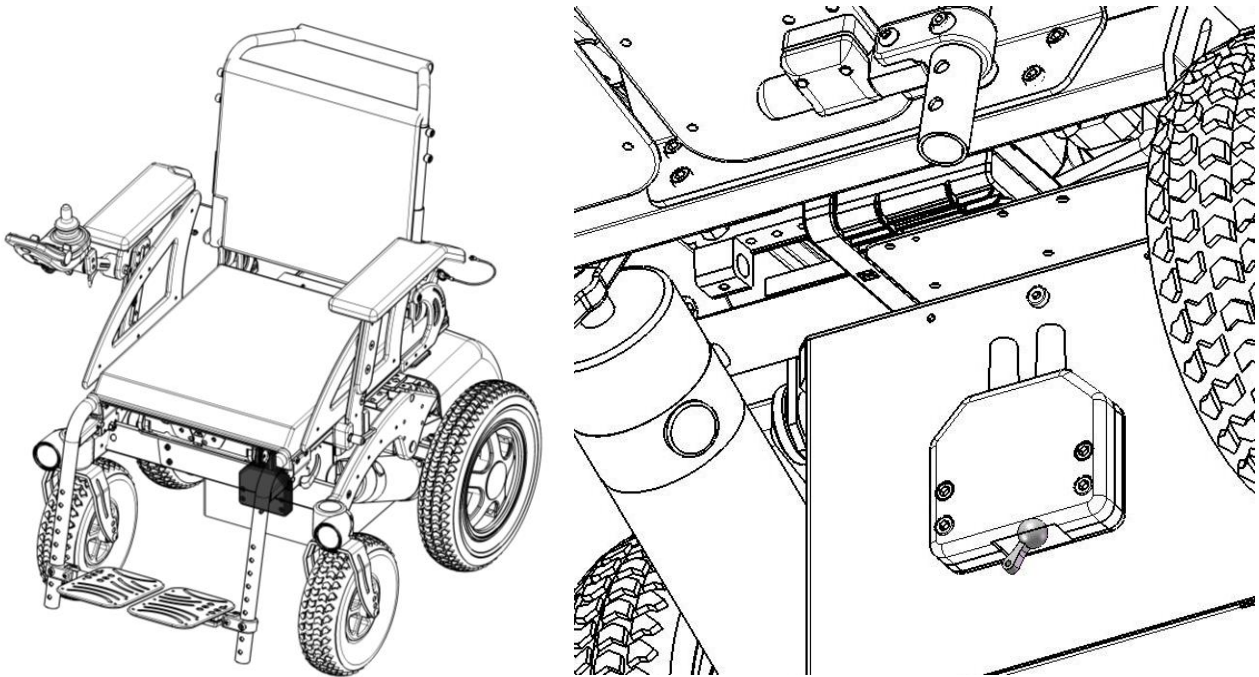


Figure 18



If the switch operates, often this means that there is a major electrical fault. The cause of fault should be checked carefully.



For more information, please contact the manufacturer.

3.5 Battery charging

In order to recharge batteries, use only the provided charger or one recommended by the manufacturer. The manufacturer is not responsible for any damage to person or objects resulting from the use of non-original product.



CHARGER SPECIFICATION

24 V -MIN 6 A MAX 10 A - Charge profile for AGM batteries - Input 100-240 V AC 50-60 Hz - IEC 60601-1 compliant

- Connect the power cord to a power supply 230 V.
- Connect the cable to the joystick as shown in Figure.



Figure 19

- When batteries are loaded unplug the power cord and the battery cable from the joystick.



RUNNING-IN PERIOD

Typically, batteries are able to offer 100% performance after about 15-20 cycles.



BATTERIES SPECIFICATION

24 V - 86 Ah - about 260x170x205 (h) mm - about 24 kg

WHEN AND HOW IT IS NECESSARY TO CHARGE BATTERIES?



It is very important to charge batteries every day, even if they are not completely discharged. Each battery is subject to a normal self-discharge, so batteries that are not used for long time will discharge by itself.

It is very important to don't let batteries uncharged for long time.

It is very important to complete every cycle of charging

Charging time is influenced by multiple factors such as remaining battery power, battery state of aging and temperature. However, the approximate charging time is about 12 hours.



Battery charging should be done in well ventilated environments. Never charge in bathroom or wet room.

When the charger is connected it is not possible to drive the wheelchair. Don't use the wheelchair during the charge.



SHOCK HAZARD

Check if charger requirements data matches with the network power (voltage, frequency)



RELEASE DANGER

Any impact to the batteries could cause a loss of fluids. Please pay special attention.



It is not possible to use the device during the battery charging.



BATTERIES DISPOSAL

To properly recycle the batteries follow instructions provided by your local waste disposal service.

3.6 Transport and storage

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

If it is necessary to transport the wheelchair to facilitate operation follow these instructions.

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

- Turn off the wheelchair.
- Turn off the main switch. See section 3.4.



WARNING

If you transport the wheelchair with motors disengaged, the wheelchair is free to move. This may result in a hazardous situation.

The wheelchair can be transported in the storage compartment of the vehicle even without any package. The unoccupied wheelchair can be also shipped via air. If it is necessary to ship the wheelchair 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 wheelchair from any hurts. When inserting the wheelchair into the package protect any protruding parts with some foam or similar.

3.6.1 Batteries removal

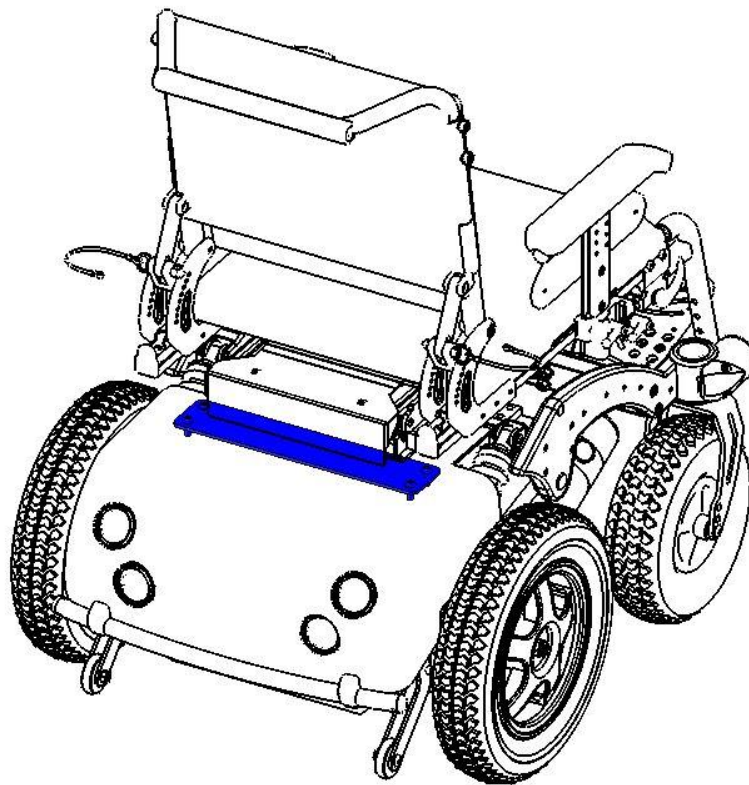


Figure 20

- Unscrew the screws shown in figure.
- Remove the cover.

ALLEN WRENCH



5 mm

- Remove traction wheels. See section 4.3.1 .

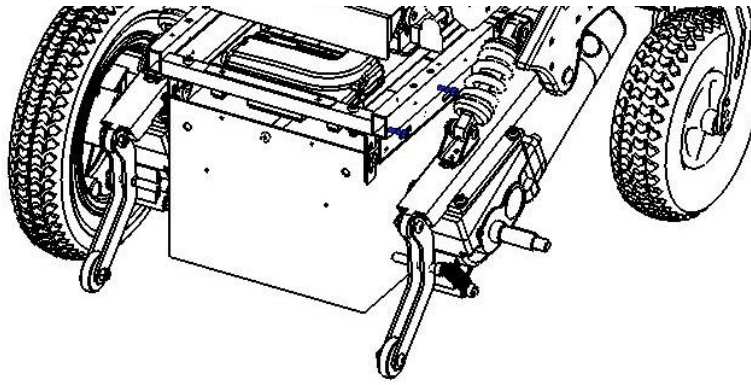


Figure 21

- Unscrew the screws shown in figure.
- Repeat operation for both left and right side of the wheelchair.

ALLEN WRENCH



5 mm

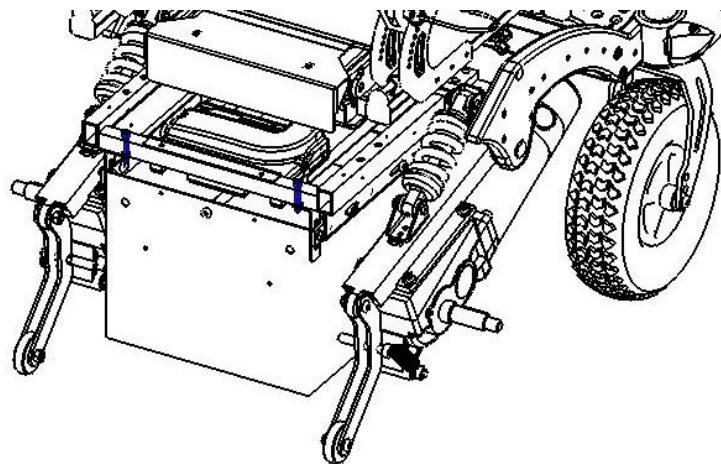


Figure 22

- Unscrew the screws shown in figure with their nuts.

ALLEN WRENCH



5 mm

OPEN-END WRENCH



10 mm

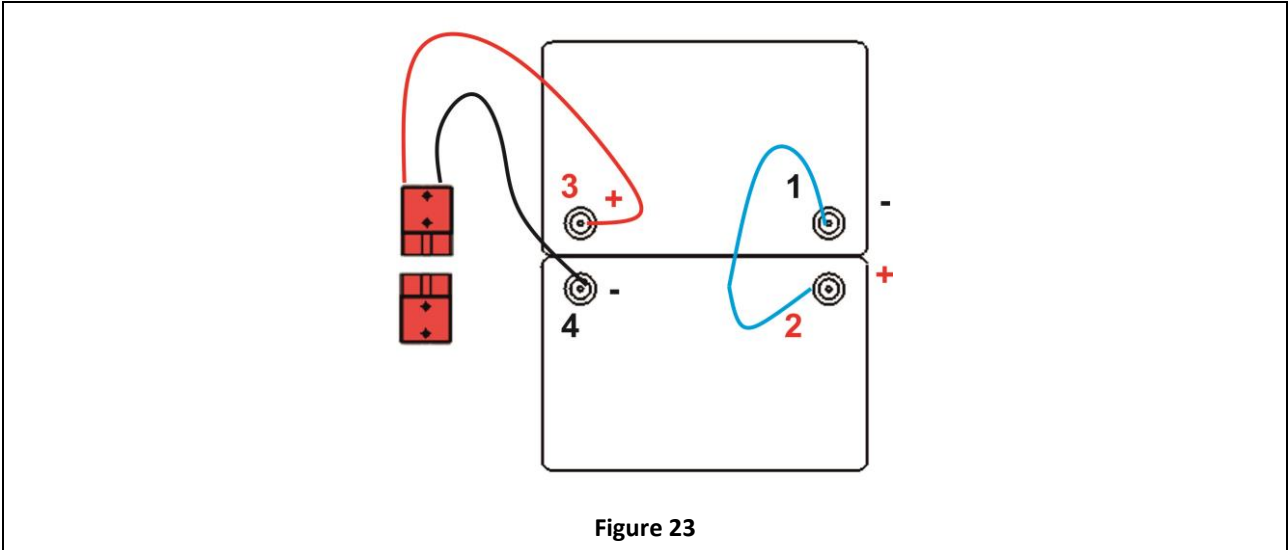




Figure 23

- Unplug wires from batteries.


ALLEN WRENCH




5 mm


 **BATTERIES SPECIFICATION**

2x 12 V 86 Ah 170x260x205 (h) mm – F16 – 24.2 kg – Sealed lead Batteries

 Contact the manufacturer to have more information about wiring diagram.

 **RELEASE DANGER**

Any impact to the batteries could cause a loss of fluids. Please pay special attention.

 **BATTERIES DISPOSAL**



To properly recycle the batteries follow instructions provided by your local waste disposal service.

4 MAINTENANCE

Please remind that the wheelchair is intended exclusively for the carriage of seated people. 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 wheelchair. 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
	<u>Any work on the wheelchair must be performed by an authorized service centre.</u>
	INFORMATION
	It is not possible to perform any maintenance on batteries. It is only possible to substitute them.

4.1 Cleaning

To clean the product do not use high-pressure water spray devices. For plastic and metal parts use a soft cloth dampened with mild detergent. For the upholstery, linings, seat and back covers use warm water and mild detergent. Do not use stain removers, solvents, acids, etc. Clean all parts of the backrest separately: separate fabric parts from the metal sheet. In order to separate them, act on the straps on the back of the backrest and remove padding. Open the zipper located on the back of the padding and remove the internal padding.

METAL SHEET	Simply use a cloth moistened with a neutral detergent.			
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.			

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 centre.

Operation	Frequency	Type of operation
Check if motors are correctly locked. See section 3.2.	Before each use	B - Assistant
Check that no wires are in the way for the movements of the chair	Before each use	B - Assistant
Check the charge of batteries	Daily	A - User
Clean the wheelchair	Weekly	B - Assistant
Check if the lever of the main switch works correctly	Weekly	B - Assistant
Check tire usury	Monthly	B - Assistant
Check brake release lever	Monthly	B - Assistant
Check aging of batteries	Monthly	C - Service

4.3 Tire puncture

4.3.1 User information

Traction wheel

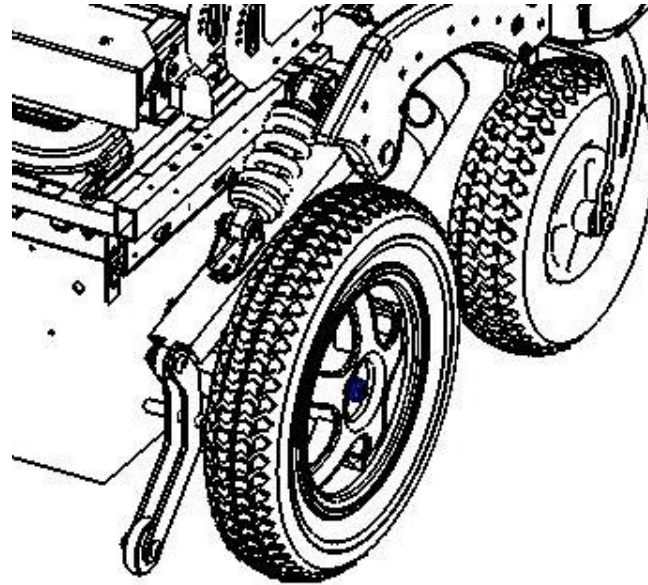


Figure 24

- Lift the wheelchair.
- Unscrew the nut shown in figure.
- Remove the wheel.

OPEN-END WRENCH

19 mm



Castors wheel

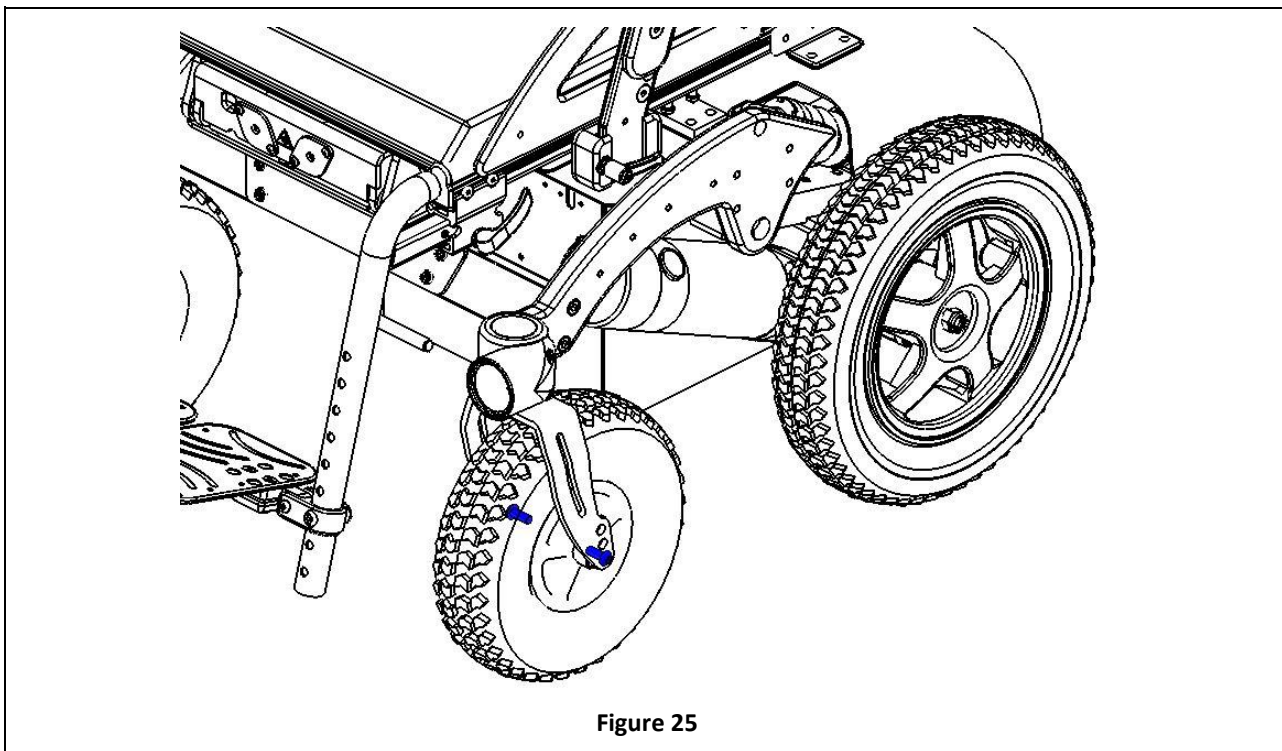


Figure 25

- Lift the wheelchair.
- Unscrew the screws shown in figure.
- Remove the castor.

ALLEN WRENCH



6 mm



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

4.4 Batteries replacement

- Remove batteries. See section 3.6.1 .
- Mount new batteries following instructions in reverse order.

ALLEN WRENCH



4 mm



BATTERIES SPECIFICATION

24 V - 86 Ah - about 260x170x205 (h) mm - about 24 kg

4.5 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 centre.

5 SPECIFICATIONS

Maximum safety slope (uphill, downhill, lateral)	10°
Expected lifetime [years]	5
Class [EN 12184]	C
Range [ISO 7176-4]	>=35 km The distance will be reduced if the wheelchair is used frequently on slopes, rough ground or to climb kerbs.
Measured sound power level - 1 meter distance	55 dB
Recommended tire pressure [kPa]	Traction wheels: 200 kPa; Castors: 200 kPa.
Standard compliance	ISO 14971: 2007 EN 12184: 2014 ISO 7176-6 ISO 7176-8 ISO 7176-9 ISO 7176-14 ISO 7176-16
	The product is compliant with mentioned standards. All variants and non original components are not tested nor approved by the manufacturer.
Motors	2 x 350 W – 24 V
Degree of protection	IP X4
Maximum climbable obstacle height	100 mm
Ground clearance	MIN 80 mm
Maximum ground unevenness	50 mm

It is possible to use the wheelchair when the temperature is between -10 °C and +40 °C.

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

DESCRIPTION	VALUE
Overall length with legrest	MIN 100.0 cm MAX 110.0 cm
Overall width	66 cm
Folded length	N.A.
Folded width	N.A.
Folded height	N.A.
Total mass (the weight may change significantly according to the configuration of the wheelchair)	MAX 125 kg
Dynamic stability	10°
Static stability downhill	15°
Static stability uphill	15°
Static stability sideways	15°
Seat plane angle	MIN 0° MAX 50°
Effective seat depth	MIN: 30.0 cm MAX: 54.0 cm
Effective seat width	MIN: 36.0 cm MAX: 48.0 cm
Seat surface height at front edge	MIN: 47.5 cm MAX: 50.0 cm
Backrest angle	MIN: 90° MAX: 135°
Backrest height	MIN: 45.0 cm MAX: 55.0 cm
Footrest to seat distance	MIN: 22.5 cm MAX: 25.0 cm

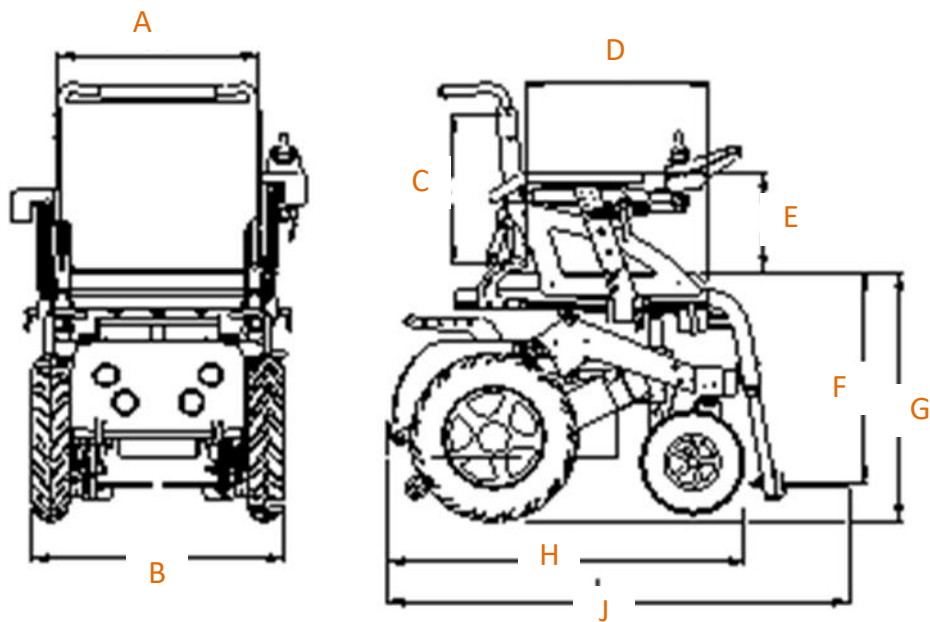
Armrest to seat distance	MIN: 22.0 cm MAX: 28.5 cm
Minimum turning radius [ISO 7176-5]	75 cm
Turn around distance [ISO 7176-5]	130 cm
Minimum turning radius [ISO 7176-5]	75 cm
Minimum braking distance from max speed	100 cm
Leg to seat surface angle	MIN 90° MAX 170°
Horizontal location of axle	REAR - POSTERIORE

5.1 Maximum user weight

Seat width	MAX
36 cm	50 kg
38 cm	75 kg
40 cm	100 kg
42 cm	100 kg
44 cm	100 kg
46 cm	100 kg
48 cm	100 kg

Table 2

5.2 Dimensions



A	360 mm	380 mm	400 mm	420 mm	440 mm	460 mm	480 mm
B	660 mm						
C	450 mm 500 mm 550 mm						
D	300 mm – 540 mm						
E	180 mm – 340 mm						
F	225 mm – 250 mm						
G	475 mm – 500 mm						
H	790 mm						
J	1100 mm						

6 WARRANTY TERMS

Definitions

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

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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]
Wheelchairs	24
Wheelchair parts and accessories (excluding batteries)	24
Batteries	6

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.

6.1 Serial number

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

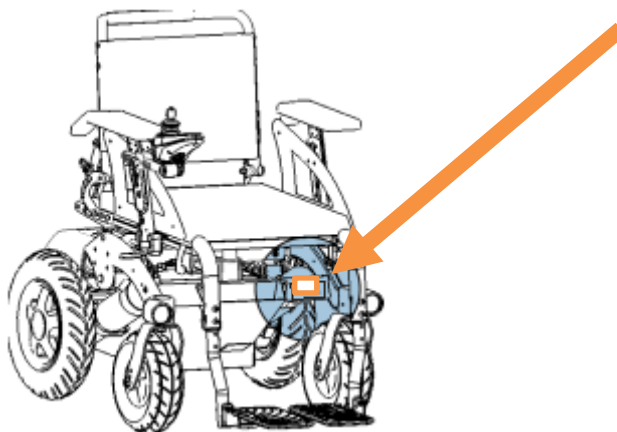


Figure 26

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