

www.<sup>®</sup>  
**HOGGI**.de



## User manual



CE

**SWINGBO-VTi XL**

---

|          |                                                       |           |
|----------|-------------------------------------------------------|-----------|
| <b>1</b> | <b>Model identification &amp; basic configuration</b> | <b>4</b>  |
| 1.1      | Model identification (lable)                          | 4         |
| 1.2      | Basic configuration                                   | 4         |
| <b>2</b> | <b>Common information</b>                             | <b>5</b>  |
| 2.1      | Preface                                               | 5         |
| 2.2      | Application                                           | 5         |
| 2.3      | Declaration of conformity                             | 5         |
| 2.4      | Terms of warranty                                     | 6         |
| 2.5      | Servicing and repairs                                 | 6         |
| <b>3</b> | <b>Safety instructions</b>                            | <b>7</b>  |
| 3.1      | Meaning of symbols                                    | 7         |
| 3.2      | Common safety instructions                            | 7         |
| <b>4</b> | <b>Delivery and preparing for use</b>                 | <b>11</b> |
| <b>5</b> | <b>Adjusting and adaptation possibilities</b>         | <b>13</b> |
| 5.1      | Brake <b>HOGGI</b> light                              | 13        |
| 5.2      | Seat width / seat height / camber                     | 14        |
| 5.3      | Seat depth                                            | 14        |
| 5.4      | Backrest height (backrest panel trough shaped)        | 15        |
| 5.5      | Decline (backrest panel trough shaped)                | 15        |
| 5.6      | Active degree                                         | 15        |
| 5.7      | Tilt                                                  | 15        |
| 5.8      | Height adjustment of push-bar                         | 16        |
| 5.9      | Anti-tip                                              | 16        |
| 5.10     | Detaching rear wheels with quick-release-axle         | 17        |
| 5.11     | Pneumatic tyres / PU-tyres                            | 17        |
| 5.12     | Hand rims                                             | 17        |
| 5.13     | Drum brakes                                           | 18        |
| <b>6</b> | <b>Accessories</b>                                    | <b>19</b> |
| 6.1      | Seat panel                                            | 19        |
| 6.2      | Backrest (backrest panel trough shaped)               | 19        |
| 6.3      | Footrest hanger 90°                                   | 19        |
| 6.4      | Knee angle system (angle adjustable)                  | 20        |
| 6.5      | Footrest angle adjustment                             | 20        |
| 6.6      | Footrest with locking mechanism                       | 20        |
| 6.7      | Footrest                                              | 20        |
| 6.8      | Footrest with heel stop                               | 21        |
| 6.9      | Single footrest hanger 85 - 160°                      | 21        |
| 6.10     | Lower leg length                                      | 21        |
| 6.11     | Seat cushion                                          | 21        |
| 6.12     | Backrest cushion                                      | 21        |
| 6.13     | Spoke guards                                          | 22        |
| 6.14     | Headrest „standard“ with cushion                      | 22        |

---

---

|          |                                                  |              |
|----------|--------------------------------------------------|--------------|
| 6.15     | Headrest bracket „universal“                     | 22           |
| 6.16     | Headrest with occiput upholstery                 | 23           |
| 6.17     | Trunk supports                                   | 23           |
| 6.18     | Chest-/thoracic support                          | 23           |
| 6.19     | Armrests with PU pads                            | 23           |
| 6.20     | Armrests with tilt balancing                     | 23           |
| 6.21     | Therapy tray                                     | 24           |
| 6.22     | Lap belt                                         | 24           |
| 6.23     | 4-point-harness                                  | 24           |
| 6.24     | Ankle hugger                                     | 25           |
| 6.25     | Hip pads                                         | 25           |
| 6.26     | Abduction block                                  | 25           |
| <b>7</b> | <b>Transport</b>                                 | <b>25</b>    |
| 7.1      | In the trunk (luggage space) of a car            | 25           |
| 7.2      | Using <b>SWINGBO-VTi XL</b> for bus transport    | 26           |
| 7.3      | Transfer - getting into or out of the wheelchair | 26           |
| 7.4      | Anti-tippers to override steps                   | 27           |
| <b>8</b> | <b>Maintenance</b>                               | <b>28/29</b> |
| <b>9</b> | <b>Specifications</b>                            | <b>29</b>    |

---

## 1 Model identification

### 1.1 Model identification (label)

(The label is placed on the axle tube, see the arrow marking)



Material number  
SB=Seat width /  
XXX=colour code

Serial number

CE label



Classification / Product name

Maximum load/load capacity



Manufacturer

Place of manufacture

Year of manufacture

### 1.2 Basic configuration

- Rigid aluminium frame with centre of gravity tilt in space
- Camber adjustable
- Fender and **HOGGI** light brake
- **HOGGI** light rear wheels including hand rim, removable via quick release axle
- Seat height adjustable
- Push-handles or push-bar inclusive
- Tilt in space adjustable: -5° up to +45°
- Seat depth adjustable up to 12 cm
- Seat width 36, 40 or 44 cm
- Weight limit/ load capacity: 75 kg

---

## 2 Common information

### 2.1 Preface

Thank you for selecting the **SWINGBO-VTi XL** wheelchair for children and adolescents with 45° tilt in space. We have designed this high-quality product to make your life safer and easier, and we've included this manual to help you use and care for it.

Please read the following instructions to make sure you use this product as recommended. If you have any further questions, or if you have any problems, please contact your health-care provider. We hope that **SWINGBO-VTi XL** meets your expectations.

The design, as described in these Instructions for use, are subject to technical alterations without notice. Before using the wheelchair for the first time, the user and helping people need to read and understand the manual in order to guarantee a safe handling with **SWINGBO-VTi XL**.

### 2.2 Application

The **SWINGBO-VTi XL** wheelchair for children and adolescents with 45° tilt in space is designed solely for individual indoor and outdoor use by persons who are unable to walk or who have a walking impediment, and can be operated by the patient or by another person.

Assistance may be required due to:

- Paralysis (paraplegia / tetraplegia or tetraparesis)
- Loss of limbs (dysmelia/lower limb amputation)
- Infantile/spastic cerebral palsy
- Spina Bifida
- Muscle and nerve disorders
- Imperfect osteogenesis
- Poliomyelitis

The **SWINGBO-VTi XL** system wheelchair is able to be used for further service. For further service the product has to be cleaned and sanitised efficiently. Afterwards the product has to be checked concerning condition, wearout and damage by an authorised technician. All damaged and inappropriate parts need to be changed. Please see also the service manual for detailed information.

### 2.3 Declaration of Conformity

**HOGGI** GmbH as manufacturer with sole responsibility declares that the **SWINGBO-VTi XL** conforms to the requirements of the 93/42/EEC Guidelines.

---

## 2.4 Terms of Warranty

Warranty applies only when the product is used according to the specified conditions and for the intended purposes, following all manufacturer's recommendations.

The manufacturer is not responsible for damages caused by components and spare parts not approved by the manufacturer.

## 2.5 Service and Repairs

Service and repairs on the **SWINGBO-VTi XL** wheelchair for children and adolescents with 45° tilt in space should only be carried out by authorized **HOGGI** dealers. Should any problems arise, please contact the dealer who supplied your **SWINGBO-VTi XL**. Authorized dealers only fit original **HOGGI** spare parts.



For Preparing, repair and service, the following tools are required:

Allen wrench, size: 3 mm, 4 mm, 5 mm and 6 mm

Screw wrench, size: 8 mm, 10 mm, 13 mm, 17 mm, 19 mm, 24 mm

---

## 3 Safety instructions

### 2.1 Meaning of symbols

**CAUTION!**

Warning of possible danger of accident and injury. Warning of possible technical damage.

**INFORMATION!**

About use of product.

**INFORMATION!**

For service-personnel.

**ATTENTION!**

Read manual before!

### 2.2 Common safety instructions



Read manual completely before use! Familiarize yourself with handling and functions of the wheelchair before use and practice the handling. You are responsible for the safety of your child. The safety of your child could be affected if you do not follow the instructions of this manual. Nevertheless not all possible circumstances and unpredictable situations can be covered by this manual. Reason, care and circumspection are not features of the product, they are required of persons, who use the wheelchair or attend it. The person, who is using the wheelchair and its accessories should understand all instructions. It must explained to every other person using the wheelchair and its accessories. If instructions are not clear and further explanations become necessary, or if you have further questions please contact your **HOGGI** dealer. Practise with the new wheelchair on even, straightforward terrain first, together with the child. Together with the child, learn how the wheelchair reacts when the centre of gravity shifts; for example on slopes or inclines or when clearing obstacles such as steps and curbs. This should be done only with assistance from another person. Using an anti-tip is strongly recommended for inexperienced wheelchair users.



Strap in your child at all times, when it is in the wheelchair.



**HOGGI** points out, that any use beside the typical use can be dangerous. The wheelchair is not suitable for jogging, running, skating or similar activities. Swivelling front wheels tend to wobble at higher speed, which can cause a sudden stop and tip over of the wheelchair. Use the wheelchair only at regular walking speed. Under no circumstances leave the handle bar while pushing and never push the wheelchair away.



The wheelchair should only be used on solid level ground.



Use your wheelchair as intended by the manufacturer. For instance, do not drive into obstacles (including steps, curbs) without braking. Do not „jump“ the chair down from higher surfaces.



To clear obstacles such as steps and curbs, tilt the wheelchair onto the rear wheels (pull it backwards to go up; to descend, slowly lower it forward).  
If only one attendant is available when ascending or descending stairs, an incorrectly set anti-tip (if mounted at all) can lead to severe falls. Adjust the anti-tipper so that it does not come in the way of the steps during transport. Afterwards, swing the anti-tipper back to its operational position.



Do not go up or down stairs without the assistance of another person. If devices such as ramps or elevators are available, please use them. Ensure that the anti-tip (if mounted) is outside the danger-area. If wheelchairfriendly access is missing, two attendants must carry the wheelchair over the obstacle.  
The wheelchair should be lifted only by touching tighten parts of the frame (on the side frame above the front wheels and on the push handles which are fixed on the backrest base - if brakes are closed, also the push-rims can be used for lifting).



When ascending slopes or ramps and when crossing obstacles on upward slopes, always lean the wheelchair user's upper body far forward.  
When descending slopes, do not drive without braking and reduce your speed. Reduced load on the casters due to centre of gravity shifting can cause the casters to flutter.



If you have to park on a slope, face the wheelchair uphill with the brakes engaged and ensure that the seat is in the upright position. There is a risk that the pushchair might tip over backwards if the seat is the reclined position.



Before leaving the wheelchair and before getting into and out of it, always lock the wheel locks.



- Don't use the footrest to get into and out of the wheelchair generally.
- Use the footrest with shoes only.



Depending on footplate settings and wheelchair geometry, the wheelchair may tip over if the user boards the chair using the footplate. First practise boarding the chair with the child and an attendant who can secure the wheelchair, and modify footplate and seat height settings if the chair has a tendency to tip over. In addition, turn the caster fork to the front prior to using the footplate for getting into the wheelchair; this increases the wheelbase and thereby the wheelchair's stability against tipping.



The effectiveness of the wheel lock and the overall driving quality are dependent on adequate air pressure. With properly inflated rear wheels and even tyre pressure on both sides, your wheelchair is much easier to operate and manoeuvre. Before starting to use your wheelchair, check that the tyres are inflated correctly. The required air pressure is printed on the side of the tyre. For rear wheels, it should be at least 6 bar.



All brakes acting on the tyres do not serve as service brake but are only designed as parking brake (wheel lock). The wheel locks must not be used as driving brakes for slowing down the wheelchair, as in extreme cases, the abrupt stopping of the wheelchair can lead to falls.



Please keep packaging material away from children. Plastic packaging presents the danger of suffocation.



Disposal of waste: The packaging material as far as metal, aluminium and plastic parts can be recycled. The recycling must be operated according to the national and legal terms.



Check the condition of the product if the packaging shows damages.



Never leave your child unattended in the wheelchair even when they are strapped in and the brakes engaged.



In the dark, the user should wear light clothing or clothing with reflectors in order to improve visibility. Ensure that the reflectors are installed on the sides and rear of the wheelchair.



Extreme settings (e.g. shortest wheelbase and seat in the backmost position) combined with an unfavourable body posture can cause the wheelchair to tip even on level ground.



Static stability is  $>10^\circ$  inclination.  
Attaching heavy bags or other weight to the push-handles can adversely affect stability.



Adjustments with a high active degree demand a practised driver and the use of an anti-tip.

Under no conditions should the anti-tip(s) assume the function of transport wheels, for example to transport a person in the wheelchair with the rear wheels removed. The antitips must audibly lock in place, before it is able to bear loads. Firm seating must be verified by the user or by an attendant.



The maximum load for the **SWINGBO-VTi XL** is 75 kg.



Accessories and add-ons reduce the maximum load proportionately.



We recommend that, wherever and whenever possible, users transfer to the seats installed in the motor vehicle and use the corresponding vehicle restraint systems, because this is the only way to ensure optimum protection of the passengers in case of an accident. **SWINGBO-VTi XL** is admitted for use as a seat in a motor vehicle.



Be careful in case of extreme temperatures. The wheelchair can heat up significantly when in the sun or in the sauna. In extreme cold, there is a risk of hypothermia. Slowing down from high speeds or when descending longer slopes tends to heat up the hands and fingers, especially if using aluminium push rings. When using the wheelchair outdoors, leather gloves should be worn. Gloves provide the wheelchair user with a better grip and protect his or her fingers from dirt and hot metal. Persons with a insensitive skin (people which cannot sense an increase of temperature) and/or with skin harms have to pay attention, that metal parts will not get too hot. In these cases it is mandatory to wear appropriate clothes to protect the skin.



Always make sure that the quick-release axles are correctly set on the rear wheel. It may not be possible to remove the rear wheel unless the button on the quick-release axle is pushed.



Neither seat nor backrest height may be exceeded.



The assembly of a seat shell is only permitted within the specified seating area. The manufacturer of that new product combination has to test the stability and the adherence of the maximum load before commissioning. When applying seat and backrest panels always use upholstered seat cushions to avoid to avoid dents



Avoid reaching into any clamping range.

Danger of clamping exist in following assembly groups:

- Brake lever (if **SWINGBO-VTi XL** is supplied with fender with integrated brake system)
- Between brake lever and rear wheel



The wheelchair should be lifted only by touching tighten parts of the frame (on the side frame above the front wheels and on the push handles which are fixed on the backrest base - if brakes are closed, also the push-rims can be used for lifting).



The **HOGGI** seat cushion (Trevira CS) and the contoured seat cushion (Trevira CS) as well as the **HOGGI** nylon backrest abd seat cover are flame resistant referred to the EN 1021-1 and EN 1021-2 norm. If using different seat or backrest cushions to the original **HOGGI** upholstery the flame-retarding impact is not a given.



Please read to visually handicapped people the manual and info material - or use electric aids. Please download or read all **SWINGBO-VTi XL** documents on our webside **www.hoggi.de**.



Whenever you change any settings on the wheelchair, make sure that you firmly tighten any screws that have been loosened.



1

## 4 Delivery and preparing for use

Your **SWINGBO-VTi XL** wheelchair will normally be supplied completely mounted with folded backrest, with removed rear wheels and if necessary removed anti-tippers (1).

Delivery in box: 920 mm (L) x 700 mm (W) x 920 mm (H)

Please check the condition of the product if the packaging shows damages.

### The original package contains the following parts:

- Wheelchair with folded backrest
- Rear wheels and quick-release axles unmounted
- Front castors already mounted in the front castor forks
- Already mounted anti-tip
- Additional accessories as ordered (These have to be mounted on the wheelchair by an authorized dealer)
- Instructions and list of tools required

Please remove the transport packaging carefully.



2

### To prepare the wheelchair for use please proceed as follows:

- Grip the head of the quick-release axle as illustrated (3) and press the release knob.
- Whilst pressing the release knob, position the quick-release axle into the rear wheel bearing (3).
- Place the wheelchair onto the front castors and lift the wheelchair by holding the rear of the seat (4).
- Insert the rear wheel and the quick-release axle into the axle housing. Hold the spokes close to the wheel hub and press the release knob with your thumb. The rear wheel can then be easily slid into position (4).
- Ensure that the quick-release axle is securely fixed in the axle housing.



3



4



#### CAUTION!

Push each rear wheel to check that each quick-release axle is safely located.



5

If your **SWINGBO-VTi XL** is supplied with a foldable backrest it is possible that it is folded for the transport

- Pull the backrest at the cross tube into the upstanding position (5).



#### CAUTION!

Push the backrest to check if the interlocks are safely located.

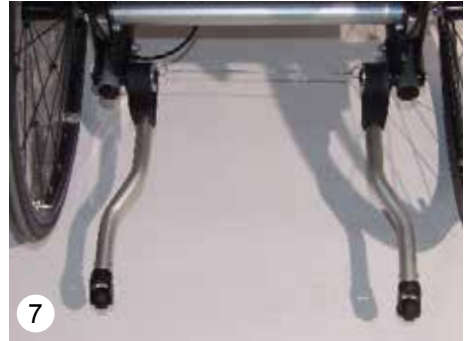
**SWINGBO-VTi XL** is generally equipped with two pre-assembled anti-tippers (6).

- Stick the anti-tip tubes into the particular support
- Press the snap button and choose the desired length position (detailed illustration).



**SWINGBO-VTi XL** is generally equipped with two pre-assembled antitippers.

The illustration (7) shows an anti-tip in the „active“ position.



#### To flip up:

- Activate the bowden cable with your foot as shown.
- Pull your foot easily to the back.

The tubes of the anti-tippers will flip up automatically.

- Move the tubes with your foot to the top until the bolt clicks into the „passive“ position.



#### To flip down:

- Activate the bowden cable with your foot.
- Pull your foot easily to the front.

The tubes of the anti-tippers will flip down automatically.

- Move the tubes with your foot to the bottom until the bolt clicks into the „active“ position.



#### CAUTION!

By tipping the wheelchair carefully backwards onto the anti-tippers, check that they are securely located.



If your **SWINGBO-VTi XL** wheelchair is supplied with seat or back upholstery from **HOGGI**, please proceed as follows:

- Slide the upholstered seat cushion under the backrest and lay the seat cushion on the seat surface as illustrated (11).
- Fasten the front flaps on the seat panel as shown in illustration (11).



- Fasten the flap of the seat cushion to the back edge of the seat surface (12).



- Pull the back cushion from top to bottom on the backrest panel.
- Press the cushion firmly on the backrest panel (13).



## 5 Adjusting and adaptation possibilities

### 5.1 HOGGI light brake

Press the brake lever below to lock the wheel lock (14).



#### CAUTION!

All brakes acting on the tires do not serve as a slow down brake but are only designed as a parking brake (wheel lock). The wheel locks must not be used as driving brakes for slowing down the wheelchair, as in extreme cases, the abrupt stopping of the wheelchair can lead to falls.



Illustration 15 shows a closed **HOGGI** light brake.



#### CAUTION!

The effectiveness of the wheel lock are dependent on adequate air pressure. Before starting to use your wheelchair, check that the tires are inflated correctly. The required air pressure is printed on the side of the tires. For rear wheels, it should be at least 6 bar.

- To release the **HOGGI** light wheel lock pull the brake lever forwards (16).



## 5.2 Seat width / seat height / camber

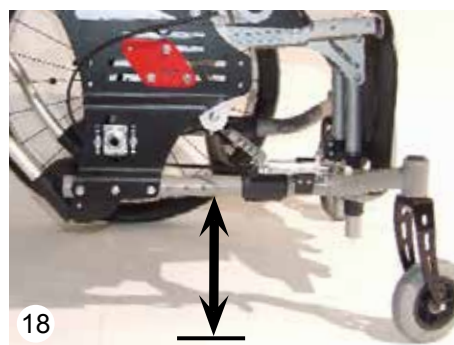
Der **SWINGBO-VTi XL** is available in six seat widths (36, 40 and 44 cm).

The seat width gets measured between the wheel guards and it depends on the cross tubes (17).



The **SWINGBO-VTi XL** wheelchair will be built in accordance with the customer's order. It is possible for the technician to modify the wheelchair with a different seat width.

The seat height depends on the chosen rear wheels and front castors as well as on the height of the rear axle and the position of the front castors in the front castor forks (18).



The **SWINGBO-VTi XL** wheelchair will be built in accordance with the customer's order. It is possible for the technician to modify the wheelchair with a different seat height.

The **SWINGBO-VTi XL** wheelchair can be supplied with rear wheels inclined (camber) 3° (not pictured here), 6° (19 left) or 9° (19 right) from the vertical.

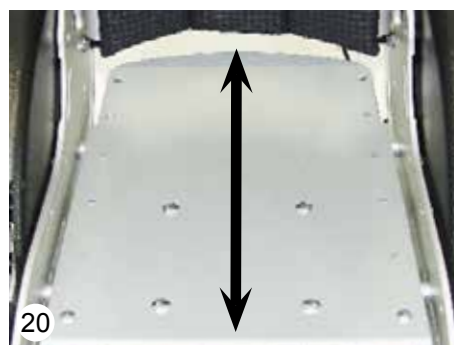


The **SWINGBO-VTi XL** wheelchair will be built in accordance with the customer's order. It is possible for the technician to modify the wheelchair with a different camber.

## 5.3 Seat depth

Loosen the four screws under the seat and adjust the seat depth by sliding the seat to the required position. To get the maximum stability the four screws should be positioned with a distance (to each other) as far as possible (20).

To adjust the seat depth remove the backrest cushion first.



Whenever you change any settings on the wheelchair, make sure that you firmly tighten any screws that have been loosened.



#### 5.4 Backrest height (backrest panel trough shaped and height adjustable)

If your SWINGBO-2 XL wheelchair is supplied with a trough shaped, 2-parts, height adjustable backrest, please proceed as follows:

Loosen the four screws on the backrest panel and adjust the backrest height by sliding the panel to the required position (21).

To adjust the seat depth remove the backrest cushion first.



#### 5.5 Recline (trough shaped backrest)

- Remove the rear wheel and the wheel guard as described under „3 Delivery and preparing for use“.
- Loose and remove both hexagon socket screws.
- Repeat that on the opposite side too
- Tilt the backrest and choose one of the five backrest angles.



#### 5.6 Active degree

The active degree describes the relation of the backrest position to the rear wheels. The more the backrest is positioned to the rear of the axle, the more active the **SWINGBO-VTi XL** can be driven (e.g. lifting of the front wheels). That means contrary a safer driving position if the adjustment is set above or in front of the rear axle.

##### CAUTION!

Adjustments with a high active degree demand a practised driver and the use of an anti-tip.

The **SWINGBO-VTi XL** will be built in accordance with the customer's order. It is possible for the dealer to modify the active degree..



- After loosening the three marked M6 screw nuts on the pressure plate on both sides of the wheelchair, the seat unit can be slides into desired position continuously.
- The selected position has to be equal on each side.
- All nuts must be firmly retightened.



Whenever you change any settings on the wheelchair, make sure that you firmly tighten any screws that have been loosened.



#### 5.7 Tilt

- Lock both wheel locks.
- Pull the release handle until the locking mechanism is fully disengaged.

By using the push-bar or push-handles, the seat unit can be adjusted to any angle between -5° and +45°.

Set the required seat angle and allow the bolt to lock in the required position.



**CAUTION!**  
Push sharply on the push-bar or push-handle to ensure that the bolt is securely located.



### 5.8 Height adjustment of the push-bar

The ratchet joint on the push-bar allows them to be adjusted to a comfortable height for the attendant.

By pressing in the knobs on both ratchet joints, the push bar can be turned to the required position (27).



### 5.9 Anti tip

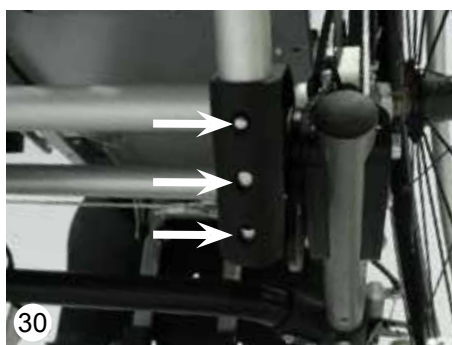
- The angle of the anti tip can be adjusted by loosening the screw.



The anti-tip should be adjusted that it is 2-3 cm above the ground (29).



- Press the snap button and choose the desired length position
- The length of the tubes can be adjusted in three positions (with respectively 2,5 cm distance).





### 5.10 Detaching the rear wheels with quick-release axles

The rear wheels are removed by means of a quick-release mechanism. This reduces the volume of the wheelchair for transportation:

- Tilt the wheelchair onto the front castors and lift it by holding the rear edge of the seat.
- Grip the spokes close to the wheel hub and, with the thumb, press the release knob of the quick-release axle.
- Pull the rear wheel with the quick-release axle out of the axle housing.
- To avoid a risk of snagging, it may be preferable to withdraw the quick-release axles from the rear wheels.
- To re-assemble the rear wheels refer to section 3 **“Delivery and preparing for use”**.



#### CAUTION!

Push sharply on each rear wheel to ensure that the quickrelease axles are securely located.



### 5.11 Pneumatic tires / PU-tires

The rear wheels can be supplied with pneumatic tires (34, left). The car type valves enable the tyres to be checked or inflated at any petrol station or by means of a suitable pump, supplying a minimum 6 bar pressure (33).



The rear wheels can also be supplied with solid PU-tyres (34, right).



### 5.12 Hand rims

Hand rims can be supplied in aluminium (35, left) or stainless steel (35, right).

---

Hand rims can be supplied with a standard diameter (36, left) or with a larger diameter (36, right). These are called respectively hand rims “standard” or hand rims “high”.

The **SWINGBO-VTi XL** wheelchair will be built in accordance with the customer’s order. It is possible for the technician to modify the wheelchair with different hand rims.



All hand rims can be mounted close to the rear wheel or a little further apart (37). A future modification is possible again.



### 5.13 Drum brakes

In addition to **HOGGI light** brake, the **SWINGBO-VTi XL** wheelchair can be fitted with drum brakes (38).

The drum brakes are activated from the push-bar or push-handles.



Each drum brake gets operated by a brake lever (39).



- To apply the drum brake squeeze the brake lever (40).
- With the finger tips press the rocking catch, until it locks with a click and release the brake handle.

When the brake lever is squeezed again, the rocking catch is unlocked and the drum brake can be released.





The brake force can be adjusted by the adjustment screw (41).

## 6 Accessories

All accessories not installed by the manufacturer must be installed by trained technicians. The following notes on installation are for your information but should be performed by trained technicians.



Straps on accessories are usually extra long to accommodate every option. Shorten excess strap ends on accessories so that they can not be trapped. To prevent strap ends from fraying the cut ends can be melted together with a flame (eg. lighter).



### 6.1 Seat panel

The **SWINGBO-VTi XL** wheelchair will be built in accordance with the customer's order

Function and adjustment of the seat panel are described in „4.2 Seat width / seat height / camber“ and „4.3 Seat depth“.



### 6.2 Backrest (backrest panel trough shaped and height adjustable)

The **SWINGBO-VTi XL** wheelchair will be built in accordance with the customer's order.

Function and attachment of the backrest panel are described in „4.4 Backrest height (backrest panel trough shaped and height adjustable)“ und „4.6 Recline (trough shaped backrest)“.



### 6.3 Footrest hanger 90° (knee angle)

Mounted footrest hanger 90° (45) available for different lower leg lengths:

LLL short: 20- 36 cm

LLL long: 20 - 41 cm

## 6.4 Knee angle system, angle adjustable

Mounted knee angle system, continuously angle adjustable from 85 - 160°(46).

LLL short: 20 - 36 cm

LLL long: 20 - 41 cm



## 6.5 Footrest angle adjustment

The footrest can be folded upwards.



To get in the wheelchair the footrest must be always folded upwards.

The position of the footrest can be adjusted by loosening the four screws on the footrest bracket (47).

This alters the location of the footrest and, therefore, also the footrest angle.

The angle of the footrest can be adjusted from approximately 80 to 100° (48 ).

- Afterwards, retighten the screws securely.



Whenever you change any settings on the wheelchair, make sure that you firmly tighten any screws that have been loosened

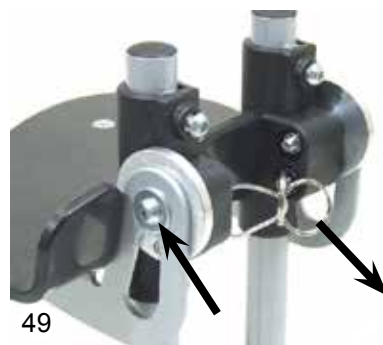


## 6.6 Footrest lock (optional)

The footrest bracket can be supplied additionally with a locking device. When adjusting the footrest angle, the locking device must also be adjusted, by loosening the screws on the right and the left side (49). By pulling the release ring, the footrest can be folded upwards. When the footrest is folded down, it will automatically lock into position.



All four screws on the footrest must be fixed.



## 6.7 Footrest

Footrest to position the feet (50).





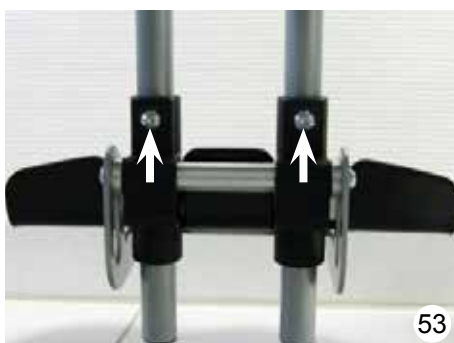
### 6.8 Footrest with heel stop

Footrest to position the feet with additional heel stop. The heel stop prevents the sliding of the feet (51).



### 6.9 Single footrest hanger (with two single footplates in boat shape)

- Functions and adjustments of the knee angle are described under **5.5**.
- Functions and adjustments of the footrest angle are described under **5.6**.
- Functions and adjustments of the footrest lock are described under **5.7**.
- Functions and adjustments of the lower leg lengths are described under **5.11** but it is necessary to move each plate into the desired position.



### 6.10 Lower leg length

After releasing both clamping screws on the footboard bracket it is possible to adjust the required lower leg length continuously (53).

- Retighten the clamping screws securely.



Whenever you change any settings on the wheelchair, make sure that you firmly tighten any screws that have been loosened.



### 6.11 Seat cushion

The **HOGGI** seat cushion is 3 cm thick and is foam filled. The cushion cover is washable and can be unzipped to remove the foam pad (54).



### 6.12 Backrest cushion

The **HOGGI** back cushion is 2,5 cm thick and is foam filled. The cushion cover is washable and can be unzipped to remove the foam pad.

### 6.13 Spoke guards

The spoke guards prevent the child's fingers from being trapped in the spokes.

The transparent spoke guards can be painted by the child or have decorative stickers applied (56).

For coloured spoke guards please visit our homepage [www.hoggi.de](http://www.hoggi.de) or ask for our spoke guards brochure.



### 5.14 Headrest „standard“ with cushion

This headrest is only lightly contoured and serves as a contact surface for the back of the head.

This headrest can be mounted on the backrest panel (57).



After loosening the four screw connections the headrest can be adjusted in the height (58).

The cover can be removed for cleaning.



Whenever you change any settings on the wheelchair, make sure that you firmly tighten any screws that have been loosened.

### 6.15 Universal headrest bracket

The bracket for the headrest can be mounted on both backrests (59).

Release the clamping lever to adjust the height of the headrest.



Whenever you change any settings on the wheelchair, make sure that you firmly tighten any screws that have been loosened.

### 6.16 Headrest with occiput upholstery

This headrest can be adjusted both in height and in angle.

The metal frame under the upholstery can be supplied to suit head size.

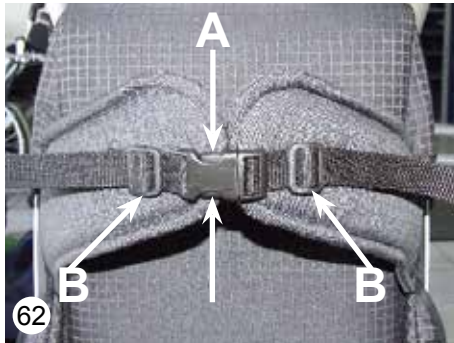
The cover can be removed for cleaning.





### 6.17 Trunk supports

The trunk supports are separately adjustable and the size of the pads is approx. 33 - 43 cm (61).



### 6.18 Chest-/ thoracic support

The chest-/ thoracic support are adjustable in the height and the breadth as well as in 2 angles.

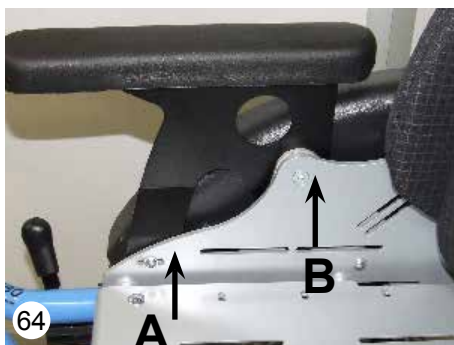
- To open the chest-/ thoracic support use the connectors.
- Press the connectors at the marked position **(A)**.
- At the marked buckles **(B)** it is possible to fix or rather loosen the chest-/ thoracic support.



Illustration 63 shows the chest-/ thoracic support adjusted in two different angles.

The **SWINGBO-VTi XL** wheelchair will be built in accordance with the customer's order.

It is possible for the retailer to convert the chest-/ thoracic support to other angles.



### 6.19 Armrests with PU-pads

The height of the armrests can be adjusted after loosening and removing the screw connections **A** and after loosening the screw connections **B** (64).



Whenever you change any settings on the wheelchair, make sure that you firmly tighten any screws that have been loosened.



### 6.20 Armrests with tilt balancing

The height of the armrests with tilt balancing is adjustable after loosening and removing the screw connections **A** and after loosening the screw connections **B** (65).

### 6.21 Therapy tray

The therapy tray can be mounted with terminal strips on the armrests.

The terminal strips are preset to the distance of the armrests.

- Loose the knurled nut and press the clamp.
- Position the therapy tray on the armrests.
- Tighten the knurled nut.



### 6.22 Lap belt

At the end of the belt are pre-assembled buckles.

- Lead the end of the lap belt as shown, so that the belt passes only once through the buckle.

The length of the free belt end causes the lap belt length.

- Lead the belt end through the slotted holes on the left and right side of the backrest base (67).



- Lead the free belt end through the buckle once again (68).



Open the lap belt by pressing the red button (69).

When the lap belt is fastened, fine adjustment can be made by pulling one free end of the belt.



### 6.23 4-point-harness

The 4-point-harness should be installed by authorized dealers or trained technicians.

Take off the seat upholstery first and mount the buckles at the slotted holes.

The lap belt ends and the tension belts get mounted and preset as described in 5.22.

Open the lap belt by pressing the connectors.





At the belt buckle the lap belt can be readjusted by adducting the lap ends (fine tuning).

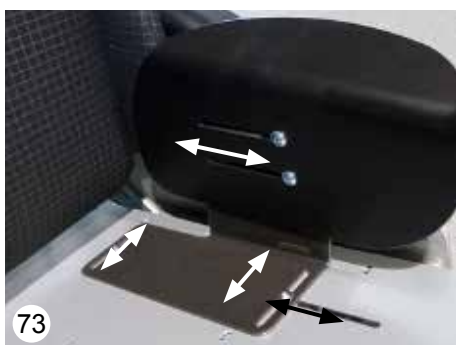


#### 6.24 Ankle hugger

By using the ankle straps feet and ankles can be comfortably positioned. The ankle straps are passed through the rings on the footrest. This holds the heels against the raised heel plate at the rear of the footrest.

The ankle straps can be adjusted and then fastened with Velcro

The fastening should always be on the outside (86).



#### 6.25 Hip pads

After loosening the marked screws the hip supports are adjustable in the length, depth and width.



#### 6.26 Abduction block

The abduction block is guiding the thighs.

By activating the marked button it is possible to swing away the abduction block. It is also possible to remove the abduction block.

These are two functions to make the entrance and the exit (in or out of the wheelchair) easier.



## 7 Transport

### 7.1 In the trunk (luggage space) of a car

The **SWINGBO-VTi XL** wheelchair can according to size and specification, be transported as one unit, with folded down backrest and folded up footrest (75).

For convenience of handling it may be preferable to partially dismantle the wheelchair into a few main components.

To achieve the most compact folding package fold the backrest and footrest but remove the rear wheels, the anti-tip assemblies and the push-bar/ push-handles (76).



## 7.2 Using *SWINGBO-VTi XL* for bus transport



### CAUTION!

We recommend that, wherever and whenever possible, users transfer to the seats installed in the motor vehicle and use the corresponding vehicle restraint systems, because this is the only way to ensure optimum protection of the passengers in case of an accident. ***SWINGBO-VTi XL*** is admitted for use as a seat in a motor vehicle.



## 7.3 Ein-, Aus- und Umsteigen



### CAUTION!

- Always lock the wheel locks before getting into or out of the wheelchair.
- First practise boarding the chair with the child and an attendant who can secure the wheelchair, and modify footplate and seat height settings if the chair has a tendency to tip over.
- Raise the tilt resistance by turning steering fork to the front (wheelbase will be enlarged).



For adolescents it can be advantageous, according to age, weight and ability, to make a transfer over the side of the wheelchair.

- Firstly position the wheelchair at an angle of 45° to the seat or wheelchair, from which a transfer is to be made (78).
- Apply the ***HOGGI light*** brakes (79).

During the transfer the seat surface, the backrest surface, the push rims or briefly the side of the seat can be used for support. The transfer should be practiced with a helper, until it can be accomplished safely. The transfer should be carried out in one movement.



- Afterwards, fold down the foot rest and position the feet on it. If necessary correct the seat position. Finally the parking brake can be released and the wheelchair is ready for use.
- Carry out the sequence in reverse when getting out of the wheelchair.





#### 7.4 Anti-tippers to override steps

The **SWINGBO-VTi XL** is equipped with two anti-tip units. The antitip increases the stability of the wheelchair.

Function and attachment of the footrest lock are described in „**4. Delivery and preparing for use**“ and „**5.9 Anti-tip**“.



#### CAUTION!

If the overriding of steps are only with the help of another person possible - a mounted or active anti-tip can lead to falls.

Adjust the anti-tip so that it can not touch the steps.

After overriding the steps or similar barriers adjust the anti-tip again.

---

## 8 Maintenance

---

Your **SWINGBO-VTi XL** wheelchair is CE approved. The manufacturer herewith guarantees that this medical product as a whole conforms to the requirements of 93/42/EEC Guideline.

The proper function of the wheelchair, especially of the wheel locks, should be checked before every use.

Safety nuts should be used only once. If they have been loosened several times, they must be replaced.

The items listed in the following table must be checked by the user at the indicated intervals. Failure to carry out these simple checks may lead to problems arising that could invalidate the warranty.

| Check                                                   | daily before use | weekly | monthly |
|---------------------------------------------------------|------------------|--------|---------|
| Function test of the brake/wheel lock                   | X                |        |         |
| Function test of the anti-tip                           | X                |        |         |
| Function of rear wheels quick-release system            | X                |        |         |
| Check stability of footrest                             |                  | X      |         |
| Air pressure (see indication on tyre)                   |                  | X      |         |
| Push rims for damage                                    |                  | X      |         |
| Screw connections                                       |                  |        | X       |
| Visual inspection for worn parts (e.g. tyres, bearings) |                  |        | X       |
| Dirt on bearings                                        |                  |        | X       |
| Spoke tension of the rear wheels                        |                  |        | X       |
| Function test of the tilt mechanism                     |                  |        | X       |

Should any defects become obvious, please contact your authorized **HOGGI** dealer to eliminate them. We also recommend that you have your **SWINGBO-VTi XL** serviced by your technician every twelve months.

### Instructions for cleaning and maintenance

- Clean all frame components and plastic parts using mild detergents only. (e.g. Sagrotan)
- Padding parts can be washed at 40 °C. If washed in a washing machine, put them in a linen bag or a pillow case
- In most cases, wiping with a damp cloth is sufficient.
- Do not use your **SWINGBO-VTi XL** wheelchair in salt water.
- Keep sand or other particles from damaging the wheel bearings.
- If your wheelchair gets wet, towel-dry it as soon as possible.
- Hair and dirt particles generally accumulate between the caster wheel and fork. This can restrict the caster wheels from rotating smoothly. Remove the caster and thoroughly clean the fork and caster using a mild detergent.
- The rear wheels feature a quick-release system. To keep this system operational, ensure that no dirt adheres to the quick-release axle or axle housing. The quickrelease axle should also be lightly lubricated regularly with resin-free sewing machine oil.
- Screw connections should be checked frequently, in particular when beginning to use the wheelchair and after any adjustment. If a screw connection becomes loose repeatedly, consult your dealer.



---

**SWINGBO-VTi XL expected useful life:**

The expected useful life of the **SWINGBO-VTi XL** wheelchair is 5 years, depending on intensity of use and maintenance. We recommend an annual inspection by an authorized **HOGGI** dealer. In case of an interference or a damage of the wheelchair it has to be checked immediately by a dealer or a medical supply store.

## 9 Specifications

---

|                               |                                         |  |               |  |               |
|-------------------------------|-----------------------------------------|--|---------------|--|---------------|
| Seat width                    | <b>360 mm</b>                           |  | <b>400 mm</b> |  | <b>440 mm</b> |
| Seat depth                    | 340 - 460 mm                            |  | 380 - 500 mm  |  | 380 - 500 mm  |
| Backrest height               | 430 - 550 mm                            |  | 450 - 570 mm  |  | 480 - 600 mm  |
| Seat height*                  | 420 mm - 510 mm                         |  |               |  |               |
| Seat angle                    | -5° up to + 45°                         |  |               |  |               |
| Backrest angle                | In 5° steps adjustable from 85° - 105°  |  |               |  |               |
| Lower leg length              | 200 mm - 410 mm                         |  |               |  |               |
| Footrest angle                | -10° up to + 10°                        |  |               |  |               |
| Rear wheel diameter           | 22x1" or 24x1"                          |  |               |  |               |
| Camber                        | 3°, 6° or 9°                            |  |               |  |               |
| Front castor diameter         | 100 mm (4"), 125 mm (5"), 140 mm (5,5") |  |               |  |               |
| Turning radius                | 1100 mm                                 |  |               |  |               |
| Load capacity**               | 75 kg                                   |  |               |  |               |
| Weight***                     | 16,9 kg                                 |  |               |  |               |
| Overall length                | 910 mm                                  |  |               |  |               |
| Overall width                 | 650 mm                                  |  |               |  |               |
| Height (Push-bar, swung away) | 650 mm                                  |  |               |  |               |
| Mass (of the heaviest part)   | 16,3 kg                                 |  |               |  |               |

**CAUTION!**

\*The seat height depends on frame size, wheel diameter and camber.

**CAUTION!**

\*\*Accessories and add-ons reduce the maximum load proportionately.

**CAUTION!**

\*\*\* The weight refers to **SWINGBO-VTi XL** in its basic configuration and in 360 mm seat width.







Partnering together to mobilise kids

**HOGGI** GmbH • Eulerstraße 27 • D-56235 Ransbach-Baumbach • Internet: [www.hoggi.de](http://www.hoggi.de)

E-mail: [info@hoggi.de](mailto:info@hoggi.de) • Telefon: (+49) 2623 / 92 499-0 • Telefax: (+49) 2623 / 92 499-99