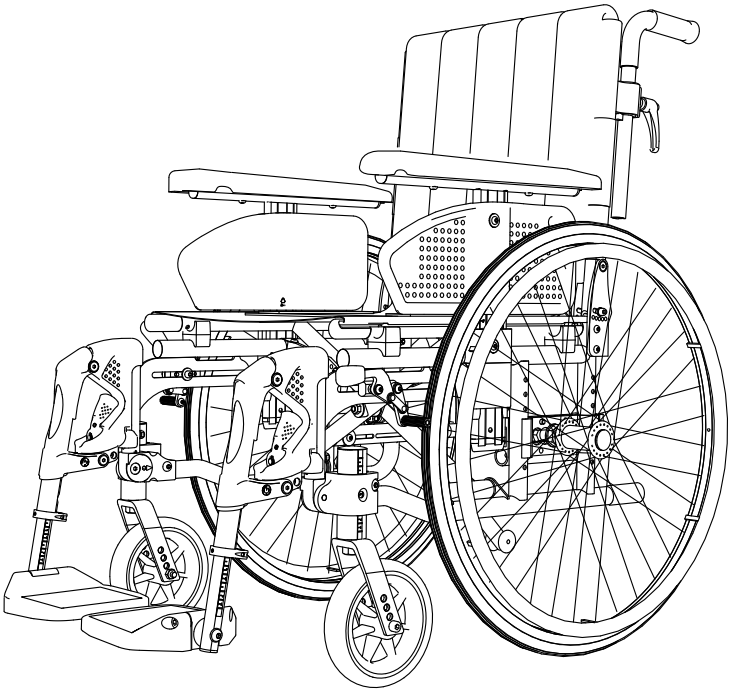
MANUAL WHEELCHAIR



Exigo 30

User manual

EN

Breezy®

MB3197-EN

INTRODUCTION

Congratulations on your choice of new wheelchair!
Quality and function are key concepts for all wheelchairs in the Sunrise series.
Your feedback can help us to produce an even better product.
For your own safety, and in order to get the most out of your new wheelchair, we recommend that you read this user manual thoroughly before using the chair.

Intended use and the intended user environment

Exigo 30 is designed for both indoor and outdoor use.

The user

This wheelchair has been developed for persons with disabilities and as an aid for those who have problems with walking. Users who can control the wheelchair by rolling, steering and braking it themselves can use the wheelchair without an assistant. The maximum user weight is 135 kg. The user must be familiar with the contents of the user manual before driving the wheelchair.

Adjusting the wheelchair

The average wheelchair user does not exist. This is why Sunrise wheelchairs can be adjusted according to the specific needs of the user. Settings mentioned in chapter Using the wheelchair can be carried out by the user. All other adjustments mentioned in this User manual are to be performed by qualified personnel or in consultation with qualified personnel.

If you are visually impaired, this document can be viewed in PDF format at www.SunriseMedical.com or alternatively is available on request in large text.

For information about product safety notices and product recalls, go to www.sunrisemedical.eu

Please contact your local, authorised SUNRISE MEDICAL dealer if you have any questions regarding the use, maintenance or safety of your wheelchair. In case there is no authorised dealer in your area or you have any questions, contact Sunrise Medical either in writing or by telephone.

The management system of SUNRISE MEDICAL is certified to ISO 13485 and ISO 14001.

CE As the manufacturer, SUNRISE MEDICAL, declares that this product conforms to the Medical Device Regulation (2017/745).

UKCA As the manufacturer, SUNRISE MEDICAL, declares that the product conforms to the UK Medical Devices Regulation 2002 No. 618

INTRODUCTION

NOTE:

General user advice.

Not following these instructions may result in physical injury, damage to the product or damage to the environment!

Notice to the user and/or patient: Any serious incident that has occurred in relation to the device should be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

B4Me special adaptations

Sunrise Medical strongly recommends that in order to ensure that your B4Me product operates, and performs as intended by the manufacturer; all the user information supplied with your B4Me product is read and understood, before the product is first used.

Sunrise Medical also recommends that the user information is not discarded after reading it, but it is kept safely stored for future reference.

Medical Device Combinations

It may be possible to combine this Medical device with one or more other Medical Device or other product. Information on which combinations are possible can be found at www.SunriseMedical.co.uk. All combinations listed have been validated to meet the General Safety and Performance Requirements, Annex I Nr. 14.1 of the Medical Device Regulation 2017/745.

Guidance on the combination, such as mounting, can be found at www.SunriseMedical.co.uk

Note:

Please note that driving a wheelchair requires sufficient cognitive, physical and visual skills. The user must be able to assess the effects of actions during the operation of the wheelchair and, if necessary, to correct them. These capabilities and the safe use of the additionally attached components cannot be assessed by Sunrise Medical as a manufacturer. We cannot accept any liability for any damage resulting from this.

Please refer to the operating instructions of the wheelchair and the additionally mounted components. Instruct the user in the safe use of the wheelchair and the additionally mounted components. Inform users of specific warnings that need to be read, understood, and respected.

CONTENTS

THE WHEELCHAIR'S PARTS

In order to be able to read and understand this manual it is important that you familiarise yourself with the most common terms we use for the different parts of the wheelchair.
Have a look at the following drawing and note the relevant parts on your wheelchair.
The equipment on your wheelchair may vary somewhat from the illustration below.

A. Back with back cover
B. Armrest
C. Clothes protector
D. Seat with cushion
E. Leg support
F. Frame
G. Footplate
H. Pushing handle
I. Driving wheel
J. Hand rim
K. Brake
L. Wheel block
M. Bearing housing castor
N. Castor wheel fork
O. Castor wheel

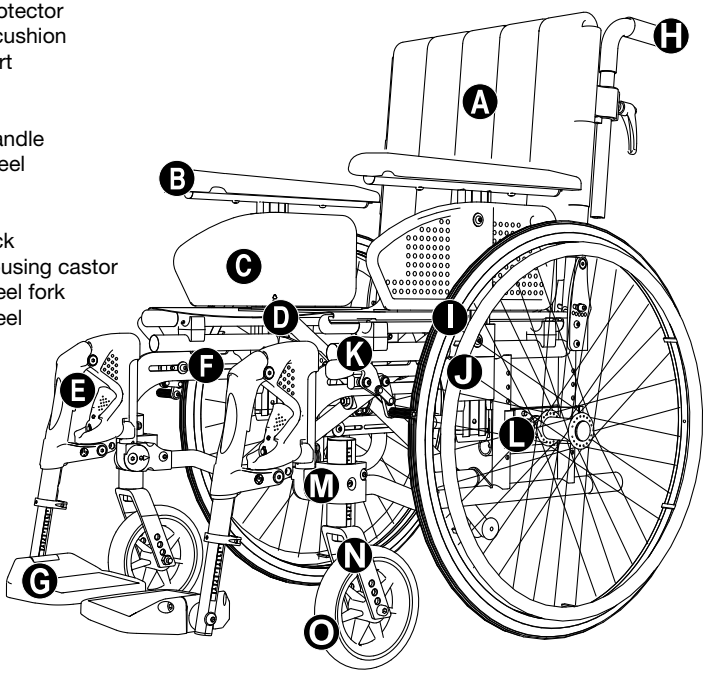


Figure 1

Assembly *Figure 2*

The standard version is delivered complete. All you need to do is unfold the wheelchair and fit the leg supports where necessary.

Unfolding the wheelchair *Figure 3*

To unfold the wheelchair, press down with the flat of your hand on the cover by the seat tubing.

Note!
Do not hold around the seat tubing as your fingers can get caught.

Put the seat cushion (accessory) into position ensuring that it sits properly on the seat fabric.

Folding the wheelchair *Figure 4*

Remove the seat cushion (accessory) and pull up the footplates or remove the leg supports before folding the wheelchair.

Take hold of the seat cover and lift straight up. The chair will fold together. Check that the back cover has folded backwards.

Transport

The wheelchair is suitable for land and/or air transport. Parts of the wheelchair that can easily be detached should be removed when transporting the wheelchair.

- Armrests
- Legrests
- Rear wheels

Once the wheelchair is in the vehicle, it must be secured with an ISO 10542 approved tie-down system that is suited to the weight of that particular wheelchair including any options.

See “Safety in cars” on page 27 for using Exigo 30 as a passenger seat in a motor vehicle.

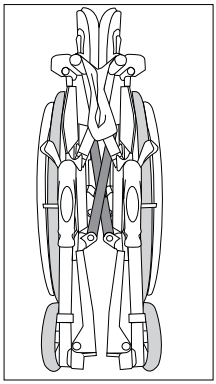


Figure 2

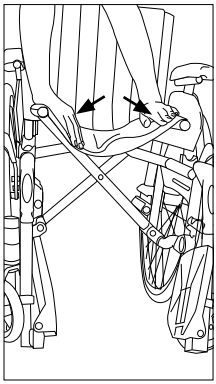


Figure 3

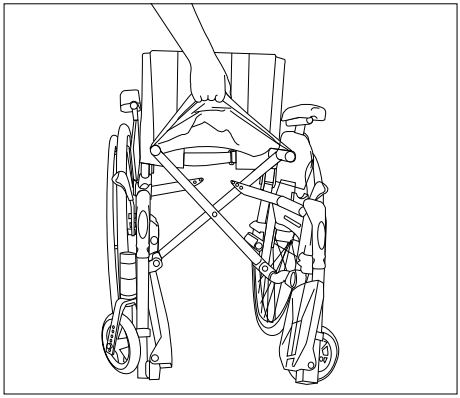


Figure 4

AREA OF APPLICATION

Indications

The varieties of fitting variants, as well as the modular design, mean that it can be used by those who cannot walk or have limited mobility because of:

- Paralysis
- Loss of extremity (leg amputation)
- Extremity defect deformity
- Joint contractures/joint injuries
- Illnesses such as heart and circulation deficiencies, disturbance of equilibrium or cachexia, Neurological disease patterns, Muscle dystrophy, Hemiplegia as well as for elderly people who still have strength in the upper body.

Contraindications

The wheelchair shall not be used without attendant in case of:

- Perception disorder
- Imbalance
- Loss of both arms, if not supported by a caregiver
- Joint contracture or joint damage on both arms
- Seating disability

Quick-release *Figure 5*

The wheelchair has a quick-release catch on the driving wheels. Press the button in the middle of the driving wheel in order to remove or attach the wheel.

NB
Check that the wheel is properly secured by ensuring that the button pops out approximately 5 mm when the wheel bolt is completely in the casing.

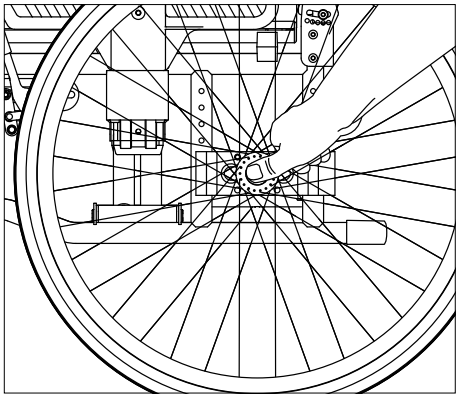


Figure 5

Height adjustable pushing handle *Figure 6*

The pushing handle is adjusted by loosening the locking handle whilst moving the pushing handle upward or downward to the desired height. Re-tighten the locking handle.

You can remove the pushing handle completely by loosening the locking handle, pulling together the spring pin (6A) and pulling up the pushing handle.

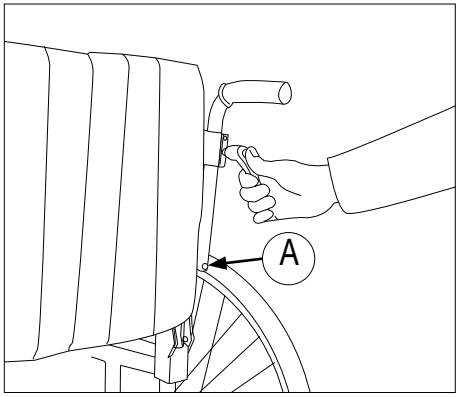


Figure 6

Armrests, removing and fitting *Figure 7*

The armrests can be removed by lifting them straight up.

⚠ **Warning**!
When removing the armrest be aware of the potential risk of getting your fingers or clothes caught in the wheel.

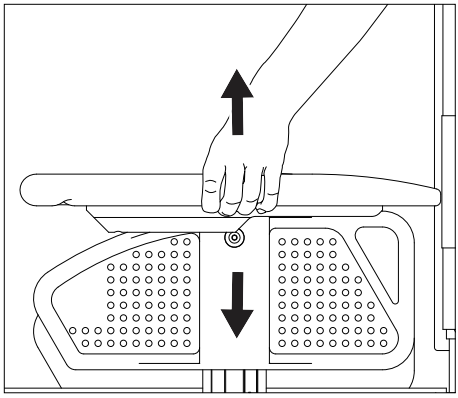


Figure 7

Swing out/Attach/Remove the leg supports *Figures 8 and 9*

The leg supports can be swung in/out and removed for easier movement.
The supports can be released by twisting the handle (8A) inwards or outwards when the leg support is swung.

After the leg support has been swung to the side, it can be lifted straight up and completely removed if desired. In order to attach it again, carry out these steps in reverse order, and the handle will automatically lock.

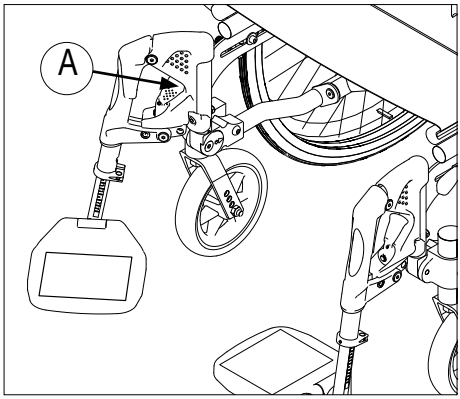


Figure 8

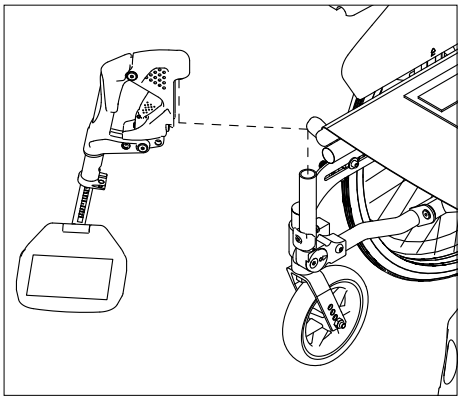


Figure 9

Full footplate (Standard on Exigo 30 X wheelchairs) *Figure 10*

The full footplate can be split in two and tipped up for transfers. Ensure that the footplates lock in place when you put them back down.

The footplates lock most easily into place if they are angled right in to each other when you put them Back down (see figure 10).

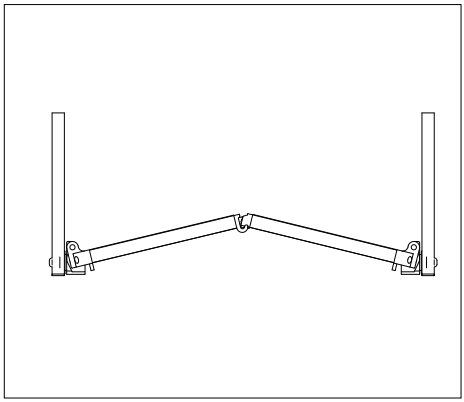


Figure 10

Swing out/Attach/Remove the leg supports (Full footplate) *Figures 11 and 12*

The leg supports can be swung in/out and removed for easier movement.
The supports can be released by twisting the handle (11A) inwards or outwards when the leg support is swung.

After the leg support has been swung to the side, it can be lifted straight up and completely removed if desired. In order to attach it again, carry out these steps in reverse order, and the handle will automatically lock.

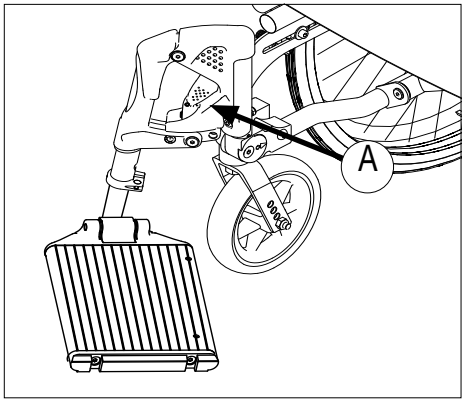


Figure 11

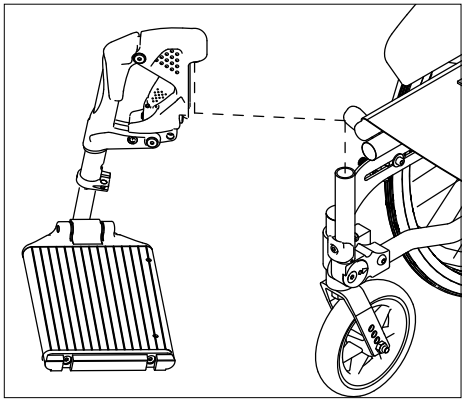


Figure 12

Using the brakes *Figure 13*

Push the brake lever forward and down when you want to lock the brake.

⚠ **Warning!**
The brake is only designed to hold the chair when it is stationary. Under no circumstances should it be used as a driving brake.

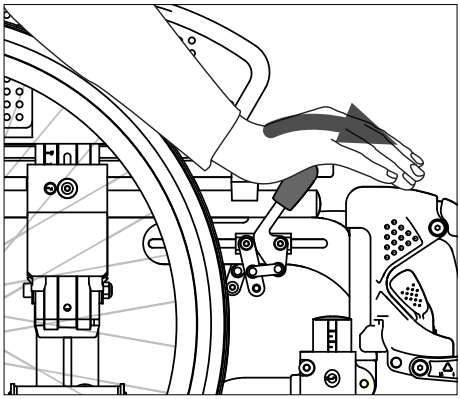


Figure 13

Anti-tip stabiliser/Tipping bar *Figure 14*

The anti-tip stabiliser is put into position by pulling it down and turning it in a downward direction simultaneously. The anti-tip stabiliser is adjusted as standard with a clearance to the base that makes it possible to negotiate door thresholds etc.

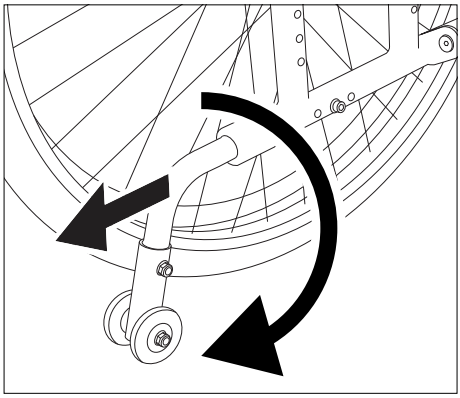


Figure 14

Anti-tip stabiliser/Tipping bar *Figure 15*

The anti-tip stabiliser is put into position by pulling it down and turning it in a downward direction simultaneously. The anti-tip stabiliser is adjusted as standard with a clearance to the base that makes it possible to negotiate door thresholds etc.

The tipping bar is accessible when the anti-tip stabiliser is up or down.

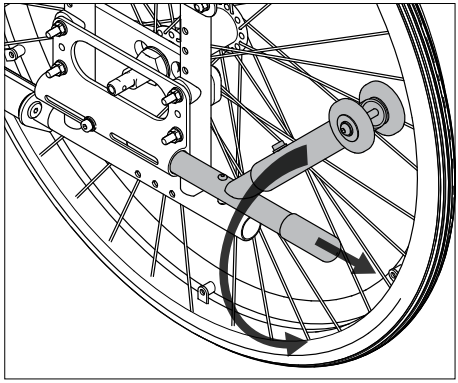


Figure 15

Moving in and out of the wheelchair

Figures 16, 17 and 18

- Activate the brakes
- Swing the leg supports away, where applicable
- Sit far forward on the chair before moving to another chair, bed etc.

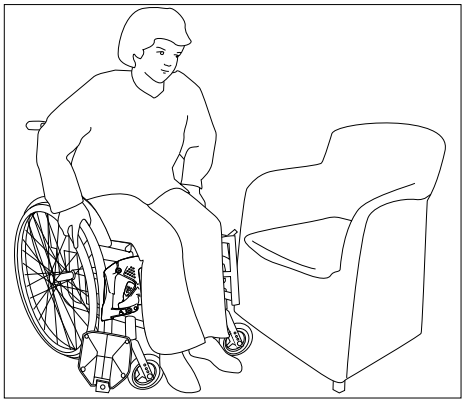


Figure 16

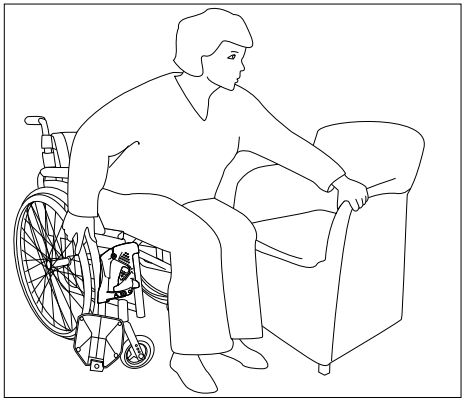


Figure 17

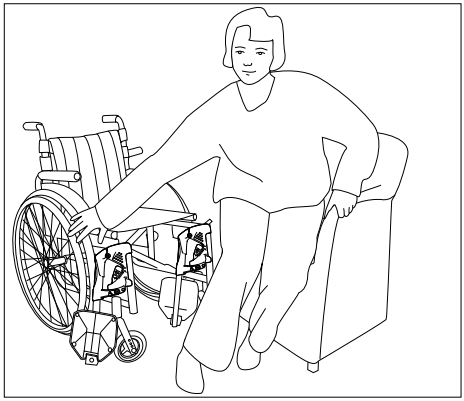


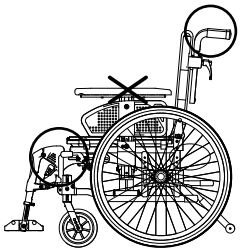
Figure 18

Negotiating obstacles, stairs

Figures 19 and 20

If the wheelchair is being lifted up/down stairs with the user sitting in it, the recommended lifting points should be used. These are marked on the product.

The lifting points are the pushing handles and the leg supports.



⚠ **Warning**!
Do not lift the wheelchair by the armrests!
Do not lift the wheelchair by the legrests if the wheelchair is equipped with angle adjustable legrests!

Note! For height adjustable pushing handles, ensure that the handle is locked before lifting.

In order for assistants to have a better lifting position they can alternatively lift from each side of the chair.

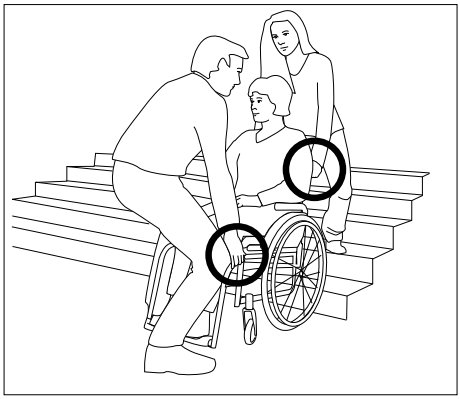


Figure 19

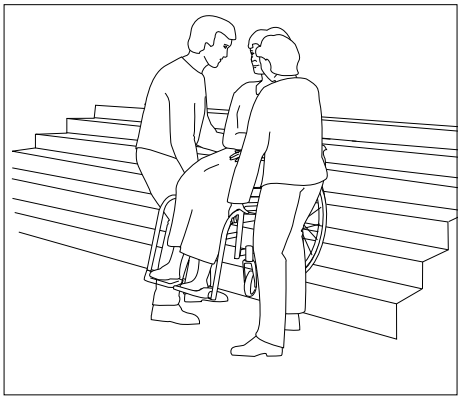


Figure 20

Negotiating obstacles, the kerb

Figure 21

When negotiating the kerb etc., swing the anti-tip stabiliser up. Then place one foot on the tipping bar whilst steering with the pushing handles.

Steep terrain
For frequent use in undulating terrain, we recommend that a separate brake be fitted for the assistant.

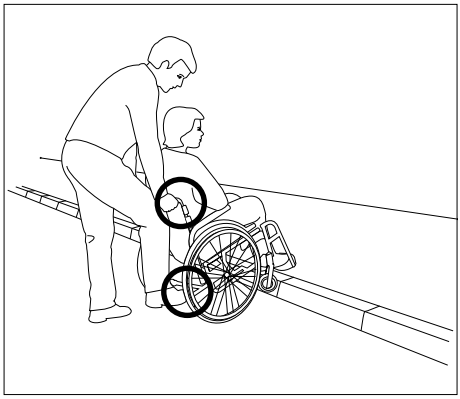


Figure 21

Exigo 30 has measuring scales that help you to adjust the chair accurately

The following adjustments can be carried out quicker and more accurately using the different measuring scales:

- **Seat height – back** Page 13 and 15
  The scale shows the seat height in relation to the driving wheels.

- **Centre of gravity** Page 16
  The measuring scale is numbered from 1 to 5, with 1 as the best anti-tipping position.

- **Seat height – front** Page 13, 14 and 17
  Stepless scale from 1 to 9 to ensure equal adjustment on both castor wheels.

- **Angle of castor wheels** Page 17
  Stepless scale to ensure equal adjustment on both castor wheels.

- **Back height** Page 18
  The scale shows the back height from 35 cm to 45 cm.

- **Back angle** Page 18
  The scale shows the back angle from –5° to 16°.

- **Anti-tip stabiliser** Page 22
  The measuring scale is numbered from 1 to 5, in order to adjust the anti-tip stabiliser in relation to the driving wheel position.

- **Leg support length** Page 20
  Stepless scale from 1 to 9 to ensure equal adjustment on both leg supports.

- **Armrest height** Page 22
  The scale shows the distance from the seat to the top of the armrest. From 18 cm to 24 cm for standard armrests and 22 cm to 29 cm for high armrests.

Adjusting the seat height

The seat height can easily be adjusted. You can also change the angle of the seat by having different heights at the front and back. By changing the angle of the seat, you can achieve better stability and seating comfort. The different seat height adjustments also effect the ability to negotiate obstacles and rolling properties of the wheelchair.

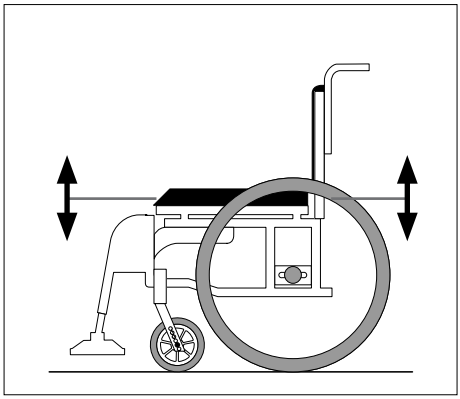


Figure 22

Adjusting the seat height – back

Figures 21 and 22

The seat height at the back can be adjusted using the methods below.

Moving the wheel block up or down
Moving the wheel block up, lowers the seat. Moving the wheel block down, raises the seat. See page 15.

Changing to bigger or smaller driving wheels
A bigger driving wheel increases the seat height, whilst a smaller wheel decreases the height. The table on page 31 shows which seat heights can be achieved by changing to different sizes of driving wheel.

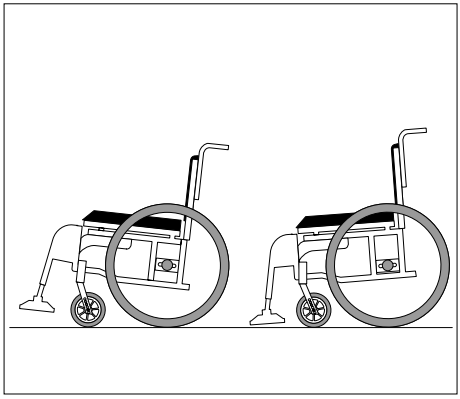


Figure 23

Adjusting the seat height – front

Figures 24

The seat height at the front can be adjusted using the methods below.

Moving the bearing housing of the castor wheel up or down (see page 17).
By moving the bearing housing up, the seat is lowered, and by moving it down, the seat is raised.

Moving the castor wheel to a higher or lower position in the castor wheel fork.
By moving the castor wheel to a higher position in the castor wheel fork (24A), the seat is lowered, and by moving the castor wheel to a lower position, the seat is raised.

Changing to bigger or smaller castor wheels
A smaller castor wheel lowers the seat height, whilst a bigger castor wheel raises the seat height. By changing the castor wheel, a smaller castor wheel will give a smaller turning radius, and thereby increase the ability to negotiate obstacles in narrow spaces, and will also give more room for the legs. A larger castor wheel will increase the turning radius but will also improve the ability to negotiate obstacles on uneven surfaces.

Changing to a longer or shorter castor wheel fork
A shorter castor wheel fork lowers the seat height, gives a smaller turning radius, and thereby increases the ability to negotiate obstacles in narrow spaces, and will also give more room for the legs. A longer castor wheel fork increases the seat height, and allows several alternative castor wheels to be used.

The table on page 31 shows which seat heights can be achieved by using the methods above.

Note! Remember to adjust the angle of the castor wheel when changing the seat height, and to adjust the brakes when changing the seat height at the back.

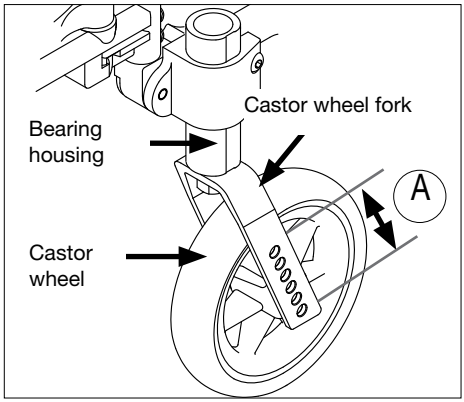


Figure 24

Adjusting the seat height – back

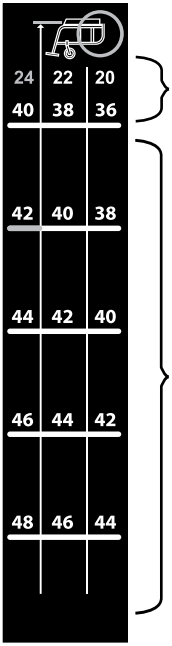
Figures 25 and 26

On the wheelchair frame you will find a measuring scale (26A) showing the seat height in relation to the size of the driving wheel

- Remove the driving wheel
- Loosen the screw (26B) with a 27 mm wrench and unscrew until it stops
- Pull the inner and outer wheel block slightly apart
- Adjust the wheel block step-by-step up or down in accordance with the scale
- Squeeze the inner and outer wheel block together

Note! It is important to ensure that the pins in the wheel block go into the holes in the frame and that the casing lies horizontally in the track before tightening the screw.

Find the dimension of your driving wheel at the top of the scale. The column under the wheel dimension shows where to place the wheel block in order to achieve the various seat heights.



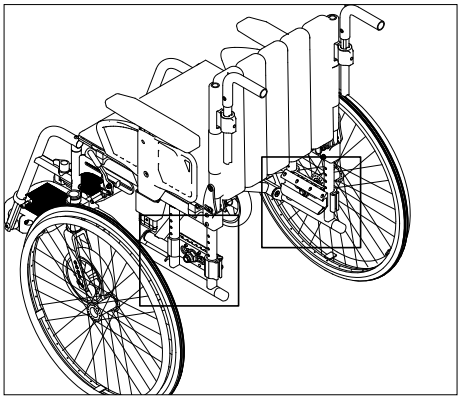


Figure 25

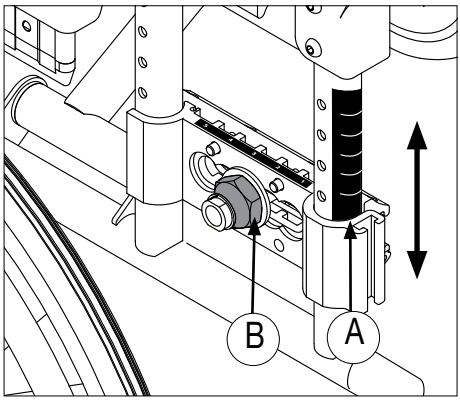


Figure 26

Adjusting the centre of gravity

Figures 27 and 28

The driving wheel can be adjusted to five different positions in relation to the centre of gravity. This is shown on the scale (27A) on the wheel block. Position 1 represents the best anti-tipping position.

- Loosen the screw (27B) with a 28 mm wrench, and unscrew until it stops.
- Adjust the casing of the driving wheel forward or backward (Figure 28).

Note!
It is important to ensure that the pins in the wheel block go into the holes in the frame and that the casing lies horizontally in the track before tightening the screw.

⚠ **Warning**!
Remember to adjust the brakes and the anti-tip stabiliser after you have adjusted the seat height and centre of gravity.

Note!
When changing the height and centre of gravity, the driving wheels should be adjusted first, followed by the height and angle of the castor wheels.

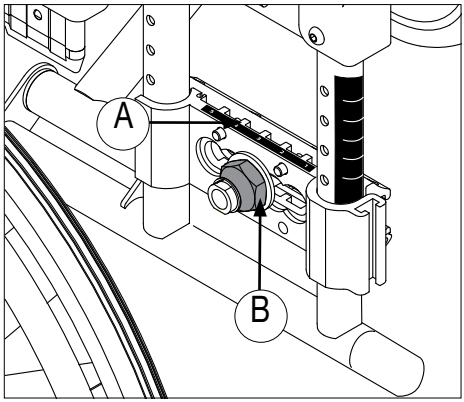


Figure 27

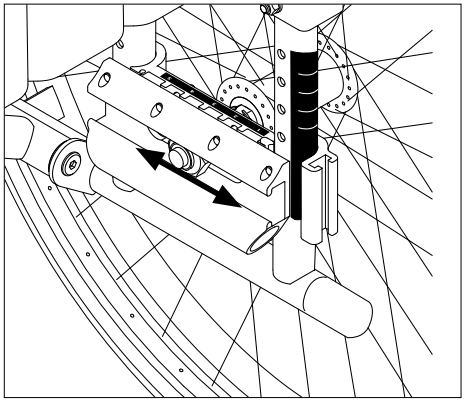


Figure 28

Adjusting the seat height - front

Figures 29, 30 and 31

When adjusting the height of the wheelchair, the height of the driving wheels should be regulated before the angle. There is a scale for adjusting both the height and angle of the castor wheels, which helps to achieve equal measurements on both castor wheels.

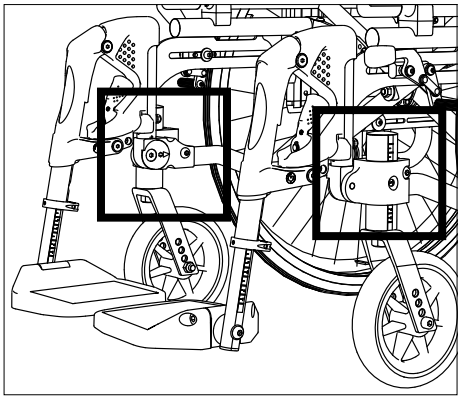


Figure 29

Adjusting the castor wheel height

Figure 30

The driving wheel has a scale from 1–9 to help achieve the same height on both castor wheels.

- Loosen screw (30A)
- Adjust to the desired height, see scale (30B)
- Re-tighten the screw

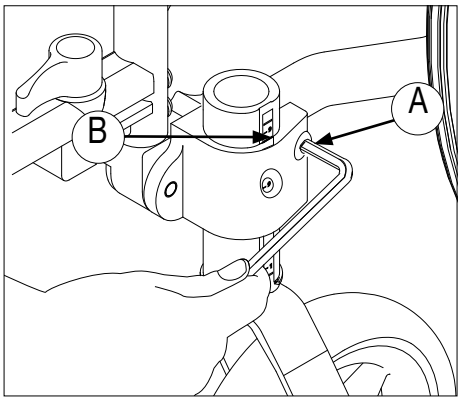


Figure 30

Adjusting the angle of the castor wheel *Figure 31*

- Loosen screw (31A) slightly
- Loosen screw (31B)
- Place the Allen key into the rotating disk (31C) and rotate to the desired angle. See the scale
- Tighten screw (31B). A screw locking device such as Blue Locktite, no. 243, can be used.
- Tighten screw (31A)

When the front castor wheel is at the correct angle, the bearing housing will be in a vertical position (90°) to the base. This is achieved by using a right angle to the bearing house/floor.

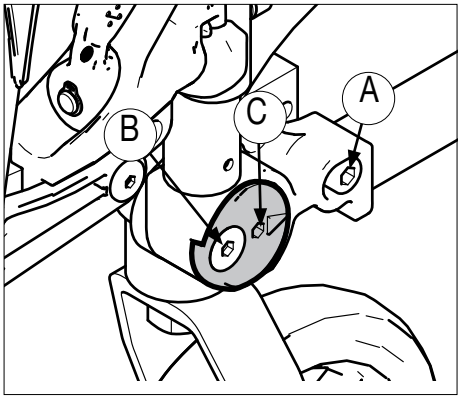


Figure 31

Adjusting the height of the back

Figure 32

In order to access the back tubing when adjusting the back height, open the “lid” (32C) in the back cover. The measuring scale (32A) shows the back height. For easier access to the back tubing, raise the pushing handle. The adjustment can be made whilst the user is in the wheelchair. Additionally, it is not necessary to remove the driving wheels in order to adjust the back height.

- Loosen the screw in the back tubing (32B)
- Adjust to the desired back height. See the measuring scale
- Re-tighten the screw

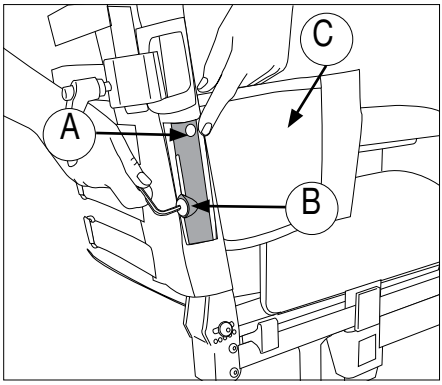


Figure 32

Adjusting the angle of the back

Figures 33 and 34

The angle of the back can be adjusted from –5° to 15°, in intervals of 5°. The scale showing the back angle (34A) is located on the back fitting bracket. The adjustment can be made whilst the user is sitting in the wheelchair. Additionally, it is not necessary to remove the driving wheels in order to adjust the back angle.

- Loosen screw (34B) approx. 5 mm
- Pull out the lock ring (34C), adjust the angle of the back and release the lock ring at the desired angle
- Re-tighten screw (34B)

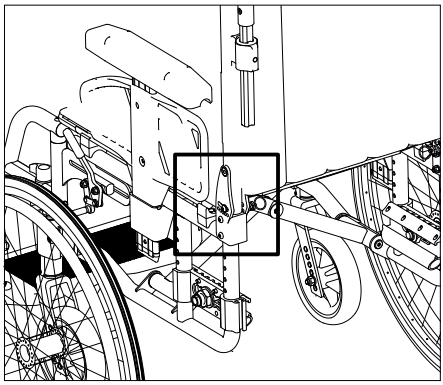


Figure 33

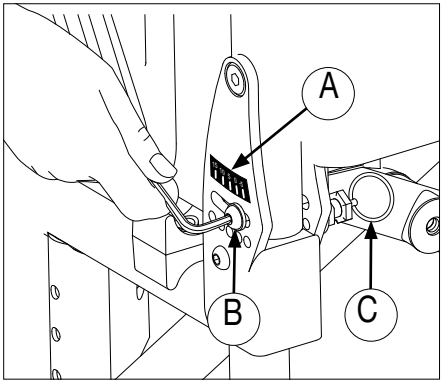


Figure 34

Adjusting the curvature of the back

Figure 35

The wheelchair has a padded back that can be adjusted to the curvature of the back in order to achieve a comfortable sitting position and good stability.
The user can sit in the wheelchair when adjustments are being made for the curvature of the back.

Loosen the back cover in order to access the Velcro tapes. These can be adjusted to change the back curvature and so achieve maximum comfort and support.

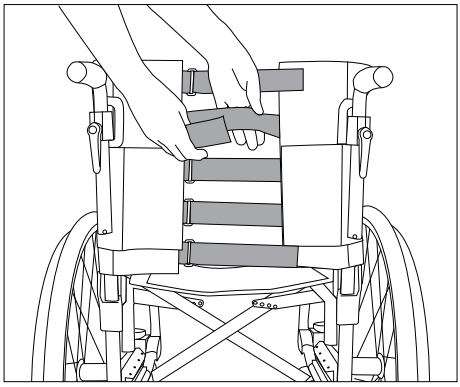


Figure 35

Adjusting the brakes

Figures 36 and 37

The standard wheelchair is delivered with brakes that are fitted in the middle driving wheel position.

In order to move the brake, loosen the screw (36A) that is located on the inside of the frame at the front of the wheelchair. Move the entire brake in the track to the desired position. Correct distance between the brake block and the wheel (37A) is approximately 2.5 cm.

The brakes that are supplied with the wheelchair will not normally need to be adjusted.

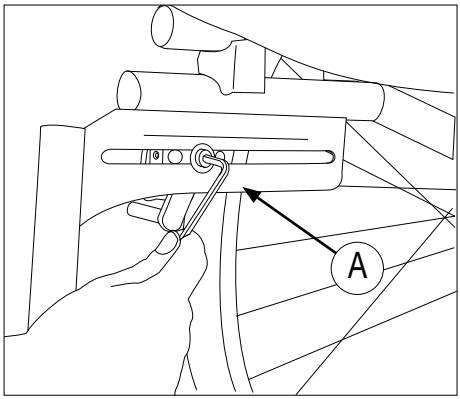


Figure 36

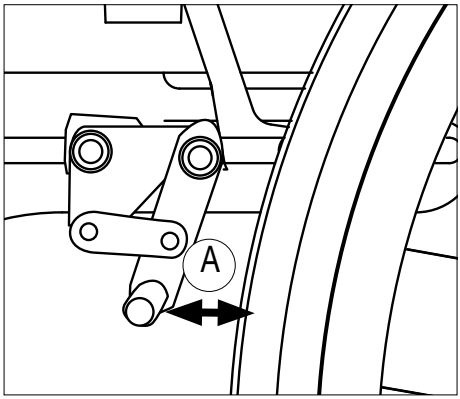


Figure 37

Adjusting the anti-tip stabiliser

Figure 38

Adjust the anti-tip stabiliser when you have changed the centre of gravity of the wheelchair. Loosen screw (38A). Pull or push the anti-tip stabiliser to the correct position so that the measurement on the stabiliser's measuring scale corresponds to the driving wheel position. Re-tighten the screw. There should be a maximum of 35 mm from the end of the anti-tip stabiliser to the base. To adjust this, loosen the screw (38B) and push/pull the lower pipe of the anti-tip stabiliser. Re-tighten the screw.

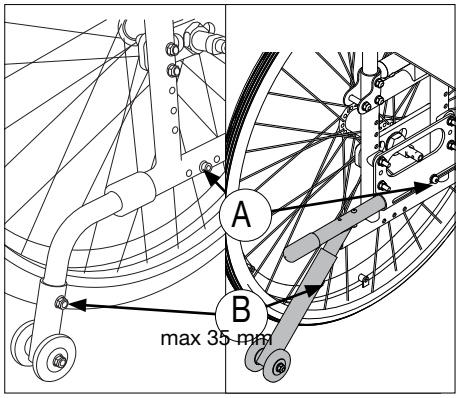


Figure 38

Adjusting the length of the legrests

Figure 39

The leg supports have a linear scale (39A) on the outside, which helps to achieve the correct length. To adjust the length of the leg supports loosen the fixing screw (39B) approx. 5 mm. Then adjust the leg supports to the desired length and re-tighten the screw.

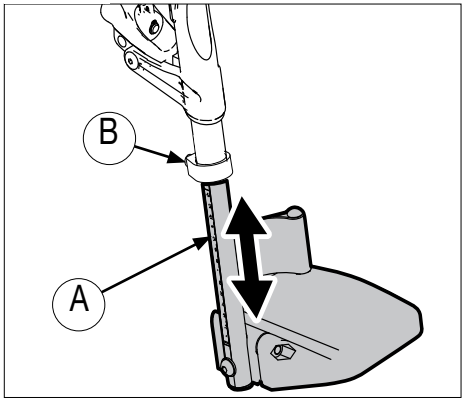


Figure 39

Adjusting the angle of the legrests

Figure 40

The angle of the legrests can be adjusted to 70˚, 80˚ or 90˚.

- Remove the screw (40A)
- Pull or push the legrest to the desired angle
- Place the screw in the correct hole and tighten

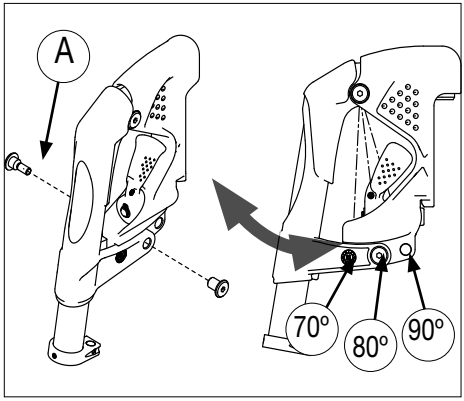


Figure 40

Adjusting the seat depth

Figures 41, 42 and 43

Adjust the depth of the seat by pulling or pushing the seat cover until the correct seat depth is achieved.

- Loosen the overlapping velcro (41A) in the seat fabric
- In order to loosen the seat cover enough to be able to move it, fold the wheelchair
- Pull or push the seat cover forward or backwards to achieve correct seat depth
- Fasten the overlapping velcro in the seat fabric and unfold the wheelchair
- The table on page 33 shows which seat depths can be achieved on your wheelchair

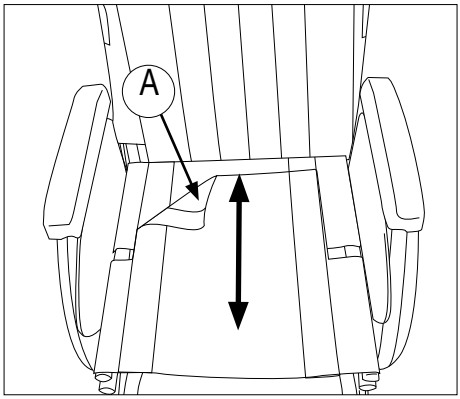


Figure 41

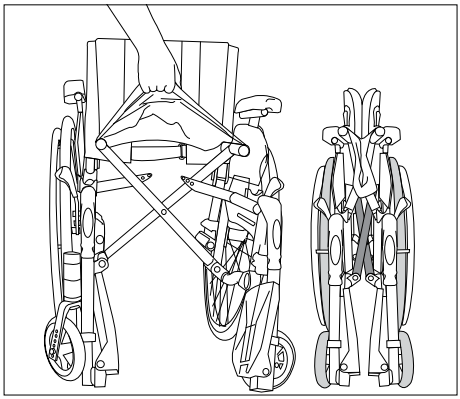


Figure 42

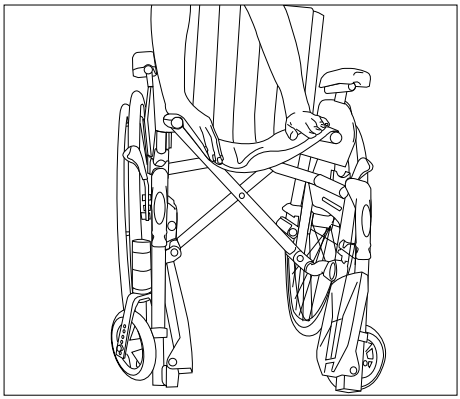


Figure 43

Adjusting the height of the armrest

Figure 44 and 45

In order to adjust the height of the armrest, loosen the screw (44A). Raise or lower the armrest to the desired position. Refer to the scale (44B) in order to achieve the same height on both armrests. The scale shows the number of centimetres from the seat to the top of the armrest. Re-tighten the screw. When the armrest is adjusted to the desired position, the clothes protector can be moved in order to avoid openings to the wheel. Loosen the screw (44C) and push the clothes protector up or down. Re-tighten the screw. (The clothing protector cannot be adjusted on Exigo 30 in seat width 54–60.)

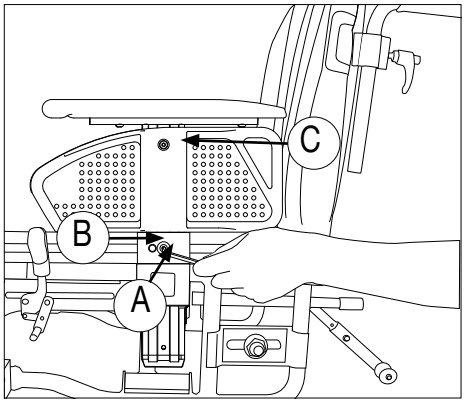


Figure 44

Adjusting the depth of the armrests

Figure 45

Adjust the depth of the armrests by moving the armrest pads forwards or backwards.

- Loosen the screws (45A) using a 10 mm wrench
- Push the armrest pads forwards/backwards to the desired position and tighten the screws

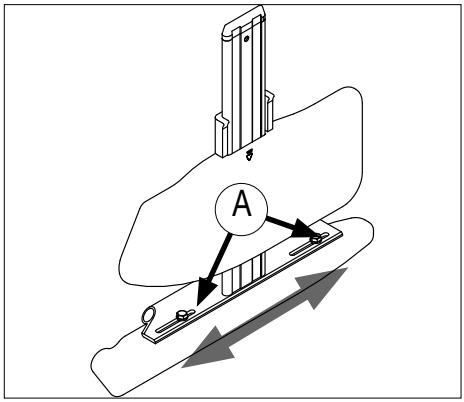


Figure 45

Fitting the hip belt (accessory)

Figures 46, 47 and 48

- Unscrew the screw (46A). Use a 4 mm Allen key.
- Fit the hip belt as shown in figure 47. Use the screw you removed.
- Check that the hip belt is correctly adapted to the wheelchair user. The belt should lie firmly over the hip at an angle of approx. 46° from the fixing position on the wheelchair.
- Make sure the belt is clean and that the locking mechanism works at all times. The belt and locking mechanism can be cleaned using a damp cloth.

⚠ **Warning!**
Placing the belt over the hip, against the soft skin of the stomach, can result in the wrong sitting position and the user sliding forward in the wheelchair.

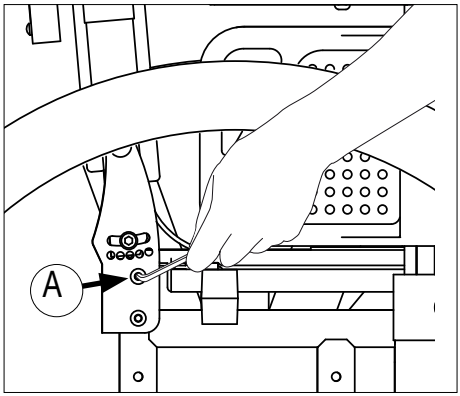


Figure 46

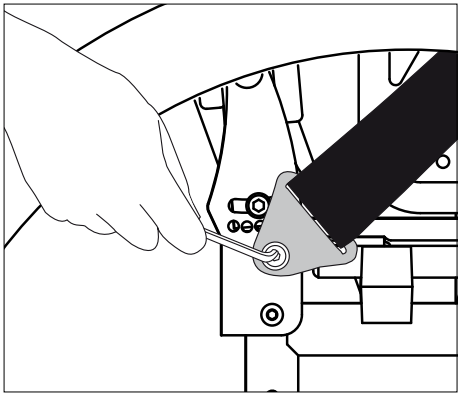


Figure 47

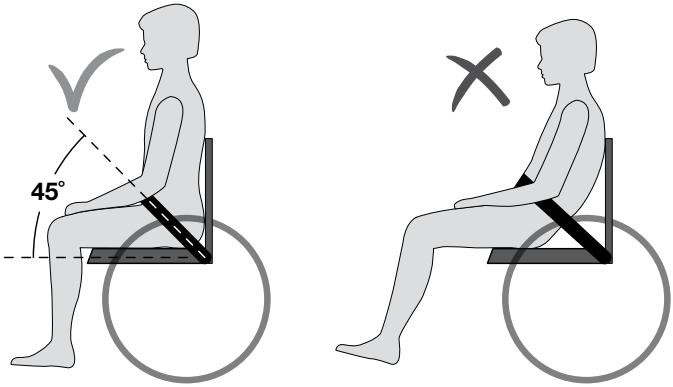


Figure 48

Correct placing of belt

Incorrect placing of belt

- Do not stand on, or exert any great pressure on the footplates.
- A wheelchair should be regarded as a replacement for the walking function. Users must therefore travel among pedestrians, and not on roads or streets with traffic.
- When moving out of the wheelchair ensure that you are standing on as stable and even a surface as possible. In order to ensure that the wheelchair does not move at unwanted times, ensure that the brake is locked in position.
- The maximum weight capacity for Exigo 30 is 135 kg.
- You should inspect the wheelchair regularly in order to ensure that all screws, bolts and other fastenings are properly secured.
- When the wheelchair is in use, always ensure that the anti-tip stabiliser is activated.
- Adjustments of seating or wheel positions can be set outside safe limit; When modifying the chair, such as moving the driving wheels, moving the castor wheels, changing the back height etc., the chair's handling properties, balance and tip over point can be affected. Special care should be taken when the wheelchair is put into use again.
- It is recommended that the user have a qualified helper when moving in and out of the chair.
- Ensure that clothing, baggage and other loose objects do not get caught in the spokes.
- Be aware of the potential risks of getting your fingers caught. Avoid putting fingers between the clothes protector and wheel, and between the wheel and brake.
- If it is necessary during operation to raise the chair's front in order to pass an obstacle, never do this by pressing the pushing handles down. Step on the tipping bar whilst applying moderate force to the pushing handles.
- If the user sits in the wheelchair for long periods at a time, the risk of pressure soars increases. Where there is a high risk of pressure soars we recommend that a special seat cushion be used to counteract this. Before using a anti decubitus cushion, check with the supplier that the cushion can be used on a seat sling surface.
- The surface temperatures can increase when the wheelchair is exposed to external sources of heat (e.g. sunlight).

Exigo 30 as a passenger seat in a car

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 travel.

The wheelchair can be used as a passenger seat in a car and has been tested in accordance with ISO 7176/19.

When the wheelchair is used as a passenger seat it should sit facing forward.
The wheelchair must be attached to the fastening system it was tested for;
The system is a 4-point fastening system. The system is a total system that fastens both the wheelchair and user to the car. The system requires fastening rails to be mounted in the car.
User restraint system: 3 point shoulder and hip belt.

Exigo 30 has marked off four points (Figure 49) that must be used when securing the wheelchair:
- The rear tubing of the side frame, above the wheel block
- The front tubing of the side frame, above the bearing housing

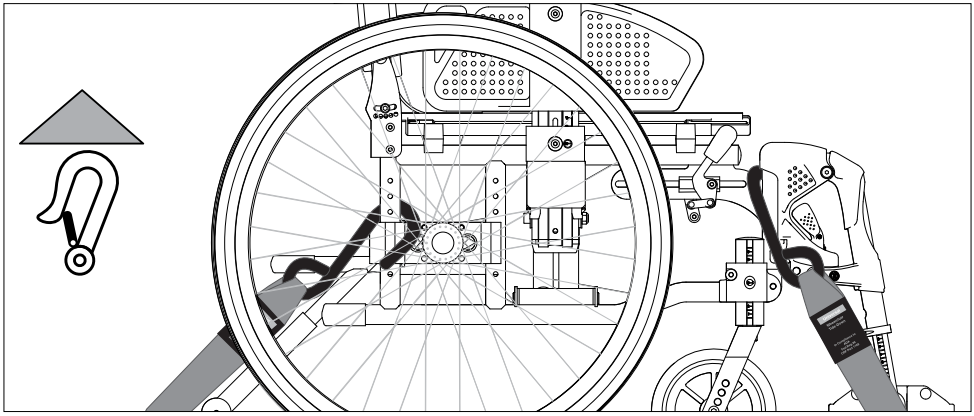


Figure 49

⚠ Warning!
Sunrise relinquishes itself of all responsibility in the event that Exigo 30 is used as a passenger seat in a car using a different fastening system to the one mentioned above.

Fastening the seat belt:

- The pelvic-belt restraint must be fastened at as steep an angle as possible; between 30° and 75°
- The shoulder-belt restraint is fastened over the shoulder and chest
- The seat belt is fastened as tightly to the body as possible and must not be twisted
- Make sure the belt restraints is not kept away from the body by the wheelchair parts, such as armrests and wheels. For correct positioning, see figure below
- The chair must not be tilted backwards when used as a passenger seat in a car

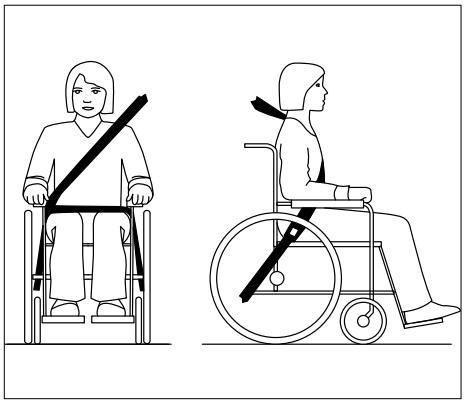


Figure 50

WARNING

a) Where possible, the wheelchair should be in a forward facing direction and secured in accordance with the instructions from the manufacturer of the fastening system.

b) This wheelchair is approved for use in cars and meets the requirements for forward facing transport and head on collisions. The wheelchair has not been tested for other positions in a vehicle.

c) The wheelchair has been dynamically tested in a forward facing direction, with the user secured by both a stomach and chest belt (3-point seat belt)

d) Both the stomach and chest belts should be used to reduce the risk of head and chest injuries in the event of colliding with parts in the car.

e) In order to reduce the risk of injury to the user, tables that are fitted to the wheelchair, which are not designed for crash safety, must be:

- Removed and secured separately in the vehicle, or
- Secured to the wheelchair, but with energy-absorbing padding placed between the table and the user

f) Where possible, other wheelchair accessories should be secured to the wheelchair or removed from the chair and secured in the vehicle during transport, so that they don't become loose and cause injury to the user in the event of a collision.

g) Support and positioning equipment must not be regarded as safety equipment/seat belts if they are not labelled in accordance with the requirements of ISO 7176/19-2008.

h) The wheelchair should in inspected by a representative of the manufacturer before being used again after any kind of collision.

i) No changes or replacements must be made to the anchorage points/car fastenings on the wheelchair, or to constructional elements or parts of the frame without consulting the manufacturer.

MAINTENANCE

Maintenance covered in this section can be carried out by the user. Other maintenance work should be undertaken by the supplier's qualified personnel in your area or by the help centre. For information concerning repairs or service, please apply to the help centre in your county.

Washing the frame

The frame should be washed regularly with mild soapy water. If the frame is very dirty, a scouring agent may be used. The frame can also be flushed using a high pressure jet spray. Spraying directly at the ball bearings using a high speed jet spray should be avoided. Dry the wheelchair thoroughly after washing or when it has been in the rain. If a scouring agent is used, movable parts should be re-greased.

Disinfection

Disinfection must only be carried out by qualified personnel.
The wheelchair can be disinfected with disinfectants that contain 70-80% ethanol. Do not use disinfectants containing chlorine or phenol.

Cleaning seat and back covers

The seat cover, back cover and extra back cover can be washed at 60°C. See the washing instructions on the different materials. To disinfect; use approved chemical disinfectant. Do not use heat disinfection.

Conditions that can damage the wheelchair

The wheelchair should not be used in temperatures below –35°C or in excess of 60°C. There are no restrictions with regard to humidity or atmospheric pressure. Storing the wheelchair does not require any special conditions in addition to the above.

Screws and nuts

Screws and nuts can become loose over time. Remember therefore to check these at regular intervals and tighten where necessary. A screw locking device such as Blue Locktite, no. 243, can be used. After a lock nut has been removed, it loses some of its locking properties and should be replaced.

Driving wheels

The driving wheels have spokes. These should be adjusted at least once a year. Apply to a local cycle dealer or to your nearest help centre.

Hygiene measures when being re-used:

Prior to the wheelchair being re-used, it must be carefully prepared. All surfaces which come into contact with the user must be treated with a disinfection spray.
To do this, you must use a disinfectant as authorised/ recommended in your country, for rapid alcohol-based disinfection for medical products and medical devices, which must be disinfected quickly. Please take into account the manufacturer's instructions for the disinfectant you are using. In general, a complete disinfection cannot be guaranteed on seams. We therefore recommend that you dispose of seat and back slings to avoid microbacterial contamination with active agents according to your local infection protection law.

Quick-release catch on wheels

The quick-release catch on the driving wheels requires regular inspection. Check that the bearings work properly. The release bolt and bearings should be cleaned and greased with oil regularly.

Recommended air pressure

The wheelchair is delivered as standard with solid wheels. Find where the size is given on the driving wheel/castor wheel, then find the recommended maximum air pressure in the table. Note that high air pressure makes the wheelchair easier to roll, whilst lower air pressure gives more cushioning. For optimum handling properties, the air pressure should be checked regularly.

	kPa	Bar	PSI
Driving wheel air	350	3,5	50
Driving wheel high pressure	630	6,3	90
Castor 6” air	250	2,5	35
Castor 8” air	250	2,5	36

Tools for adjustments

Adjusting:	Tools:	Adjusting:	Tools:
Brakes	Allen key 4 mm	**Back height**	Allen key 5 mm
Leg support length	Allen key 5 mm	**Back angle**	Allen key 4 mm
Footplates	Allen key 5 mm	**Seat depth**	Allen key 3 mm
Anti-tip stabiliser	Allen key 4 mm, 5 mm, wrench 10 mm	**Seat height front**	Allen key 6 mm
		Driving wheel pos.	Wrench 27 mm
Armrest height	Allen key 4 mm	**Castor angle**	Allen key 5 mm

Inspection after six months, subsequently every year

- Check that the brake works properly. Adjust if necessary.
- Check that the tyres are whole and that there is no damage to the sidewalls.
- Ensure that the wheelchair is clean and that all moveable parts work.
- Check for slack on the front castor wheel fork. Adjust if necessary. The axle should run freely around its axis, but there should not be any slack in an up/down direction.
- Check screwed joints and adjust where necessary.

Repairs

Apart from minor enamel repairs, change of tyres, tubes and adjusting the brakes, all repairs must be carried out by the supplier's qualified personnel in your area or at the help centre.

For information regarding repairs or service, enquire at the help centre in your county.

Changing inflated tyres *Figure 51*

Inflated tyres are accessories.

Dismounting tyres
- Remove the wheel, drain off the air by holding in the small pin in the valve, or by unscrewing the valve.
- Ensure that the edge of the tyre is positioned well into the inner groove of the rim (51A).
- Bend the edge of the tyre over the edge of the rim. Use a special tyre lever (51B) if necessary. Make sure that the tube does not get caught between the lever and the edge of the rim.

Fitting tyres
- Insert the tube into the new tyre and apply a friction-reducing agent (tyre fitting agent or soap) to the end of the tyre (51C).
- Ensure that the end of the tyre is positioned well into the groove of the rim on one side. Bend the tyre over the edge. Ensure that the tube does not get caught.
- Fill the right amount of air pressure and fit the wheel to the wheelchair.

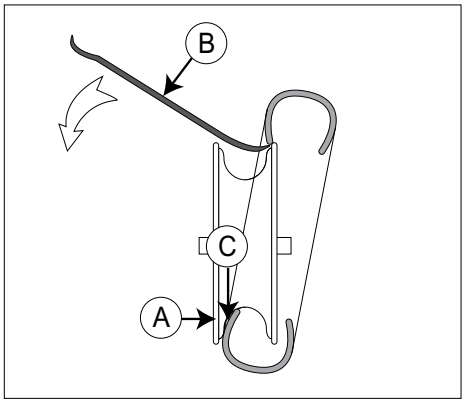


Figure 51

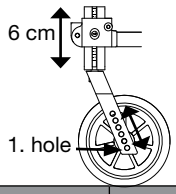
Long-term storage (more than four months)

- Store indoors in a cool, dry place
- During storage, the ambient temperature should not be lower than -20°C or higher than +65°C.
- Reccommended humidity: 15% - 93%.
- No restrictions on air pressure.

Technical specifications and dimensions

The wheelchair is delivered as standard in several different seat heights and seat widths. The height that best suits the user of the wheelchair depends on two factors: The height of the user and how the wheelchair will be operated. Ask your dealer or enquire at your nearest help centre if you are uncertain as to whether you have the correct height and width. (Dimensions are given in millimeters unless otherwise specified. Dimensions may vary +/- 10 mm from specifications mentioned in this table)

Seat width		360, 390, 420, 450, 480, 510, 540[1)], 570[1)] and 600[1)]					
Seat depth		**Standard**		Long		Short	
		390 (360-450)		450 (450-510)		390 (330-390)	
Seat height front		= position not applicable					
Fork mm	**Wheel** inches/ mm	**Hole positions in the castor wheel fork**					
		1.	2.	3.	4.	5.	6.
92	4”/100	370-430	355-415				
92	5”/125	385-445					
120	4”/100	400-460	385-445	37-43			
120	5”/125	415-475	400-460	385-445			
120	6”/150	430-490	415-475	400-460			
146	4”/100	430-490	415-475	400-460			
146	5”/125	445-505	430-490	415-475	400-460		
146	6”/150	460-520	445-505	430-490	415-475		
146	8”/200	475-535	460-520				



Seat height back	**Driving wheel**	**Seat height – back**
	20”	360 - 440
	22”	380 - 460
	24”	400 - 480
Back height	35 - 45	
Armrests height	Standard armrests: 170 - 240	
	Armrest, heigh: 220 - 290	
Total height	750 - 930, Standard 840	
Total width	Seat width +180	
Width folded up	280	

Total length	940 - 1000, Standard 970
Weight of chair	18 kg
Transport weight	9,3 kg
Max. user weight	135 kg (SW 54, 57 and 60: 160 kg)
Max. slope for parking brakes	7°
Ignitability	Textiles have been tested and approved in accordance with: NS-EN 1021-2 Ignition source: Match flame equivalent

1) Exigo 30 in seat width 54 cm, 57 cm and 60 cm exceeds the maximum required dimensions for public access, it might not be fit for transport in public means for transportation like train, busses or get access to public facilities like toilets.

Lifespan

The wheelchair and most of its fittings are manufactured in a special aluminium alloy. The back and seat covers are made of flame retardant material. The wheelchair can alternatively be delivered with solid/pneumatic tyres for the castor wheels and driving wheels.

Under normal use and with prescribed maintenance, the wheelchair's expected lifespan is approximately seven years.

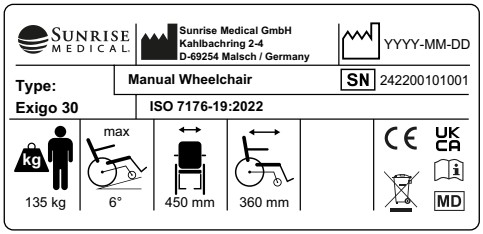
Waste management

Waste from packaging and parts of the wheelchair, as well as the wheelchair itself, can be treated as ordinary waste. The main constituent of the wheelchair is aluminium, which is suitable for remelting. The plastic and cardboard packaging can be recycled.

Indicates electrical / electronic equipment must be disposed of in accordance with the WEEE regulation.

LABELLING

TYPE:	Product Name/SKU Number.
max X°	Maximum safe slope with anti-tip tubes fitted, Depends on wheelchair setting, posture and physical capabilities of the user.
XXX mm	Seat width.
XXX mm	Seat depth.
XXX kg	Load Maximum.
UK CA	UKCA Mark.
CE	CE Mark.
	Consult instructions for use.
XXXX-XX-XX	Date of manufacture.
SN	Serial number.
MD	This symbol means Medical Device.
	Indicates electrical / electronic equipment must be disposed of in accordance with the WEEE regulation.
	Manufacturer's address.
ISO 7176-19:2022	Crash tested according to ISO 7176-19:2022.
	Importer's address
UK RP	UK Responsible Person
CH REP	Swiss Representative's address



ISO 7010-M002 Instruction manual/ booklet must be read! (Blue Icon)

UK RP

Sunrise Medical Limited
Thorns Road, Brierley Hill
West Midlands, DY5 2LD
UNITED KINGDOM

ACCESSORIES

Driving wheel and driving wheel fastening
- Driving wheel fastening with Impera wheel block (enables the camber angle to be adjusted)
- Amputation block
- Driving wheel with different dimensions and tyres – solid, high pressure and pneumatic
- Friction hand rim
- Friction cover
- Spoke protectors
- Single hand operated wheel
- Additional brake for assistant

Castor wheel and castor wheel fastening
- Castor wheel, with different dimensions and tyres – solid and pneumatic
- Castor wheel forks in different sizes

Brakes
Brake – pull to lock with long lever

Leg support
- Leg support, angle adjustable
- Footplate, depth adjustable
- Amputation support

Back
- Smartsit comfort back
- Angled pushing handle
- Pushing handle
- Pushing handle for neck support
- Neck support

Armrests and clothes protector
- Armrests with short pads, standard height
- Armrests with long pads, high
- Armrests with short pads, high
- Hemiplegia armrest
- Clothes protector

Miscellaneous accessories
- Pump, electric
- Crutch holder
- Table
- Seat cushion
- Hip belt
- Fitting for hip belt
- Satchel
- Anti-tip stabiliser, swing forward using leg
- Dahl MADS docking device

Fittings instructions are supplied with the accessories.

Contact your Sunrise distributor for accessories and spare parts.

Warranty

Definitions of terms

Definitions of terms used in this warranty:

- Consumable part: Part that is subjected to natural wear and tear or natural contamination during normal operation within the lifetime of the product (section 9 of Sunrise's general terms and conditions of sale);
- Client: Those who purchase the product directly from Sunrise;
- Corrective action: Repair, replace or refund of the product;
- Dealer: Those who re-sell the product to the User;
- Defect: Any circumstance due to which the product is not sound or fit to use, caused by a lack of quality of the material used to manufacture the product as well as the quality of the manufacturing process;
- Option: An accessory delivered by Sunrise to extend the standard product model;
- Product: Product that is delivered according to brochure or contract (e.g. wheelchair, scooter, battery-charger etc.);
- Part: Part of product that can be exchanged or replaced. This can be an option, accessory, service part or consumable part;
- Returns: Product or part that needs to be returned;
- RMA-process: Process to return goods, contact your dealer;
- Service part: Part that is durable and may be subjected to natural wear and tear or natural contamination during normal operation within the lifetime of the product.;
- User: Those who use the product;
- Warranty: The rights and obligations set forth in this document;
- Warranty period: The period of time during which the warranty is valid;
- Warranty provider: Sunrise Medical.

Notwithstanding the rights and obligations of Sunrise, Client and User set forth in Sunrise's general terms and conditions of sale, the rights of the Client and/or User towards Sunrise in case of defects are limited to the provisions set forth in this warranty. For the duration of the warranty period Sunrise guarantees that the product is without defects. In case of any defects the User is required –within two weeks after discovery of the defect- to contact the dealer. He has to complete a return form and return the product or part via the RMA-process. Sunrise will, at its sole discretion, take the corrective action it seems fit under the given circumstances within a reasonable period of time (depends on nature of claim) from receipt of the completed return form. The warranty period will not be extended after a corrective action.

GUARANTEE

Warranty period table

Description	Warranty period	Examples include, but are not limited to the parts mentioned below
Frame	5 years	Weldment/frame
Service Parts	New: 1 year after invoice Repaired: 90 days after invoice	Brakes
Consumable parts	40 days after invoice	Seat- and back textiles, wheels, griphandles etc.
Options/ Accessories	2 years	Headrests, legrests, drum brake etc. Not being service part or consumable part.

Sunrise will only accept shipment costs and corrective costs related to warranty on equipment during the warranty period.

This warranty will void in case of:
- The product and/or its parts being modified or items having been added by others than Sunrise;
- Changes in cosmetic appearance by use;
- Failure to observe the instructions for use and maintenance, use other than normal use, wear and tear, negligence, collateral damage by neglect of earlier symptoms, overloading, third-party accidents, non-original parts used and defects not caused by the product;
- Circumstances beyond our control (flood, fire, etc.).

This warranty does not cover:
- Tyres and inner tubes

Clients and/or Users have legal (statutory) rights under applicable national laws relating to the sale of consumer products. This warranty does not affect statutory rights you may have nor those rights that cannot be excluded or limited, nor rights against the entity from whom the product was purchased. Clients may assert any rights they have at their sole discretion.

USER AND MOUNTING INSTRUCTION FOR DOCKING ADAPTATION KIT 502961.

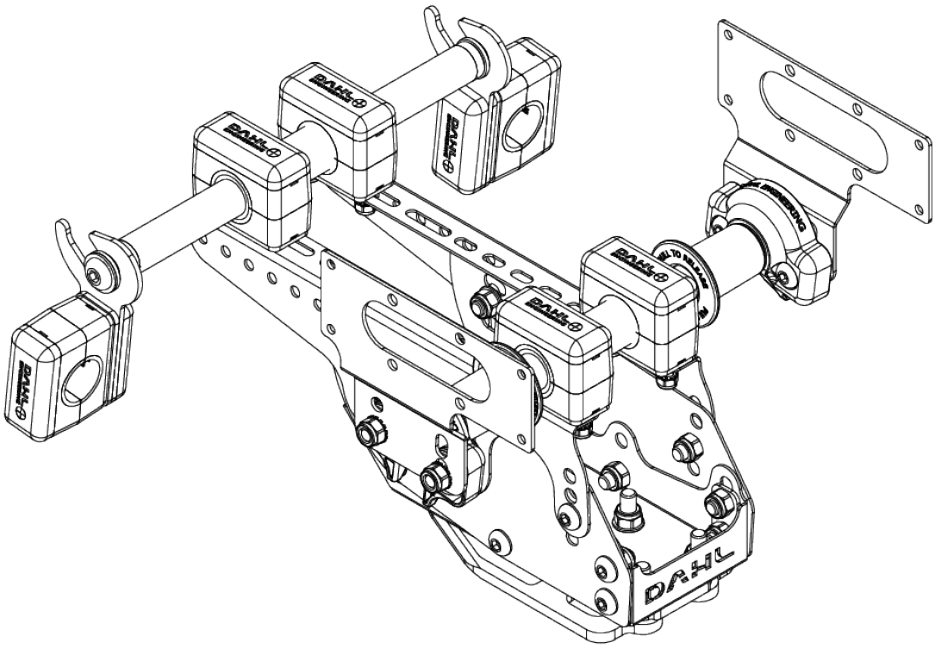


Fig.52

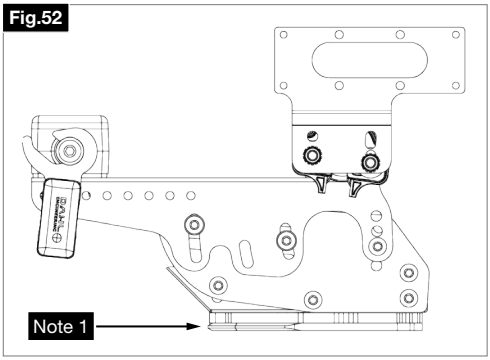


Figure 52 - 53

For the Docking Station to function properly the Locking Plate must be mounted horizontally.

Fig.53

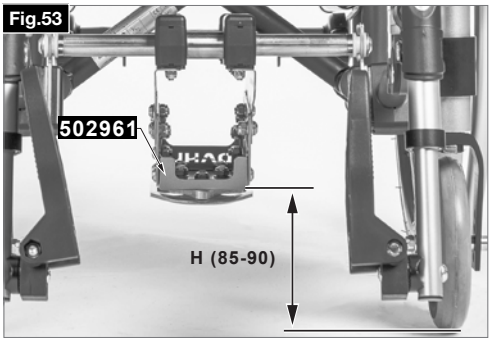


Figure 53

When the entire assembly process is completed measure this height H with the user sitting in the wheelchair.

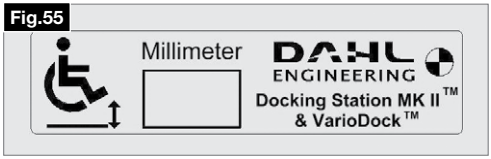
Make sure the tire pressure is correct beforehand!

Fig.54

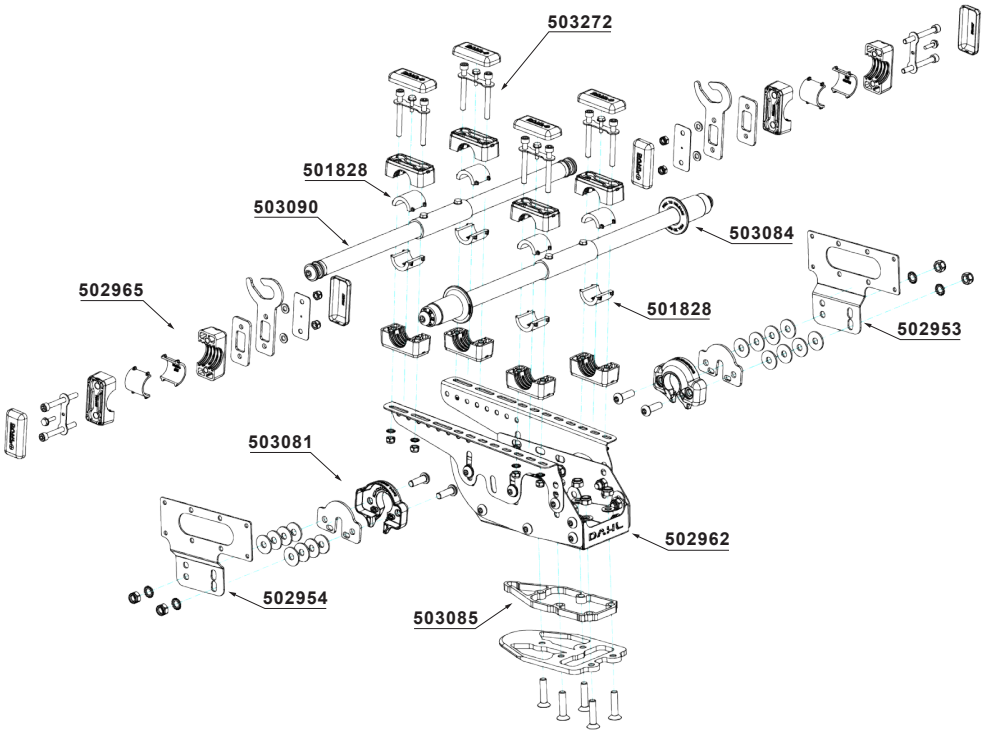
Figure 54 - 55

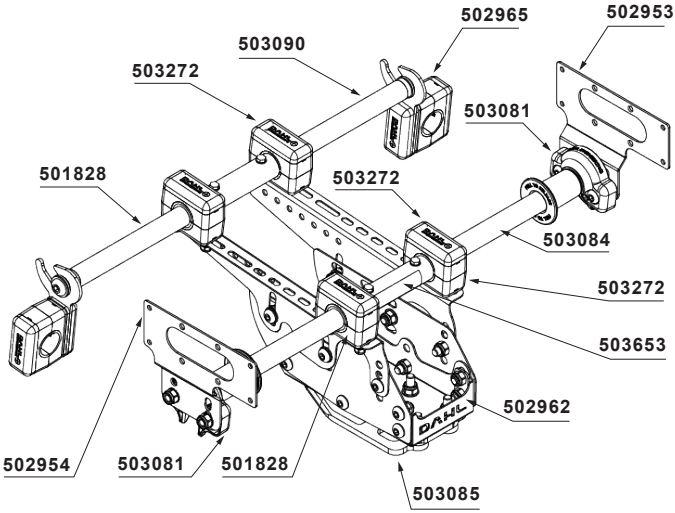
Record the measured height H minus 2 mm on the supplied sticker 503653 and place as shown.

Fig.55

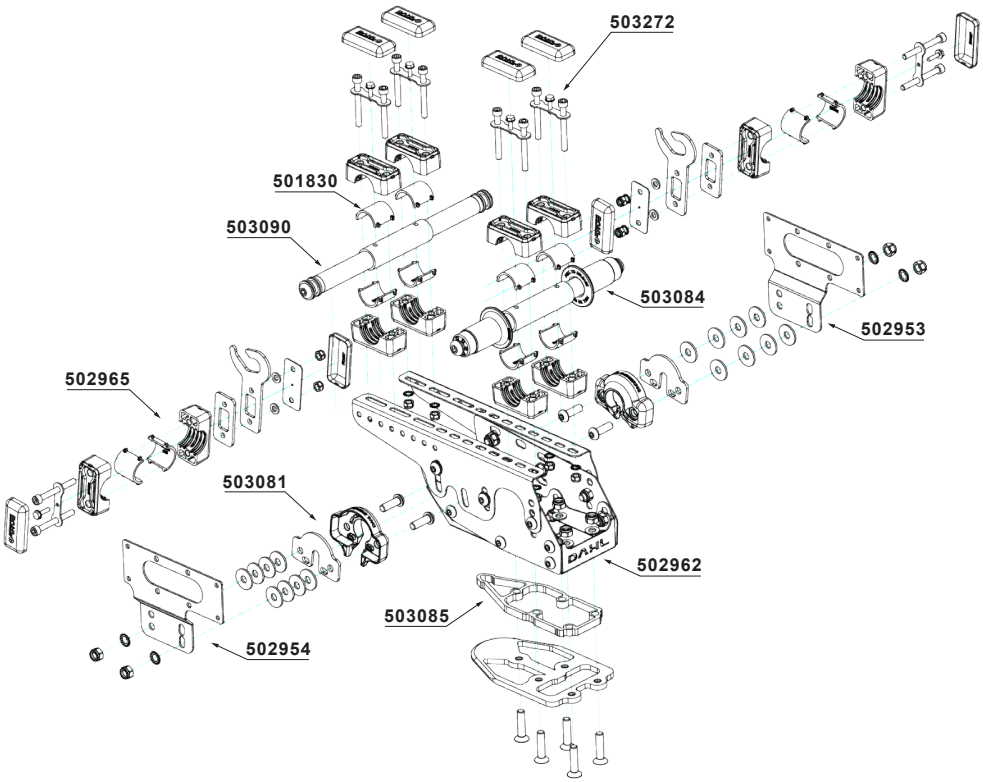


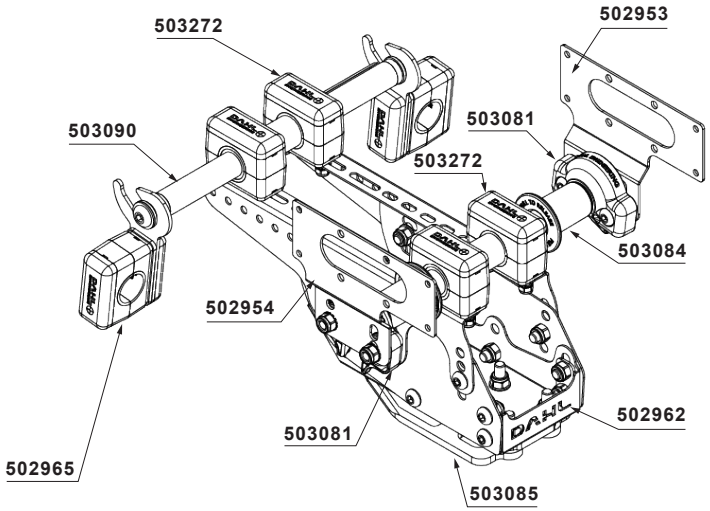
ASSEMBLY USED FOR SEAT WIDTH 42-51 CM.





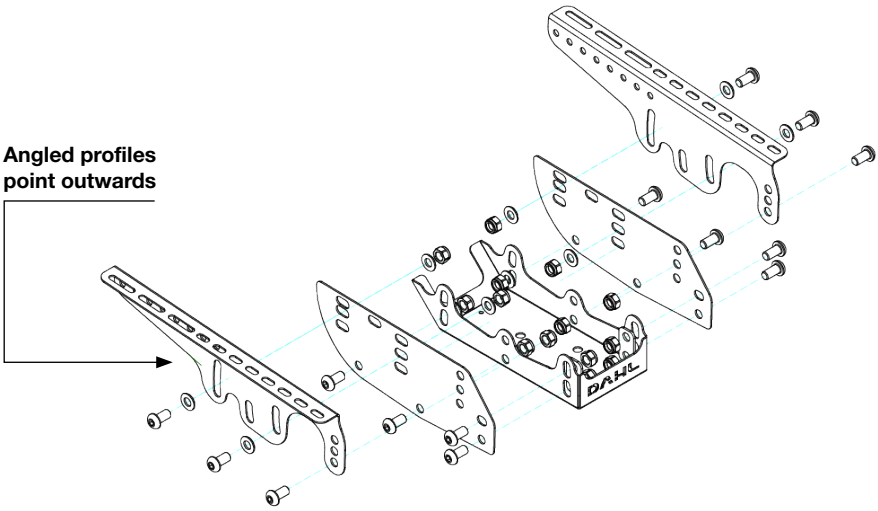
ASSEMBLY USED FOR SEAT WIDTH 36-39 CM.





CONSOLE 502962

ASSEMBLY USED FOR SEAT WIDTH 42-51 CM.



ASSEMBLY USED FOR SEAT WIDTH 36-39 CM.

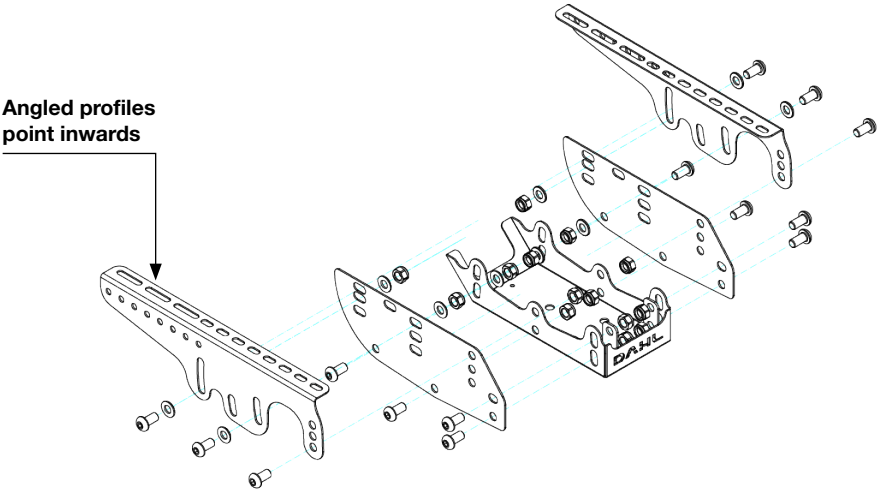


Fig.56

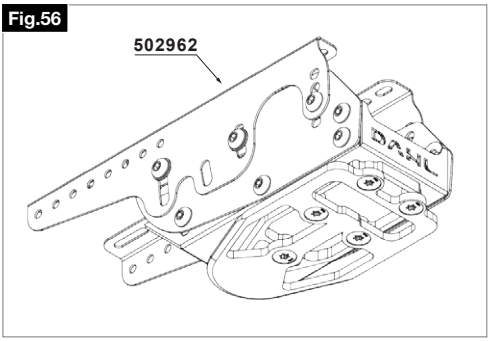


Figure 56

Considering the wheelchair's configuration and the resulting ground clearance of the locking plate, assemble 502962 and 503085 - see 501553 and 502961. Do not completely tighten the screws before the final adjustment has been determined.

Tightening Torque 20-25 Nm.

Fig.57

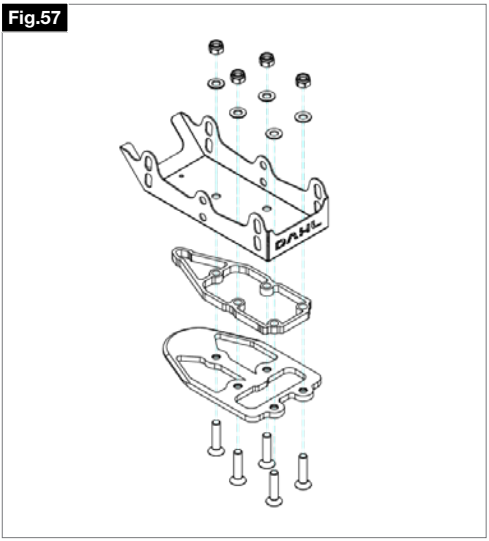


Figure 57

Tightening Torque 16-18 Nm,
(see 501553.)

Warning:

Do not use any other bolts for the locking plate than those supplied from Dahl Engineering (part no. 502800, quality 14.9, torx key size 27). Standard countersunk M8 bolts will not be strong enough in the event of a collision.

A qualified and experienced technician must carry out the installation the Dahl MADS™ adaptation system on your wheelchair.

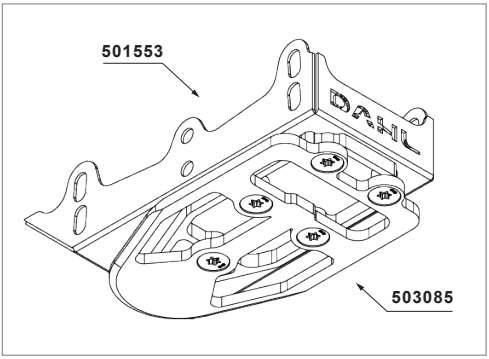


Fig.58

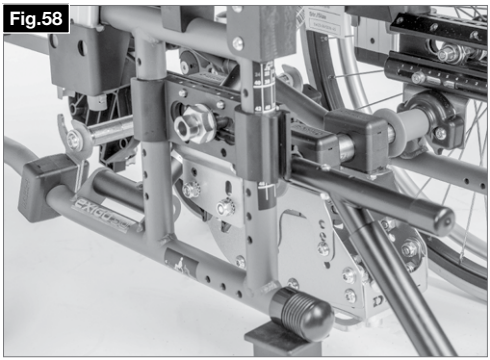


Figure 58

The parts are mounted mirrorverse on the opposite side.

Fig.59

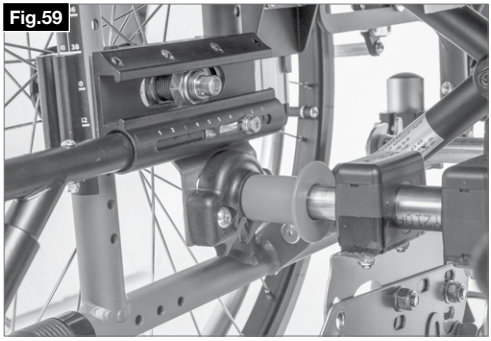


Figure 59 - 60

503081 are assembled with brackets 502953 and 502954. Tightening Torque 5 Nm.

Fig.60

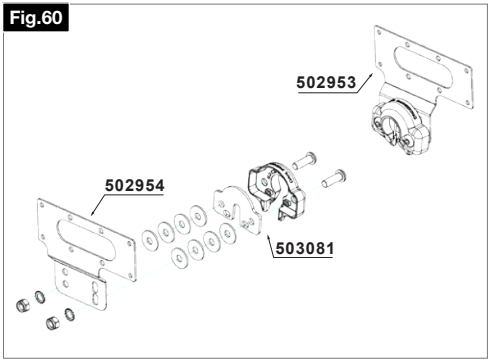


Figure 60

The slotted holes on brackets 502953 and 502954 are used for fine-adjustment of bracket 503081.

This is important to ensure that the red plungers and bolts of the pipe lock will glide smoothly in and out of the bracket 502953 and 502954. Tighten screws with 5 Nm.

Fig.61

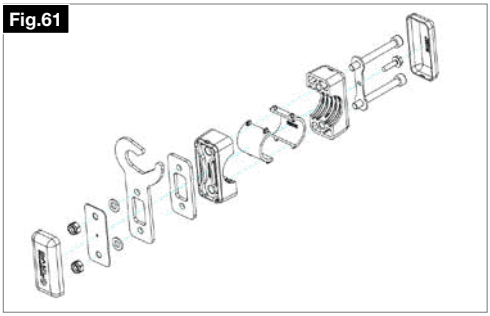


Figure 61

The thread forming screws 502729 (M5x16 mm) must be installed as locks against rotation.

This is the LAST step of the installation process!

After all elements have been assembled and adjusted, carry out a final functional test, whereafter Ø4 mm holes must be drilled through the plastic clamps and the wheelchair metal tube. Tighten screws with 4 Nm.

Fig.62

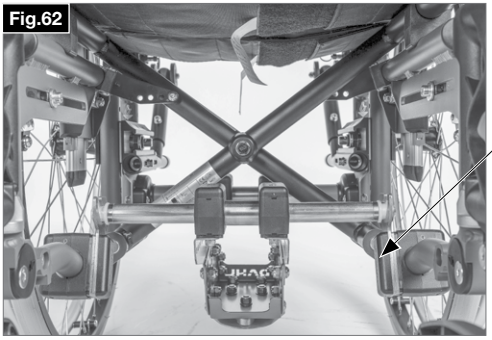


Fig.63

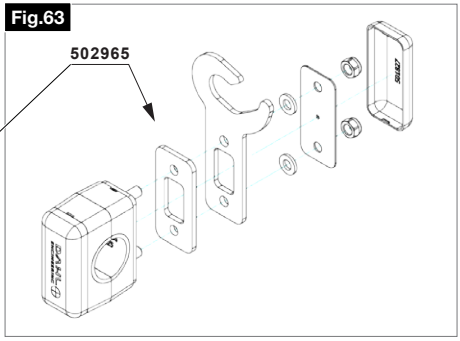


Fig.64

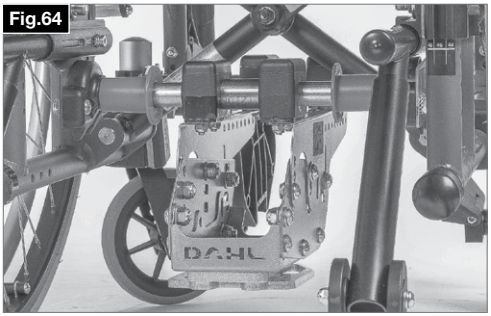
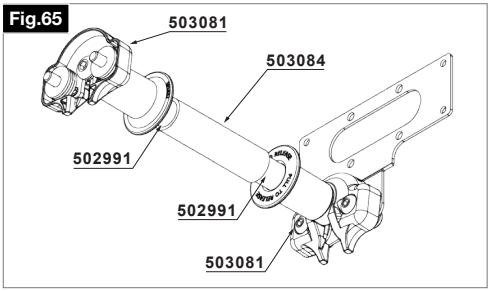
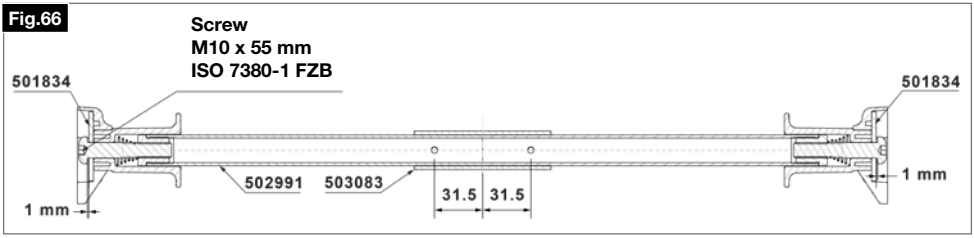


Figure 64 - 65

Cut the tubes 502991 to fit with the locking sockets 503081 - see 503084.

Fig.65





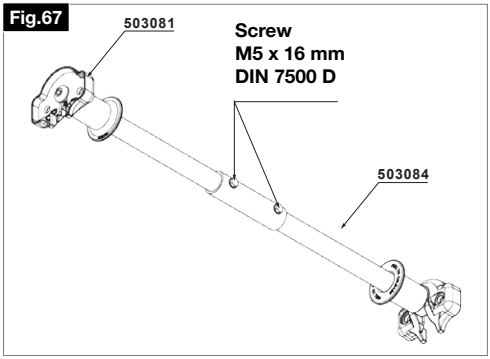


Figure 66

Cut tubes 502991 to fit the specific wheelchair, so the screws that are mounted in both ends of 503084 fit to the total outer measurement between brackets 501834, after those have been installed on the wheelchair.

Add 2 mm to the measured total outer distance between brackets 501384 to ensure that the screws can glide easily into the brackets.

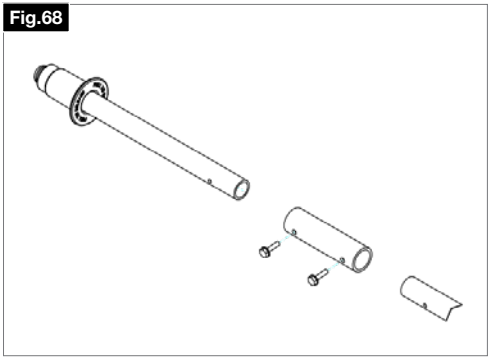


Figure 68

After cutting the tubes, drill Ø4mm holes into them, so that they will fit with the positions of the fixation holes in the connecting tube 503083.

Fit self-tapping screws 502729 (M5 x 16 mm DIN 7500 D) and tighten these with tightening torque 4 Nm.

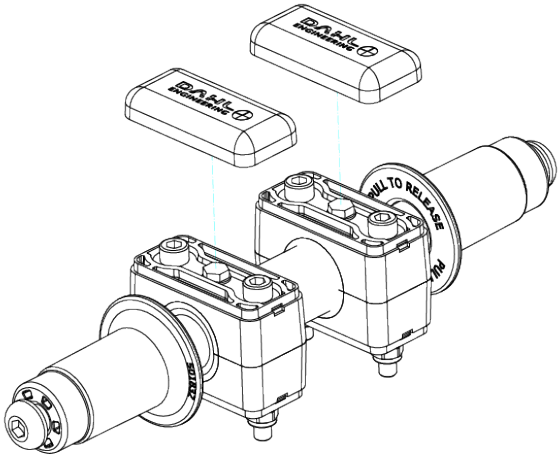


Fig.69

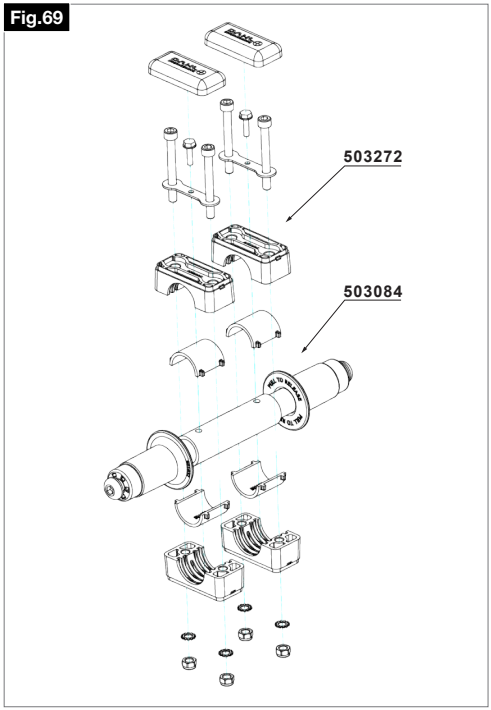


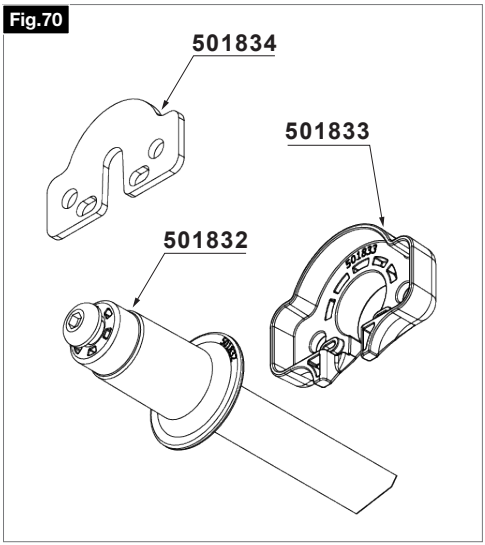
Figure 69

The thread forming screws 502729 (M5x16 mm) must be installed as locks against rotation. This is the LAST step of the installation process!

After all elements have been assembled and adjusted, carry out a final functional test, whereafter Ø4 mm holes must be drilled through the plastic clamps and the wheelchair metal tube. Tighten screws with 4 Nm.

After cutting the tubes, drill Ø4mm holes into them, so that they will fit with the positions of the fixation holes in the connecting tube 503084.

Fig.70



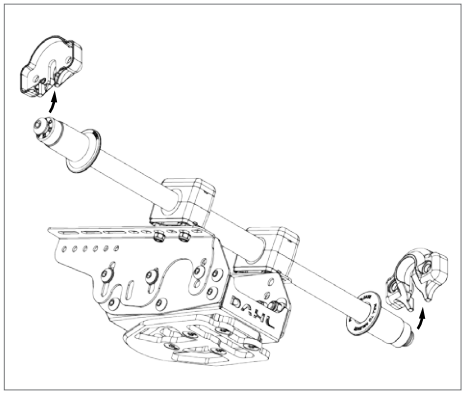


Figure 70

The screw heads of the locking mechanism 501832 will be guided into the slots of the metal brackets 501834, that are installed inside the locking socket 501833 on both sides.

Fig.71

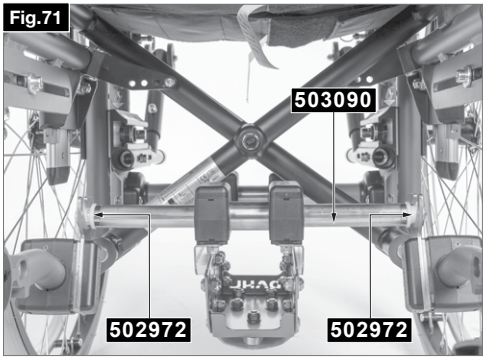


Figure 71

The cross tube 503090 is placed with the grooves of the plastic rolls 501839 in the hooks 502972. Before this can be done, cut tubes of 502990 so that the grooves of the plastic rolls will fit the spacings of the hooks 502972.

Fig.72

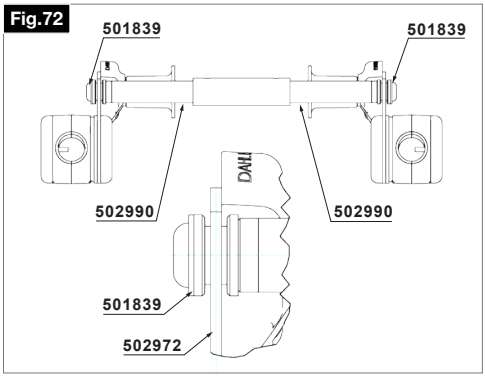
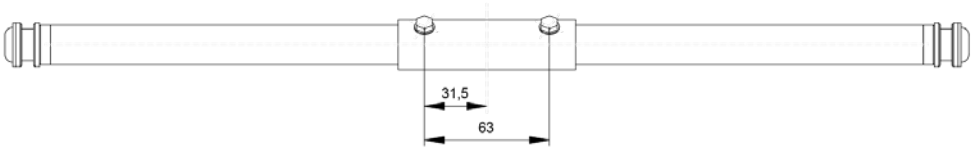


Figure 72

The spacing between the hooks 502972 and the length of the cross tube depends on the width of the wheelchair. The grooves of the plastic rolls 501839 must be centered on the hooks 502972.

ASSEMBLY USED FOR SEAT WIDTH 42-51 CM.



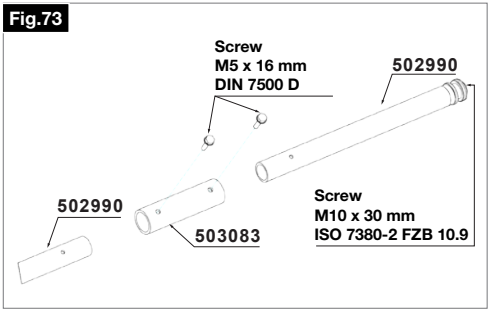


Figure 73

After cutting the tubes, drill Ø4mm holes into them, so that they will fit with the positions of the fixation holes in the connecting tube 503083.

Fit self-tapping screws 502729 (M5 x 16 mm DIN 7500 D) and tighten these with tightening torque 4 Nm.

ASSEMBLY USED FOR SEAT WIDTH 36-39 CM.

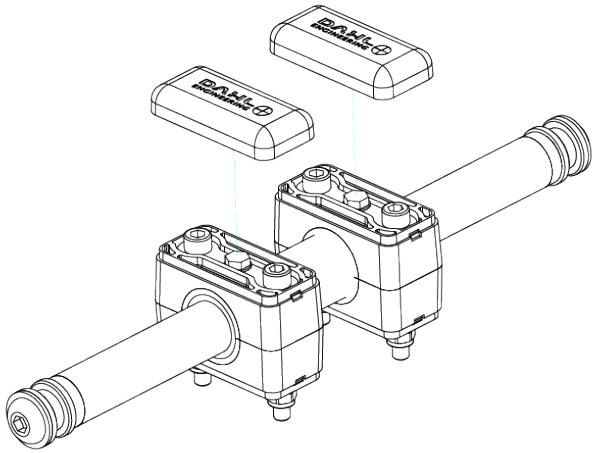


Fig.74

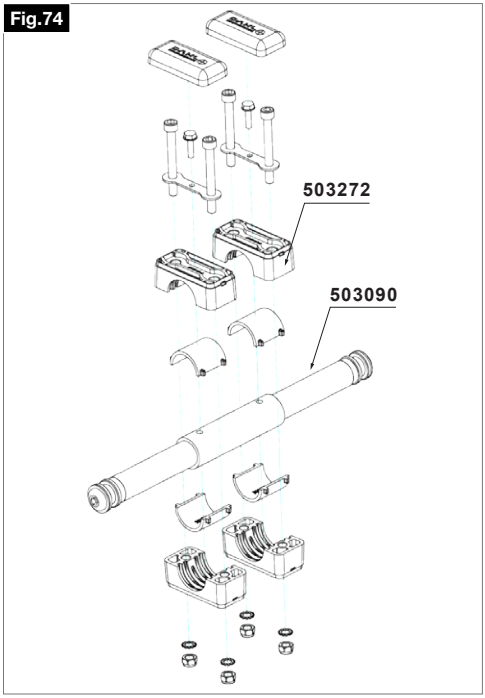


Figure 74

The thread forming screws 502729 (M5x16 mm) must be installed as locks against rotation. This is the LAST step of the installation process!

After all elements have been assembled and adjusted, carry out a final functional test, whereafter Ø4 mm holes must be drilled through the plastic clamps and the wheelchair metal tube. Tighten screws with 4 Nm.

After cutting the tubes, drill Ø4mm holes into them, so that they will fit with the positions of the fixation holes in the connecting tube 503090.

Fig.75

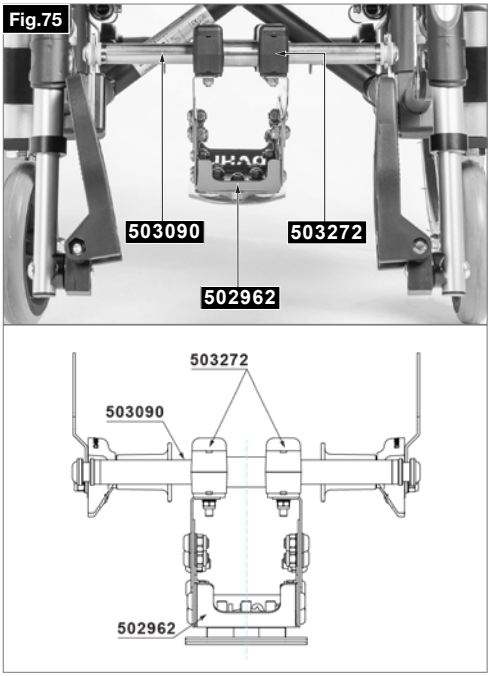


Figure 75

Mount cross tube 503090 centered on console 502962 using the clamps 503272.

Fig.76

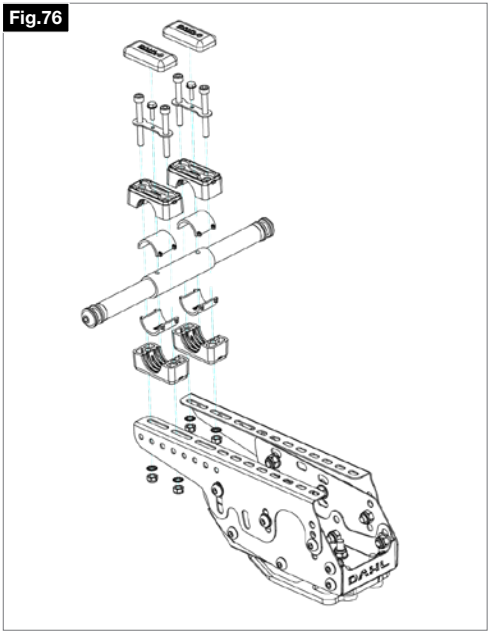


Figure 76

The thread forming screws 502729 (M5x16 mm) must be installed as locks against rotation. This is the LAST step of the installation process!

After all elements have been assembled and adjusted, carry out a final functional test, whereafter Ø4 mm holes must be drilled through the plastic clamps and the wheelchair metal tube.

Tighten screws with 4 Nm.

Fig.77

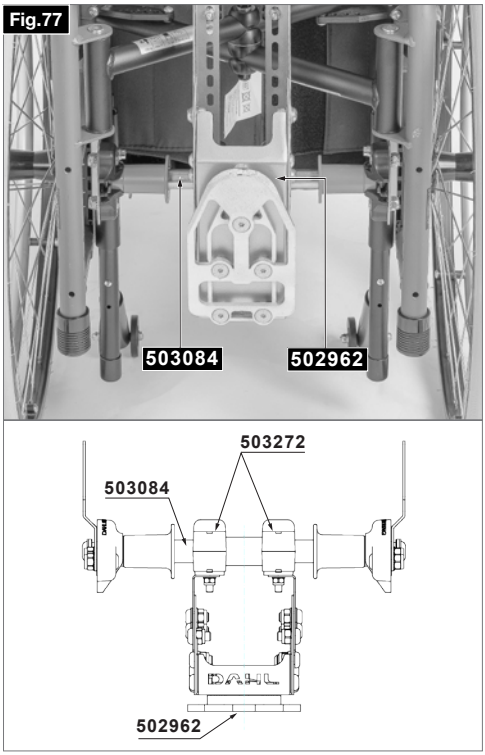


Figure 77

Mount cross tube with locks 503084 centered on console 502962 using the clamps 503272.

Fig.78

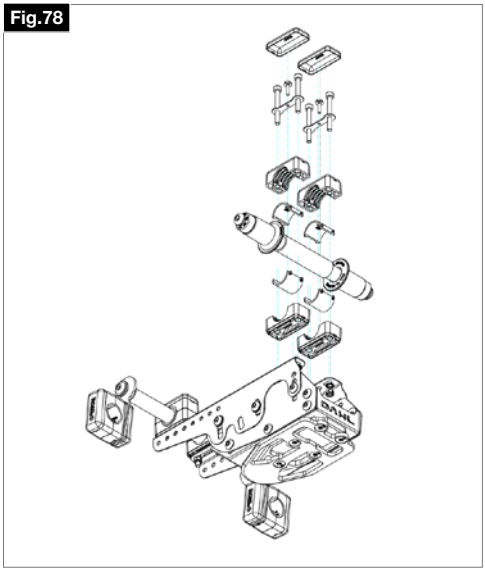


Figure 78

The thread forming screws 502729 (M5x16 mm) must be installed as locks against rotation. This is the LAST step of the installation process!

After all elements have been assembled and adjusted, carry out a final functional test, whereafter Ø4 mm holes must be drilled through the plastic clamps and the wheelchair metal tube.

Tighten screws with 4 Nm.

Fig.79

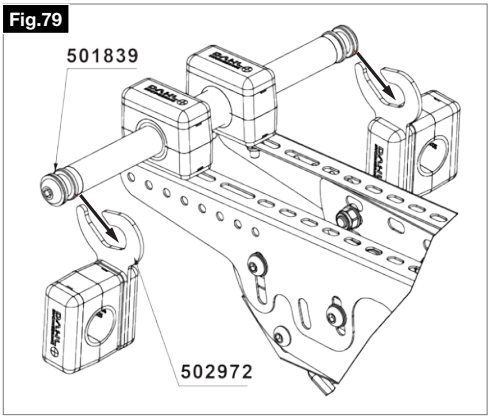


Figure 79

The plastic rolls 501839, which are mounted on the cross- tube, are placed with the grooves into the hook- openings 502972 on both sides.

Figure 80

Pull back console, until the plastic rolls 501839 glide into the bottom of the hooks 502972 on both sides.

Fig.80

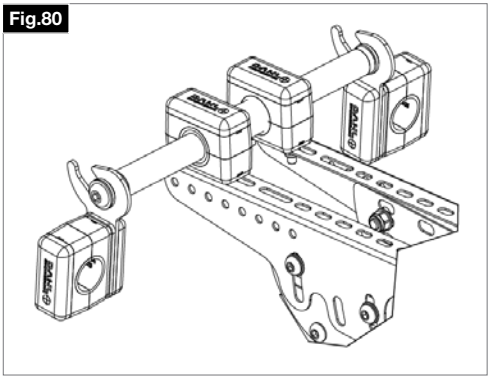


Figure 81

As soon as the plastic rolls 501839 are sitting correctly in the hooks 502972, swing up the console with the two red tube locks 501832 into the lockingbrackets 501833 on both sides.

When the screw heads, which are mounted in the ends of the red locking plungers 501832, are positioned correctly, the spring- loaded red locking mechanisms 501832 must plunge into the sockets of the locking brackets 501833. Hereafter the console has been secured.

To release the console carry out the same steps in reversed order, after the red spring-loaded locking plungers 501832 have been unlocked by sliding them inwards towards each other.

Fig.81

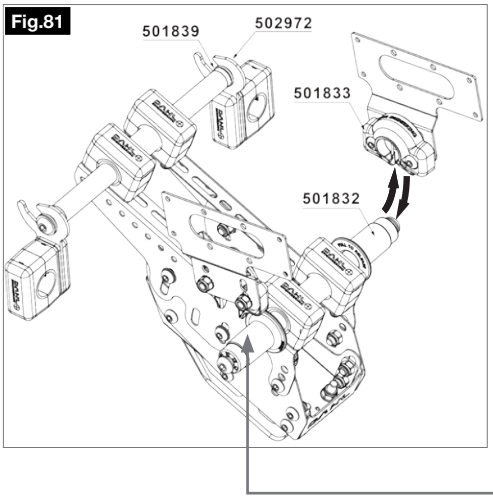


Fig.82

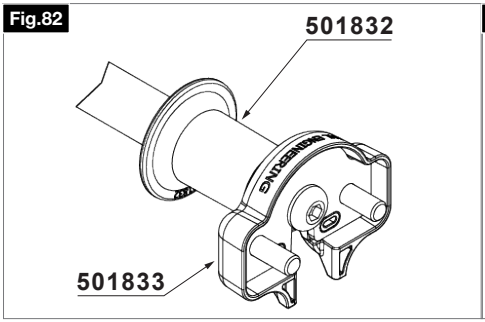


Fig.82.1

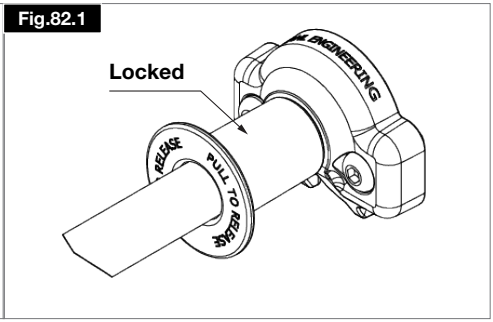


Fig.82.2

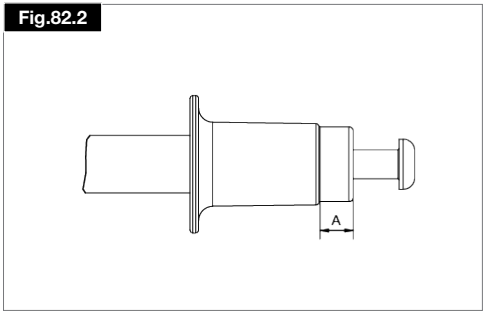


Figure 82

The locking tube 501832 is not locked correctly, until the shiny tips (A) on the red locking plungers 501832 are fully inserted into the sockets of the locking brackets 501833, whereafter the shiny tips (A) will no longer be visible.

Check, that it has been completely locked, by pushing the red locking plungers completely out towards the sockets 501833.

Fig.82.3

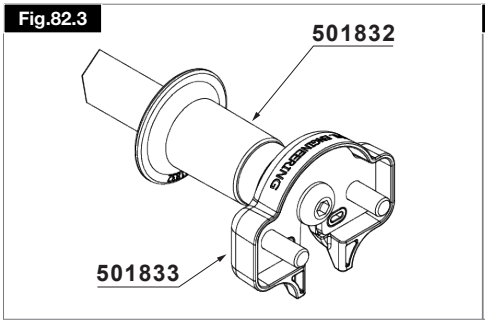
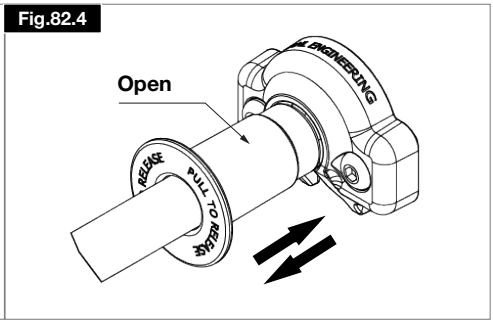


Fig.82.4



⚠ WARNING:

Incorrect installation of the Mads adaptation kit on the wheelchair could cause serious injury or death in a crash. Always check the specific wheelchair manufacturer's user and installation guides to assure the correct parts are properly installed on your specific wheelchair for use with the Dahl Docking Station. Do not drive the vehicle until wheelchair and user are correctly secured.

The wheelchair Sunrise Exigo 30 has been tested and approved according to ISO 7176-19: 2022 together with the Dahl MADS™ wheelchair adaptation system designed for securement in the automated and power-height adjustable wheelchair docking stations - Dahl VarioDock™ (part no. 503600) and the fixed height docking station Dahl MK II (part no. 501750).

Equipped with the Dahl MADS™ adaption system the Sunrise Exigo 30 can subsequently be secured in vehicles where a Dahl docking station has been installed. Securement with the Dahl MK II requires that its installed height corresponds with the exact height of the wheelchair locking plate to function whereas the power-height adjustable VarioDock™ can be set to suit it upon entering the vehicle.

Transport in a road vehicle

⚠ DANGER!

Ensure that the vehicle is suitably equipped to transport a passenger in a wheelchair and ensure the method of access /egress is suitable for your wheelchair type.

The vehicle should have the floor strength to withstand the combined weight of the occupant and wheelchair in case of a collision.

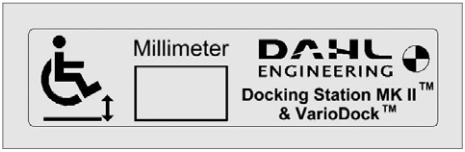
The wheelchair shall be secured in a forward-facing direction only. This wheelchair is tested according to ISO 7176-19 for use in road vehicles and meets the requirements for forward facing transport and head on collisions. The wheelchair has not been tested for other directions in a vehicle.

⚠ DANGER!

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

Identification of the Dahl Docking system

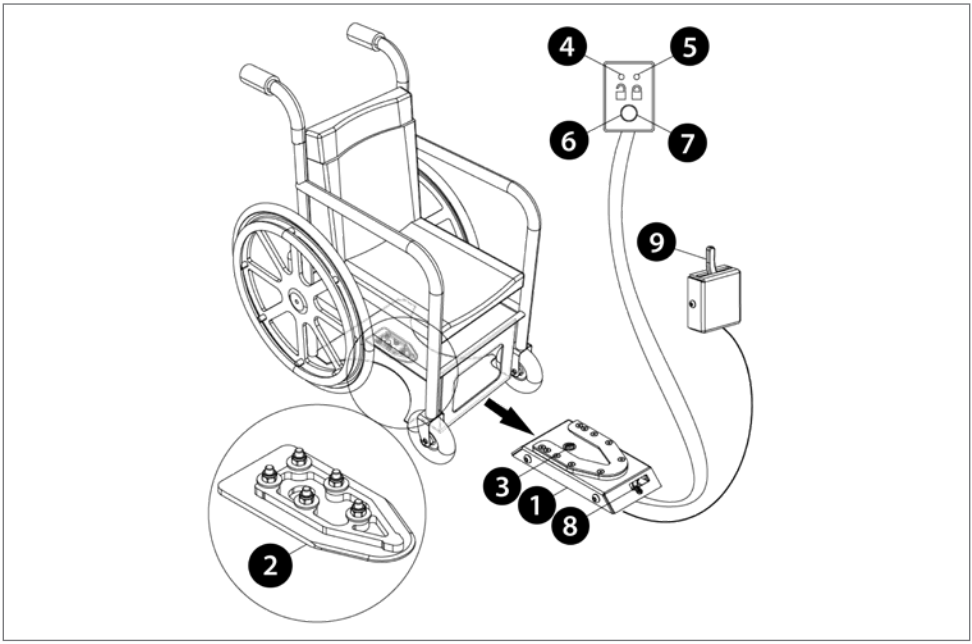
If your wheelchair is equipped with the locking plate for the Dahl Docking systems, the following label will be present on your wheelchair.



The height noted on the label indicates the value that the height adjustable VarioDock™ control panel display must be set to. For the MK II this is the height that the docking unit must be installed at.

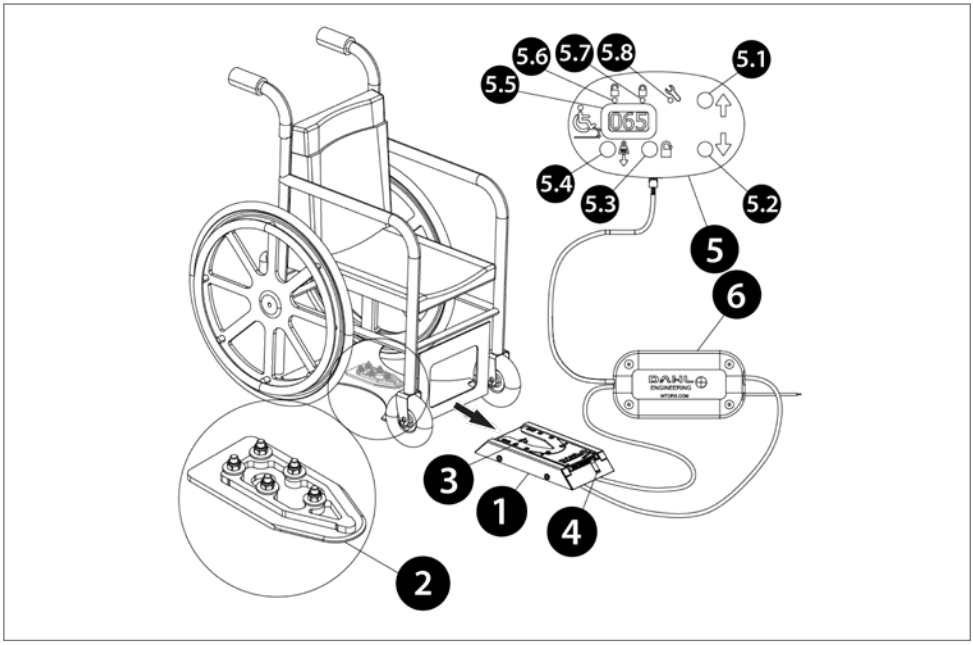
Failure to set/install the docking unit to the correct height might impede the locking plate from sliding smoothly into the docking unit or prevent the Docking station and wheelchair from connecting altogether.

DAHL DOCKING STATION MK II



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

DAHL VARIODOCK™



1. Dahl VarioDock™
2. Lock plate and spacer
3. Lock pin
4. Manual emergency release lever
5. Control panel
   - 5.1 Adjust upwards (yellow button)
   - 5.2 Adjust downwards (green button)
   - 5.3 Release button (red button)
   - 5.4 Pull down to remove slack (blue button)
   - 5.5 Current measurement display
   - 5.6 Red indicator LED (wheelchair is not secured and can be removed from docking station)
   - 5.7 Green indicator LED (wheelchair is secured)
   - 5.8 Illuminated when maintenance required
6. Control module

The Docking units are designed to retain manual and electric wheelchairs, as well as Dahl's seat bases in the vehicle's floor. A control module/ panel controls and monitors the docking unit, distributes power to the various components.

Use the up or down buttons (5.1) and (5.2) on control panel to set height of docking unit to suit the height of wheelchair locking plate (available on VarioDock™ only).

Securing the wheelchair in the MK II and VarioDock™ docking stations:

- Maneuver the wheelchair slowly and in a uniform direction over the docking station. The locking plate (2) positioned under the wheelchair helps to guide the wheelchair into place in the docking station.
  When the locking plate is fully engaged in the docking station, a spring-action locking pin (3) automatically secures the lock plate;

- The Dahl docking stations are equipped with a control switch that indicates whether the locking plate is correctly secured in the docking station. As soon as the locking plate comes into contact with the locking pin (3), a warning tone will sound (a high-pitched howl), and the red diode/lamp/LED, in the control panel, MK II (4) and VarioDock™ (5.6), will light up until the lock plate is either fully engaged or else the wheelchair is removed from the docking station;

- As an indication that the wheelchair locking plate is fully entered into the docking unit and properly secured, the warning tone will cease, the red lamp/LED in the control panel will go out and the green lamp/LED, MK II (5) and VarioDock™ (5.7) will light up.

⚠ WARNING:

Do not move the vehicle:

- Whilst the wheelchair is being maneuvered into position in the docking station;

- If the wheelchair and user are not correctly secured;

- If the warning tone sounds and/or the red warning lamp (LED) in the control panel flashes or is lit!

Always check if the lock plate is properly engaged in the docking station by trying to reverse the wheelchair out of the docking station before moving the vehicle.

It must not be possible to reverse out of the docking station without pressing the red release button in the control panel.

Buckle up seat belt before driving!

General occupant restraint instructions

⚠ DANGER!

- 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, ISO 10542-1, SAE J2249 or any other. Use a vehicle anchored and certified occupant restraint system instead;

- Use a suitable positioned headrest when being transported;

- The upper torso restraint belt must fit over the midpoint of the shoulder and across the chest as illustrated;

- 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.

Fig.83

Occupant belt restraints must not be held away from the body by wheelchair components such as armrests or wheels.

Illustration of improper belt restraint fit

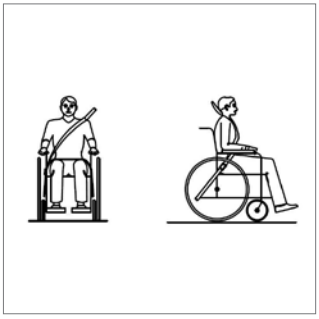


Illustration of proper belt restraint fit

Fig.84

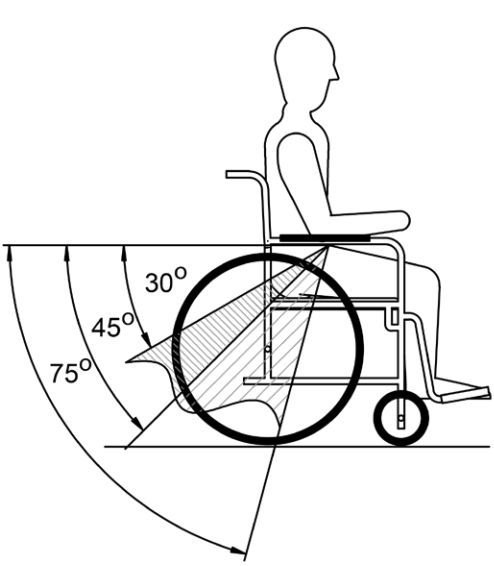
Fig.85

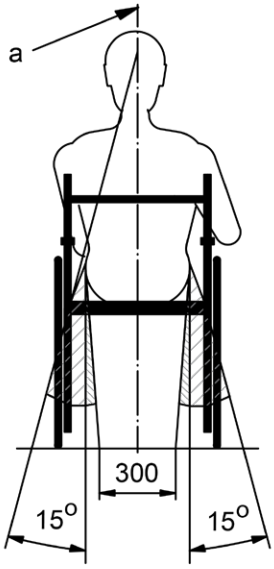
Occupant belt restraints should make full contact with the shoulder, chest, and pelvis and pelvic belts should be positioned low on the pelvis near the thigh-abdominal junction.

Positioning the occupant restraint when using it with the Dahl Docking systems

⚠DANGER!

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.





Preferred and optional angles for location of the lap belt. *(Dimensions in millimeters)*

Key

Preferred zone

Optional zone

Release from the docking station:

- When the vehicle has been brought to a halt, remove the safety belt;
- To unlock commence by driving the wheelchair forward to release pressure on the lock pin;
- Press the red release button in the control panel VarioDock™ (5.6) and MK II (7). The locking pin will be triggered/ released for approx. 5 seconds, after which the locking pin automatically locks again;
- Move the wheelchair away from the docking station within this 5-second period. Do not attempt to reverse out of the docking station until the red LED on the control module, which indicates the unlock position, has been illuminated.

⚠ **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 fault:

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

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

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

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

Fig.86

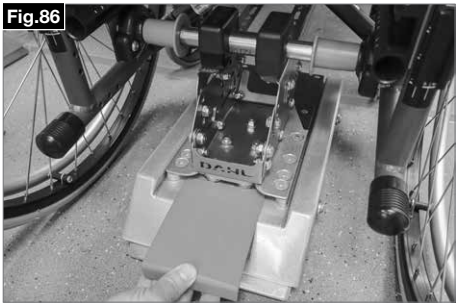
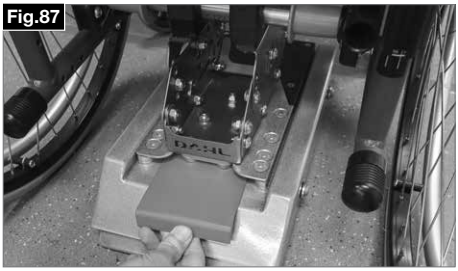


Fig.87



Move wheelchair forward to remove the pressure on the lock pin.

Place the emergency release tool in the gap between the locking plate and the docking station.

Push the release tool and wheelchair forward until the locking pin has been forced down - after which the wheelchair can reverse out of the docking station.

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

Installation of the Dahl Docking stations in the vehicle

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

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

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