

# SHERPA

**User manual** 

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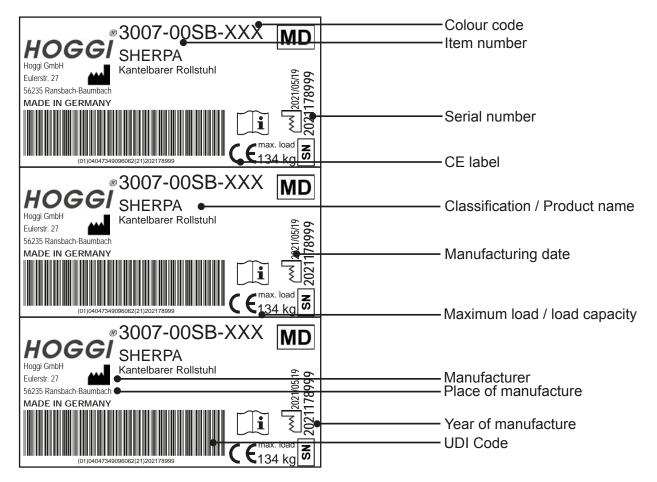
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# 1 Model identification

# **1.1 Model identification (label)**

(The label of SHERPA is placed on the rear cross tube)



# 1.2 Basic configuration

- Powder coated rigid aluminium frame indoor base
- Seat widths: 320 mm up to 480 mm
- Tilt of centre of gravity mounted on roller bearings from -7° up to 45°
- System-shape-seating frame
- System-shape-backrest frame in 3 backrest heights
- Adjustment of backrest angle from 80°up to 123°
- Rear wheels
- Knee lever wheel locks
- Wheel camber: 0° or 3°
- Weight limit: 134 kg

## 1.3 Environmental conditions

Environmental factors such as temperature and humidity can damage the wheelchair. The manufacturer recommends not condensing the **SHERPA** at ambient temperatures between -20 ° C and +40 ° C and a humidity of 5 to 100%.

Caution: Prolonged exposure to the sun may cause parts of the wheelchair to become hot. Be sure to!

# 2 Common information

# 2.1 Preface

Thank you for selecting the **SHERPA** system-wheelchair with 45° tilt in sapce. 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 **SHERPA** meets your expectations.

We reserve technical modifications regarding the specified model in this manual. Before using the system-wheelchair the first time, this manual has to be read and understood by patient and support personnel in oder to ensure a safe handling with the system-wheel-chair.

# 2.2 Application

The **SHERPA** system-wheelchair with 45° tilt in sapce is designed solely for individual indoor and outdoor use by children and adolescents 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 **SHERPA** 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 inapropptiate parts need to be changed. Please see also the service manual for detailled information.

## 2.3 Declaration of Conformity

**HOGGI** GmbH as manufacturer with sole responsibility declares that the **SHERPA** wheelchair as a whole conforms to the basic safety and performance requirements in accordance with Annex I to Regulation (EU) 2017/745 of the EU Parliament and of the Council. Applicable harmonized standards have been applied. **SHERPA** meets the requirements of ISO 7176-8, DIN EN ISO 12182 and DIN EN ISO 12183.

### 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.

See also § 8 of terms and conditions on: www.hoggi.de.

(1) Precondition for any warranty claim of the purchaser is the purchaser's full compliance with all requirements regarding inspection an objection in accordance with § 377 of the German Commercial Code [HGB].

(2) Warranty claims shall be time-barred after 12 month of the passage of risk.

(3) In the case of a justified notice of defects, we shall carry out subsequent performance either by means of professional elimination of the defect (reworking) or through the quickest possible replacement delivery. If the remedying of the defect or the supply of a replacement within a reasonable period fails, the Buyer shall be entitled to reduce the purchase price or, provided it is not just an insignificant defect, to, withdraw from the contract.

(4) If one of the two or both types of subsequent fulfillment is impossible or disproportionate, we are entitled to refuse them. We can also refuse subsequent fulfillment if the purchaser has not fulfilled his payment obligations to an extent that corresponds to the defect-free part of the service performed.

(5) If the remedying of the defect or the supply of a replacement within a reasonable period fails, the Buyer shall be entitled to reduce the purchase price or, provided it is not just an insignificant defect, to, withdraw from the contract.

(6) Any additional claims by the ordering party, particularly those concerning damages instead of performance and replacing any other direct or indirect damages, including ancillary or consequential damage, irrespective of their legal basis, shall be excluded. The aforementioned limitations of liability shall not apply if the damage is attributable to a wilful or grossly negligent breach of obligations, if a guarantee for the properties of the service has been stipulated, or if damages for bodily injuries, death, or other impairment of health are claimed. If the delivery delay for which we are responsible concerns a non-accidental breach of an essential contractual duty or a cardinal obligation, we are liable according to the legal regulations; in this case, the liability compensation is limited to the foreseeable, typically occurring damage.

### 2.5 Service and repairs

Service and repairs on the *SHERPA* system-wheelchair with 45° tilt in sapce should only be carried out by authorized *HOGGI* dealers. Should any problems arise, please contact the dealer who supplied your *SHERPA*. 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

# 3.1 Meaning of symbols



CAUTION!

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

# i

About use of product.

**INFORMATION!** 



#### **INFORMATION!** For service-personnel.

ATTENTION! Read manual before!

# 3.2 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 forinexperienced wheelchair users.



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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° 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 **SHERPA** is 134 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. *SHERPA* is not admitted for use as a seat in a motor vehicle.



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 SHERPA 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.



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.



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



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

Please check the condition of the product if the packaging shows

Your **SHERPA** system-wheelchair will normally be supplied completely mounted with folded backrest and with removed rear

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

#### The original package contains the following parts:

• System-wheelchair with folded backrest

wheels.

damages.

• Rear wheels and quick-release axles unmounted

4 Delivery and preparing for use

- · Front castors already mounted in the front castor forks
- Additional accessories as ordered (These have to be mounted on the system-wheelchair by an authorized dealer)
- Instructions and list of tools required

Please remove the transport packaging carefully.

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

- Grip the head of the quick-release axle as illustrated (1) and press the release knob.
- Whilst pressing the release knob, position the quick-release axle into the rear wheel bearing (1).
- Place the system-wheelchair onto the front castors and lift the system-wheelchair.
- by holding the rear of the seat (2).
- 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 (2).
- Ensure that the quick-release axle is securely fixed in the axle housing.

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

SHERPA will be delivered with a folded backrest.

• Pull the bowden cable as shown and move the backrest into the upstanding position

CAUTION! Push the backrest to check if the interlocks are safely located. CAUTION! Avoid reaching into any clamping range.

CAUTION!

CAUTION!





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#### Checking of the anti-tippers:



**SHERPA** is generally equipped with pre-assembled anti-tippers.

• Move the anti-tippers as shown downwards with your hand



• Turn the anti-tip to the back into the active position. and check that they are securely located.

For use in everyday life the anti-tippers can be activated as shown in pictures A and B.



CAUTION! Danger for movable parts. Avoid reaching into any clamping range.



Picture shows anti-tippers in an active position.



#### Activating of the anti-tip by foot:

- Move the anti-tip as shown with the foot downwards.
- Turn the anti-tip with the foot to the back into the active position



#### Deactivating of the anti-tip by foot:

- Move the anti-tip as shown with the foot downwards.
- Turn the anti-tip with the foot to the front into the inactive position



#### CAUTION!

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

# If your SHERPA 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.
- Fasten the front flaps on the seat panel as shown in illustration



• Fasten the flap of the seat cushion to the back edge of the seat surface



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



# 5 Adjusting and adaptation possibilities

### 5.1 Knee lever wheel locks

Press the brake lever forward to lock the wheel lock



#### 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.

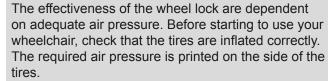




CAUTION! Danger for movable parts. Avoid reaching into any clamping range.



#### CAUTION!



• To release the wheel lock pull the brake lever to the back



#### 5.2 Seat width / Seat height / Camber

SHERPA is available in the seat widths from 320 up to 480 mm.

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

The **SHERPA** system-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 size of rear and front wheels.



The **SHERPA** system-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 **SHERPA** can be supplied with rear wheels inclined (**camber**)  $0^{\circ}$  (as pictured) or  $3^{\circ}$ . A camber of  $3^{\circ}$  is only available for rear wheels with 22" and 24".

The **SHERPA** system-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 two marked screw connections lateral of the seating panel (on both sides) and adjust the seat depth by sliding the backrest panel. Remove the seat cushion first. The seat depth (min/max) is restricted by 2 stops - see arrows.



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)** If your **SHERPA** system-wheelchair is supplied with a trough shaped, 2-parts, height adjustable backrest, please proceed as follows: Loosen the six screws on the backrest panel and adjust the backrest height by sliding the panel to the required position.

To adjust the seat depth remove the backrest cushion first.





#### 5.5 Recline

- Loosen both bolts by pulling the bowden cable.
- Tilt the backrest and choose one of the backrest angles.
- Tighten all bolts firmly.



# CAUTION!

Danger for movable parts. Avoid reaching into any clamping range.

#### 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 **SHERPA** 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 **SHERPA** will be built in accordance with the customer's order. It is possible for the dealer to modify the active degree.

• Loosen both marked screw connections (as shown) on both sides of the **SHERPA** and slide the seat unit in the required position. The active degree is restricted by 2 stops - see arrows.



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



#### 5.7 Tilt in space

- 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 -7° 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.

#### CAUTION!



Danger for movable parts. Avoid reaching into any clamping range. Also be aware that the child is not reaching into the clamping range before using the tilt in space.



#### 5.8 Height adjustment of the push-bar/push-handles

The cam lever on the back panel allow the push-bar/push-handles to be adjusted to a comfortable height for the attendant.

Open the cam lever on both sides. Press both spring buttons simultaneously and slide the push-bar/ push-handles in the desired height position



#### 5.9 Anti-tip

• The angle of the anti-tippers can be adjusted by loosening the screws.



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



Whenever you change any settings on the wheelchair, make sure that you firmly tighten any screws that have been loosened. Any adjustments should be done only by a technician.



Press the snap button and choose the desired length position. The length of the anti-tipper tubes can be adjusted in the anti-tipper bracket in three positions 2.5 cm apart.





**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 system-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 (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.

Check the maximum tire pressure, which is indicated on the tire.





The drive wheels can also be supplied with solid PU-tyres (right).





The size of the tire types can be found on the tires.

# **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 *SHERPA* system-wheelchair was built in accordance with the customer's order. Functions and adjustments of the seat panel are described under "**5.2 Seat width / Seat height / Camber**" and "**5.3 Seat depth**".



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

The **SHERPA** system-wheelchair was built in accordance with the customer's order.

Function and attachment of the backrest panel are described in "5.4 Backrest height (backrest panel trough shaped)" and "5.5 Recline (trough shaped backrest)".



# **6.3 Footrest hanger 90° (knee angle)** Mounted footrest hanger 90° available for different lower leg lengths.



**6.4 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



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

The angle of the footrest can be adjusted from approximately  $80^\circ$  to  $100^\circ\!.$ 

• 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.

#### **6.5 Footrest** Footrest to position the feet.



#### 6.6 Footrest with heel stop

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



#### 6.7 Lower leg lengthe

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

• 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.

#### 6.8 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.



#### 6.9 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.



6.10 Lap belt The *HOGGI* lap belt will be delivered pre-assembled.



Insert the slot nut in the backrest panel as pictured.



Bolt the pre-assembled lap belt holder on the backrest panel.



Repeat step 46 - 47 on the opposite side.



7.2 Using SHERPA 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. SHERPA is admitted for use as a seat in a motor vehicle according to ISO 7176-19 and ANSI / RESNA WC-4 Section 19.

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

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

7.1 In the trunk (luggage space) of a car

any clamping range.

CAUTION!

The SHERPA can according to size and specification, be transported as one unit, with folded down backrest and folded up footrest.

Danger of clamping whilst folding. Avoid reaching into

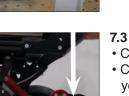


7 Transport









#### 7.3 General

- · Check that your wheelchair is suitable for a crash test.
- Check that the vehicle is equipped and compatible for transporting your wheelchair.
- Pay attention to the correct course of the belt (see marking)
- There should also be enough space for safe transport.
- During transport ensure an upright sitting position.

The system-wheelchair should be lifted only by touching tighten parts of the frame (on the side frame above the front wheels). If brakes are closed, also the push-rims can be used for lifting.

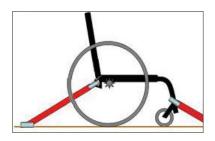
#### 7.4 Securing the wheelchair during bus transport



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. **SHERPA** was successfully tested in accordance with ISO 7176-19 (Crash Test). It is, however, possible to use **SHERPA** as a seat in a motor vehicle, if our "Tie down Kit" as well as appropriate restraint systems are used. Your **SHERPA** is admitted for use as a seat in a motor vehicle yet.

 If the user finds itself in the rehab pushchair, the rehab pushchair has to be positioned forward and has to be fixed with the fastening and safety belts according to the instruction for use of the restraint system manufacturer (fastening belts referred to WTORS need to fulfil the requirements of ISO 10542 or SAE J2249).
The wheelchair has not been tested for transportation in another position. The transportation in a lateral directed position for instance is not allowed at all.

3) Depending on the size of the pushchair the maneuverability can be impaired, so that the turning of the pushchair is not or only partially possible, to position the stroller forward in the direction of travel.



4) The buggy has to be fixed with a restraint system referred to ISO 10542 or SAE J2249 with fixed belts in the front and adjustable belts in the back.

Usually this concerns snap hooks/ s-shaped hooks as well as plug closures. The restraint systems usually consist of 4 single belts, which have to be attached to the 4 edges of the pushchair. The attachment points of the pushchair restraint systems are marked with the international hook symbol.

5) The wheelchair may also be supplemented for transport with other positioning and fixation systems. However, these are not a substitute for passenger and rehab pushchair restraint systems and may limit user comfort.

The accommodation of a wheelchair in a vehicle using anchored belts was rated as "poor" according to the test methods of ISO 7176-19 Appendix D.



SHERPA may only be used forward in the direction of travel.



The wheelchair was dynamically tested in the direction of travel and the dummy was there fastened with lap belt and shoulder strap.



In order to reduce the risk of injury to vehicle occupants, tools that are not specifically designed for crash safety, should be removed and stored separately in the vehicle safely such. eg crutches, loose pillows, therapy tables etc.



Without consulting the manufacturer, no changes may be made or replaced at the points of attachment of the wheelchair or to components of the chassis and frame. Failure to comply with these requirements, the wheelchair may not be transported in vehicles..

#### 7.5 Buckling the wheelchair passenger

The user has to be buckled up with the lap belt as well as the shoulder belt.

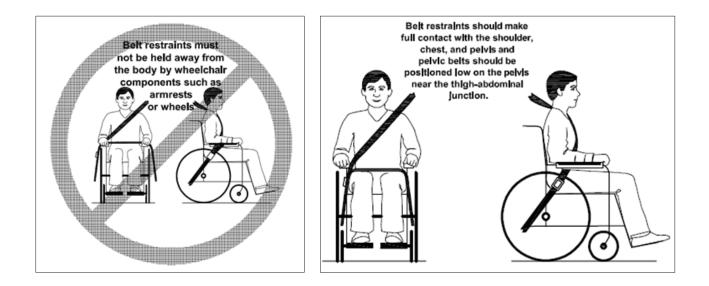
Shoulder and lap belts should be used to minimize and / or avoid potential injury from impact on vehicle components.

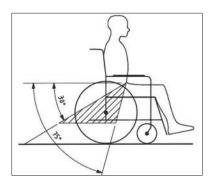
- 1) The person executing the attachment should be trained in the handling of the system.
- 2) Before transportation the following adjustments of the rehab buggy have to be carried out:

Seat: 0° - 5° Backrest: 90° - 100°

Footrest: 90°

3) The angle between lap belt and horizontal has to be 30°- 75°. An angle close to 75° is preferable.





4) The shoulder belt has to run across to chest and shoulder. The belt may not but at the neck and may not be attached loose from the shoulder.

The lap belt and the shoulder belt must be flat and as tight as possible against the body and must not be damaged by components such as e.g. Armrests or wheels are kept away from the body and must not restrict user comfort.

5) The belt strap may not be twisted.

As far as possible all additives should be detached and stored securely: • crutches, loose cushions and therapy trays.

6) The user's head should be additionally secured by a separate and permanently mounted headrest in the bus.

You should not rely on the occupant restraint systems unless they are marked in accordance with the requirements of ISO 7176-19: 2008.

7) During transport, the drum brake must not be tightened.

8) Please lock the manual brake firmly.

Care should be taken that the occupant restraint is positioned so that in the event of an accident, the release button is not triggered by pushchair components and results in unintentional opening of the seat belts.

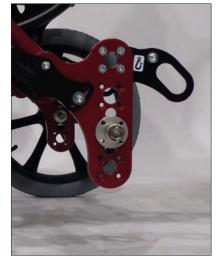
9) Remember, however: In the event of a traffic accident, the risk of injury can only be minimized and not ruled out, even if the passenger and rehab pushchair restraint systems are used correctly.

Before reusing the pushchair after a collision or an accident with a bus, the pushchair may no longer be used for transport in a bus until it has been checked for possible damage by authorized personnel and then released again.

If you have questions about our products and transport safety devices for wheelchairs, we or your specialist dealer will be happy to help.



Attachment points, front according to ISO 7176-19



Attachment points, rear according to ISO 7176-19 for lap belt



Attachment points, rear according to ISO 7176-19





#### CAUTION!

- Always lock the wheel locks before getting into or out of the wheelchair.
- First practise boarding the chair with the child and and an attendant who can secure the wheelchair, and modify the footplate and the 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.
- Apply the knee lever brakes.

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 necessarycorrect 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 wheechair.



#### **7.5 Anti-tippers to override steps** The **SHERPA** is equipped with two anti-tip units. The antitip increases the stability of the system-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 Storage

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The **SHERPA** can according to size and specification, be transported as one unit, with folded down backrest and folded up footrest.



**Instructions for cleaning and maintenance** Clean your **SHERPA** systematicly before storage. Follow the instructions for cleaning and maintenance thereby on page 24.

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

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

### 9 Maintenance

Your **SHERPA** is CE approved. The manufacturer herewith guarantees that this medical product as a whole conforms to the basic safety and performance requirements in accordance with Annex I to Regulation (EU) 2017/745 of the EU Parliament and of the Council. The wheelchair should be checked for correct function before every use. Nuts with self-assurance should only be used once. After repeated loosening nuts must be replaced. The items listed in the following table must be checked by the user at the indicated intervals.

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

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

#### Expected useful life:

The expected useful life of the *SHERPA* system-wheelchair is 5 years, depending on intensity of use and maintenance. We recommend an annual inspeciton 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.

#### 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 SHERPA 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.

# 10 Recycling and disposal

SHERPA is manufactured from recyclable material.

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.



# **11 Specifications**

Seat width	320 - 480 mm
Seat depth	290 - 540 mm
Backrest height	470 - 610 mm
Seat height*	450 mm, 480 mm, 500 mm
Seat angle	-7° up to + 45°
Backrest angle	80° up to 123°
Lower leg length	210 mm - 410 mm
Footrest angle	-10° up to + 10°
Rear wheel diameter	12", 16", 22", 24"
Camber	0° or 3°
Front wheel diameter	125 mm (5"), 140 mm (5,5"), 190 mm (7,5")
Turning radius	1300 mm
Load capacity**	134 kg
Weight***	20,65 kg
Overall length	680 - 970 mm without footrest / 900 - 1220 mm with footrest
Overall width	540 - 730 mm
Height (Push-bar, swung away)	960 - 1250 mm
Mass (of the heaviest part)	18,35 kg



#### **CAUTION!**

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



#### **CAUTION!**

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

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#### CAUTION!

\*\*\* The weight refers to SHERPA in its basic configuration and in 480 mm seat width.

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