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Instruction Manual



KARMAN HEALTHCARE INC.

This manual must be provided to the user of the product. Before using this product, you must read and save this manual so that for later reference.

05/05/2025

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1 General Overview

1.1 Introduction

This user manual contains important information regarding the handling of the following content products. To ensure safety when using the product, please read the instruction manual carefully and follow the safety rules.

KARMAN HEALTHCARE INC. reserves the right to change product specifications without notice. For more information about the product, such as product safety notifications and product recalls, please contact your KARMAN HEALTHCARE INC. (local dealer)

If a serious accident occurs with the product, please inform your dealer and your national competent authorities.

1.2 Symbols used in this manual

Symbols and signal words used in this manual apply to hazards or unsafe practices that could result in personal injury or property damage.

See below for definitions of information signal words.



WARN !

**Indicates a potentially hazardous situation
If not avoided, serious injury or death will result.**



NOTICE

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



IMPORTANT

**Indicates a potentially hazardous situation
If not avoided, it may cause property damage.**



TIPS AND ADVICE

**Provides helpful tips, suggestions and
Information for efficient and trouble-free use.**



This product complies with Directive 93/42/EEC and its amendment 2007/47/EC Sep, 5, 2007 /US FDA-QSR (21CFR/Part 820.30)

For medical devices, the conformity is stated in the CE declaration of the product on the date of launch.



MANUFACTURER INFORMATION FOR THE PRODUCT.

1.3 Warranty Information

Cloud Network provides warranty service for our products in accordance with our general terms and conditions.

Warranty claims can only be made through the provider where the product was purchased.

1.4 Limitation of Liability

KARMAN HEALTHCARE INC. assumes no liability for damages caused by:

- Failure to follow the instruction manual
- Incorrect use
- Natural wear and tear
- Assembly by the purchaser or a third party or incorrect settings by a third party
- Technical modification
- Unauthorized modifications and/or use of inappropriate parts

1.5 Standards and regulations

Quality in accordance with ISO 13485.

This vehicle has passed international testing for safety standards (refer to EC declaration).

Complies with RoHS 2011/65/EU, REACH 1907/2006/EC, EN 12183 including flammability testing (EN 1021-2 or ISO 8191-2), and ISO 7176-14. Also successfully tested for spray resistance in accordance with EN 60529 IPX4

1.6 Intended Use

- 1.6.1 This type of wheelchair is manually propelled and can only be used for independent or auxiliary transportation of physically and mentally disabled people with limited mobility.
- 1.6.2 This wheelchair is intended to provide mobility for persons aged 15 years and over (adolescents and adults) and has a maximum weight capacity of 115 kg.
- 1.6.3 The equipment provides mobility to persons who are restricted to a seated position. It is intended for active users who wish to remain in a standing position during the day for medical or professional reasons.
- 1.6.4 When used without an assistant, the wheelchair should only be used by a person who is physically and mentally capable of using it safely. (e.g. propelling yourself, steering, braking). Wheelchairs can only be moved on level ground. Accessible terrain as well as indoor use.



This medium-duty active wheelchair needs to be tailored to your specific health condition.



It is important to follow the positioning protocol (duration, frequency, posture, maximum vertical angle, ...) of the upright standing position provided by a physiotherapist or a professional technician of the dealer.



WARN !

Any other or incorrect use may result in a hazardous situation.



WARN !

- In some configurations, the overall dimensions of the wheelchair when ready for use exceed the authorized limits and cannot be accessed in emergency escape routes.
- In some configurations, the wheelchair exceeds the EU recommended dimensions for train travel.

1.7 Service life

Under normal use and in accordance with the safety instructions, maintenance intervals and correct usage specified in this manual, the expected life of this product is five years.

The effective service life will vary depending on the frequency and intensity of use.

2 Safety

2.1 Safety Message

This section contains safety information to keep wheelchair users and assistants safe and to ensure trouble-free use of the wheelchair.



WARN !

Risk of accident and serious injury.

If the wheelchair is not adjusted correctly, an accident could occur resulting in serious injury.

- **Adjustments to the wheelchair must only be made by an authorized dealer.**



WARN !

Risks caused by inappropriate driving style.

For example, risks on wet ground, gravel or uneven terrain.

- **Always adjust your speed and driving style according to the conditions (weather, surface, personal ability, etc.).**



WARN !

Risk of injury from collision.

In a collision, parts of the body that are out of the range of the wheelchair, such as feet or hands, may be injured.

- **Avoid unbraked collisions.**
- **Never drive head-on into an object.**
- **Drive carefully through narrow passages.**



WARN !

Risks of losing control of your wheelchair.

At high speeds, you may lose control of your wheelchair and it may tip over.

- **Do not exceed 6 km/h.**
- **Avoid collisions in general.**



WARN !

Tilt risk.

The position of the rear wheel axle and the angle of the wheelchair backrest may affect your stability in the wheelchair.

- **Any setting or change of the front wheel or fork adjustment of the wheelchair must be done under the guidance of a qualified person who understands the risks of the possible effects of making changes to the wheelchair configuration. Therefore please consult your dealer.**



WARN !

Burn hazard.

Wheelchair parts may become hot when exposed to external heat sources:

- **Before use, do not expose the wheelchair to strong sunlight.**
- **Before use, check the temperature of all components that come into contact with your skin.**



WARN !

Risk of injury during transportation.

Wheelchairs may not be transported in vehicles using common attachment points.

- Do not use normal fixing points to transport a wheelchair, occupied or unoccupied, through a vehicle.
- Transporting the wheelchair as luggage, e.g. in the trunk of a vehicle.



WARN !

Wheelchair restraints

- Wheelchair users should not be transported in any type of vehicle while in their wheelchair. To date, the Department of Transportation has not approved restraint systems for transporting users in wheelchairs in any type of mobility vehicle.
- It is the position of KARMAN HEALTHCARE INC. that wheelchair users should be transferred to an appropriate seat for transportation and use restraints provided by the automotive industry. **KARMAN HEALTHCARE INC. DOES NOT RECOMMEND ANY WHEELCHAIR TRANSPORTATION SYSTEM.**



WARN !

There is a risk of fingers being trapped.

There is always a risk of something getting caught, for example a finger or arm, in the moving parts of a wheelchair.

- Make sure that nothing can get caught when activating the folding or insertion mechanisms of moving parts (e.g. removable rear wheel axles, folding backrests or anti-tilt devices).



WARN !

Dumping risk

Hanging an additional load (a backpack or similar item) on the back of the chair may affect the rearward stability of the chair, especially when used in combination with a reclining backrest.

- KARMAN HEALTHCARE INC. strongly recommends installing an anti-tipping device (optional equipment) when using the backrest to support additional loads.

2.2 Electromagnetic safety information interference

The wheelchair has been tested to comply with international standard electromagnetic interference (EMI/EMC) regulations. However, electromagnetic fields are generated by radio and television transmitters and mobile phones and can affect the functioning of the wheelchair's motorised mechanisms. Additionally, the electronic devices used in our wheelchairs will generate low-level electromagnetic interference, but will still be within the tolerance range permitted by law. For these reasons we ask you to observe the following precautions:



WARN !

Risk of malfunction due to electromagnetic interference

- Do not switch on or operate any portable transceiver or communications equipment (e.g. radio transceiver or mobile phone) while any electrical device is switched on.
- Avoid proximity to powerful radio transceivers and TV transmitters.
- Adding electrical accessories and other components or modifying electrical equipment in any way may make it susceptible to electromagnetic interference.

There is no definitive way to determine how much such modifications will affect the overall noise immunity of an electronic system.

- Report all incidents involving electrical equipment to your authorized dealer.

2.3 Changed and modified safety information



WARN !

Risk of serious injury or damage.

Use of incorrect or inappropriate replacement (repair) parts may result in injury or damage

- Replacement parts must correspond to original parts.
- Please always provide your wheelchair serial number to obtain the correct replacement part. °



WARN !

Risk of injury and damage from using unapproved components and accessories.

Seating systems, attachments, and accessories that have not been approved by KARMAN HEALTHCARE INC. for use with this mobility device may affect the stability of the wheelchair and increase the hazard of tip-over.

- Use only seating systems, attachments, and accessories approved by KARMAN HEALTHCARE INC. for use with this mobility device.

Seating systems used with this mobility device that have not been approved by KARMAN HEALTHCARE INC. may not meet valid standards in some cases and may increase the risk of flammability and skin irritation.

- Use only seating systems that have been approved by KARMAN HEALTHCARE INC. for use with this mobility device.

Using electrical and electronic components of mobile devices with this product that are not approved by KARMAN HEALTHCARE INC. may cause fire and electromagnetic damage.

- Use only KARMAN HEALTHCARE INC. approved electrical and electronic components.

Batteries not approved by KARMAN HEALTHCARE INC. for use in this mobile device may cause chemical burns.

- Use only batteries approved by KARMAN HEALTHCARE INC. for use with this mobile device.



WARN !

If unapproved backrests are used, there is a risk of injury and damage.

Modified backrests not approved by KARMAN HEALTHCARE INC. for use with this mobility device may overload the backrest tubes, increasing the risk of injury and damage to the mobility device.

- Please contact your authorised dealer who will carry out risk analysis, calculations, stability checks etc. to ensure the backrest is safe to use.



CE Marking for Mobile Devices

- Conformity assessment/CE marking is according to Directive 93/42 EEC and applies only to complete products.
- If components or accessories not approved by KARMAN HEALTHCARE INC. for use in this product are substituted or added, the CE marking will become invalid.
- In this case, the company adding or replacing components or accessories is responsible for the conformity assessment for CE marking or registering the mobile device as a special design and for the associated documentation.

2.4 Safety devices



WARN !

Risk of accidents.

Incorrectly set or ineffective safety devices (brakes, anti-roll devices) may lead to accidents.

- Always check that the safety devices are functioning properly before using the wheelchair and have them checked regularly by an authorised reseller.

The functionality of the safety device is described in the Product Overview chapter.

3 Components and their functions

3.1 Overview



01	Armrest Pad	08	Heel strap
02	Handle Controller	09	Footrest
03	Seat rest	10	Caster
04	Knee Support	11	Battery
05	Wheel lock	12	Rear Wheel
06	Actuator	13	Side Panel
07	Gas Spring	14	Backrest

3.2 Parking brake

The parking brake is used to secure the wheelchair when it is stationary to prevent it from rolling.



WARN !

Sudden braking may cause the vehicle to roll over.

If you apply the parking brake while the wheelchair is moving, it may stop suddenly and the direction of movement may become uncontrollable. This could result in a collision or you falling out of your wheelchair.

- **Never move the brake handle when parking.**



WARN !

Risks of losing control of a wheelchair

- **The parking brake must be applied on both sides simultaneously.**
- **Do not use the parking brake to slow the wheelchair.**
- **Do not use the parking brake for support or transfer.**



WARN !

Capsize risk

There must be enough air in the tires, otherwise the parking brake will not work properly.

- **Ensure correct tyre pressure, 3.9 Tires, page 19.**



WARN !

Risk of pinching or crushing

There may be a small gap between the wheel and the parking brake, which could pose a risk of pinching your fingers.

- **Keep your fingers away from moving parts when applying the brakes and always keep your hand on the brake lever.**



The distance between the brake pad and the tire can be adjusted. Must be adjusted according to the tire air pressure.

● Standard brake



1. To apply the brakes, push the brake lever forward. As ①
2. To release the brake, pull back on the brake lever. As ②



The joystick handle can be folded back for easy transfer. To do this, pull up on the grip and fold it back.

3.3 Backrest

The height and angle of the backrest can be adjusted.



WARN !

Dumping risk

Suspending an additional load (a backpack or similar item) from the wheelchair backrest can affect the rearward stability of your wheelchair.

This could cause the chair to tip backwards and cause injury.

- When using your back post with an additional load (backpack or similar), KARMAN HEALTHCARE INC. strongly recommends using an anti-tip device (as an option)

3.3.1 Backrest cover

You can adjust the tightness of the backrest cover as needed.



WARN !

Dumping risk

If the Velcro is set too loose, the critical point of the wheelchair will become poor.

- Make sure the tension is set correctly.



IMPORTANT !

- Do not tighten the straps too much; this is to ensure that the geometry of the wheelchair does not change.

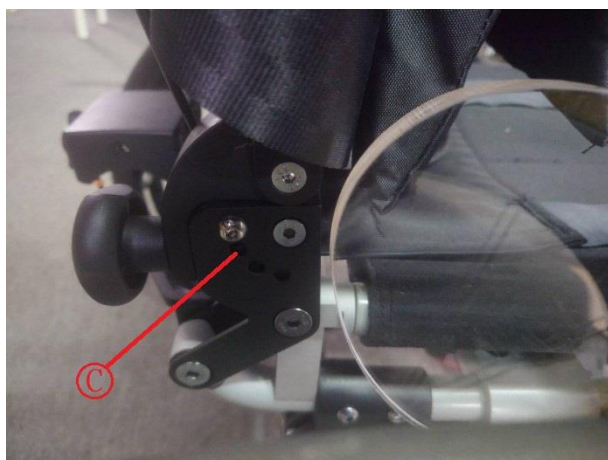
- Adjust the backrest cover



1. Remove the backrest pad ① °
2. Simply pull the backrest cover to release the hook and loop fastener ② on the back of the unit.
3. Tighten or loosen the Velcro as needed and reinstall.

3.3.2 Backrest Angle Adjustment

1. Remove screw ③.
2. The backrest can be adjusted to 6°/12° /18° according to 3 holes.



3.4 Handrails



WARN !

The armrests do not engage with the wheelchair, be aware of the risk of pinching fingers.
– Do not lift the wheelchair by holding it, and keep your fingers away from moving parts during removal, installation or adjustment.

3.4.1 Handrail tube



● Foldable

1. Apply both parking brakes.
2. Grasp the armrest pads of the armrest tube and pull back.

● Set the height

1. Loosen screw ④ using a 5 mm hexagonal wrench.
2. Slide the handrail tube bracket to the desired height and tighten the screws (10 Nm)④.
3. If necessary, adjust the other side accordingly.

KARMAN HEALTHCARE INC. recommends that handrail adjustments be performed by an authorized dealer.

3.5 Foot pedal



WARN !

Risk of injury

- Never lift the wheelchair by the footrests or legrests.



WARN !

Risk of pinching or crushing fingers

There is an oscillating mechanism that may pinch your fingers.

- Use caution when using, swinging, removing or adjusting these mechanisms.



IMPORTANT !

Risk of damage to the leg rest mechanism

- Do not place heavy objects or allow children to sit on the leg rest.

3.5.1 Two-piece footrest



● Footrest (with 2 angle positions) adjustment.

1. Loosen the lower locking screw **B** using a 4 mm hexagonal wrench.
2. Use a 4 mm hexagonal wrench to remove the upper locking screw **A**.
3. Rotate the footrest to the desired angle.
4. Insert the upper locking screw **A** into the pre-set hole and tighten the screw **A** **B** at the same time (10 Nm). (10 Nm) °

● Height adjustment

The footrest has three levels of height adjustment options.

1. If necessary, remove the calf strap.
2. Use a 4 mm hexagonal wrench to remove the two locking screws **A** and **B** on the side.
3. Place the footrest assembly into the desired location.
4. Insert the two screws **A** and **B** on both sides into the pre-set holes and tighten the screws (10 Nm).

KARMAN HEALTHCARE INC. recommends that angle and depth adjustments be performed by an authorized dealer.

3.5.2 Calf strap adjustment

i To ensure a good position of the foot, the calf strap can be loosened or tightened by adjusting the position of the Velcro as needed.

3.6 Chest and knee pads

Chest pads ① and knee pads ②③ contribute to increased comfort and good posture when standing.



WARN !

Risk of falling

Chest and knee pads that are not set or secured correctly may result in a risk of falling. Always check that the seat cushion is in the correct position before using the wheelchair.



WARN !

Risk of discomfort

Based on the user's morphology and specific physical limitations, the chest strap tension should be adjusted to ensure that there is no compression on the chest cavity.



Always check that the hook and loop fasteners are properly positioned and that they overlap completely and are properly secured to the fasteners ④ on both sides.



● Chest pad

The installation and evaluation of the chest pad ④ and the fixing belt ⑤ must be performed by an authorized dealer.



WARN !

Risk of injury

- Chest pad adjustments must be made by an authorized dealer.

● Knee pads

The installation and evaluation of the knee pad ⑥ and its strap ⑦ must be performed by an authorized dealer.



WARN !

Risk of injury

- Knee pad adjustments must be performed by an authorized dealer.



These adjustments need to take into account the user's morphology and his specific physical limitations.



Make sure the knee pad buckles are properly fastened to the fixings ⑧ on both sides.

3.7 Adjusting the seat depth

- (1) Press the lift button upwards to raise the wheelchair frame until it is above the rear wheels (Figure 1) to facilitate removal of the screws.
- (2) Remove the fixing screws (8 male screws) on the left and right sides (Figure 2~3), and you can use the different holes at a distance of 1 inch.
- (3) Pull the back pad fixing bracket backwards (Figure 4) and place the screw holes at the desired positions.
- (4) Re-tighten the fixing screws on the left and right sides.
- (5) Press the lift button downward to return the seat cushion to its lowest position.



Fig 1



Fig 2



Fig 3



Fig 4

3.8 Push handle



IMPORTANT !

- Before use, make sure to check that the wheelchair push handle cannot be turned or folded down and can be gripped safely.



WARN !

- If the set screw is not tightened correctly, the push handle may accidentally fall off.
- Make sure the screws are securely fastened.

● Push handle installation



1. Place the handle into the backrest tube and tighten the two screws ①.
2. Press the buckle under the handle to fold the handle downwards ②.
3. Pull the handle upward to return it to the correct position ③.

The handlebar must be installed by professionals from an authorized dealer.

3.9 Anti-tilt device

The anti-tip device prevents the wheelchair from tipping over backwards.



WARN !

Capsize risk

An anti-tipping device that is incorrectly set or no longer operates effectively could result in a capsize.

- Always check that the anti-tip device is in place and functioning properly before using the wheelchair.
- In some configurations, the static stability of the wheelchair may be less than 10° inclination; KARMAN HEALTHCARE INC. strongly recommends the use of an anti-tip device (available as an option)



WARN !

Capsize risk

On uneven or soft ground, the anti-roll device may sink into a pothole or directly into the ground, reducing or eliminating its safety function.

- Use the anti-tip device only when driving on level, firm ground.

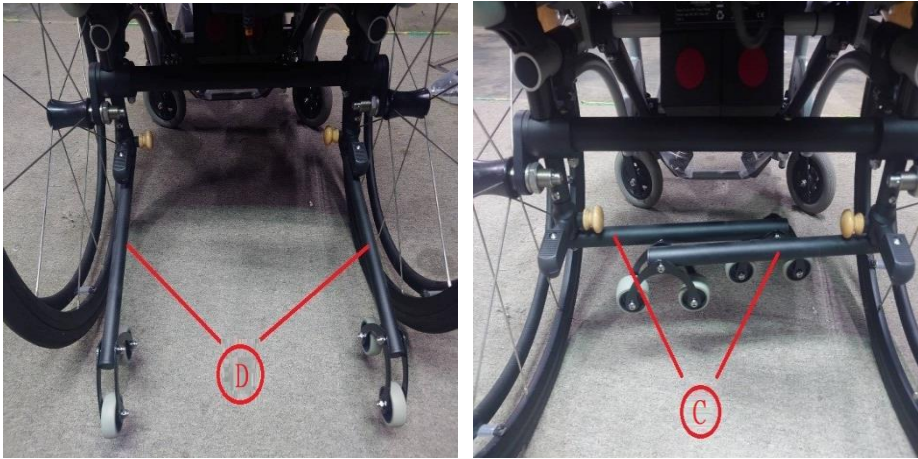


Make sure the anti-tip device is installed correctly on each side. The fixing point ④ must be locked in place.

Anti-tilt device installation

1. Lock the anti-tilt device on the frame ④.
2. Pull out knob to rotate the anti-tilt device forward and retract the anti-tilt device ③.
3. Pull out the knob ⑤ to rotate the anti-tilt device backward and deploy it to the correct anti-tilt position ⑥.





The installation of the anti-tilt device must be performed by professionals at an authorized dealer.

3.10 Tires

The ideal pressure depends on the tire type:

TIRE	Max. pressure		
Solid tire: 610 mm (24 inches)	-	-	-
Pneumatic tires: 610 mm (24 inches)	4 bar	400 kPa	58 psi
Non-marking pneumatic tires: 610 mm (24 inches)	7 bar	700 kPa	101 psi
Solid tire: 150 mm (6 inches)	-	-	-



Compatibility of the above tires depends on the configuration and/or model of your wheelchair.



The size of the tire is marked on the sidewall of the tire. Replacement of the tyre must be done by an authorised dealer.



WARN !

- The tire pressure on both wheels must be equal to avoid loss of driving comfort and to maintain braking efficiency and easy propulsion of the wheelchair.

3.11 Seat

It is recommended to use suitable cushions to provide even pressure distribution on the seat.



WARN !

If you add a cushion to your seat, it will raise your height from the ground, which will affect your stability in all directions.

If the cushion is replaced it may also change the stability of the user.

If the thickness of the seat cushion is changed, the wheelchair will need to be reconfigured by an authorized dealer.

- We recommend using a KARMAN HEALTHCARE INC. cushion to prevent sliding.

4 Accessories

4.1 Posture belt

Wheelchairs can be equipped with posture belts to prevent the user from sliding down in the wheelchair or falling out of the wheelchair. The posture belt is not a positioning device.

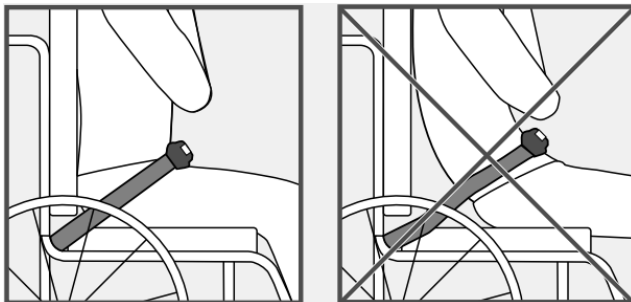


WARN !

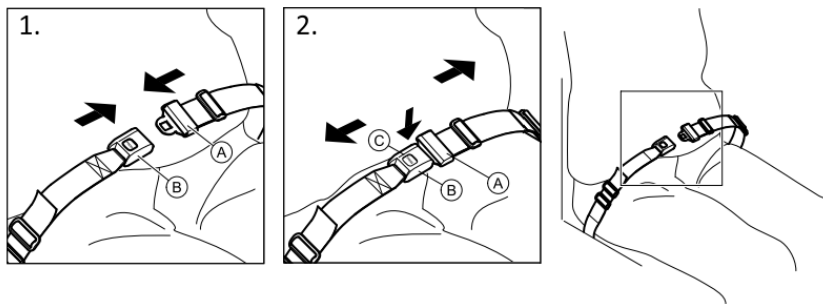
Risk of serious injury/strangulation

The loose position could cause the user to slip and create a strangulation risk.

- Posture belts should be installed by a qualified technician.
- Always make sure the posture belt is in a snug fit over your lower pelvis.
- Each time you use the posture strap, check for a correct fit. Changing the seat and/or back angle, cushions, and even your clothing can affect the fit of the harness.



4.1.1 Closing and opening the posture belt

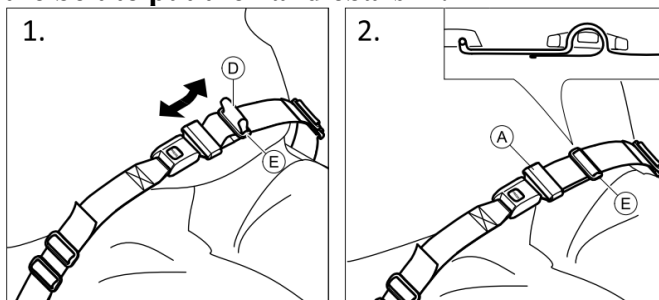


Make sure you are fully seated in the seat back and your pelvis is as upright and symmetrical as possible.

1. To close, push the buckle ① into the ring ②.
2. To open, press button ③ and pull buckle ① out of buckle ring ②.

4.1.2 Adjust length

The posture belt is adjusted to a good length so that there is just enough space between the body and the belt to put the handlebars in.



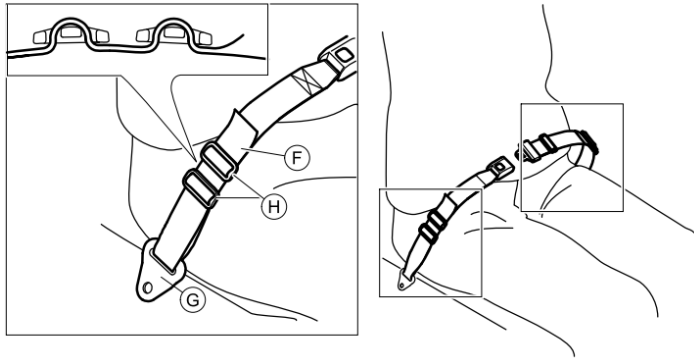
1. Shorten or lengthen ring ① as needed.
 2. Pass the ring ① through the buckle ④ and the plastic buckle ⑤ until the ring becomes flat.
- If this adjustment is not sufficient, it may be necessary to reinstall the posture strap in place.

4.1.3 Install the posture belt at the fixed position



WARN !

- Pass the belt loop through the two plastic buckles to prevent the belt from coming loose.
- Adjust both sides equally to keep the buckle in the center.
- Make sure the belt does not catch on the spokes of the rear wheel.



1. Pass the ring ① through the fixing on the chair ④ and then through the two plastic buckles ⑤.

4.2 Table Plate



WARN !

Risk of tipping/injury

- Maximum load on the table: 5 kg



WARN !

Discomfort/risk of minor bruising

- The wheelchair must be pushed so that the user's elbows are resting on the table. If the elbows extend outside the table while the wheelchair is being pushed, there is a risk of discomfort or minor bruising.

4.2.1 Table tray installation

Desktop Tray ① Installation must be performed by professionals from authorized dealers.





WARN !

Risk of discomfort

- When adjusting the tray depth, make sure not to squeeze the user's stomach.



Table Tray ④ Reduced access to items hinders ease of use of raise/lower buttons.

4.3 Pumping

The air pump is equipped with a universal valve. Use the correct valve connection, depending on the type of internal pipe valve.

1. Remove the dust caps from the valve connections.
2. Push the valve connector onto the open valve and pump up the wheel.



There are two types of pumps available:

- Low pressure <6 bars
- High pressure > 6 bars

Instructions for use are printed on the packaging.

5 Settings

5.1 Safety Information



WARN !

Risk of injury

- Before using the wheelchair, check its general condition and its main functions, 8.2 Maintenance plan, page 46.

Your authorized dealer will provide you with a wheelchair ready for use. Your dealer will explain the key features and ensure the wheelchair meets your needs and requirements.

Adjustments to the axle position and front wheel stands must be made by an authorized dealer.

If you received a folded wheelchair, please read section 7.2 Folding and unfolding your wheelchair, page 42.

6 Using a wheelchair

6.1 Safety Information



WARN !

Risk of accidents

Uneven tire pressure will have a great impact on vehicle safety.

- **Check tire pressure before every trip.**



WARN !

Risk of falling from a wheelchair

When using front wheels that are too small, the wheelchair may get stuck in curbs or floor recesses.

- **Make sure the front wheels are suitable for the surface you are driving on.**



WARN !

Crushing hazard

There may be a small gap between the side guards/armrest pads, which may cause a risk of pinching fingers.

- **Make sure you always push the wheelchair using only the handwheel.**

6.2 Braking during use

When you move the wheelchair, you can brake it by holding the handwheels with both hands.



WARN !

Sudden braking may cause the vehicle to roll over.

If you apply the parking brake while moving, the direction of movement can become uncontrollable.

The wheelchair may stop suddenly which could cause a collision or you to fall out of the wheelchair.

- **Never move the brake handle when parking.**



WARN !

Risk of burns to hands

If you brake for a long time, the friction will be very high and heat will be generated at the handwheel (especially the anti-slip handwheel), and there is a risk of scalding your hands.

- **Wear suitable gloves.**

When braking, hold the handwheel with both hands and press evenly until the wheelchair stops.

6.3 Moving to/from a wheelchair



WARN !

Capsize risk

There is a great risk of rollover during the transfer process.

- **Only move in and out of the wheelchair without assistance if your physical condition allows.**
- **When transferring, position yourself as far back in the seat as possible. This will prevent damage to the cushions and the possibility of the wheelchair tipping forward.**
- **Make sure both front wheels are facing directly forward.**



WARN !

Capsize risk

If you stand on the steps, the wheelchair may tip forward.

- **Never stand on the footrest when entering or exiting.**



WARN !

If the brakes are released or damaged, the wheelchair may slide and you may lose control.

- **Do not use the brakes for support when entering or exiting.**



IMPORTANT !

The side guards and armrests may become damaged.

- **Never sit or press on the side guards or armrests when entering or exiting the wheelchair.**



1. Push the wheelchair as close as possible to the position where you want to move to a sitting position.
2. Apply the parking brake.
3. Pull the armrest up and back.
4. Lift the two-piece pedal outwards.
5. Place your feet on the ground.
6. Hold onto the wheelchair and, if necessary, nearby stationary objects.
7. Slowly move to the chair.

6.4 Driving and steering of wheelchairs

You can use the handwheel to drive and maneuver the wheelchair.

You must find your wheelchair's breaking point before driving without an assistant.



WARN !

Dumping risk

If the anti-tip device is not installed, the wheelchair may tip backwards. When searching for the tipping point, an assistant must stand immediately behind the wheelchair to catch it if it tips over.

- To prevent tipping, install an anti-tip device.



WARN !

Dumping risk

The wheelchair can be tilted forward.

- When programming your wheelchair, test its forward tilt behavior and adjust your driving style accordingly.



WARN !

Heavy objects hanging from the backrest will affect the center of gravity of the wheelchair.

- Change your driving style accordingly.

● Finding the critical point



1. Release the brake.
2. Roll back a short distance, hold the wheels tightly with both hands and kick forward lightly.
3. By shifting the weight and turning the handwheel in opposite directions, you will be able to find the critical point.

6.5 Steps and restrictions for crossing stairs



WARN !

Capsize risk

When negotiating stairs, you may lose your balance and the wheelchair may tip over.

- Approach steps and curbs carefully and slowly.
- Do not go up or down steps higher than 20 cm.



WARN !

Use the anti-tip device to prevent the wheelchair from tipping over and tilting backwards.

- Before going up stairs or walking down steps or curbs, always retract the anti-tip device.



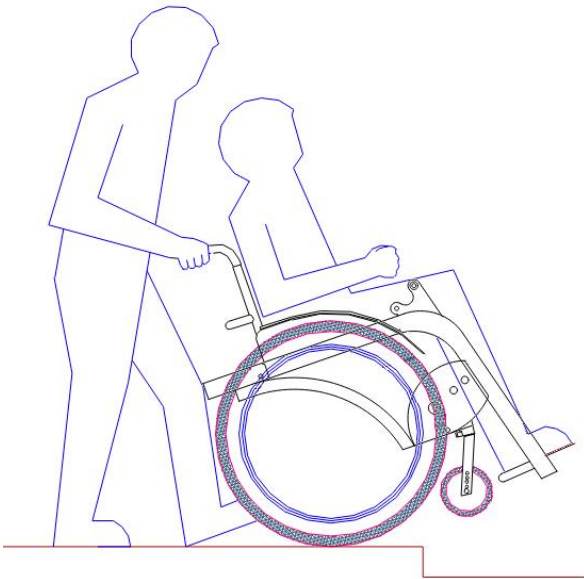
WARN !

Risk of serious injury.

Frequent climbing of steps and curbs may cause fatigue fracture earlier than expected and the user may fall out of the wheelchair.

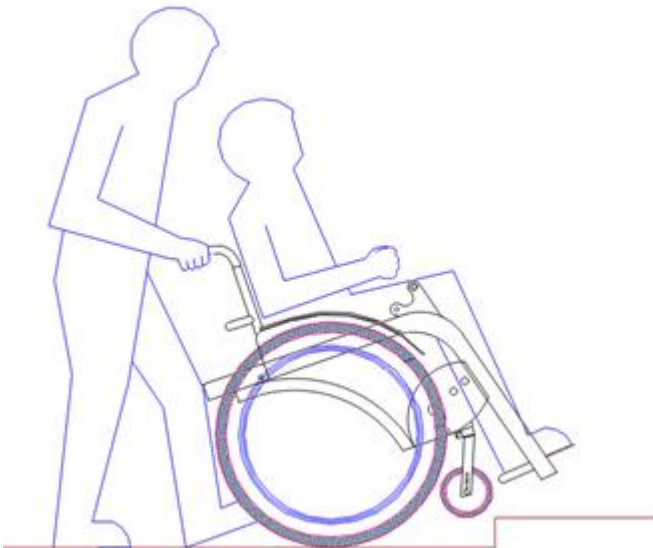
- Before going up or down stairs, the anti-tipping device must be placed in the folded position.

6.5.1 Walk down the stairs with an assistant



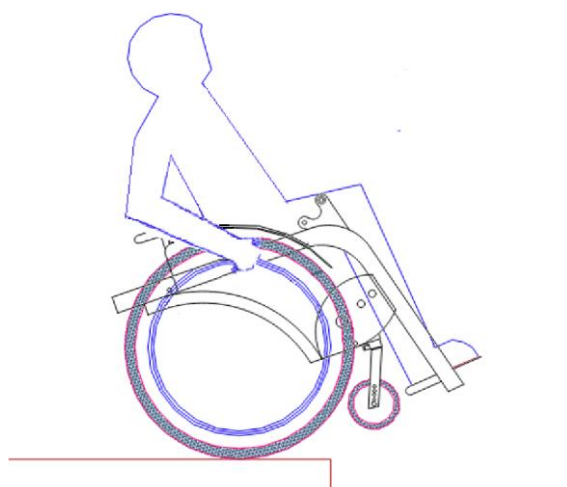
- 1. First place the anti-tipping device (if installed) in the folded position.**
- 2. Move the wheelchair to the side of the road and hold the wheelchair handles.**
- 3. The assistant should hold both push handles, place one foot on the assist device and tilt the wheelchair backwards so that the front wheels are off the ground.**
- 4. The assistant should secure the wheelchair in this position, carefully push it down the steps, and then tilt it forward until the front wheels are back on the ground.**

6.5.2 Climbing stairs with an assistant



- 1. Place the front wheels of the wheelchair as close to the steps as possible.**
- 2. The assistant should hold both handles, place one foot on the assist device and tilt the wheelchair forward until the rear wheels touch the step and then lower the front wheels back to the ground.**
- 3. The assistant should secure the wheelchair in this position, then lift the rear wheels up the steps and push it forward.**

6.5.3 Walking down stairs without assistance



WARN !

Dumping risk

When you walk down steps without an assistant, you may fall backwards if you lose control.

- **First learn how to walk down the steps with the help of an assistant.**
- **Learn how to balance on the critical point of a wheelchair. 6.4 Propulsion and steering of wheelchairs, page 27.**

- 1. Move the wheelchair to the side of the road, lift the front wheels and keep the wheelchair balanced.**
- 2. Now slowly roll both rear wheels over the steps to the ground. While doing this, hold the handwheel firmly with both hands until the front wheel returns to the ground.**

6.6 Going up and down stairs

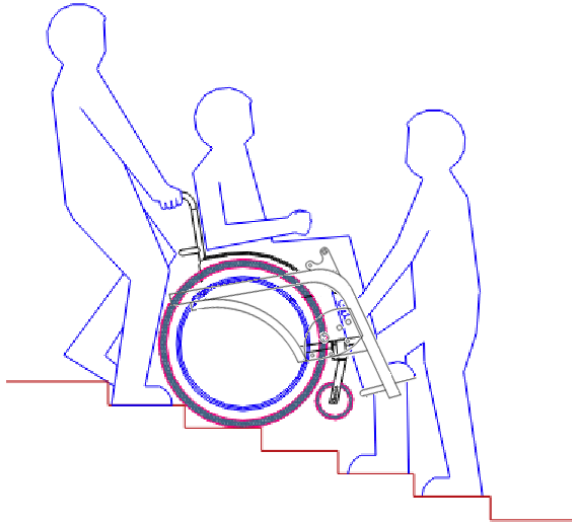


WARN !

Capsize risk

When you climb stairs, you may lose your balance and cause your wheelchair to tip over.

– When negotiating stairs with multiple steps, two assistants are required to negotiate the stairs.



- 1. As mentioned above, you can go up and down the stairs step by step. The first assistant should stand behind the wheelchair and hold the handle, and the second assistant should hold the front frame firmly to stabilize the wheelchair from the front.**

6.7 Going over ramps and slopes



WARN !

Risks of losing control of a wheelchair

When you negotiate a ramp, your wheelchair may tilt backwards, forwards, or sideways.

- **When approaching long ramps, always have a helper behind the wheelchair.**
- **Avoid lateral slopes.**
- **Avoid slopes exceeding 7°.**
- **Avoid changing direction on slopes.**



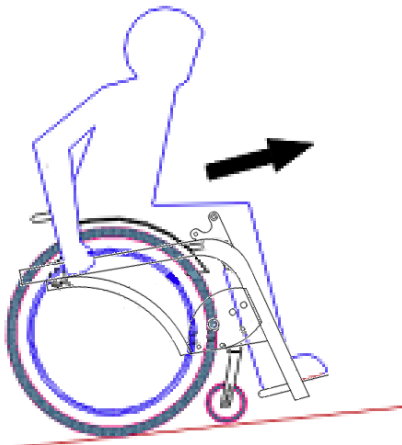
WARN !

If you do not use the hand wheels to control your wheelchair, your wheelchair may slide even on a slightly sloping surface.

- **If your wheelchair is stationary on an inclined surface, use the parking brake.**

6.7.1 Climbing up the slope

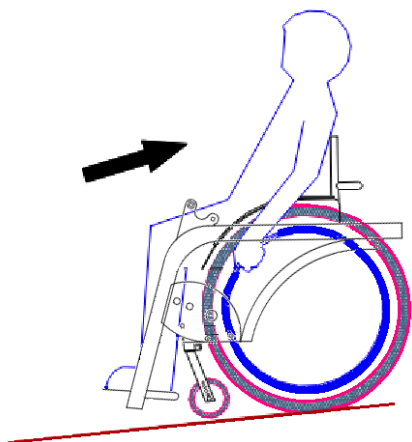
To climb a slope, you have to create some momentum and maintain it while also controlling the direction.



- 1. Bend your upper body forward and push the wheelchair quickly and forcefully with both hands.**
- 2. Control the direction while pushing the wheelchair.**

6.7.2 When going down a slope

When going downhill, it is important to control the direction of your body and the speed of your wheelchair.



1. Lean your body backward and hold the handwheels with both hands to stop the wheelchair at any time.



WARN !

There is a risk of burning your hands.

If you brake for a long time, the friction will be very high and heat will be generated at the handwheel (especially the anti-slip hand ring).

- Wear suitable gloves.

6.8 Stability and balance when seated

Some daily activities and movements require you to lean forward, sideways or backward from your wheelchair. This has a great impact on the stability of the wheelchair.

To maintain your balance, follow these steps:

6.8.1 Leaning Forward



WARN !

Risk of falling

If you lean forward in your wheelchair, you may fall out of it.

- Do not bend forward too far or move forward in your seat to reach for objects.
- Do not bend forward between your knees to pick up something from the floor.



1. Point the front wheels forward. (To do this, move your wheelchair slightly forward and then backward.)
2. Apply both parking brakes.
3. When leaning forward, your upper body must remain over the front wheel.

6.8.2 Reaching Back

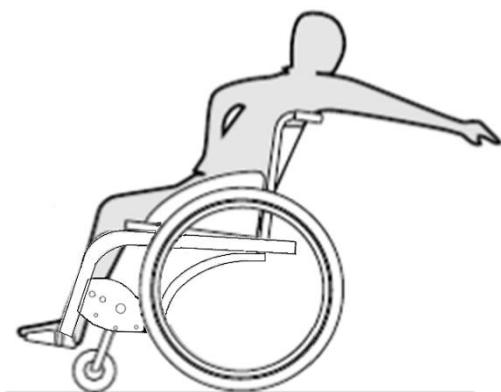


WARN !

Risk of falling

If you lean back too much, your wheelchair may tip over.

- Do not lean over the backrest.
- Use anti-tip devices.



1. Point the front wheels forward. (To do this, move your wheelchair slightly forward and then backward.)
2. Do not apply the parking brake.
3. When reaching back, do not reach too far and change your sitting position.

6.9 Upright standing position



WARN !

Safety procedures

- Always apply the brakes on both sides to lock the rear wheels.
- Check that the chest strap pads and knee pads as well as the posture strap and calf straps used to support the body are adjusted and fixed in the correct position. These adjustments must be made by an authorized dealer.
- Make sure that there are no obstacles or persons (e.g. children) interfering during the raising/lowering process, as there is a risk of serious injury if the body becomes caught in the moving device.
- Make sure you can call for assistance (mobile phone or alarm necklace/bracelet) if you have trouble standing.



WARN !

Do not operate the raise/lower function while the charger is connected unless the battery is very low in capacity and cannot power the lowering operation.

- The battery allows approximately 150 cycles at its maximum capacity, depending on the weight of the user.



Always make sure that the surface you wish to stand on is completely flat and firm, without any obstacles or objects that could compromise the stability of the wheelchair and the safety of the user.

● Sitting and standing assessment

Follow the standing protocol prescribed by your physical therapist. It is extremely important that this standing wheelchair is perfectly adapted to your physical condition.

Service Manual. All necessary adjustments are described, please contact your authorized dealer for a complete evaluation.

1. Seat depth adjustment: correct center position of knee ④, seat depth is too long ⑤, seat depth is too short ③.
2. Standing position adjustment: correct ankle/knee/hip alignment , knee hyperextension ⑤, knee incomplete extension ③.

Seating and Standing Assessment

Seat depth : correct



Knee support attachment
screw even with center of knee



Ankle/knee/Hip joint straight

Seat depth : too long



Knee support attachment
screw beyond center of knee



Knee joint hyper extened

Seat depth : too short



Knee support attachment
screw short of center of knee



Incomplete knee extension

Correct position



Seat cushion too high

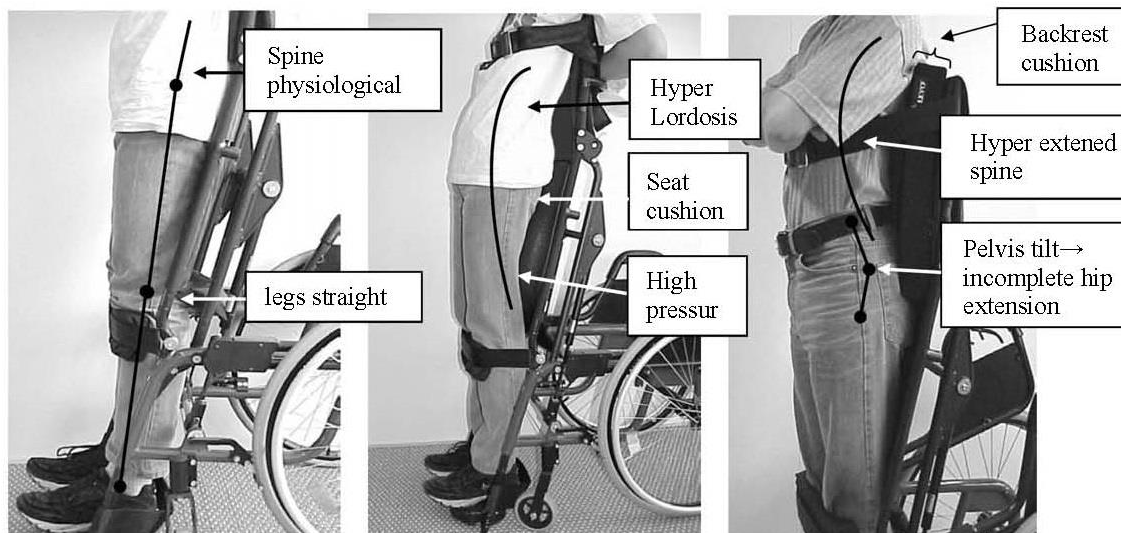


Cushion for pressure relief
in seated position

Back too deep/thick



Backrest cushion or solid
back for more comfort or
stability



All sit and stand assessments, chest and knee pad, posture strap and calf strap adjustments must be performed by a qualified professional at an authorized dealer.

● Standing operation

Once all safety procedures are completed, you can stand up.

1. Place your forearms on the handrails
2. Press the upward lift button ①.
3. Stand up gradually until you are nearly upright.

i If you stand for more than 15 minutes, the green light on your power indicator ② (yellow or red light if low voltage) will automatically go out and enter power saving mode. When you re-activate the lift button , there will be a beep and the battery indicator light will start to display (high and medium voltage are green lights, low voltage is yellow and red lights)



WARN !

There is a risk of damage from hitting obstacles when standing or sitting. During the standing/sitting process, you may bump the raise/lower button ① , which may result in a longer press time or no operation at all.

- Do not hit obstacles when raising/lowering button ①.



The battery level display shows ③, and the LED lights (green, yellow, red) indicate the battery level.

Press the lift button ① to maneuver the wheelchair to stand up or sit down.

● Sit down operation

1. Place your forearms on the handrails.
2. Press the down lift button ①.
3. Gradually descend to the original seating position.



When you sit for more than 15 minutes, the green light on your battery power indicator ② (yellow or red light when low voltage) will automatically go out and enter power saving mode. When you re-activate the lift button ①, there will be a beep and the battery indicator light will start to display (high and medium voltage are green lights, low voltage is yellow and red lights)



● Emergency descent operation

1. Quickly press the lift button ① downwards 5 times in a row, and then press it down for 30 seconds to operate the emergency downward function until the seat returns to the original sitting position.
2. The battery level indicator ② will turn blue.

6.10 Battery Charging

After receiving the wheelchair, the battery must be fully charged before first use.

Battery level indicator of the hand controller (LED light)	Charging time
First time use (charge even if the LED is green)	6 hours
Yellow (LED light just disappeared)	5 hours
The red LED lights up and a beeping sound is emitted to warn that the battery is running low.	6 hours



WARN !

Risk of battery damage

The battery cannot reach its optimum load capacity.

- Do not leave the battery charging for more than 7 hours.



WARN !

RISK OF ELECTRIC SHOCK, EXPLOSION, AND DAMAGE TO BATTERY OR CHARGER

- Always use the charger that comes with the wheelchair. If you use poor quality or damaged batteries or an incompatible charger, there is a risk of battery explosion or damage.
- Always protect the charger from moisture, as a wet charger creates a risk of electric shock and destruction.
- Do not use the charger if it is dropped or damaged due to the risk of short circuit and electric shock.



WARN !

Risk of fire and/or injury

- Use extension cords only when absolutely necessary as there is a risk of fire or injury if a damaged extension cord is used
- If there is no other option, make sure the extension cord is in good condition and compatible with the charging power source.
- Do not operate the raise/lower function when the charger is connected unless the battery is at a very low capacity and the lowering operation is not possible.

● **Battery placement**



If the battery is not inserted correctly, the battery indicator on the hand controller will show a blue light and the charging process will not proceed.

- (1) Take the battery and charger out of the box and remove the packaging.
- (2) Place the battery into the wheelchair main controller and press it down until it clicks into place (pay attention to the left and right sides of the socket hole and the direction of the socket).



● Battery Charging Procedure



Fig 1



Fig 2 AC Power Cord



Fig 3



Fig 4



Fig 5



Fig 6

1. Take the charger out of the carton and remove the packaging.
2. Connect the charging cable and AC power cable ② to the charger port. (Figure 1.2.3.4.)
3. Connect the charger plug to Mini Controller ③ (with the bump facing up) and then connect the power plug ① to the AC power source. (Figure 5)
4. After the connecting cable is correctly connected, the charger will display a red light, and then the charger will display a green light, flashing on and off, indicating that it is in charging status.
5. When the charger light is on green, the hand controller battery indicator ⑤ will also be on green. A steady green light indicates charging is complete.
6. Unplug the charger's power plug ① first, then unplug the Mini Controller's charging cable plug ③.



● Battery storage and transportation

 Store batteries only when they are fully charged in a well-ventilated area. The general storage temperature is 0 °C to 45 °C (6 months-20 °C~45 °C , 1 year-20 °C~25 °C) , relative humidity 60±20%. If the battery is stored for more than 6 months, it must be recharged. Keeping it fully charged prevents any deterioration through spontaneous discharge.

 Wheelchairs are equipped with batteries and are not considered "hazardous equipment." This battery complies with dangerous goods regulations for shipment (IATA/DGR).

Battery Specifications: Li-ion Battery 24V/3.0Ah (72W) 2PCS

7 Transportation

7.1 Safety Information



WARN !

There is a risk of injury if the wheelchair is used incorrectly.

If you suddenly apply the brakes in an accident, you could be thrown out of your wheelchair and seriously injured.

- Always transport the wheelchair with the rear wheels removed.
- Securely fasten all wheelchair parts to the vehicle to prevent them from coming loose during travel.



IMPORTANT !

Excessive wear and abrasion may affect the strength of load-bearing components.

- Do not pull a wheelchair without wheels over rough surfaces (e.g. pulling the frame over a helipad).

7.2 Folding and unfolding the wheelchair

A wheelchair has a rigid frame. Nevertheless, the backrest can be folded forward.

● Folding wheelchair



1. Remove the additional seat cushion (if applicable).
2. Loosen the knob ④ of the guard plate and fold the guard plate downward.
3. Fold the handle and pull the left and right armrests back.
4. Loosen the fixing knob and gently turn it to the bottom.
5. Gently press the backrest forward as far as it will go.



● Unfold the wheelchair



WARN !

Risk of pinching fingers

There is a risk of fingers being pinched between the tubular armrests and the backrest.

- Never grip the tubular handrails with your fingers.



IMPORTANT !

Risk of falling

- Before using the wheelchair, check that the backrest is fully locked to the frame.

1. Place the wheelchair next to you.
2. If possible, gently tilt the wheelchair towards you.
3. Pull the backrest up to the limit and tighten the two knobs **A**.
4. Place the left/right armrest forward and downward.
5. Pull the folding handle upwards.

7.3 Lifting the wheelchair



Lifting the wheelchair into the trunk of the vehicle requires two helpers to lift the wheelchair.



IMPORTANT !

- Never lift the wheelchair by removable or movable parts (rear wheels, tubular armrests).
- Make sure the backrest frame is locked in the correct position.





1. Fold the wheelchair, see section 7.2 Folding and unfolding the wheelchair, page 42.
2. Be sure to hold the frame and lift the wheelchair to point **B**.

7.4 Removing and installing the rear wheel



WARN !

Capsize risk

If the removable axle does not fully engage the rear wheel, the wheel may come loose during use. This may cause the wheelchair to tip over.

- When you install the wheel, always make sure that the removable axle and the rear wheel are fully engaged.



● Removing the rear wheel

1. Release the brake.
2. Use one hand to keep the wheelchair upright.
3. Use your other hand to grasp the wheel through the spokes that secure the outside of the wheel.
4. Press the detachable axle button **A** with your thumb, hold it and remove the wheel from the fixed sleeve **B**.

● **Install the rear wheel**

- 1. Release the brake.**
- 2. Use one hand to keep the wheelchair upright.**
- 3. Use your other hand to grasp the wheel through the outer fixed wheel spokes.**
- 4. Press the removable shaft button with your thumb. Then hold down.**
- 5. Push the shaft into the fixed sleeve ⑧ until it stops.**
- 6. Release the removable axle button and make sure the wheel is secured.**

8 Maintenance

8.1 Security Information



WARN !

Some materials will naturally deteriorate over time. This may cause damage to wheelchair parts.

- Your wheelchair should be inspected by an authorized dealer at least once a year or if it has not been used for an extended period of time.



Return Packaging

The wheelchair should be sent to the authorized reseller in appropriate packaging to avoid damage during transportation.

8.2 Maintenance plan

To ensure safe and reliable operation of your wheelchair, please perform the following inspections and maintenance regularly.

If you clean your wheelchair regularly, your wheelchair will last for many years.



IMPORTANT !

Sand and seawater can damage bearings, and steel parts can rust if the surface is damaged.

- Do not expose your wheelchair to sand and sea water for long periods of time and clean it after every trip to the beach.



IMPORTANT !

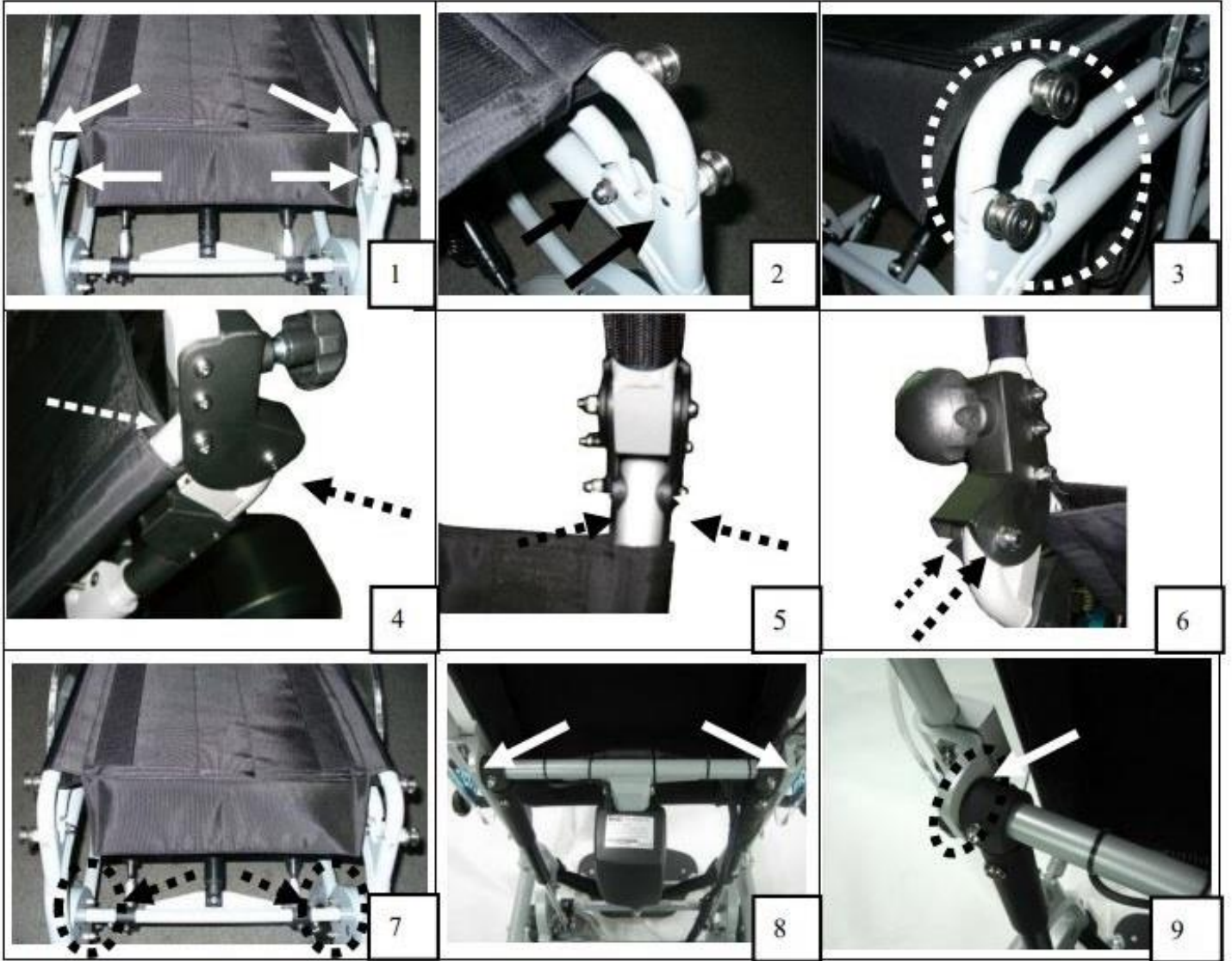
- Do not use harsh abrasives, aggressive cleaning products or high-pressure cleaners. Do not use acids, bases or solvents such as acetone or cellulose thinners.
- Always use normal household cleaners.

1. Clean the cushions and metal parts with a soft damp cloth.

2. After using the wheelchair in the rain, please carefully dry the wheelchair with a cloth

3. If the wheelchair is dirty, wipe off the dirt with a damp cloth as soon as possible and dry it carefully.

- When cleaning, please use a dry or slightly damp cloth to wipe the wheelchair. For stubborn or oily stains, use a cloth dampened with a mild detergent. Do not rinse with water.
- Check the condition of the tire tread every one to six months. If tires are wearing heavily or unevenly, they should be replaced.
- Check the brakes every one to six months to see if they are still functioning properly. When the brakes are applied, the wheels should stop turning completely. If the brakes are ineffective, they should be tightened.
- Lubricate the joints once a week to once a month, depending on the frequency of use. (Figure 1~9)



● **Check tire pressure**

1. Check tyre pressure, 3.9 Tires, page 19.
2. Inflate the tire to the desired pressure.
3. Check the tire tread at the same time.
4. Replace the tire if necessary.

● **Check whether the rear wheel is properly positioned**

1. Pull the rear wheel to check that the removable axle is correctly seated. The wheels should not wobble or fall off.
2. If the rear wheels do not engage properly, remove any dirt or deposits. If the problem persists, have your authorized reseller reinstall the removable axle.

● **Check posture belt**

1. Check that the posture belt is adjusted correctly.

! IMPORTANT !

- Loose posture belts must be adjusted by an authorized dealer.
- A damaged posture belt must be replaced by an authorized dealer.

● **Check the battery load level**

1. Check that the battery load level is 100%.

● **Visual inspection**

1. Inspect your wheelchair for loose parts, cracks or other defects.
2. If you notice any problems, have your wheelchair checked immediately by an authorized dealer.

● **Check the standing mechanism**

1. Check whether the standing mechanism is easy to operate.

● **Clean the front wheel**

1. Check if the front wheel turns freely.
2. Clean any dirt or hair from the front wheel bearing.

● **Check the bolts**

Bolts may loosen with continued use.

1. Check that the bolts are tight (on footrest, seat cover, sides, backrest, frame, seat module).
2. Tighten any loose bolts to the appropriate torque. Therefore, please refer to the service manual.

! IMPORTANT !

- Security nuts and bolts lose their effectiveness through repeated loosening and tightening.
- Security nuts and bolts must be replaced by an authorized dealer.

● Check spoke tension

The spokes should not be loose or deformed.

1. Loose spokes must be tightened by an authorized reseller.
2. Damaged spokes must be replaced by an authorized dealer.

● Check the parking brake

1. Check that the parking brake is in the correct position. If the brake lever pushes the tire down a few millimeters when the brake is pressed, the brakes are set correctly.
2. If you find that the settings are incorrect, please authorize the reseller to reset them.



IMPORTANT !

If you replace the rear wheels or change the rear wheel position, you must reset the parking brake.

Inspection after a severe collision or impact.



IMPORTANT !

A wheelchair can sustain visible or invisible damage from a severe collision or blow.

- After a serious collision or violent impact, your wheelchair must be inspected by an authorized dealer.

● Repair or replace the inner tube

1. Remove the rear wheel and release the air from the inner tube.
2. Use a bicycle tire lever to pry one side of the tire wall away from the rim. Do not use sharp objects such as screwdrivers to avoid damaging the inner tube.
3. Pull the inner tube out of the tire.
4. Repair the inner tube using a bicycle repair kit, or replace the inner tube if necessary.
5. Slightly inflate the tube until it becomes round.
6. Insert the valve stem into the valve hole on the rim and place the inner tube into the tire (the inner tube should sit right around the tire without any creases).
7. Lift the tire wall to the edge of the rim. Starting close to the valve, use a bicycle tire lever. As you do this, check all the way around to make sure the tube isn't getting caught between the tire and rim.
8. Inflate the tire to maximum operating pressure. Check to see if there is any air escaping from the tire.



Regular cleaning can detect loose or worn parts and enhance the smooth operation of your wheelchair. To operate correctly and safely, your wheelchair must be cared for like any other vehicle. For heavily soiled or badly damaged finish, contact an authorized reseller for more information.

● Cleaning the seat cushion/back cover

To clean the seat cushion/back cover, refer to the instructions on the seat, cushion, and back cover labels.



If possible, always overlap the Velcro (self-adhesive part) when washing to minimize the buildup of lint and thread on the Velcro and prevent them from damaging the cushions/back covers.

● Clean metal surfaces

Metal surfaces should be cleaned with hot water, a soft cloth and a mild detergent.

1. Wipe with a damp cloth.
2. Wipe the surface dry with a dry cloth.

Car polish and soft wax can be used to remove scrapes and restore the shine.

● Clean plastic surfaces

Plastic surfaces must be cleaned with a soft cloth, mild detergent and hot water.



IMPORTANT !

Sand and seawater can damage bearings, and steel parts can rust if the surface is damaged.

- Do not use solvents or kitchen cleaners to clean plastic surfaces.

1. Rinse the surface with clean water.
2. Wipe the surface dry with a dry cloth.

● Disinfection

Wheelchairs can be disinfected by spraying or wiping with a tested, (approved) disinfectant.



Spray with soft cleaning and disinfection products (fungicides and biocides in accordance with EN1040 / EN1276 / EN1650 standards) and follow the instructions given by the manufacturer.

9 Handling of wheelchair after use

9.1 Storage



IMPORTANT !

Risk of product damage

- Do not store the product near heat sources.
- Do not store other objects on the wheelchair.
- Store your wheelchair indoors in a dry environment.

After long-term storage (more than four months), the wheelchair must be inspected as described in Chapter 8, Maintenance, page 46.

9.2 Reuse

The wheelchair is suitable for repeated use. Before re-use, always inspect the wheelchair according to Chapter 8 “Maintenance” on page 46:

9.3 Processing

Be environmentally conscious and dispose of your wheelchair properly. Disposal is subject to state and local regulations.



For correct disposal, please contact your specialist reseller or ask your town or district council about local waste management companies.