



Start M4 XXL, Start M6 Junior

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1 Foreword

INFORMATION

Last update: 2019-12-19

- ▶ Please read this document carefully before using the product.
- ▶ Follow the safety instructions to avoid injuries and damage to the product.
- ▶ Have yourself instructed by qualified personnel in the proper and safe use of the product.
- ▶ Please keep this document in a safe place.

INFORMATION

- ▶ New information regarding product safety and product recalls as well as the declaration of conformity can be obtained at oa@ottobock.com or from the manufacturer's service department (see inside or outside of rear cover for addresses).
- ▶ You can request this document as a PDF file at oa@ottobock.com or from the manufacturer's service department (see inside or outside of rear cover for addresses). The PDF file can also be displayed in a larger size.
- ▶ Report all serious incidents that have occurred in connection with the product, both to the manufacturer (see rear cover for contact information) and to the relevant authority in your country.
- ▶ For further questions about the instructions for use, please contact the qualified personnel who issued the product to you.

You have received a product that is very versatile for everyday use at home and outdoors.

In order to exclude injuries of any type, familiarise yourself with the handling, functions and intended use of the product before using it. These instructions for use provide you with the related necessary information.

Please note the following in particular:

- All users must be instructed in the use of the product by qualified personnel with the aid of these instructions for use.
- Attendants (persons who operate and push the product) must also be instructed in the use of the product by qualified personnel with the aid of these instructions for use.
- The product has been adapted to the needs of the user. Further changes may be made only by qualified personnel. We recommend checking the product settings regularly in order to assure an optimum fit over the long term. For growing children and youths in particular, fitting should be performed every six months.
- In case of questions or problems, please consult the qualified personnel that adapted the product or the manufacturer's service (see inside back cover or back page for addresses).
- The product may be combined only with the options listed here. The manufacturer assumes no liability for combinations with third-party medical devices and/or accessories not included in the modular system. Please also observe the information in the section "Liability".
- Service and repairs to the product may only be carried out by qualified personnel. If you have any problems, please contact your specialist dealer. This ensures that any necessary repairs will be made exclusively with Ottobock spare parts.
- Your product may differ from the models shown. In particular, not all the options described in these instructions for use will be installed on your product.
- The manufacturer reserves the right to make technical changes to the model described in these instructions for use.

2 Intended use

2.1 Indications for use

The wheelchair is intended solely for everyday indoor and outdoor use by people who are unable to walk or have a walking impediment and for operation by the patient or another person.

The product is suitable for users whose anatomy (such as body dimensions and weight) permits the intended use of the product.

The wheelchair may only be used with the options listed on the product order form.

Ottobock assumes no liability for combinations with medical devices and/or accessories from other manufacturers not included in the modular system.

Combinations based on a combination agreement that have been evaluated for effectiveness and safety are an exception to this.

The safe use of the wheelchair can only be ensured if it is used as intended in accordance with the information contained in these instructions for use. The user is ultimately responsible for accident-free operation.

2.2 Indications

Minor to pronounced or complete restrictions of mobility and strength deficits of the lower and upper limbs, caused for example by:

Paralysis

- Paraplegia (tetraparesis, paraparesis, hemiparesis, hemiplegia)
- Cerebral palsy
- Multiple sclerosis
- Progressive muscular dystrophy or spinal muscular atrophy
- Traumatic brain injuries
- Stroke

Loss of limbs

- Amputation in combination with severe circulatory or balance disturbances
- Amputation with insufficient weight bearing on the sound leg
- Multiple amputation

Defects or deformation of the limbs

- Dysmelia, phocomelia
- Osteogenesis imperfecta
- Scoliosis

Joint contractures or joint damage (of a significant extent, cause cannot be treated)

- Polyarthrosis, polyarthritis
- Morbus Bechterew
- Arthrogryposis multiplex congenita
- Neurogenic functional disturbances

Other diseases

- Cardiac insufficiency, circulatory insufficiency
- Vestibular disorders
- Cachexia

2.3 Contraindications

2.3.1 Absolute Contraindications

There are no known contraindications given proper use.

2.3.2 Relative Contraindications

There are no known contraindications given proper use.

In certain versions and with certain settings, the wheelchair tends to tip backwards due to its design. This is an intentional feature designed to enable users with the corresponding physical prerequisites to manoeuvre quickly and nimbly. Users lacking the necessary physical or psychological prerequisites must **not** be supplied with such versions/settings!

3 Product description

3.1 Function

The wheelchair is intended exclusively for transporting one person on the seat.

The wheelchair can be used on solid ground both indoors and outdoors.

3.2 Product overview



Start M4 XXL

1	Side panel with forearm support	8	Caster wheel
2	Seat cushion	9	Drive wheel with handrim
3	Leg support, elevating (option)	10	Swinging anti-tipper (option)
4	Wheel lock (here: knee lever wheel lock)	11	Release button for quick-release axle
5	Crossbrace	12	Back support, back support upholstery
6	Frame	13	Drum brake lever (option)
7	Foot plate (segmented)	14	Push handles with stabiliser bar



Start M6 Junior

1	Side panel with forearm support	8	Caster wheel
2	Seat cushion	9	Drive wheel with handrim
3	Leg support, removable	10	Anti-tipper (option)
4	Wheel lock (here: knee lever wheel lock)	11	Release button for quick-release axle
5	Crossbrace	12	Back support, back support upholstery
6	Frame	13	Push handle, height-adjustable (option)
7	Foot plate (segmented)		

4 Safety

4.1 Explanation of warning symbols

⚠ WARNING	Warning regarding possible serious risks of accident or injury.
⚠ CAUTION	Warning regarding possible risks of accident or injury.
NOTICE	Warning regarding possible technical damage.

4.2 Safety instructions for use

Hazards during preparation for use

⚠ WARNING

Independent modification of settings

Serious injuries to the user due to unallowable changes to the product

- ▶ Do not modify the settings established by the qualified personnel. Only the settings described in the section "Use" in these instructions for use may be adjusted independently.
- ▶ In case of problems with the settings, please contact the qualified personnel who fitted your product.
- ▶ Discuss all changes to the settings with the qualified personnel/therapist in advance in order to minimise health hazards and avoid putting the therapy results at risk.

⚠ WARNING

Settings outside the safety limits

Tipping over, falling due to adjustment errors because of failure to observe the physical/psychological requirements of the user

- ▶ In certain versions and with certain settings, the product tends to tip backwards due to its design. This is an intentional feature designed to enable users with the corresponding physical prerequisites to manoeuvre quickly and nimbly.
- ▶ Users with the necessary physical and psychological preconditions can be supplied with such versions/settings. If the physical/psychological preconditions change, the product may no longer be used with these settings. Inform the responsible qualified personnel immediately in this case.

⚠ WARNING

Improper handling of packaging materials

Risk of suffocation due to neglect of the duty to supervise

- ▶ Packaging materials must be kept out of the reach of children.

Risk of hand injuries

⚠ CAUTION

Pinching on components

Pinching, crushing due to lack of caution in danger areas

- ▶ Do not reach between the drive wheel and wheel lock or drive wheel and side panel when driving the wheelchair.
- ▶ Do not reach into the spokes of the rotating drive wheel.
- ▶ Pay attention not to pinch parts of your body at the wheel lock lever or between the side or frame parts.

⚠ CAUTION

Heat development when braking with handrims

Burns due to insufficient hand protection

- ▶ Wear wheelchair gloves when travelling at high speeds.

Hazards while driving

⚠ WARNING

Improper use of the wheel lock

Falling due to abrupt braking, rolling away of the wheelchair, damage to the wheel lock

- ▶ Do not use the wheel lock as a driving brake.
- ▶ Apply the wheel lock to prevent the wheelchair from moving on uneven ground or during transfers (e.g. into a car).

⚠ CAUTION

Lack of driving experience

Tipping over, falling due to errors in handling the product

- ▶ Practise on level, open ground first.
- ▶ Learn with the support of an assistant how the product reacts to changes in centre of gravity, e.g. downward or upward slopes, inclines or when overcoming obstacles.

⚠ CAUTION

Leaning forward in the wheelchair

Tipping over, overturning due to incorrect centre of gravity

- ▶ Do not lean too far out of the wheelchair when trying to pick up objects.
- ▶ Lean well forward with your upper body when climbing gradients, overcoming obstacles on gradients or on ramps. If users cannot lean their upper body forward, accompanying persons must support the wheelchair from behind.

⚠ CAUTION

Risky operation

Falling, tipping over backwards due to approaching obstacles incorrectly

- ▶ Push slowly when crossing obstacles (e.g. steps, curbs) and negotiating uphill or downhill slopes and inclines.
- ▶ Never cross obstacles at an angle. Always approach obstacles head on (at an angle of 90°).
- ▶ Raise the front wheels before crossing obstacles.
- ▶ Avoid collisions with obstacles and dropping off curbs/ledges.
- ▶ Avoid riding cross-country.

⚠ CAUTION

Lack of tipping resistance on public transport

Tipping over, user falls, damage to the product due to incorrect positioning

- ▶ When using public transit, always observe the currently applicable legal requirements and the safety notices of the public transit operator.
- ▶ Use the permanently installed seats in the vehicle. If you depend on using your wheelchair as a seat, please use the designated wheelchair spaces and safety securing equipment provided. Always ensure that you are held in place securely.

⚠ CAUTION

Incorrect handling at level crossings

User may fall or tip over due to driving error

- ▶ Only cross railway systems and railway tracks in the designated areas.
- ▶ Negotiate level crossings so the caster wheels of the product cannot get caught in the gap between the rail and the road surface.

⚠ CAUTION

Driving in the dark

Risk of collisions with other traffic participants due to lack of lighting

- ▶ Wear bright clothing or clothing with reflectors.
- ▶ Install active lighting on your product.
- ▶ Ensure that the reflectors on the product are clearly visible.

Hazards when overcoming obstacles

WARNING

Overcoming steps and obstacles without assistance

Tipping over, falling of the user due to failure to observe transportation instructions

- ▶ Always have accompanying persons help you negotiate steps and other obstacles.
- ▶ Use available facilities (e.g. access ramps or lifts).
- ▶ If such facilities are not available, have 2 assistants carry you over the obstacle.

WARNING

Improper lifting by attendants

Tipping over, falling of the user due to lifting on components that come loose or are not intended for lifting

- ▶ Only lift the product on permanently welded components (e.g. main frame).
- ▶ Do not lift the product on components installed with screw connections or add-on components.

WARNING

Reduced ground clearance with the "foot-propelled chair" option

Tipping over, falling due to getting caught on obstacles

- ▶ Please note that wheelchairs with the "foot-propelled wheelchair" option might fall below the minimum ground clearance of **40 mm** depending on the selected settings for the lower leg length and the front seat height.
- ▶ Adjust your driving to the reduced ground clearance and exercise particular caution with obstacles on the ground e.g. steps, curbs and thresholds.

Hazard in case of broken skin

CAUTION

Contact with broken skin

Reddening of the skin or pressure points due to contamination with germs or incorrectly adapted seat cushion

- ▶ Check before using the product that the skin is not broken in areas subject to prolonged pressure (e.g. buttocks, back and rear of the thighs).
- ▶ In case of problems, please contact the qualified personnel who adjusted the product.
- ▶ No liability is assumed for injuries caused by the use of the product with broken skin.

Hazards due to fire, heat and cold

CAUTION

Extreme temperatures

Hypothermia or burns due to contact with components, failure of components

- ▶ Do not expose the product to any extreme temperatures (e.g. direct sunlight, sauna, extreme cold).
- ▶ Do not leave the product in the immediate vicinity of heaters.

Hazards due to improper use of the product

WARNING

Overloading

Severe injuries if the product tips over due to overloading, damage to the product

- ▶ Do not exceed the maximum load capacity (see the nameplate and section "Technical data").
- ▶ Please note that certain accessories and add-on components will reduce the remaining load capacity.

WARNING

Exceeding the service life

Serious injuries due to failure to observe the manufacturer's requirements

- ▶ Using the product beyond the specified expected service life leads to increased residual risk.
- ▶ Observe the specified service life.

⚠ WARNING

Incorrect pushing or pulling of the wheelchair
 Falling, tipping over due to user error

- ▶ Only the push handles may be used for pushing or overcoming obstacles.
- ▶ The attendant should make sure that he/she has a secure stance and firm grip (on both sides).
- ▶ In case of damage, have the push handles repaired promptly.

⚠ CAUTION

Use of the product during diagnostic examinations and therapeutic treatment
 Impairment of the examination results or the effectiveness of treatment due to interactions of the product with devices that are used

- ▶ Make sure that examinations and treatments are carried out exclusively under the prescribed conditions.

⚠ CAUTION

Uncontrolled driving behaviour, unexpected sounds or odours
 Falling, tipping, collision with persons or nearby objects due to defects

- ▶ If any faults, defects or other hazards that can lead to personal injury are detected, the product must be taken out of service immediately. This includes uncontrolled movements as well as sounds that are unexpected or previously not noted or odours that deviate significantly from the state of the product at the time of delivery.
- ▶ Please contact your authorised dealer.

NOTICE

Use under incorrect environmental conditions
 Damage to product due to corrosion or abrasion

- ▶ Do not use the product in salt water.
- ▶ Make sure that the wheel bearings are not damaged by sand or other particles.

4.3 Side effects

The following side effects may occur during use of the product:

- Neck, muscle and joint pain
- Circulatory disorders, risk of pressure sores

Contact a doctor or therapist in case of problems.

4.4 Further information

INFORMATION

Even in the event of compliance with all applicable guidelines and standards, alarm systems (e.g. in department stores) may respond to your product. Should this happen, remove your product from the area where the alarm was triggered.

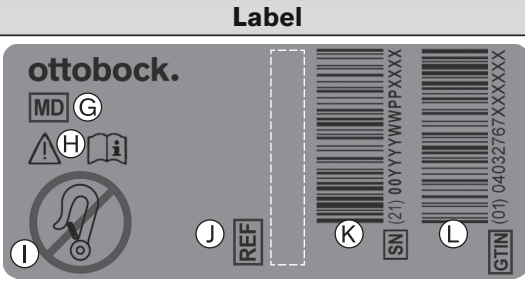
4.5 Nameplate and warning labels

4.5.1 Nameplate

The nameplates are found on the crossbrace.

4.5.1.1 Start M4 XXL

Label	Meaning
<p>The nameplate contains the following elements: 'ottobock.' logo (A), CE marking (B), 'max. Zuladung: XXX kg / XXX lbs' (C), manufacturer information 'Otto Bock Mobility Solutions GmbH, Lindenstraße 13 - 07426 Königsee/Germany, Made in XXXX - www.ottobock.com' (D), serial number 'SN YYYYYWPPXXXX' (E), manufacturing date 'YYYY-MM-DD' (F), and a medical device symbol (G).</p>	A Manufacturer's product name
	B CE marking
	C Maximum load (see section "Technical data")
	D Manufacturer information/address
	E Serial number ¹⁾
	F Manufacturing date ²⁾
	G Symbol for medical device

Label	Meaning
	H WARNING! Read the instructions for use before using the product. Observe important safety-related information (e.g. warnings, precautions).
	I The product has not been approved by the manufacturer for use as a seat in vehicles for transporting persons with reduced mobility
	J Manufacturer's reference number for the product variant
	K Serial number (PI) ^{3),1)}
	L Global Trade Item Number (DI) ⁴⁾

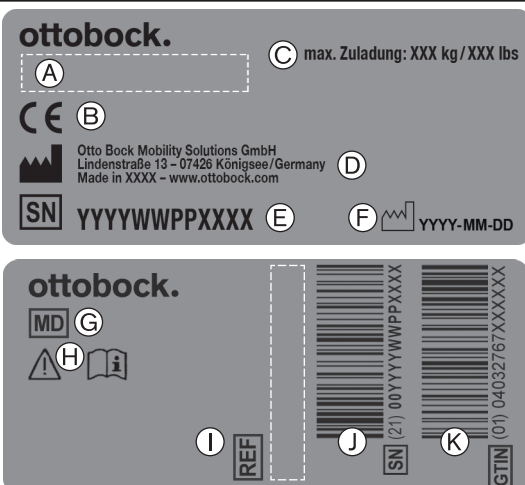
1) YYYY = year of manufacture; WW = week of manufacture; PP = production site; XXXX = sequential production number

2) YYYY = year of manufacture; MM = month of manufacture; DD = day of manufacture

3) UDI-PI to GS1 standard; UDI = Unique Device Identifier, PI = Product Identifier

4) UDI-DI to GS1 standard; UDI = Unique Device Identifier, DI = Device Identifier

4.5.1.2 Start M6 Junior

Label	Meaning
	A Manufacturer's product name
	B CE marking
	C Maximum load (see section "Technical data")
	D Manufacturer information/address
	E Serial number ¹⁾
	F Manufacturing date ²⁾
	G Symbol for medical device
	H WARNING! Read the instructions for use before using the product. Observe important safety-related information (e.g. warnings, precautions).
	I Manufacturer's reference number for the product variant
	J Serial number (PI) ^{3),1)}
	K Global Trade Item Number (DI) ⁴⁾


1) YYYY = year of manufacture; WW = week of manufacture; PP = production site; XXXX = sequential production number

2) YYYY = year of manufacture; MM = month of manufacture; DD = day of manufacture

3) UDI-PI to GS1 standard; UDI = Unique Device Identifier, PI = Product Identifier

4) UDI-DI to GS1 standard; UDI = Unique Device Identifier, DI = Device Identifier

4.5.2 Warning labels

Label	Meaning
	Fixation point to attach the product in vehicles for transporting persons with reduced mobility

5 Delivery

5.1 Scope of delivery

- Wheelchair ready for use
- Instructions for use (user)

5.2 Options

The standard model can be fitted to the user's personal requirements thanks to a large range of options. For use of these options: see Page 15 ff.

5.3 Storage

5.3.1 Storage during daily use

The wheelchair must be stored in a dry place.

5.3.2 Storage during extended disuse

The wheelchair must be stored in a dry place. During longer storage periods, an ambient temperature between **-10 °C and +40 °C** must be maintained.

It is not necessary to disassemble or fold up the wheelchair.

During extended storage, the knee lever wheel lock on wheelchairs with PU tyres (= tubeless tyres) must be released since tyre deformation may otherwise result.

Tyres contain chemical substances that can react with other chemical substances (such as cleaning agents, acids, etc.).

6 Preparation for use

6.1 Assembly

⚠ CAUTION

Exposed pinch points

Crushing, pinching due to incorrect handling

- ▶ When folding the wheelchair out or together, only grip by the specified components.

⚠ CAUTION

Failure to verify readiness for use before putting into operation

Tipping, falling due to incorrect adjustment or installation

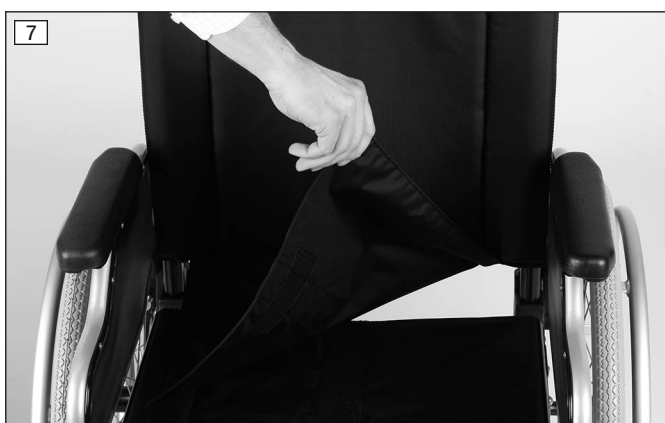
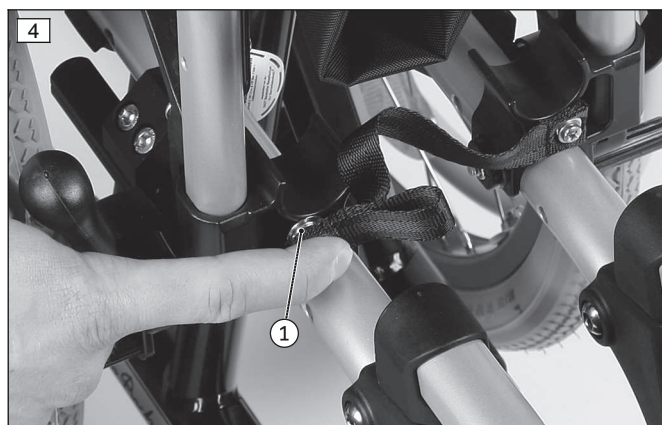
- ▶ Before you start using the wheelchair for the first time, check the chosen wheelchair settings with the support of qualified personnel.
- ▶ After every assembly, check for proper mounting of the drive wheels. The quick-release axles must be securely locked in the receiver bushings.
- ▶ Pay particular attention to the stability against tipping, free running of the drive wheels and correct function of the wheel locks.
- ▶ Check the tyre pressure. The correct tyre pressure is printed on the sidewall. Ensure that the pressure is the same in both tyres.

INFORMATION

On the topic of disassembly/transport: see Page 36.

It only takes a few simple steps to prepare the wheelchair for use:

- 1) Attach the drive wheels to the quick-release axle housings:
 - Press in the button on the quick-release axle (see fig. 3).
 - Attach the drive wheel to the receiver bushing and release the button on the quick-release axle.
 - The quick-release axles must not be removable after releasing the push-button.
 - **INFORMATION: For the “lock-release assist” option see the section “Drive wheels”.**
- 2) Loosen the safety strap by means of the push-button (see fig. 4, item 1).
- 3) Unfold the wheelchair (see fig. 5).
INFORMATION: While you are next to the wheelchair, tip it slightly toward you and press on the edge of the seat upholstery closest to you.
- 4) **If necessary:** Insert the leg supports into the retainer (see Page 18).
- 5) Fold down the foot plates (see fig. 12).
- 6) **If necessary:** Pull the part of the flap that can be fastened forwards and fasten tightly to the seat upholstery (see fig. 7).
- 7) Fit the seat cushion. The seat cushion is secured against sliding by being pressed on to the hook-and-loop fastener.



7 Use

7.1 Further instructions for use

- Attaching loads (e.g. backpacks) can adversely affect stability. Suspending additional loads on the wheelchair is not permitted.
- The recommended overall width for manual wheelchairs in an operational state is **700 mm**. This specification should ensure unhindered use of escape routes, for example. Please note that the product dimensions can exceed the recommended value in versions with very large seat widths (for more information see see Page 46 ff.).
- The wheelchairs in this series fully satisfy the minimum technical requirements for wheelchairs transportable by train. However, please note that it is possible that not every individual wheelchair will fulfil the minimum requirements due to the variation in designs (please see see Page 48 for further details).

7.2 Getting in and transferring

⚠ CAUTION

Incorrect handling when getting in

Risk of falling, tipping or rolling away due to incorrect handling

- ▶ Activate the wheel lock each time before you get into or out of or transfer to or from the wheelchair.
- ▶ Always get into the wheelchair from the side, where possible.
- ▶ Never step on the foot plates when getting in and out.
- ▶ Do not support yourself on the wheel lock when getting in/out.

⚠ CAUTION

Incorrect caster wheel position when leaning forward in the wheelchair

Tipping over, falling due to incorrect caster wheel positioning

- ▶ Prior to activities that require you to bend forward in the wheelchair (e.g. tying your shoes), maximise the stability of the wheelchair.
- ▶ In order to do so, push the wheelchair backwards until the caster wheels turn forward.

Users can choose the method for getting into and out of the wheelchair which is most suitable for them. The respective procedure should be discussed and practised with a therapist.

As a rule, the frame tubes, seat bottom or side panels can be used as supports for getting into the wheelchair.

If getting in independently is not possible, transferring or getting in always has to be performed with the help of an assistant. The manufacturer also offers transfer aids for getting in, such as transfer boards.

7.3 Legrests

⚠ WARNING

Reduced ground clearance with the "foot-propelled chair" option

Tipping over, falling due to getting caught on obstacles

- ▶ Please note that wheelchairs with the "foot-propelled wheelchair" option might fall below the minimum ground clearance of **40 mm** depending on the selected settings for the lower leg length and the front seat height.
- ▶ Adjust your driving to the reduced ground clearance and exercise particular caution with obstacles on the ground e.g. steps, curbs and thresholds.

The leg supports support the user's feet.

The height of the leg support has been adjusted by qualified personnel to the length of the user's lower legs.

The angle of the foot support has been set by the qualified personnel so that it allows the ankles to rest in a comfortable position.

Different leg support types and other accessories may be installed depending on the order:

“Angle-adjustable” leg support (see fig. 8)

The depth of the foot supports is **160 mm**. The leg support can be folded up to make getting into the wheelchair easier.

“Segmented, angle-adjustable” leg support (see fig. 9)

Each leg support can be folded up individually to make getting into the wheelchair easier.

“Elevating” leg support (see fig. 10)

The leg support allows positioning of the leg at different angles.

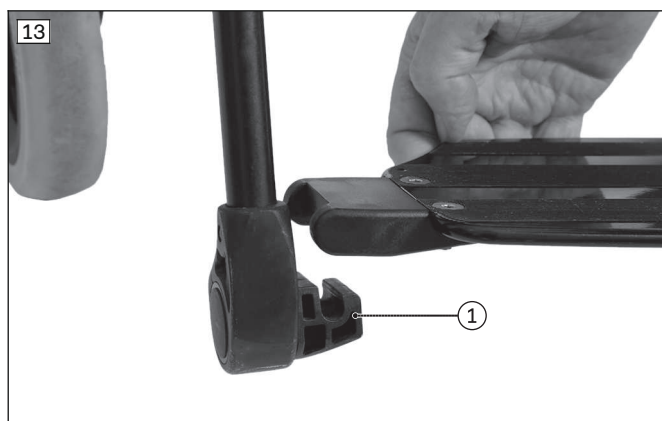
Amputation leg support (see fig. 11)

Alternative for installation on an “elevating” leg support.



7.3.1 Folding the foot plate up and down

- 1) Hold the foot plate by the edge and fold it up or down (see fig. 12).
- 2) **Only for leg supports with single-panel foot plate:** Make sure the support of the foot plate is locked into the receiver (see fig. 13).



7.3.2 Removing and fastening the calf strap

The calf strap offers additional support for the user's legs. It also prevents the feet from sliding off the foot plate into the danger area. The calf strap can be removed for cleaning.

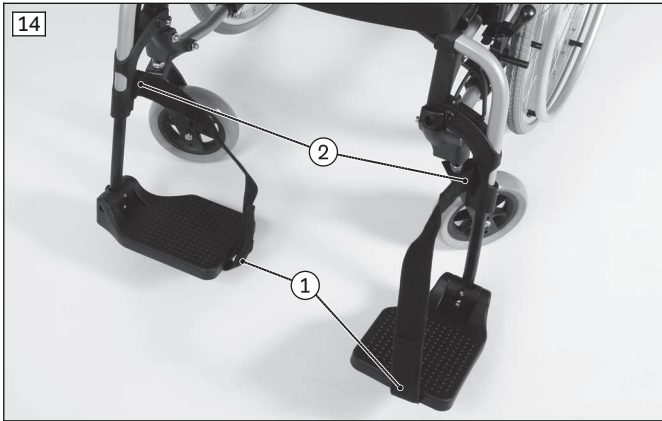
Fastening the calf strap

- 1) Open all hook-and-loop closures.
- 2) Thread the calf strap through the eyelet on the foot plate (see fig. 14, item 1).
- 3) Thread the other end through the eyelet on the swivel segment (see fig. 14, item 2; see fig. 15).
- 4) Adjust the length and fasten the hook-and-loop closure (not illustrated).

Removing the calf strap

- 1) Undo the hook-and-loop closure.

- 2) Remove the calf strap from the frame tube.



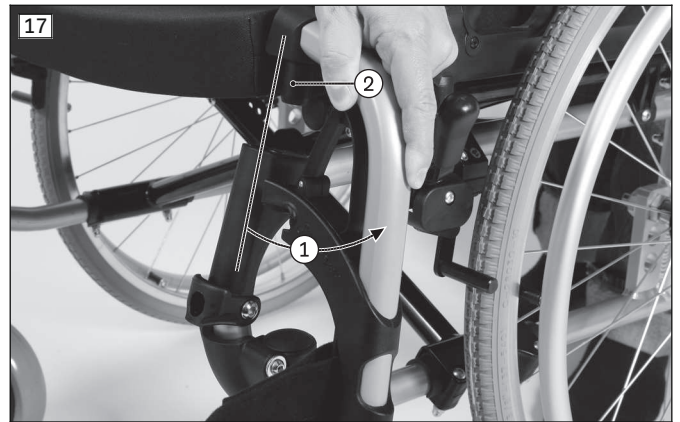
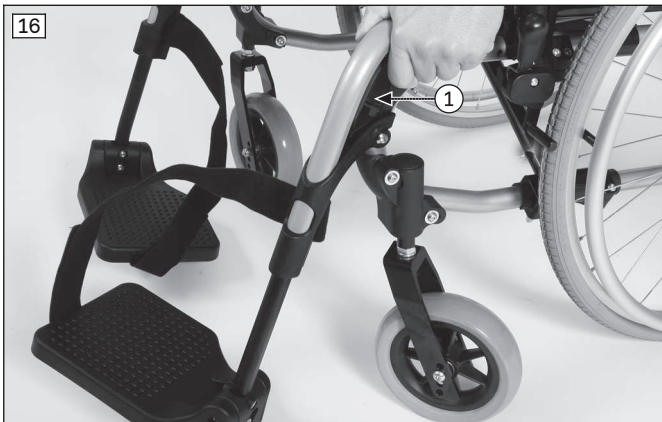
7.3.3 Removing and attaching the leg supports

Removing the “segmented, angle-adjustable” leg support

- 1) Fold the foot plate up.
- 2) Push the pan bar of the leg support back and down (see fig. 16, item 1).
- 3) Swing the leg support outwards and to the side by **90°** (see fig. 17, item 1) and pull up to detach (see fig. 17, item 2).

Mounting the “angle-adjustable” leg support

- 1) Hold the leg support out to the side by **90°** and insert the pivot bearing into the leg support retainer (see fig. 17, item 2).
- 2) Swing the leg support into the direction of travel until it engages.
- 3) Fold the foot plate down.

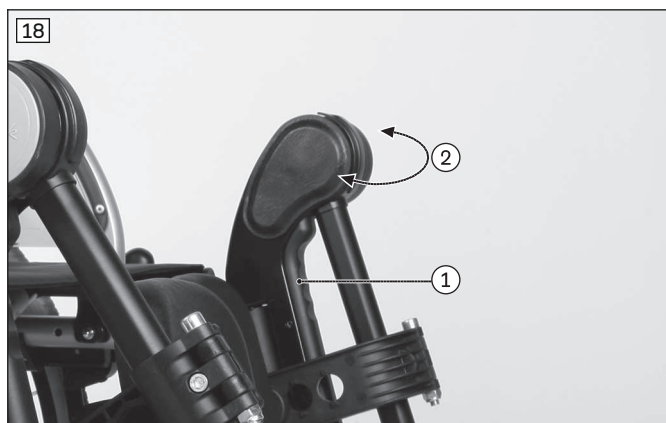


Removing the “elevating” leg support/amputation leg support

- 1) Activate the release lever (see fig. 18, item 1).
- 2) Swing the leg support outwards and to the side by **90°** (see fig. 18, item 2) and pull up to detach.

Mounting the “elevating” leg support/amputation leg support

- 1) Hold the leg support out to the side by **90°** and insert the pivot bearing into the leg support retainer (see fig. 19, item 1).
- 2) Swing the leg support into the direction of travel until it engages (see fig. 18, item 2).



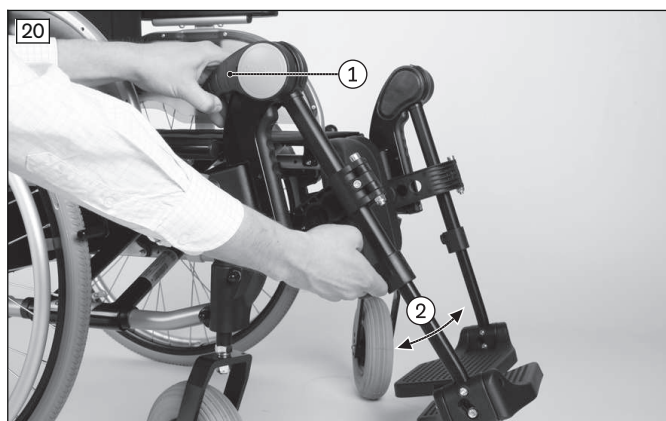
7.3.4 Adapting the angle of the "elevating" leg support

Lowering the leg support

- 1) Turn the release lever upwards to the stop (see fig. 20, item 1).
- 2) Simultaneously move the leg support down to the desired angle (see fig. 20, item 2).
- 3) Twist the release lever back down. The leg support will automatically snap into place in the next free position.

Swinging up the leg support

- 1) Grasp the leg support and pull it up (see fig. 20, item 2).
- 2) Release the leg support at the desired angle. The leg support locks into place automatically.



7.3.5 Adjusting the leg supports

Further adjustments may be made only by qualified personnel.

7.4 Seat and back upholstery

⚠ WARNING

Seat cushions and back support pads may ignite

Burns due to user error

- ▶ The seat and back support upholstery as well as seat cushions, padding and covers fulfil the normative requirements for flame resistance. However, they may still ignite if fire is handled improperly or negligently.
- ▶ Keep away from all ignition sources, especially lit cigarettes.

⚠ CAUTION

Wear of the seat and back upholstery

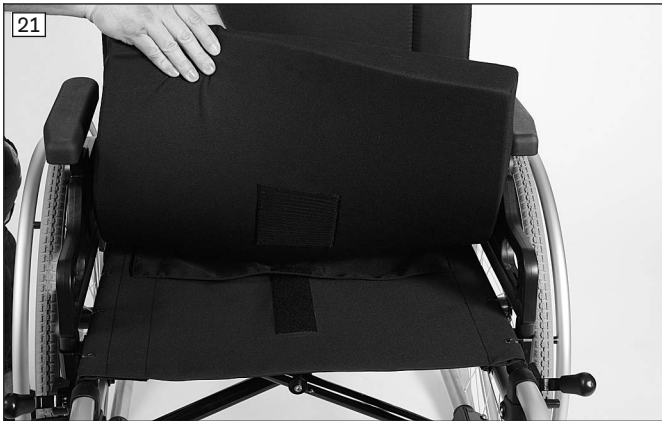
Loss of functionality due to prohibited continued use

- ▶ Have the seat and back upholstery replaced immediately in case of damage.

The product is equipped with seat and back upholstery. Hook-and-loop fasteners on the seat upholstery are used to attach the seat cushion. The seat cushion ensures pressure relief during use of the wheelchair. It was chosen by qualified personnel according to the needs of the user.

7.4.1 Removing and fastening the seat cushion

- 1) Lay the seat cushion onto the seat upholstery and secure it against sliding by pressing it onto the hook-and-loop fastener (see fig. 21).
- 2) To remove, detach the seat cushion from the hook-and-loop closure on the seat upholstery.



7.4.2 Removing and fastening the back support pad

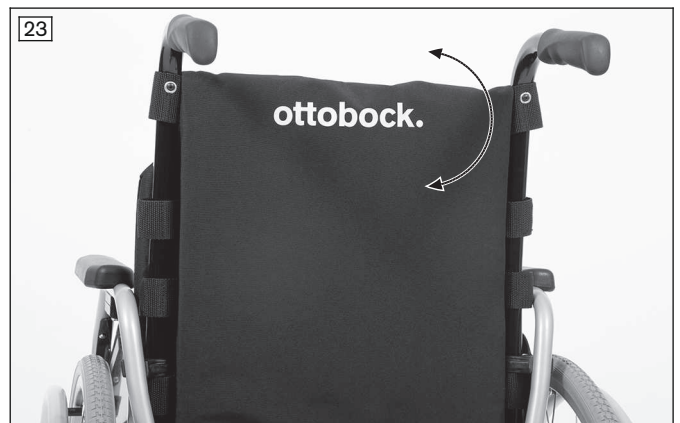
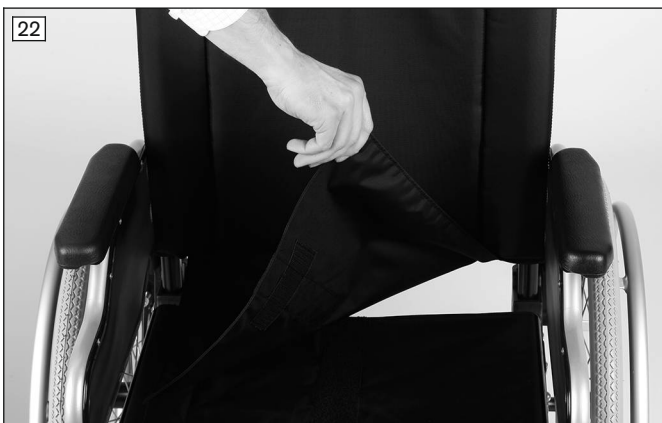
The back padding can be removed from the wheelchair for cleaning.

Removing the back support pad

- 1) Remove the seat cushion.
- 2) Pull the flap of the back support pad off the seat upholstery (see fig. 22).
- 3) Fold the back support pad to the rear and pull it off the hook-and-loop straps of the back support upholstery (not illustrated).

Fastening the back support pad

- 1) From the rear, apply the edge of the back support pad to the upper hook-and-loop strap.
- 2) Fold down the back support pad and secure it to the upholstery straps with the hook-and-loop fasteners (see fig. 23).
- 3) Pull the part of the flap that can be fastened forward and attach it to the seat upholstery with the hook-and-loop fastener (see fig. 22).



7.5 Backrest

⚠ WARNING

Incorrect use of back support angle adjustment

Falling, tipping over due to operation without anti-tipper

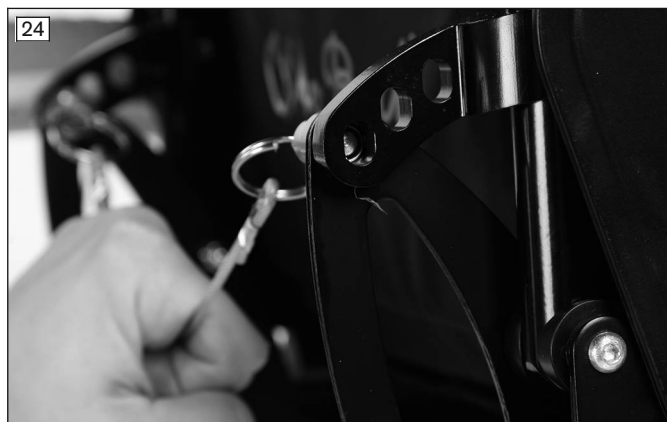
- ▶ Note that adjusting the back support angle shifts the centre of gravity. Only use the back support angle adjustment with the anti-tipper activated.
- ▶ Drive in street traffic only with a vertical back support.

The product can be equipped with a fixed or optionally an angle-adjustable backrest.

“Back support angle adjustment 30°” option

With this option, the back support angle is continuously adjustable from **90° to 120°**.

- 1) Pull the cable of the back support release mechanism until the angle adjustment is released by the locking pins (see fig. 24).
- 2) Move the back support to the desired position (see fig. 25).
- 3) Release the cable. Ensure that the locking pins securely engage on both sides.



7.6 Side panels

⚠ CAUTION

Pinching at the side panels

Pinching, crushing due to lack of caution in danger areas

- ▶ Pay attention not to pinch parts of your body between the side panel or frame parts.

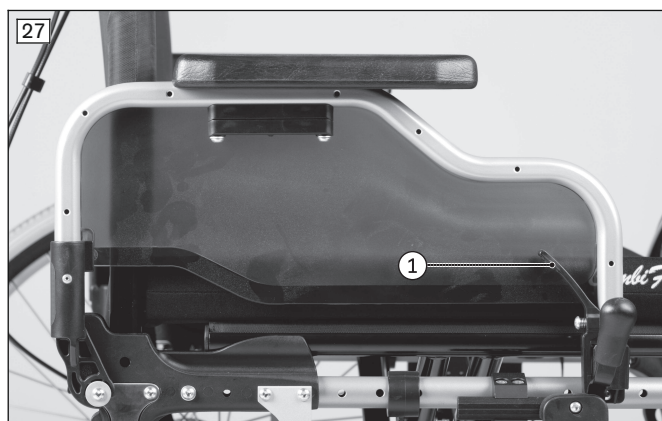
The side panels protect the user and his/her clothing from getting dirty.

If armrests have been installed on the wheelchair, they offer the user additional support for the forearms.

The wheelchair can be equipped with various side panels:

“Standard” side panel (see fig. 26); “stepped” desk side panel (see fig. 27)

After activating the locking mechanism, the side panels can be swung away to the rear and removed for transfer (see item 1).



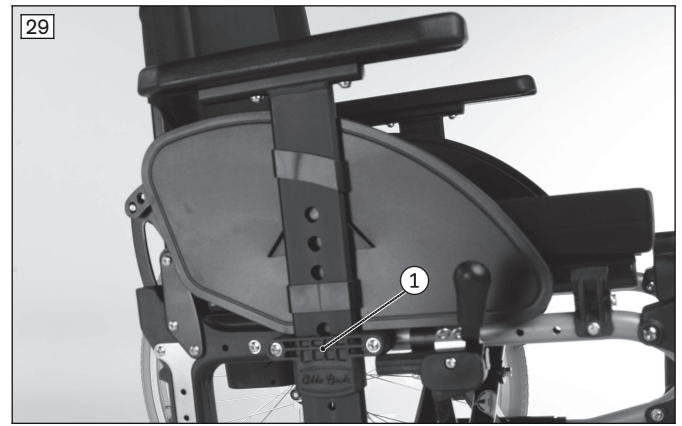
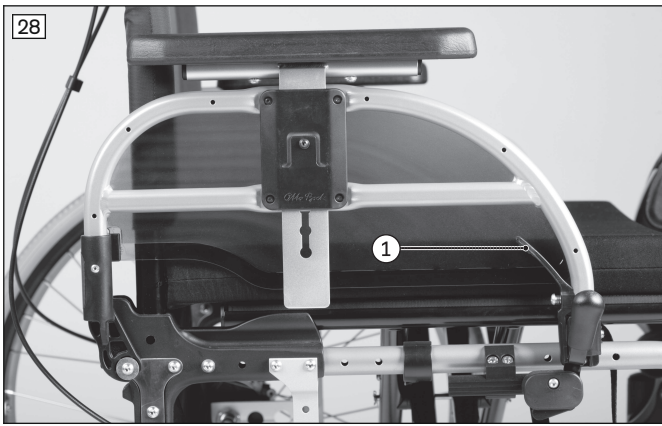
“Height-adjustable” side panel (see fig. 28)

After activating the locking mechanism, the side panels can be swung away to the rear and removed for transfer (see item 1).

The height of the forearm support can also be adjusted without the use of tools.

“Plug-on” side panel (see fig. 29)

These side panels can be pulled up and out of the adapter for getting into or out of the wheelchair (see item 1). The height of the forearm support can also be adjusted.



7.6.1 Folding down the side panels

To make getting into the wheelchair easier and for transportation, the side panels can be folded down.

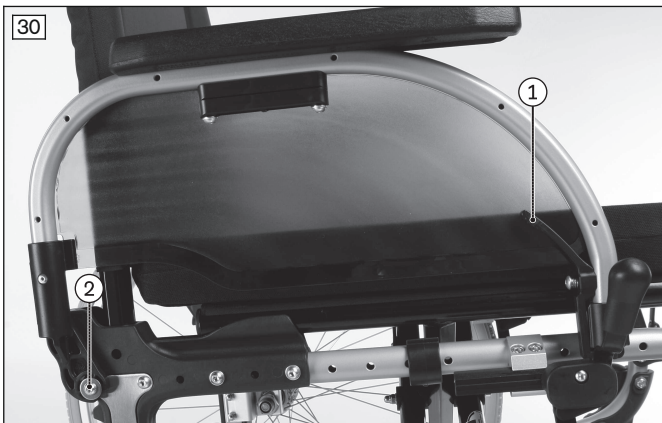
Swinging up the “standard”, “stepped” and “height-adjustable” side panels

- 1) Push the locking mechanism (example: see fig. 30, item 1).
- 2) Swing the side panel back around the axis of rotation (example: see fig. 30, item 2).

Swinging back the “standard”, “stepped” and “height-adjustable” side panels

- 1) Fold the side panel forwards.
- 2) The locking mechanism has to audibly engage in the side panel adapter.

INFORMATION: Verify the firm fit of the side panels in the side panel adapter.



7.6.2 Adjusting the height of the forearm support

“Standard” side panel, “stepped” desk side panel

Subsequent adjustments to the forearm support height may be made only by qualified personnel.

“Plug-on” side panel

- 1) Use a ballpoint pen or screwdriver to push in the counter-sunk locking button (see fig. 31).
- 2) Slide the side panel to the desired position.

CAUTION! The locking button is intentionally counter-sunk to prevent accidental operation. Always use an object to press the locking button, never your fingers.

“Height-adjustable” side panel

The height of the forearm support can be set to various positions without the use of tools.

- 1) Push the locking button in the circular opening in to the stop (see fig. 32).
- 2) Slide the forearm support to the desired position.
- 3) Release the locking button. The forearm support locks into place automatically.



7.6.3 Removing the side panels

To make getting into the wheelchair easier and for transportation, the side panels can be removed.

Removing the “standard”, “stepped” and “height-adjustable” side panels

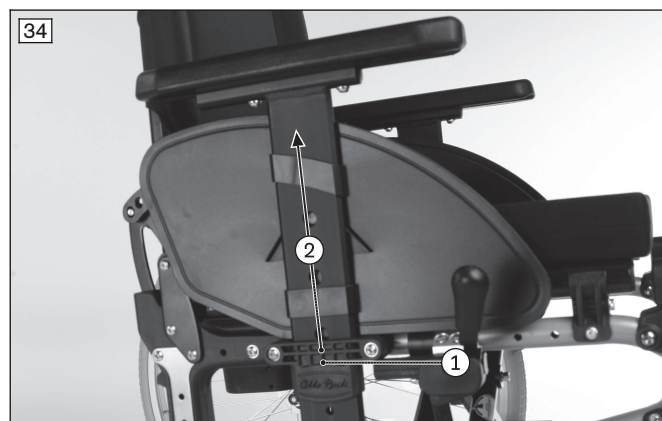
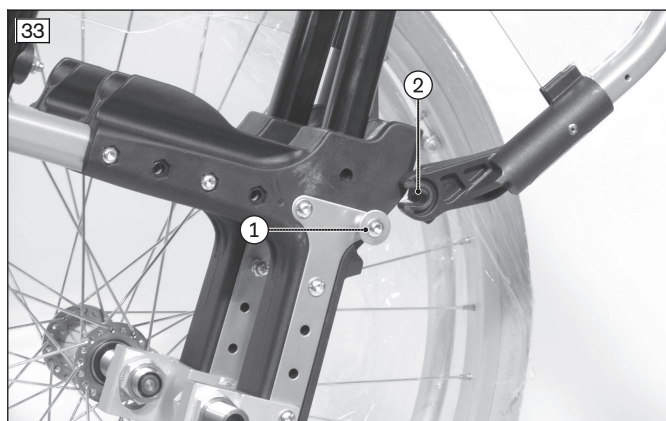
- 1) Press the locking mechanism (see above).
- 2) Swing back the side panel to a 45° angle.
- 3) Release the side panel from the rear mounting (see fig. 33, item 1) and pull it diagonally back/up and out (see fig. 33, item 2).

Installing the “standard”, “stepped” and “height-adjustable” side panels

- 1) Engage the side panel in the mounting (see fig. 33, item 1).
- 2) Fold the side panel forwards. The locking mechanism engages.

Removing/installing the “plug-on” side panels

- 1) Pull the side panel out of the side panel adapter (see fig. 34, item 1/2).
- 2) After getting in, slide the side panel back into the side panel adapter.



7.6.4 Adjusting an arm support with swivel unit

INFORMATION

After adjusting the swivel unit, please always make sure that the lock pins have safely snapped in place.

The swivel unit allows the support angle and the rotation setting of an arm support to be adjusted individually. Furthermore, the swivel unit is required for using a modular forearm support.

Adjusting the support angle

- 1) Pull the release button outwards (see fig. 35, item 1).
- 2) Lift up the arm support at the front end and adjust it to the desired angle (see fig. 35, item 2).
- 3) Let go of the release button. The arm support will be secured in its position.

Adjusting the rotation setting in 15° increments

- 1) Pull the release button downwards (see fig. 36, item 1).

- 2) Move the arm support to the desired rotation setting.
- 3) Let go of the release button. The arm support will be secured in its position.

Continuously adjusting the rotation setting

- 1) Pull the release button downwards (see fig. 36, item 1).
- 2) Turn the release button 90°. The arm support can be rotated freely in this position.
- 3) Move the arm support to the desired rotation setting.
- 4) Let go of the release button. The arm support will be secured in its position.

Adjusting the depth of the arm support

- 1) Loosen the Allen head screws under the arm support (see fig. 36, item 2).
- 2) Slide the arm support to the desired depth.
- 3) Re-tighten the Allen head screws under the arm support (see fig. 36, item 2).



7.7 Push handles

The push handles make pushing the wheelchair easier for the attendant.

Some of the push handle designs allow the height to be adjusted to suit the needs of the attendant.

7.7.1 Adjusting the height of the push handles

The height of the push handles on the wheelchair (“telescoping” push handle: see fig. 37; “height-adjustable, removable” push handle: see fig. 38) can be adjusted to make pushing easier for the attendant.

- 1) Release the clamping lever.
 - 2) Adjust the height of the push handle.
 - 3) Close the clamping lever tightly.
- Both push handles must be adjusted to the same height.



7.7.2 Removing the push handles

Push handles of the “height-adjustable, removable” type can be removed from the back support tube when needed.

Removing/installing the push handles

- 1) Release the clamping lever (see fig. 39, item 1).
 - 2) Push in the tripod spring (see fig. 39, item 2) and pull the push handle up and out of the adapter (see fig. 39, item 3).
 - 3) To install, push in the tripod spring again and insert the push handle into the adapter.
 - 4) Firmly close the clamping lever (see fig. 39, item 1).
- Both push handles must be installed at the same height.



7.8 Stabiliser bar

The stabiliser bar between the push handles increases the wheelchair's stability, especially in case of high loads (see fig. 40). It has to be opened before folding the wheelchair.

Opening the stabiliser bar

- 1) Open the star handle on the right side (see fig. 41, item 1).
- 2) Fold the stabiliser bar down (see fig. 41, item 2).

Closing the stabiliser bar

- 1) Fold the stabiliser bar up until the opening is against the screw of the star handle.
- 2) Hand-tighten the star handle.



7.9 Drive wheels

⚠ WARNING

Improper assembly of removable wheels

Tipping, falling over of the user due to wheels coming off

- ▶ After each assembly, verify the proper fit of the removable wheels. The quick-release axles must be firmly locked in the wheel attachment.

⚠ CAUTION**Reaching into exposed drive parts**

Crushing, pinching due to incorrect handling

- ▶ Do not reach between the drive wheel and wheel lock or drive wheel and side panel when driving the product.
- ▶ Do not reach into the spokes of the rotating drive wheel while riding in the product.

⚠ CAUTION**Defective tyres**

Accidents/falling due to poor traction, reduced braking force or lack of manoeuvrability

- ▶ Ensure that the tyres have sufficient tread depth.
- ▶ Replace the drive wheels in case of tyre damage (tread surface extends up to **5 mm** to the edge of the tyre, cracking) or damage on the rim.

⚠ CAUTION**Heat development when braking with handrims**

Burns due to insufficient hand protection

- ▶ Wear wheelchair gloves when travelling at high speeds.

The wheelchair is moved, steered, braked and stopped with the help of the handrims on the drive wheels. To make transport easier, drive wheels with quick-release axle can be taken off the wheelchair.

7.9.1 Removing and mounting the drive wheels**⚠ CAUTION****Incorrect removal/attachment of the wheels**

Tipping, falling due to incorrect installation

- ▶ The user is not permitted to sit in the wheelchair during wheel replacement.
- ▶ For changing wheels, set the wheelchair onto a solid surface.
- ▶ To change the wheels, secure the wheelchair against tipping over or rolling away.
- ▶ If the drive wheel does not lock securely or has too much sideways play, contact the qualified personnel promptly.

- 1) Release the wheel lock.
- 2) Grip the area between the spokes near the hub with your fingers.
- 3) Use your thumb to press in the push-button on the quick-release axle.
- 4) Remove or mount the drive wheel.

After mounting: The drive wheels must not be removable after releasing the push-button on the quick-release axle.

**7.9.2 Spoke protector**

The spoke protector prevents the fingers from getting caught in the wheel spokes.

7.10 Caster wheels and caster forks

⚠ WARNING

Failure of caster wheels or caster forks

Falling, severe injury due to the wheelchair tipping over

- ▶ Regularly inspect the caster wheels and caster forks for damage.
- ▶ Regularly clean and oil the caster wheel axles and the threaded axles on the caster forks, especially in case of stiffness.
- ▶ Inform the responsible qualified personnel in case of permanent changes to the driving characteristics.

⚠ CAUTION

Incorrect caster wheel position when leaning forward in the wheelchair

Tipping over, falling due to incorrect caster wheel positioning

- ▶ Prior to activities that require you to bend forward in the wheelchair (e.g. tying your shoes), maximise the stability of the wheelchair.
- ▶ In order to do so, push the wheelchair backwards until the caster wheels turn forward.

The combination of caster wheels and caster forks ensures the ability to hold a straight line and navigate bends securely.

The caster wheels and caster forks have been chosen by the qualified personnel according to the needs of the user.



7.10.1 Approach in case of stiffness

In case of stiffness, the caster wheel axles should be cleaned and oiled.

Oiling the caster axle

- 1) Remove dirt (e.g. hairs) from the caster wheel axle between the caster wheel and caster fork (see fig. 44, item 1).
- 2) Lubricate the caster axle between the caster wheel and caster fork with a few drops of thin, resin-free oil (sewing machine oil).



7.11 Wheel locks

⚠ WARNING

Improper use of the wheel lock

Falls due to abrupt braking, rolling away of the product, crushing of hands

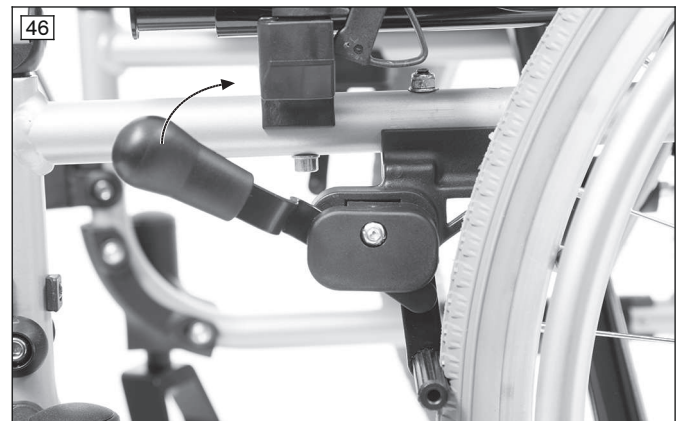
- ▶ Do not use the wheel lock as a driving brake.
- ▶ Always engage the wheel lock on both sides.
- ▶ Engage the wheel lock to prevent the product from moving when it is parked on uneven ground or during transfers (e.g. into a car).
- ▶ Do not reach between the rear wheel and the wheel lock when driving the product.
- ▶ Ensure that the knee lever wheel lock is properly adjusted (max. **5 mm** gap to the tyre). The lock bolt must lock the drive wheel securely when stationary.
- ▶ Please contact the qualified personnel who adjusted your product for readjustment of the wheel lock.

The wheel locks secure the parked wheelchair against rolling away.
Different wheel lock types may be installed depending on the order.

7.11.1 Using the wheel locks

Activating/deactivating the knee lever wheel lock

- 1) Push the handle of the knee lever wheel lock forward (see fig. 45).
→ The wheel lock bolt secures the wheel.
- 2) Pull the wheel lock lever upwards (see fig. 46).
→ The wheel lock lever releases the wheel.



7.11.2 Drum brake

The drum brakes allow the attendant to slow the wheelchair easily and safely by activating the wheel lock lever on the push handles.

When the wheel lock lever is activated, the brake pads press against the brake drum.

The drive wheels can still be removed via the quick-release axles when the wheel lock lever is released.

Activating/deactivating the drum brake

- 1) Pull the brake lever (see fig. 47, item 1).
- 2) If necessary, secure the brake lever by additionally actuating the lock slide (see fig. 47, item 2).
- 3) Deactivate the brake by actuating the brake lever again or pressing the lock slide.

The drive wheels can still be removed via the quick-release axles when the brake lever is released.



7.11.3 Knee lever wheel lock for user and attendant

This wheel lock type can be used by both the user and an attendant.

INFORMATION

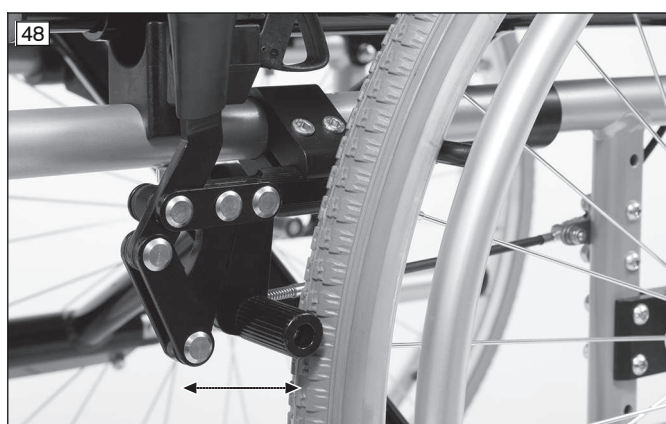
- ▶ Operation of the wheel lock by the user is the same as for the knee lever wheel lock described above.
- ▶ Operation of the wheel lock levers by the attendant is the same as for the drum brake described above.

Activation/deactivation by the user

- 1) Push the handle of the knee lever wheel lock forward (see fig. 48, item 1).
→ The wheel lock bolt secures the wheel (see fig. 48, item 2).
- 2) Pull the wheel lock lever upwards (see fig. 48, item 1).
→ The wheel lock bolt releases the wheel (see fig. 48, item 2).

Activation/deactivation by the attendant

- 1) Pull the wheel lock lever (see fig. 49, item 1).
- 2) Secure the wheel lock lever by additionally actuating the lock slide (see fig. 49, item 2).
→ The wheel lock bolt secures the wheel (see fig. 48, item 2).
- 3) Deactivate the wheel lock by actuating the wheel lock lever again or pressing the lock slide (see fig. 49, item 1/2).
→ The wheel lock bolt releases the wheel (see fig. 48, item 2).



7.11.4 Using the wheel lock lever extension

The “plug-on wheel lock lever extension” option makes the knee lever wheel lock easier to use. The wheel lock lever extension can be folded over for easier transfer into the wheelchair. The wheel lock lever extension is attached to the wheel lock lever with a rubber band.

Removing/mounting the wheel lock lever extension

- 1) Pull away the handle of the wheel lock lever extension forward or up (see fig. 50).
- 2) Fold the wheel lock lever extension either forward or to the side.

- 3) To mount, pull on the handle of the wheel lock lever extension and slide the wheel lock lever extension back onto the wheel lock lever.



7.12 Lap belt (seat belt)

⚠ CAUTION

Incorrectly adjusted lap belt

Malpositions, illness, falling of the user due to installation/adjustment errors

- ▶ Do not modify the settings established by the qualified personnel. In case of problems with the adjustments (unsatisfactory sitting position) please contact the qualified personnel who fitted the product.
- ▶ The lap belt has to fit closely but not too tightly so the user is not injured. It should be possible to slide two fingers comfortably between the belt and thigh.
- ▶ Have the settings of the belt system checked regularly. Adjustments may be required due to the growth of the user or because of changes in the course of the disease or different clothing.

The lap belt (seat belt) prevents the user from slipping and supports positioning.

It is installed on the product by qualified personnel if needed and adapted to the requirements of the user.

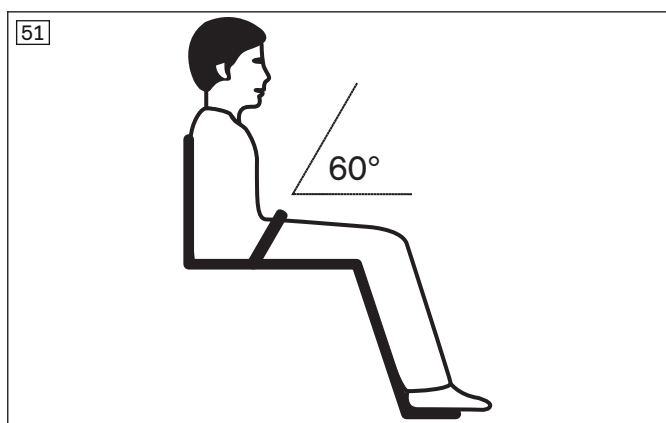
Information about subsequent acquisition and mounting is provided by the qualified personnel that handed over the product.

Using the lap belt

- 1) Open the buckle.
- 2) Place the user in an upright, 90° seated position (if physiologically possible). Ensure that the back is up against the back support pad (if physiologically possible).
- 3) Close the buckle.
- 4) The lap belt should be at an angle of about **60°** to the seat bottom. The belt strap should run across the thighs in front of the pelvic bones (see fig. 51).

Possible errors

- The lap belt is positioned above the user's pelvis in the area of the soft part of the stomach.
- The user does not sit upright in the seat.
- If the lap belt is too loose, the user can shift/slide out to the front.
- During the installation/adjustment, the lap belt is routed over parts of the seating system (e.g. over forearm supports or seat pads). This causes the lap belt to lose its retaining function.



7.13 Anti-tipper/swinging anti-tipper

⚠ WARNING

Incorrectly adjusted anti-tipper

Risk of falling as a result of incorrectly adjusted anti-tipper.

- ▶ The anti-tipper may only be adjusted by qualified personnel.

⚠ WARNING

Incorrectly adjusted anti-tipper

Tipping over, falling of the user due to errors in handling the product

- ▶ If only one attendant helps in overcoming steps, the attendant must first deactivate the anti-tipper so that it cannot collide with the steps during transport.
- ▶ The attendant must activate the anti-tipper again after overcoming the steps.

7.13.1 Anti-tipper

⚠ WARNING

Anti-tipper not activated

Tipping over, falling of the user due to improper operation of a safety device

- ▶ Ensure that an installed anti-tipper is activated before travelling over obstacles and on inclines.
- ▶ The anti-tipper has to engage audibly prior to use. Proper engagement must be checked by the user or an attendant.
- ▶ The use of an anti-tipper is highly recommended for transfemoral amputees and inexperienced users.

The anti-tipper prevents the wheelchair from tipping backwards when overcoming obstacles and going uphill.

The anti-tipper is set for a maximum ground clearance of **50 mm** and so that the anti-tipper rollers, as a minimum, project fully beyond the largest diameter of the drive wheels.

A mounted anti-tipper must always be active.

When overcoming obstacles (such as steps and curbs that are not lowered) **upwards**, the anti-tipper rollers contact the ground.

When overcoming obstacles (such as steps and curbs that are not lowered) **downwards**, the anti-tipper has to be deactivated by the user or attendant to avoid damaging the anti-tipper.

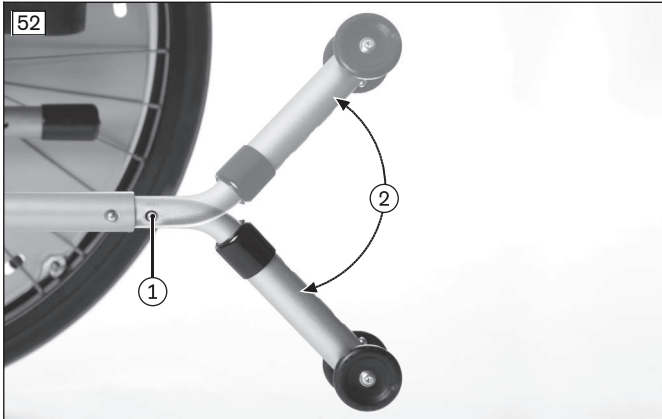
Activation

- 1) Depress the spring button on the upper tube section of the anti-tipper (see fig. 52, item 1).
 - 2) Rotate the anti-tipper down by **180°** (see fig. 52, item 2).
 - 3) Allow the spring button to engage.
- The anti-tipper is activated.

Deactivation

- 1) Depress the spring button on the upper tube section of the anti-tipper (see fig. 52, item 1).
- 2) Rotate the anti-tipper upwards by **180°** (see fig. 52, item 2).
- 3) Allow the spring button to engage.

→ The anti-tipper is deactivated.



7.13.2 Swinging anti-tipper

⚠ CAUTION

Improperly crossing obstacles

Tipping over, falling of the user due to improper operation

- ▶ Never cross obstacles such as stairs and curbs at a slant angle. Always approach obstacles head on (at an angle of 90°).

The swinging anti-tipper allows the wheelchair user to safely overcome thresholds and lowered curbs without the help of an attendant. It prevents the wheelchair from tipping and after overcoming the obstacle automatically swings back to the rear.

The swinging anti-tipper is set for a ground clearance of **about 20 to 30 mm (max. 50 mm)** and so that the outer arm of the anti-tipper projects beyond the largest diameter of the tyre.

Negotiating thresholds/lowered curbs

The arms of the swinging anti-tipper should hang down towards the floor and swing freely for negotiating thresholds and lowered curbs (see fig. 53).

When ascending an obstacle, the arms of the anti-tipper hit the ground and prevent the wheelchair from tipping over to the rear (see fig. 54).

When descending an obstacle, the front arm of the anti-tipper must protrude beyond the edge of the obstacle to enable the anti-tipper to swing out of the way.

As the wheelchair continues to be pushed (forwards/backwards), the anti-tipper turns around its axis (see fig. 55, item 1). Once the obstacle has been overcome, the anti-tipper swings back into the start position.





Negotiating steps/curbs

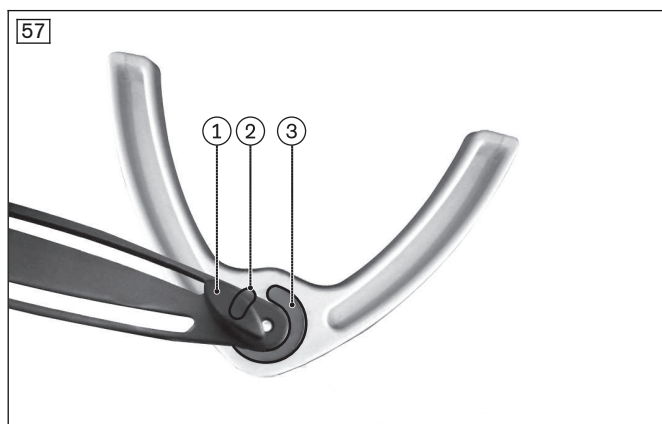
When negotiating steps and curbs that are not lowered, the swinging anti-tipper must be deactivated by the attendant prior to tipping the wheelchair to prevent damage to the swinging anti-tipper (see fig. 56).

Deactivation

- 1) Unscrew the thumb screw (see fig. 57, item 1) from the swing zone (see fig. 57, item 3).
 - 2) Rotate the anti-tipper upwards by **180°**.
 - 3) Then screw the thumb screw into the central locking zone (see fig. 57, item 2).
- The anti-tipper is deactivated and the obstacle can be crossed forwards/backwards.

Activation

- 1) Loosen the thumb screw on the rocker (see fig. 57, item 1).
 - 2) Rotate the swinging anti-tipper down by **180°** (not illustrated).
- The swinging anti-tipper is activated (see fig. 53).



7.14 Transport wheels

⚠ CAUTION

Knee lever wheel lock when the drive wheels are removed

Risk of accident, falling due to loss of functionality of the knee lever wheel lock

- ▶ Note that a wheelchair with transport wheels can only be braked by an attendant.

⚠ CAUTION

Incorrect height setting

Risk of tipping or falling due to the sloped product setting

- ▶ Always adjust the height equally on both sides.

The transport wheels permit movement through very narrow passages (e.g. in trains or aircraft).

Transport wheels take the place of the drive wheels. In order to move, an attendant is required to push the wheelchair.

Using the transport wheels

> Prior to use, verify whether the transport wheels have been set to the same height.

1) Remove the drive wheels.

Whenever possible, this should be done when the user is not sitting in the wheelchair. If the user is sitting in the wheelchair, proceed as follows:

2) The first attendant holds the wheelchair in a stable position so that the drive wheels are relieved in turn.

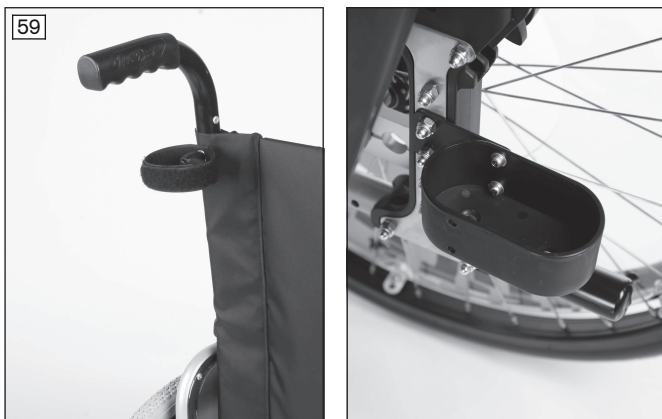
3) The second attendant carefully removes the first and second drive wheel one after the other.

→ The wheelchair can now be pushed on the transport wheels.



7.15 Crutch holder with hook-and-loop fastening strap

The crutch holder with hook-and-loop fastening strap allows crutches to be attached to the wheelchair.



7.16 Headrest

Head/neckrests or headrests make it possible to support the head in case of various severe disability indications. The head/neckrests or headrests consist of polyurethane foam and can be cleaned with mild soap and water.

The option is installed on the product by qualified personnel if needed and adapted to the requirements of the user.

The head support can be removed from the wheelchair for transportation.

Removing the head support

1) Release the clamping lever (see fig. 60, item 1).

2) Pull out the adjustment tube with the head support (see fig. 60, item 2).

Attaching the head support

1) Insert the adjustment tube with the head support into the clamp fitting to the stop (see fig. 60, item 2/3).

2) Tighten the clamping lever (see fig. 60, item 1).



7.17 Tray

⚠ CAUTION

Improper adjustment

Crushing or pinching due to adjustments which are too tight

- ▶ Do not pinch the user when sliding in the product.

⚠ CAUTION

Driving with objects on the tray top

Injuries due to unsecured objects

- ▶ Remove all objects from the tray top prior to travelling.

⚠ CAUTION

Improper lifting by attendants

Tipping over, user falls due to lifting by removable components

- ▶ The product must not be lifted by the tray.

NOTICE

Overloading

Damage to the product due to user error

- ▶ Do not load the tray with heavy objects.
- ▶ No persons may sit or lean on the tray.

The tray serves as a supporting surface during meals, when working or when playing. The clear material allows visibility of the legs and correction of the sitting posture.

Prior to use in a vehicle for transporting persons with reduced mobility, the tray has to be removed.

Mounting/removing the tray

- 1) Slide the tray onto the arm supports.
- 2) Pull the tray off the arm supports.

Always guide the tray parallel to the arm supports to avoid tilting.



7.18 Additional options

The product may be equipped with additional options:

- Clinical mounting kit
- Mounting kit for head support attachment
- Lateral thoracic supports (can only be used with adjustable back support upholstery)
- Seat cushion from the current seat cushion range

7.19 Disassembly and transport

NOTICE

Deformation when folded

Damage to the product, problems unfolding due to unallowable loads

- ▶ Never place heavy objects on the folded product.

INFORMATION

- ▶ When transporting the wheelchair in vehicles, fold it up and remove the wheels and leg supports if necessary.
- ▶ Follow the IATA (International Air Transport Association) rules and those of the relevant airline when transporting the wheelchair in an aircraft. Inform the airline several days before your flight. Use the SSR (special service request) codes to describe the type of limited mobility if necessary. You can for example research these on the Internet.

The wheelchair must be prepared for transport in a passenger vehicle.

- 1) Fold up the foot plates (see Page 17).
- 2) Swing away the leg supports, remove and set aside (see Page 18).
- 3) **If necessary:** Detach the seat cushion from the hook-and-loop fastener (see Page 20).
- 4) Pull up the seat upholstery until the wheelchair folds together (see fig. 62).
- 5) Fasten the safety strap (see fig. 63).
- 6) Remove the drive wheels (see Page 26).
- 7) Place the disassembled wheelchair in the vehicle.



7.20 Use in vehicles for transporting persons with reduced mobility

7.20.1 Start M6 Junior

⚠ WARNING

Use in vehicles for transporting persons with reduced mobility

Serious injuries in case of accidents due to user error

- ▶ Always use the seats and personal restraint systems in the vehicle for transporting persons with reduced mobility first. This is the only way to ensure optimum protection of passengers in the event of an accident.
- ▶ If the product is to be used as a seat in a vehicle for transporting persons with reduced mobility, the safety elements offered by the manufacturer and appropriate fastening and personal restraint systems must be used. For more information, please refer to our brochure with the order number 646D158.
- ▶ Never transport more than one person in the product.
- ▶ Only use the product in a vehicle for transporting persons with reduced mobility with the back support in a vertical position.
- ▶ Observe the limitations regarding installed options (see Page 41).

⚠ WARNING

Use of the belt system as a passenger restraint system in vehicles for transporting persons with reduced mobility is forbidden

Serious injuries due to improper handling of the product

- ▶ Under no circumstances may the belts and positioning aids offered with the product be used as part of a passenger restraint system in vehicles for transporting persons with reduced mobility.
- ▶ Note that the belts and positioning aids offered with the product are only intended to help support the user sitting in the product.

⚠ WARNING

Prohibited transportation of the passenger with activated back angle adjustment

Loss of safe restraint in the product due to user error

- ▶ Ensure the passenger is seated in a nearly upright position during transport.
- ▶ If a back angle adjustment mechanism is installed, move the backrest to a nearly upright position prior to travel.
- ▶ Check the locking mechanism on both sides.

The product has been tested by the manufacturer according to ISO 7176-19 and may be used as a seat in vehicles for transporting persons with reduced mobility subject to the conditions defined below.

The product must be sufficiently secured during transport in vehicles for transporting persons with reduced mobility. The illustrations that follow show an example for anchoring in a motor vehicle.

The manufacturer is not responsible for the fastening systems that are used. Ensure that only fastening systems that meet the applicable legal requirements and are designed for the overall weight of the product including the user are used.

The transport weight of the person to be transported in a vehicle for transporting persons with reduced mobility corresponds to the maximum permissible user weight (see Page 46).

7.20.1.1 Required accessories

To use the product as a seat in a vehicle for transporting persons with reduced mobility, additional accessories have to be mounted:

- 481S00=SK030 Fixation kit
- Alternative: four belt loops (e.g. from the manufacturers Q'STRAIN or Unwin Safety Systems, tested according to ISO 10542-1)

The qualified personnel who fitted the wheelchair can provide more information about accessories.

7.20.1.2 Using the product in a vehicle

⚠ WARNING

Positioning in vehicles for transporting persons with reduced mobility

Serious injuries in case of accidents due to user error

- ▶ Positioning of the product in vehicles for transporting persons with reduced mobility may only be performed by qualified personnel.
- ▶ The product must always face forwards when it is used as a seat in a vehicle for transporting persons with reduced mobility.
- ▶ Instruct the qualified personnel regarding the mounting points on your product described below.

⚠ WARNING

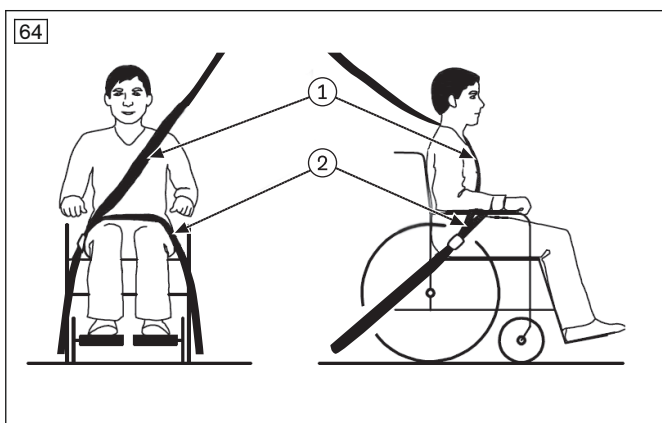
Inadequate transportation safety

Loss of safe restraint due to failure to observe transportation instructions

- ▶ Observe the following instructions for correct transport safety in the vehicle for transporting persons with reduced mobility.
- ▶ If necessary, instruct the qualified personnel on the following information.

General information on correct transport safety of the user in the vehicle for transporting persons with reduced mobility

- The straps of the personal restraint system must always be routed close to the user's body. The straps must not be routed over the side panels and wheels (see fig. 64 item 2).
- The shoulder belt must always be routed over the user's shoulder (see fig. 64, item 1).
- The belt strap must not be twisted on the user's body.

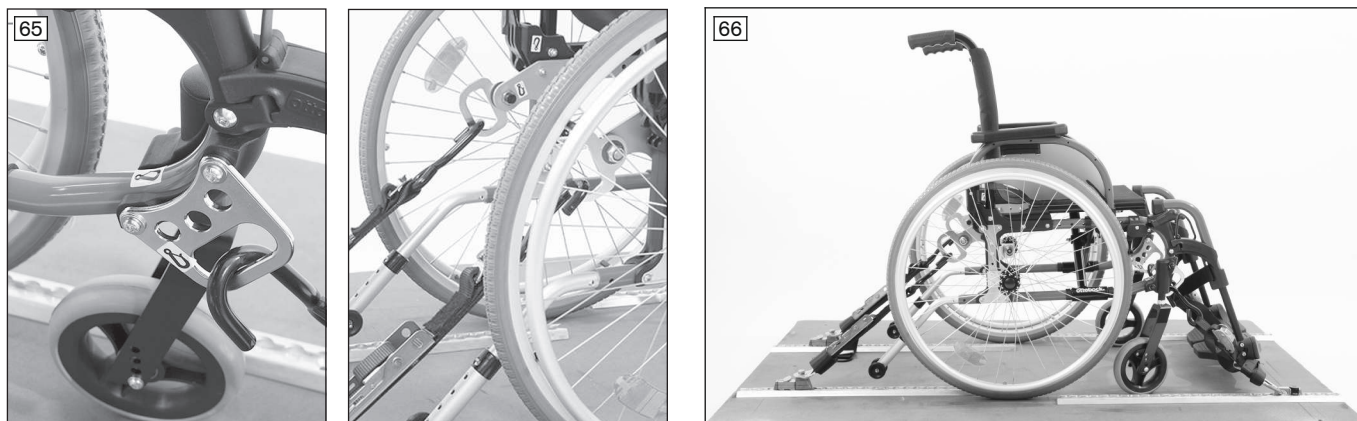


7.20.1.2.1 Use with fixation kit

Securing the product in the vehicle for transporting persons with reduced mobility

The wheelchair is secured in the vehicle for transporting persons with reduced mobility with the help of the fixation kit. The fixation points are marked with stickers. The stickers indicate where the user has to engage the hooks of the safety belt system:

- 1) Position the product in the vehicle for transporting persons with reduced mobility. For more information, please refer to section 5 in the brochure "Transporting persons with reduced mobility", order number 646D158.
- 2) Engage the hook of the respective vehicle side wheelchair restraint belt in the front and rear mounting eyes and tighten as firmly as possible (see fig. 65).
 - The product showing the correct positioning of the attachment straps (see fig. 66).



Information on correct transport safety of the user in the vehicle for transporting persons with reduced mobility

- Please also observe the section “General information on correct transport safety of the user in the vehicle for transporting persons with reduced mobility”.
- Using the personal restraint system of the vehicle for transporting persons with reduced mobility is required. If the wheelchair is equipped with a fixation kit (anchor point adapters), the three-point personal restraint system is attached in the vehicle for transporting persons with reduced mobility as follows:
 - The lap belt of the personal restraint system is usually attached by the qualified personnel to the left and right sides respectively on the mounting point/pin of the anchor point adapters.
 - The shoulder harness of the personal restraint system is usually mounted on the vehicle pillar and is attached by the qualified personnel to the corresponding mounting point/pin provided on the lap belt.

Placement of the personal restraint system integrated in the vehicle for transporting persons with reduced mobility

- 1) Pull the respective ends of the restraint lap belt from the inner side of the seat through to the outside (see fig. 67).
- 2) Engage the ends of the restraint lap belt on the respective mounting point/pin (see fig. 68).
- 3) Secure the shoulder harness on the mounting point/pin provided on the lap belt (not illustrated).
 - The restraint lap belt is pulled through and fastened.
 - The belt runs between the side panel and seat cushion on each side.



7.20.1.2.2 Use with belt loops

Securing the product in the vehicle for transporting persons with reduced mobility

The wheelchair is secured in the vehicle for transporting persons with reduced mobility with the help of four belt loops, on which the vehicle side wheelchair restraint belts are attached.

The fixation points of the belt loops are marked with stickers (pattern). These stickers show where the user has to pass the belt loops around the frame tube:

- The stickers that identify the front fixation points are found above the caster attachment device on each side: see fig. 69.
- The stickers that identify the rear fixation points are found on the central unit behind the lower end of the back support tube on each side: see fig. 70.



Attaching the belt loops

- 1) Position the product in the vehicle for transporting persons with reduced mobility. For more information, please refer to section 5 in the brochure “Transporting persons with reduced mobility”, order number 646D158.
- 2) **Front fixation points:** Attach one belt loop around each of the frame tubes on the left and right, wrapping them around the frame tubes at the marked position once or twice depending on the length (example: see fig. 71, item 1).
- 3) Engage the hook of the respective vehicle side wheelchair restraint belt in the belt loop (see fig. 71, item 2).
- 4) **Rear fixation points:** Attach one belt loop around each of the back support tubes on the left and right at the marked position (example: see fig. 72, item 1).
- 5) Engage the hook of the respective vehicle side wheelchair restraint belt in the belt loop (see fig. 72, item 2).
- 6) Tighten the vehicle side wheelchair restraint belts at the front and rear as firmly as possible.
→ The product showing the correct positioning of the attachment straps (see fig. 73).





Information on correct transport safety of the user in the vehicle for transporting persons with reduced mobility

- Please also observe the section “General information on correct transport safety of the user in the vehicle for transporting persons with reduced mobility”.
- Using the personal restraint system of the vehicle for transporting persons with reduced mobility is required. Attaching personal restraint systems of the vehicle for transporting persons with reduced mobility to the wheelchair is not permitted. The three-point restraint has to be realised entirely on the vehicle:
 - The lap belt of the personal restraint system is usually attached at the rear on both sides on the vehicle bottom with the help of a belt reel or retractor (seat belt tightener).
 - The shoulder harness of the personal restraint system is usually mounted on the vehicle pillar and is attached by the qualified personnel to the corresponding mounting point/pin provided on the lap belt.

Placement of the personal restraint system integrated in the vehicle for transporting persons with reduced mobility

- 1) **Recommendation:** Fold the side panels back.
- 2) Pull each end of the restraint lap belt from the inner side of the seat through to the outside.
- 3) Attach each of the ends of the restraint lap belt on the vehicle bottom in the manner described above.
- 4) Secure the shoulder harness above and behind the user.
- 5) Fold the side panels forward again.
 - The restraint lap belt is pulled through and fastened.
 - The belt runs between the side panel and seat cushion on each side.

7.20.1.3 Restrictions for use

⚠ WARNING

Risk of accidents and injury due to using the product with certain settings and/or installed options

Severe injury in case of accidents due to options coming loose

- ▶ Before using the product as a seat in a vehicle for transporting persons with reduced mobility, remove options that need to be taken off for safe transportation. Please observe the following table.
- ▶ Stow all dismantled components securely in the vehicle for transporting persons with reduced mobility.
- ▶ Please note that certain settings on the product exclude the use of the product in a vehicle for transporting persons with reduced mobility.

Start M6 Junior

Option ¹⁾	Transportation in a vehicle for transporting persons with reduced mobility not possible	Remove option	Secure option on product
Add-on drive	X		
Back support angle adjustment of 30°	X		
Back support, folding	X		
Long/passive wheelbase	X		

Option ¹⁾	Transportation in a vehicle for transporting persons with reduced mobility not possible	Remove option	Secure option on product
Combination of:	X		
• Rear seat height < 380 mm and 22" drive wheel	X		
• Rear seat height < 410 mm and 24" drive wheel	X		
Clinical mounting kit		X	
Head support with mounting kit		X	
Head support installation kit, multi-axis		X	
Stabiliser bar		X	
Transport wheel			X ²⁾
Tray		X	
Lap belt			X ³⁾

¹⁾ Not all of the options named are installed on all products.

²⁾ Transport wheels can remain on the wheelchair with installed drive wheels during transportation in a vehicle for transporting persons with reduced mobility.

³⁾ The lap belt can be used to position the passenger during transport. Using the personal restraint system is nevertheless required.

7.20.2 Start M4 XXL

⚠ WARNING

Improper use in vehicles for transporting persons with reduced mobility

Risk of serious injury when using the product as a seat

- ▶ The product has **not** been approved by the manufacturer for use as a seat in vehicles for transporting persons with reduced mobility.
- ▶ In vehicles for transporting persons with reduced mobility, only use the seats installed in the vehicle with the corresponding personal restraint systems.
- ▶ Information on the current status of our measures is available from your specialist dealer.

7.21 Care

7.21.1 Cleaning

7.21.1.1 Cleaning by hand

- 1) Clean the padding and upholstery with warm water and a mild detergent.
- 2) Remove any spots with a sponge or a soft brush.
- 3) Rinse with clear water and let the components dry.

Important information on cleaning

- Do not use any aggressive cleaners, solvents or hard brushes etc.
- Clean plastic parts, frame parts and the chassis and wheels with a mild cleaner and a damp cloth. Dry thoroughly afterwards.
- For information on cleaning seat cushions, see the care instructions on the product or the supplied instructions for use.

7.21.1.2 Cleaning belts/straps

Cleaning a belt system with metal closure

INFORMATION

Observe the washing recommendations on the product and the information in the corresponding instructions for use provided for the product.

- Straps with metal closures **may not be washed in the washing machine** as the penetration of water could cause corrosion and subsequent malfunctions.
- Clean the belt straps by gently dabbing them with warm soapy water (with some disinfectant) or carefully wipe with a dry, clean, absorbent cloth.

Cleaning a belt system with plastic closure

- Depending on the model, belts/straps with plastic buckles can be washed in the washing machine between **40 °C** and **60 °C**.
- Recommendation: Use a laundry bag or net and mild detergent.

INFORMATION

Alternatively, the belt straps can be cleaned by gently dabbing them with warm soapy water (with some disinfectant) or carefully wiped with a dry, clean, absorbent cloth.

Additional cleaning instructions

- Allow the belts to air dry. Ensure that the belts and pads are completely dry before installation.
- Do not expose the belts to direct heat (e.g. sunshine, stove or radiator).
- Do not iron or bleach the belts.

7.21.2 Disinfection

- 1) Thoroughly clean the pads and handles before disinfecting.
- 2) Wipe all parts of the wheelchair with a disinfectant.

Important information about disinfecting

- If the product is used by more than one person, using a conventional disinfectant is required.
- Only use colourless water-based disinfectants. Observe the instructions for use provided by the manufacturer.

8 Maintenance and repair

8.1 Maintenance

- The function of the product should be checked **before each use**.
- The product may not be used if defects are noted. This applies in particular in case of instability of the product or altered driving characteristics as well as problems with the user's seating position or the stability of the seat. Inform the qualified personnel promptly for the rectification of defects.
- This also applies if loose, worn, bent or damaged components, cracks in the frame or broken frame components are identified.
- Some maintenance tasks can be carried out to a certain extent by the user at home (see the sections "Maintenance intervals" and "Maintenance tasks").
- The manufacturer also recommends regular maintenance **every 12 months** by authorised, qualified personnel.
- Failure to maintain the product can lead to injuries for the user of the product.
- Service and repairs may only be carried out by authorised, qualified personnel or the manufacturer. This will ensure that only Ottobock spare parts are used for repairs.

8.1.1 Maintenance intervals

The functions described below must be checked by the user or an attendant at the specified intervals:

Inspection task	Before each use	Monthly	Quarterly
Functional test of the wheel locks	X		
Sagging of the seat or back support upholstery		X	
Setting of the caster journal bearing		X	
Stability of the leg supports		X	
Visual inspection of wear and tear parts (e.g., tyres, bearings)		X	
Soiling of bearings		X	
Damage to the handrim		X	
Air pressure (see information on tyre sidewall)		X	
Wear and tear of the folding mechanism		X	
Check the spoke tension on the drive wheels			X

Inspection task	Before each use	Monthly	Quarterly
Check all screw connections			X
Check the legibility of all labels and markings on the product		X	

8.1.2 Maintenance tasks

To ensure smooth operation at all times, users or attendants with some technical skills can maintain some parts of the product:

- Bolted connections must be periodically checked for tightness, especially during the initial period of use or after adjustments have been made to the wheelchair. If a screw connection loosens repeatedly, contact the specialist dealer promptly.
- Particles of dirt and hair accumulate on the caster wheel axle and threaded axle of the caster fork over time. This makes the steering stiffer. Regularly remove dirt and oil the axles. See the section “Approach in case of stiffness”.
- The drive wheels are equipped with a quick-release axle system as standard equipment. To keep this system operational, ensure that no dirt adheres to the quick-release axle or receiver bushing. Periodically lubricate the quick-release axle lightly with thin, resin-free oil (sewing machine oil).
- If the wheelchair becomes wet, it should be rubbed dry again.

8.2 Repair

8.2.1 Inner tube, rim tape and tyre replacement

⚠ CAUTION

Improper tyre replacement

Injuries to the user due to incorrect installation, product damage

- ▶ No person is permitted to sit in the wheelchair during tyre replacement
- ▶ Before removing a wheel, support the product so it cannot tip over.
- ▶ Always replace the tyres in pairs. Two differently worn tyres affect the directional stability of the wheelchair.

INFORMATION

When driving outdoors, always carry a repair kit and tyre pump (when using pneumatic tyres) in case of emergency.

Suitable tyre pumps are listed on the order form and are supplied with the product. An alternative is tyre foam, which fills your tyre and then hardens (available from bicycle shops, etc.).

Repairing flat tyres requires only the necessary tools and users may change tyres themselves if they wish:

Removal and preparing for installation

- 1) Carefully remove the tyre from the rim using appropriate tools.
INFORMATION: Take care not to damage the rim or the inner tube.
- 2) Unscrew the valve nut from the valve and remove the tube.
- 3) Repair the tube according to the directions in the repair kit or replace it with a new tube.
- 4) Before fitting the tyre again, inspect the rim bed and tyre inner wall for foreign objects. This could have caused the puncture.
- 5) Before installing the tube, check that the rim band is in proper condition. The rim band protects the tube from being damaged by the ends of the spokes.



Replacing the rim band (only when necessary)

- 1) If the rim band needs to be replaced, remove it from the rim.
- 2) Install the new rim band on the inside of the rim, making sure the valve opening is in the right position.
- 3) Glue the rim band in place if this is intended. Ensure that all spoke ends are covered.

Installing the tube and tyre

- 1) Behind the valve, push one side of the tyre over the edge of the rim.
- 2) Slightly inflate the tube until it starts to assume its round shape.
- 3) Unscrew the valve nut from the tube and push the valve through the valve opening in the rim.
- 4) Insert the tube into the tyre.
- 5) Mount the other side of the tyre on the rim, starting from the position across the valve. Ensure that the tube is not pinched between the tyre and rim during this process.



Inflating the tube

- 1) Ensure that the valve is positioned perpendicularly for proper positioning of the tube and tyre in the region of the valve.
- 2) Firmly screw on the valve nut.
- 3) Inflate the tube so that the tyre can still be pressed in easily with your thumb.
INFORMATION: If the circumferential lines on the two sides of the tyre are both at an even distance from the rim, the tyre is centred. If not, let some air out and realign the tyre.
- 4) Inflate the tube to the maximum pressure specified by the tyre manufacturer (see information printed on the tyre sidewall).
- 5) Firmly screw the valve cap onto the valve.

9 Disposal

9.1 Disposal information

Return the product to the specialist dealer for disposal.

All components of the product must be disposed of properly in accordance with the respective national environmental regulations.

10 Legal information

All legal conditions are subject to the respective national laws of the country of use and may vary accordingly.

10.1 Liability

The manufacturer will only assume liability if the product is used in accordance with the descriptions and instructions provided in this document. The manufacturer will not assume liability for damage caused by disregarding the information in this document, particularly due to improper use or unauthorised modification of the product.

10.2 Warranty

Further information on the warranty terms and conditions can be obtained from the qualified personnel that has fitted this product or the manufacturer's service (see inside back cover for addresses).

10.3 Service life

Expected service life: **4 years**

The design, manufacturing and requirements for the intended use of the product are based on the expected service life. These also include the requirements for maintenance, ensuring effectiveness and the safety of the product.

11 Technical data

INFORMATION

- ▶ Much of the technical data below is given in mm. Please note that product settings – unless otherwise specified – cannot be adjusted in the mm range but only in increments of approx. **0.5 cm** or **1 cm**.
- ▶ Note that the values achieved during adjustment may deviate from the values specified below. The deviation can be **±10 mm** and **±2°**.

INFORMATION

- ▶ Some of the measurements indicated below are values that were theoretically determined.
- ▶ Note that not all adjustment possibilities can be used with all product versions. Furthermore, the adjustment combinations are limited by the compact frame geometry.
- ▶ Technical changes and tolerances are reserved by the manufacturer.

General information

	Start
Max. load [kg]	M4 XXL: 160; M6 Junior: 90
Max. load with use in a vehicle for transporting persons with reduced mobility [kg]	M6 Junior: 75
Transport weights (for seat width of 430 mm) [kg] ¹⁾	Frame: from approx. 9.5 Leg support: approx. 1.4 24" drive wheel (pair): approx. 3.5
Overall length (with leg support) [mm]	See table below
Overall width [mm]	See table below
Seat width [mm] ²⁾	See table below
Seat height [mm]	See table below
Max. overall height [mm]	<1,200 (complies with recommendations of DIN EN 12183)
Caster wheel size ["]	5 to 8
Ground clearance [mm]	>30 (complies with recommendations of DIN EN 12183)
Min. tyre pressure [bar] ³⁾	6
Permissible tyre type – drive wheels	PU tyres, pneumatic tyres
Permissible tyre type – caster wheels	PU tyres, pneumatic tyres, solid rubber
	1,300

	Start
Steering range, approx. [mm] ^{2) 4)} (for seat width of 430 mm and seat depth of 420 mm)	
Turning radius [mm] ²⁾	<1,500 (complies with recommendations of DIN EN 12183)
Maximum permissible inclination [°]/[%] ⁵⁾⁶⁾⁷⁾	7/12.3

1) The specified weights vary according to the selected options and model.

2) In accordance with ISO 7176-5, 8.12.

3) Varies according to tyre option; see the marking on the tyre wall.

4) Three-point turn by 180°.

5) Also applies for parking with wheel lock engaged.

6) Applies to all directions (upwards, downwards, sideways).

7) In accordance with ISO 7176-1.

Additional information

Start	Minimum	Maximum
Overall length (with leg supports) [mm]	Start M4 XXL: 870 ¹⁾ Start M6 Junior: 800	Start M4 XXL: 1,090 Start M6 Junior: 1,065
Overall width (with standard drive wheels) [mm] ²⁾	Start M4 XXL: 645 Start M6 Junior: 495	Start M4 XXL: 795 Start M6 Junior: 620
Overall width (with drive wheels with drum brake) [mm] ²⁾	Start M4 XXL: 670 Start M6 Junior: 520	Start M4 XXL: 820 Start M6 Junior: 645
Overall height [mm]	Start M4 XXL: 840 ³⁾ Start M6 Junior: 840 ⁴⁾	Start M4 XXL: 1,045 Start M6 Junior: 1,040 ⁴⁾
Length (folded, without leg supports) [mm]	Start M4 XXL: 760 Start M6 Junior: 750	Start M4 XXL: 1,090 Start M6 Junior: 950
Width (folded) [mm]	Start M4 XXL: 340 Start M6 Junior: 300	Start M4 XXL: --- Start M6 Junior: ---
Height (folded) [mm]	Start M4 XXL: 840 ³⁾ Start M6 Junior: 840	Start M4 XXL: 1,045 Start M6 Junior: ---
Total weight (without user) [kg]	Start M4 XXL: 17.5 Start M6 Junior: 12	Start M4 XXL: 20 Start M6 Junior: 14.5
Weight of the heaviest removable component [kg]	---	1.8
Seat inclination [°]	0	5
Effective seat depth [mm]	Start M4 XXL: 430 Start M6 Junior: 310	Start M4 XXL: 490 Start M6 Junior: 370
Effective seat width [mm]	Start M4 XXL: 430 Start M6 Junior: 280	Start M4 XXL: 580 Start M6 Junior: 380
Front seat height [mm]	Start M4 XXL: 400 Start M6 Junior: 400	Start M4 XXL: 510 Start M6 Junior: 490
Rear seat height [mm]	Start M4 XXL: 380 Start M6 Junior: 370	Start M4 XXL: 500 Start M6 Junior: 490
Back support angle [°]	0 (vertical)	Start M4 XXL: 3 ⁵⁾ Start M6 Junior: 30 ⁶⁾
Back support height [mm]	Start M4 XXL: 400 Start M6 Junior: 300	Start M4 XXL: 475 Start M6 Junior: 375
Lower leg length [mm]	Start M4 XXL: 270 Start M6 Junior: 160	Start M4 XXL: 470 Start M6 Junior: 450
Angle between leg support and seat surface ⁷⁾ [°]	70	80
Angle from foot plate to seat surface [°]	Fully adjustable	
Distance arm support to seat surface [mm]	Start M4 XXL: 200 Start M6 Junior: 200	Start M4 XXL: --- Start M6 Junior: 400

Start	Minimum	Maximum
Front position of the arm support [mm]	Start M4 XXL: 220 ⁸⁾ Start M6 Junior: 175	Start M4 XXL: 310 Start M6 Junior: 270
Handrim diameter [mm]	470	540
Horizontal position of the quick-release axle [mm]	Start M4 XXL: 30 Start M6 Junior: - 35 ⁹⁾	Start M4 XXL: 90 Start M6 Junior: 35 ⁹⁾
Minimum turning radius [mm] ¹⁰⁾	Start M4 XXL: 790 ¹¹⁾ Start M6 Junior: 570	Start M4 XXL: 980 ¹²⁾ Start M6 Junior: ---

- 1) With the shortest seat depth and smallest wheelbase.
- 2) Specified for narrow handrim attachment.
- 3) With smallest seat height and smallest back support height.
- 4) Minimum value for 22" drive wheel size and non-height-adjustable push handles; maximum value for height-adjustable push handles.
- 5) With standard back support tubes.
- 6) With back support angle adjustment of 30°.
- 7) With standard leg supports, value does not apply to angle-adjustable leg supports.
- 8) With long forearm support ≥ 160 mm.
- 9) Minimum value = setting for active users; maximum value = setting for passive users.
- 10) In accordance with ISO 7176-5.
- 11) With minimum seat depth and seat width.
- 12) With maximum seat depth and seat width.

Environmental conditions

Temperatures and relative humidity	
Operating temperature [°C (°F)]	-10 to +40 (14 to 104)
Transport and storage temperature [°C (°F)]	-10 to +40 (14 to 104)
Relative humidity [%]	45 to 85

12 Appendices

12.1 Threshold values for wheelchairs transportable by train

INFORMATION

- The products in this series fully satisfy the minimum technical requirements of regulation (EU) No. 1300/2014 regarding train accessibility for people with disabilities.

Feature	Threshold value (according to Regulation (EU) No. 1300/2014)
Length [mm]	1200 (plus 50 mm for the feet)
Width [mm]	700 (plus 50 mm on each side for the hands when moving)
Smallest wheels ["]	approx. 3 or greater (according to the regulation, the smallest wheel must be able to overcome a gap measuring 75 mm horizontally and 50 mm vertically)
Height [mm]	max. 1375; including a 1.84 m large male user (95th percentile)
Turning radius [mm]	1500
Maximum weight [kg]	200 (product with user, including luggage)
Maximum obstacle height that can be overcome [mm]	50
Ground clearance [mm]	60 (at an upward slope angle of 10°, ground clearance must measure at least 60 mm under the footrest for going forward at the end of the slope)
Maximum inclination angle on which the product will remain stable [°]	6 (dynamic stability in all directions) 9 (static stability in all directions, also when wheel lock engaged)



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