



S.ORG[®]

**service record
for the rehab technician**

Mio



IIMPRINT

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REVISION STATUS

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TECHNICAL STATUS

Technical changes and misprints reserved. The pictures in this user manual can – depending on the individual equipment – differ from the actual equipment components. However, a corresponding conduction is possible.



REHAKIND

We are a member of rehaKIND e.V.
International association
child and adolescent rehabilitation

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CERTIFICATION

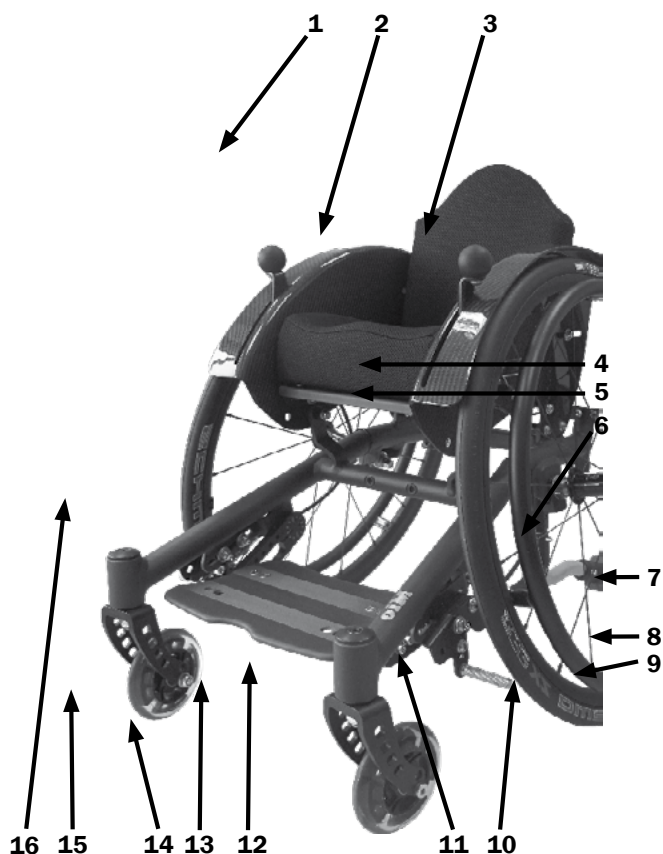
Our Quality Management System is certified according to the ISO 9001:2015 under the certificate no. 12 100 20070 TMS.



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Wheelchair overview

Overview Mio



1. back cushion (for curved back plate model 3)
2. active side guard with built-in cable brake
3. brake lever (for cable brake)
4. anatomically formed seat
5. firm seat plate
6. *taurus frame* (with small abduction)
7. caster adapter
8. caster fork
9. caster
10. caster axle
11. foot plate
12. locking brake
13. brake pressing bolt
14. driving wheel
15. hand rim
16. quick release axle



1. height adjustable push bail
2. angle adjustment for push bail
3. firm curved back plate (model 3)
4. side guard
5. driving wheel
6. hand rim
7. anti-tipper
8. locking lever (eccentric clamp) for push bail
9. loop to mount hand rims (wide/tight)

1 PREAMBLE

1.1 GENERAL INFORMATION

▶▶ INDICATION

First and foremost, this service book is for the rehab technician.

All of the listed work is to be done by a qualified rehab technician, due to safety reasons.

All of our wheelchairs fulfill the guidelines and requirements according to 93/42/EWG, 2007/47/EWG and EN12183:2009. SORG Rollstuhltechnik is also certified according to the quality management system ISO 9001. With this, the quality of our wheelchairs are guaranteed and documented in each step from development to assembling.

If you have any questions, our qualified team would be happy to help you (+49 7254 9279-0).

1.2 SIGN EXPLANATION

ATTENTION

This is how individual related safety aspects of utmost importance are indicated.

▶▶ INDICATION

This is how possible indications of utmost importance are labeled.

INFORMATION

This is how INFORMATION on mounting and adjustment work is labeled.

READ

This refers to additional material.

BOLD PRINT

Text in bold print highlights important passages or remarks.

1.3 RECEPTION

DELIVERY

Each wheelchair is mounted, tested for functionality and correctness in our works and packaged into special cardboard boxes by our shipping experts.

FORWARDING COMPANY

RECEIVING

▶▶ INDICATION

For liability reasons we have to ask you to check the wheelchair IMMEDIATELY after receiving it and IN THE PRESENCE of the deliverer (forwarding company) for possible damages that may have occurred during transportation.

CONFIRMATION OF RECEIPT

▶▶ INDICATION

Only sign the confirmation receipt after you have thoroughly checked the wheelchair for defects.

▶▶ INDICATION

In case of damages, note on the confirmation receipt that you have received a damaged wheelchair.

TRANSPORTATION DAMAGES

In case of damages, please proceed as follows:

- write a short record of the damage and review of events, if possible include pictures clearly showing the damage,
- get the personal information of the bearer (driver's license etc.),
- inform us immediately.

▶▶ INDICATION

According to the valid law, damages reported late can neither be asserted to us nor to the forwarding company.

1.4 SERVICE AND MAINTENANCE

READ

According to § 33 subparagraph 1, clause 4, [German] SGB V, the responsibility of maintenance, repairs and replacement lies with the benefactor. After agreement with your benefactor, be sure to have all safety relevant inspections, maintenance work and if necessary repairs conducted in order to make the wheelchair functional.

ATTENTION

Only original parts are to be used for all service and maintenance work.

INFORMATION

Proceed according to the maintenance plan in the user manual.

1.5 DOCUMENTATION

▶▶ INDICATION

Keep this service record in a safe place. Have all work/repairs done on your wheelchair documented by the medical supply store in the maintenance plan. If applicable, hand it back to your benefactor along with the wheelchair.

▶▶ INDICATION

In the event of the wheelchair being reused, the service book is an important source of information for you benefactor. It provides evidence of regular inspections which might be relevant in the event of warranty claim.

1.6 ACCESSORY AND ATTACHMENT DRIVES

ATTENTION

The addition of these accessory and attachment drives is done by either the manufacturer or the sanitary house and solely in their responsibility

2 ADJUSTMENTS ON THE WHEELCHAIR

2.1 GENERAL INDICATIONS

ATTENTION: DANGER OF BRUISING

When operating the adjustable parts (back rest, side guard, leg support, wheel lock, positioning aids etc.) as well as fixation and reparation work, there is an injury risk or of crushing body parts in the pivoting range.

ATTENTION

All wheelchairs are to be handled with care. Removable parts are not to be thrown or dropped!

ATTENTION

Before repairs or adjustments are made, clean/disinfect the wheelchair and secure it from tipping over and/or falling down.

ATTENTION

Only use original spare parts.

ATTENTION

Safety nuts are only to be used once. After first removal the safety nut must be replaced by a new one.

2.2 TIGHTENING TORQUE AND TOOLS

INFORMATION

Technical changes reserved.

Screws

- M5: 5 Nm;
- M6: 7 Nm;
- M6: (hole plate) 10 Nm,
- M8: 20 Nm;
- M10 (Nut): 25Nm (caster)
- Fitting of quick-release axle: 35Nm

Tools needed:

- torque wrench (5-50 Nm)
- open end wrench
- flex ratchet handle with socket wrench inserts
- hexagon screw driver
- Phillips screw driver
- flat head screw driver
- plastic mallet
- side cutter
- threadlocker (fluid)
- bicycle inner tube repair kit
- work bench/jaw vise with rubber pads

Word explanation:

Loosen screw:

means to only loosen the screw so that the parts are still held together but (e.g.) can be moved around along a slotted hole.

Remove screw:

means to completely remove the screw from where it was attached so that the parts are no longer connected.

2.3 ASSEMBLY GROUP WHEELS

2.3.1 Centre of Gravity /active level / seat height

The centre of gravity (active level), the seat height and the seat angle of the wheelchair are normally set with the constellation of rear wheels and casters or perforated plate on wheelchairs of the production group 18.50.03. The wheelbase of Mio, Kika and Mio Move is fixed and cannot be changed. The centre of gravity is adjusted by the seat or seat angle (see the appropriate chapter seat).

2.3.2 Camber

(1) In order to change the camber remove the driving wheels and secure the wheelchair from rolling away.

- Completely remove the quick-release axle fitting (A) including the drum brake arm (B),
- place the camber adjustment (C) on the rear wheel reception (D) (possible changes of camber about $\pm 2^\circ$ to 7° or 11° from horizontally turning the camber adjustment 180°),
- replace quick-release axle fitting (A) including the drum brake arm (B), screw on tightly and
- put wheels back on.

(2) Check the distance of the driving wheel to the side guard by shortly placing the rear wheel on.

(3) Correct the quick-release axle fitting and turn it as far in or out, that the wheels tire has a minimum distance of 10 mm to the side guard or the skirt guard.

- Remove nuts (A) and (B),
- turn the quick-release axle adapter (C) in or out,
- retighten the nuts (A) and (B) (tightening torque nuts M18 fitting 35 Nm).

ATTENTION

After adjusting the quick-release axle adapter, be sure to check that the wheel lock functions properly.

ATTENTION

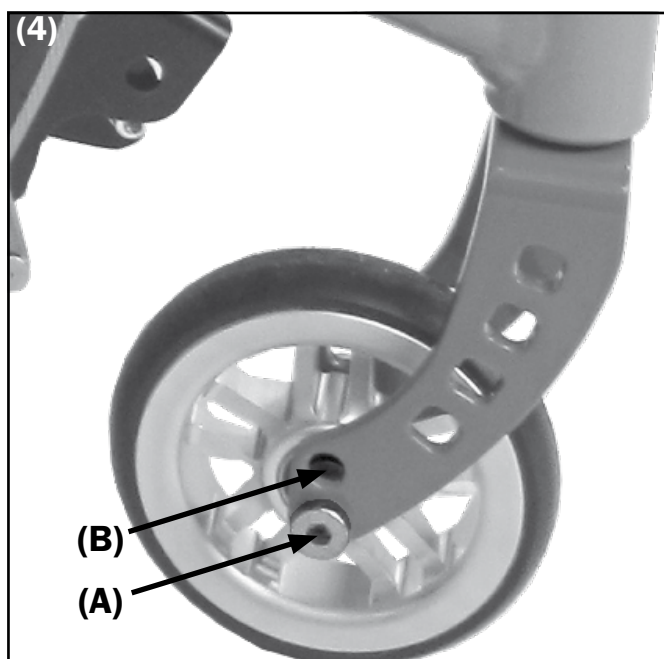
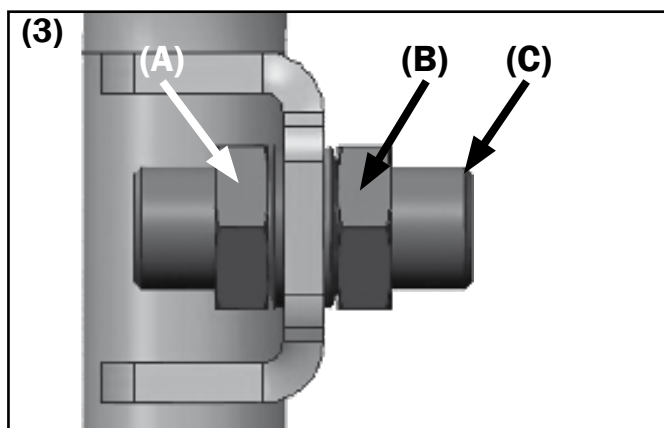
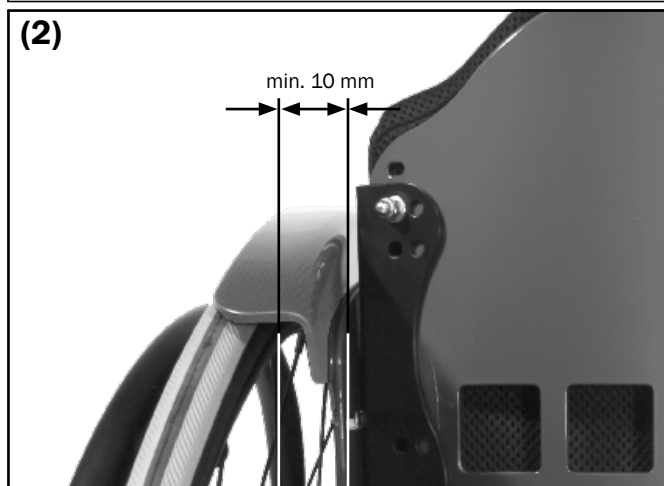
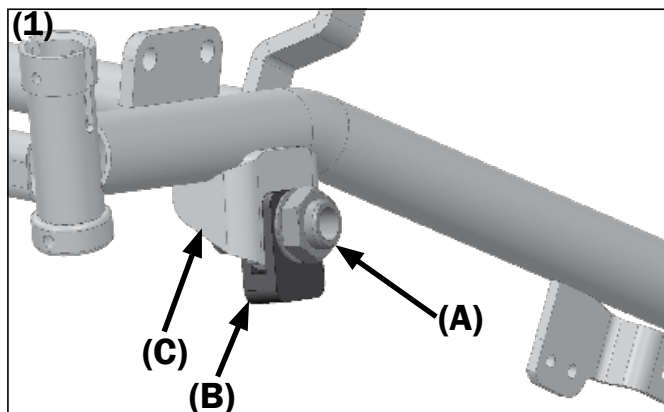
Make sure the distance of the quick-release fitting is the same on the left and right!

2.3.3 Casters

The casters are tightly attached to the frame pipe and cannot be adjusted.

(4) To displace/replace the casters:

- remove the screws (A) completely,
- remove the husks,
- change the casters,
- if necessary, guide the husks and wheels in the new holes (B),
- **replace the safety nuts with new ones (!)**
- and retighten all the screws.



2.4 ASSEMBLY GROUP SEAT

2.4.1 Seat height and seat tilt

The **seat height** is (next to the centre of gravity) a significant factor for the ideal length for turning the driving wheel and causes a positive division of the child's strength when using the wheelchair.

►► INDICATION

A general rule is: with a straight (and relaxed shoulder area) stance of the child, the elbows should reach the side guard. Be sure that when setting the seat height to check that the child does not need to lift its shoulders when moving the wheelchair.

A slight or strong **seat tilt** allows a safe and comfortable seat position with a good distribution of the seat pressure and promotes the straightening of the pelvis.

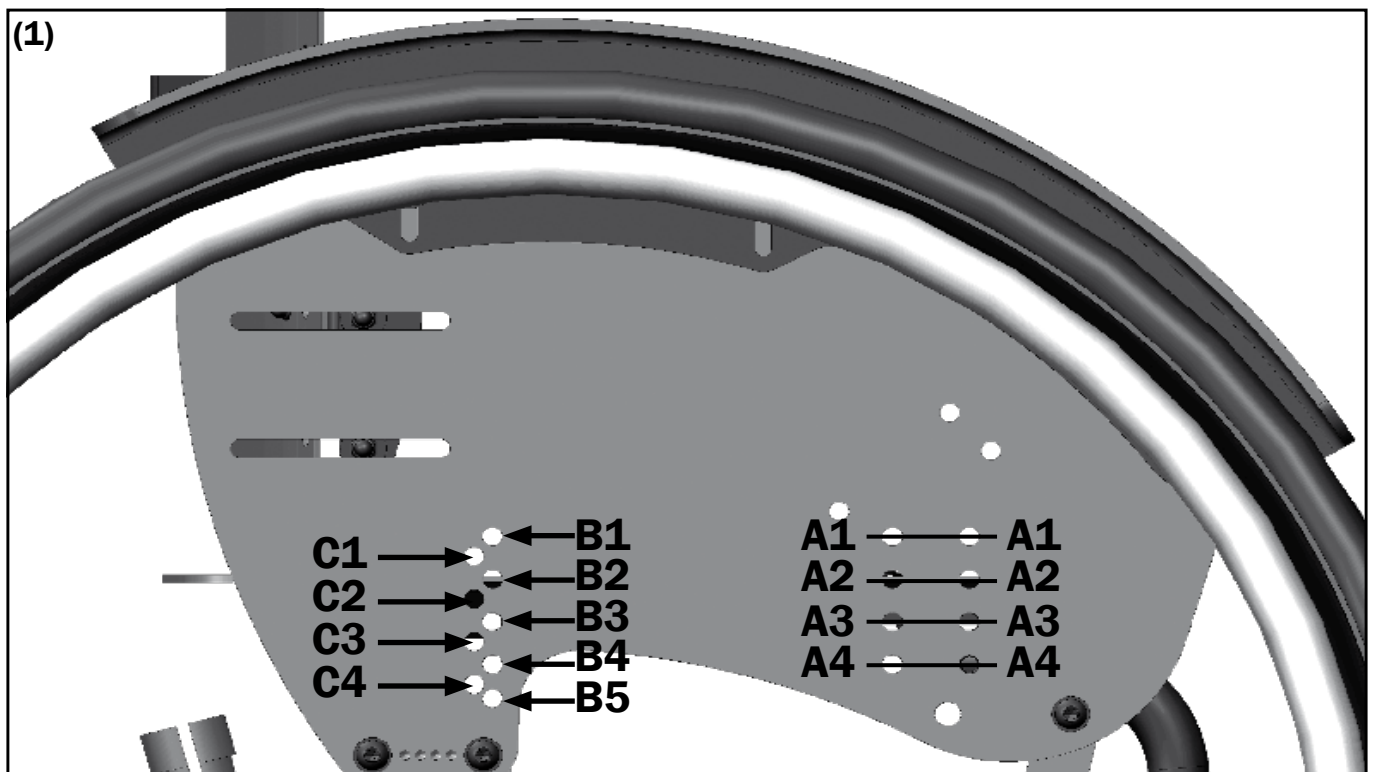
(1) By alternating the seat angle the seat height can be changed in 1,5 cm steps up to 4,5 cm and gives the following seat heights in the front:

wheels bore	Distance top edge of the seat to ground (without seat cushion!)			degree of tilting	
	with 20"	with 22"	with 24"	bore	degree
A1	38,5 cm	40,5 cm	43,0 cm	B1	without
				C1	slight
				B2	strong
A2	37,0 cm	39,0 cm	41,5 cm	B2	without
				C2	slight
				B3	strong
A3	35,5 cm	37,5 cm	40,0 cm	B3	without
				C3	slight
				B4	strong
A4	34,0 cm	36,0 cm	38,5 cm	B4	without
				C4	slight
				B5	strong

- Remove the screws of the seat supporting angle (e.g.: A1 + B1 = highest position) on both sides (e.g.: A2 + C2),
- mount the seat plate in the desired position,
- replace the screws and tighten them.

►► INDICATION

When setting the seat height regard the daily situations (pushing the wheelchair under a table at school or nursery school etc.). According to the set position of the foot notch, it must be ensured that the casters can turn freely 360°.



2.4.2 Widening the seat

In order to change the seat width 2 cm you must make changes on the following four factors:

- distance bushing
- back supporting angle
- seat supporting angle
- setting the quick release axle adapter

For this please proceed as follows:

- remove the driving wheels,
- secure the wheelchair from rolling away,
- **(1+2)** remove the seat plate completely,
- **(3)** remove the firm curved back plate from the connection angles to the side guards,
- remove the side guards completely.

2.4.3 Seat supporting angle

(2) Leave the seat supporting angle **(C)** connected to the side guards and only remove the seat plate.

- **(1+2)** Remove the screw connections **(A)** on the seat supporting angle under the seat plate on both sides.

2.4.4 Back supporting angle

(3) Leave the back supporting angle **(C)** connected with the side guards and only remove the firm curved back plate.

- **(3)** Remove the screw connections **(A)** completely on both sides.

2.4.5 Side guards/distance bushings

(4) The wheelchair is delivered from us with the distance bushings **(B)**, necessary for widening the seat, on the inside of the side guard holder **(D)**.

- **(4)** Remove the screw connections **(A)** and the distance bushings **(B)** on both sides.
- Place the distance bushings between side guard **(C)** and side guard holder **(D)**,
- remount the side guards on to the side guard holders **(D)**,
- replace all screw connections and retighten them.

After widening the seat the distance bushings must be on the outside between side guard holder and side guard.

Then mount the seat plate in the new position:

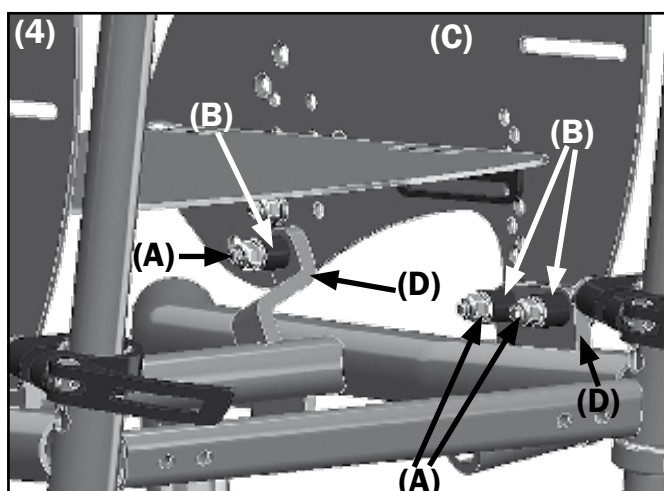
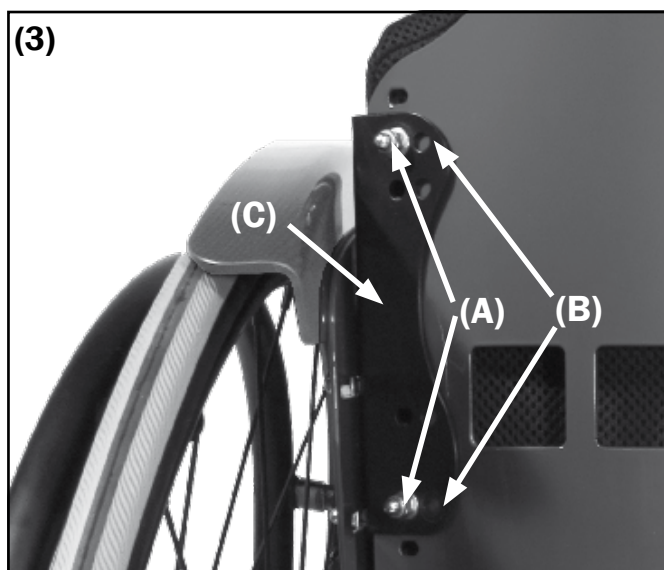
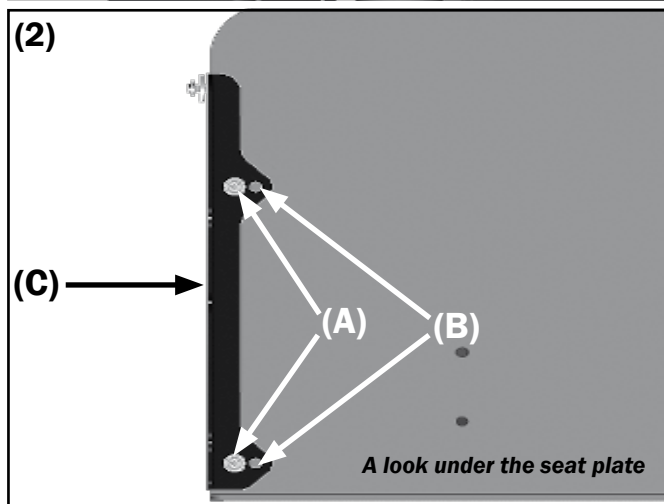
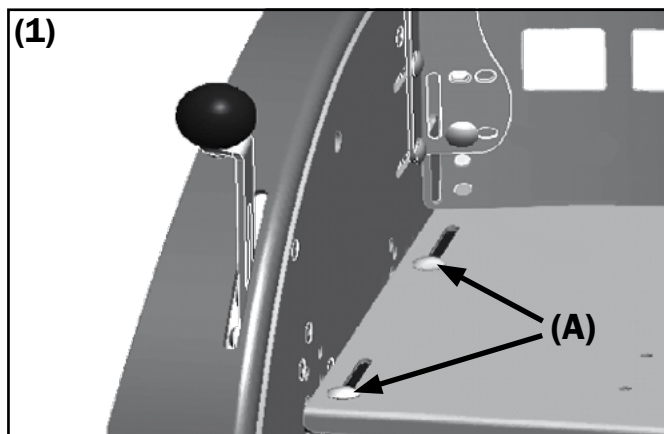
- **(2)** Mount the seat plate in the inner holes **(B)** of the seat supporting angle.
- Replace the screw connections and tighten them.

After, mount the firm curved back plate in the new position:

- **(3)** Mount the firm curved back plate on the inner holes **(B)** of the back supporting angle **(C)**.
- Replace the screw connections and tighten them.

2.4.6 Setting the quick release axle adapter

Correct the distance of the driving wheels to the side guards. For this, proceed as described in 2.3.



2.4.7 Seat depth

There are three possibilities to change the seat depth:

- by displacing the seat plate,
- by displacing the seat supporting angle,
- by displacing the firm curved back plate.

In the pictures you can see the delivering state of the Mio.

- (1) seat plate all the way back on the seat supporting angle (2B), this way it goes over the back of the firm curved back plate about 2-3 cm.
- (2) the seat supporting angle is mounted as far forward as possible,
- (3) the back rest is mounted as far forward as possible.

In this position the seat depth can be extended by displacing the seat plate forward about 4 cm and by displacing the firm curved back plate backwards it can be extended additionally 3 cm. With the position of the seat supporting angle you can influence the centre of gravity and the length the user needs to turning the driving wheel.

2.4.8 Displacing the seat plate

- (1) Remove the screw connections (A) on both sides,
- slide the seat plate in the wanted position,
- retighten the screw connections.

2.4.9 Displacing the seat supporting angle

- (2) Remove the screw connections (A) on both sides, slide the seat supporting angles (B) in the wanted position, retighten the screw connections.

2.4.10 Displacing the firm curved back plate

- (3) Remove the screw connections (A) on both sides,
- place the firm curved back plate in the wanted position,
- retighten the screw connections.

2.4.11 Centre of gravity

The centre of gravity of the user is set by:

- the position of the seat supporting angle vertical and horizontal,
- the position of the firm curved back plate.

With this the adjustment of the seat plate and the firm curved back plate occurs automatically.

The necessary settings are already described in the earlier chapters (assembly group seat).

►► INDICATION

The (body) centre of gravity of the user in his/her wheelchair is the vital factor for the ideal length for turning the driving wheel and with it a positive strength balance. Mostly by young users this decides over the acceptance of the aid and with it the success of the rehab arrangements.

Because of this, please be accurate and patient when adjusting the wheelchair.

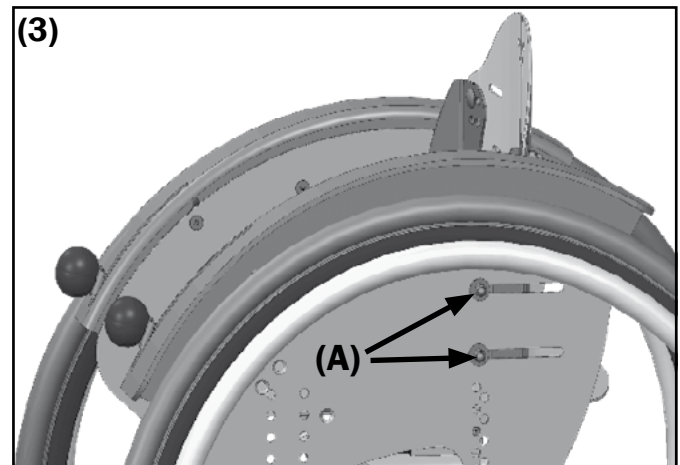
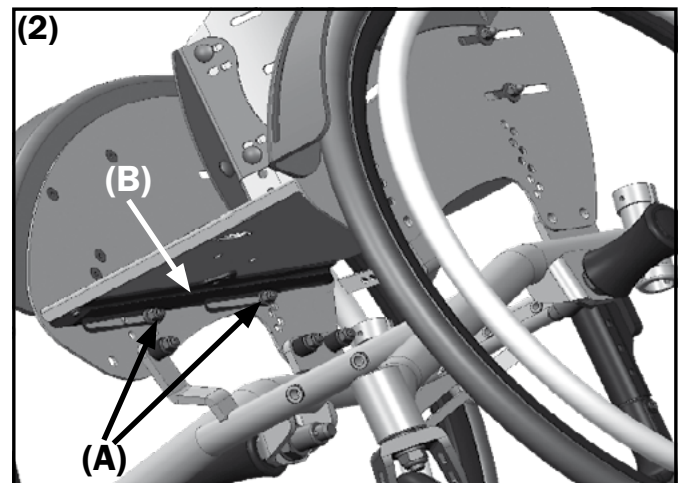
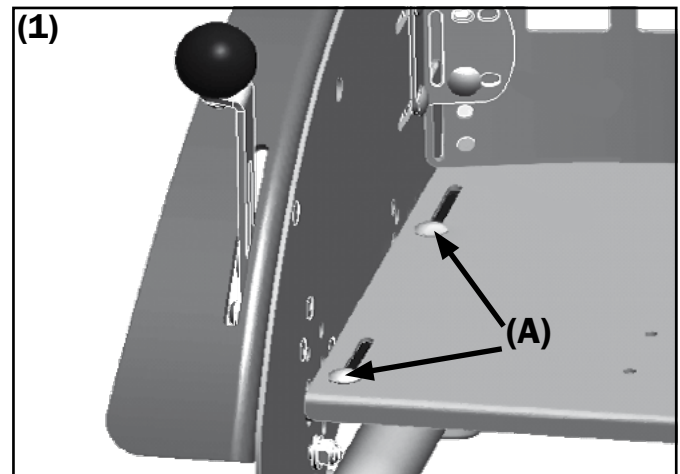
Ex works the wheelchair is set in a tilt stable position (see 2.4.3). The more the back rest and/or the seat supporting angle are mounted backward, the more the wheelchair is bound to tip backward. Although this way it can be easily tilted on 2 wheels, which allows practiced wheelchair users to overcome obstacles easier.

⚠ ATTENTION

A too wobbly set wheelchair can make an unpracticed user highly uncertain and even unmotivated! Even when the anti-tippers (safety wheels) are activated and there is no risk, the user would probably feel restricted in his/her abilities.

⚠ ATTENTION

Slowly and only with the help of an experienced carer go step by step to the maximum and from the user wanted wobbling position. Read the SAFETY INSTRUCTIONS carefully and thoroughly.



2.5 ASSEMBLY GROUP BACK

2.5.1 Adjusting the back height

In order to have enough room for the arms while moving the wheelchair, for active driving the back height should reach the bottom of the shoulder blades.

On our firm curved back plates the top edge is extended ca. 5 cm on model 3 (on model 1 about 2 cm). With this, a longer support for the spine is reached. With the cant of the back plate outward the shoulder blades can still move freely.

Picture **(1)** shows:

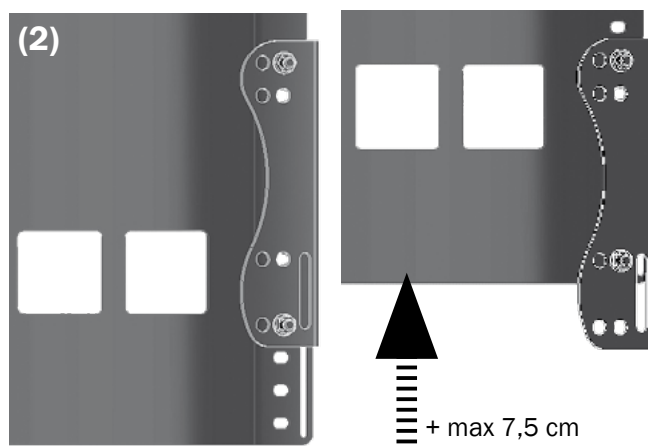
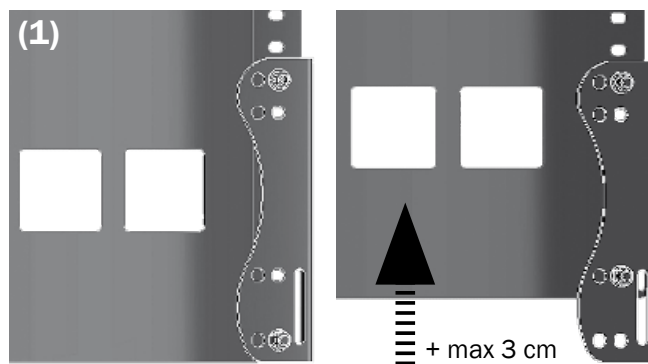
- The bottom of the back with maximum seat height,
- maximum back extension: BH +3 cm in 1,5 cm intervals.

Picture **(2)** shows:

- **(2)** The bottom of the back with minimum seat height,
- maximum back extension: BH + 7,5 cm in 1,5 cm intervals.

To change the position of the firm curved back plate (back height):

- **(3)** completely remove the screws **(A)** on both sides,
- place the firm curved back plate in the desired position,
- replace the screws and tighten them.



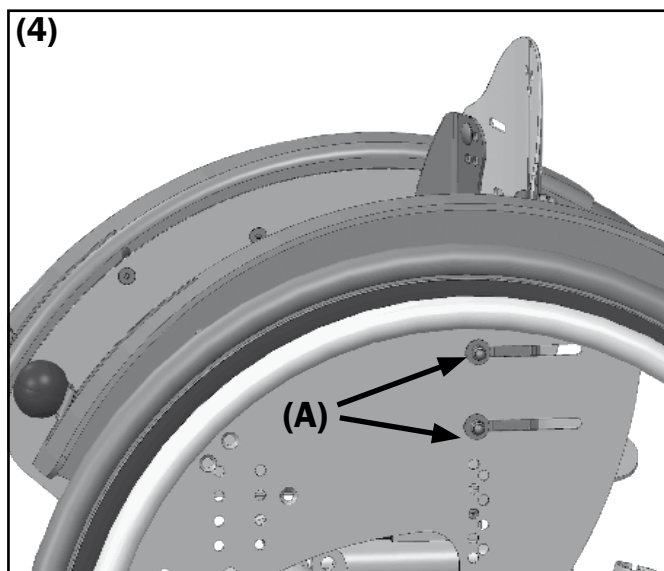
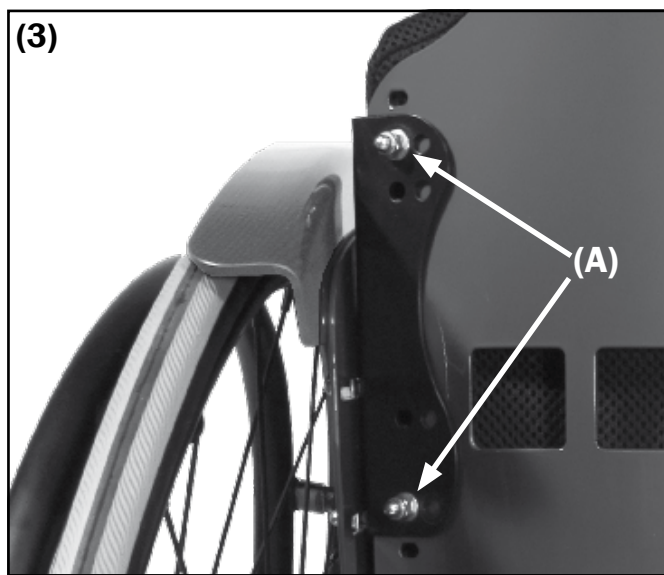
2.5.2 Adjusting the back angle

The back angle can be adjusted steplessly about $\pm 10^\circ$ by shifting the back rest in the side guard. Please consider that by adjusting the back rest the centre of gravity of the wheelchair changes.

- **(4)** Remove the screws **(A)** on both sides,
- position the firm curved back plate in the desired angle,
- retighten the screws.

ATTENTION

Only try new settings with the assistance of a helper!



2.6 ASSEMBLY GROUP LEG SUPPORTS

⚠ ATTENTION

A too highly set foot plate can lead to a kink stance in the pelvis and a too low set foot plate can lead to jams in the thighs.

The thighs must lie evenly on the seat cushion; the back of the knees must stay free.

2.6.1 Leg support standard

The standard leg support can be turned 360° in the holding slot **(1G)** on the Mio. With this “turning” the distance between seat and foot plate changes horizontally and vertically.

Vertical setting of the foot plate (lower leg length)

- **(1)** Remove the screws **(A)** on both sides.
- Place the foot plate **(B)** in the wanted position. (The foot plate must be in the same position on both sides.)
- Replace the screws **(A)** and retighten them.

Horizontal setting of the foot plate (angle adjustment of the foot plate holder)

- **(2)** Loosen the screws **(A)** on both sides,
- place the foot plate holder **(B)** on both sides in the same wanted position, see scale **(C)**,
- retighten the screws,
- if necessary readjust the angle of the foot plate (see next point).

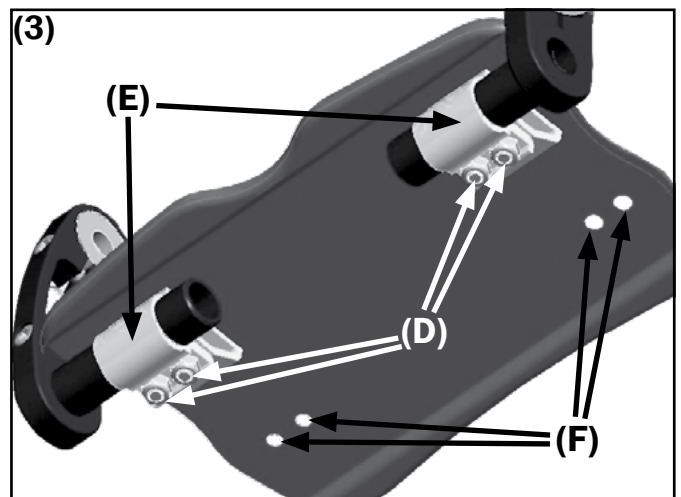
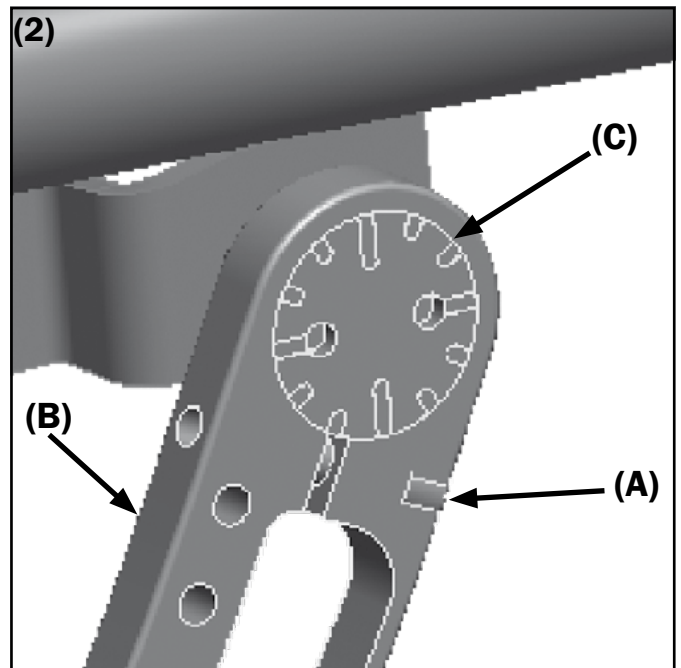
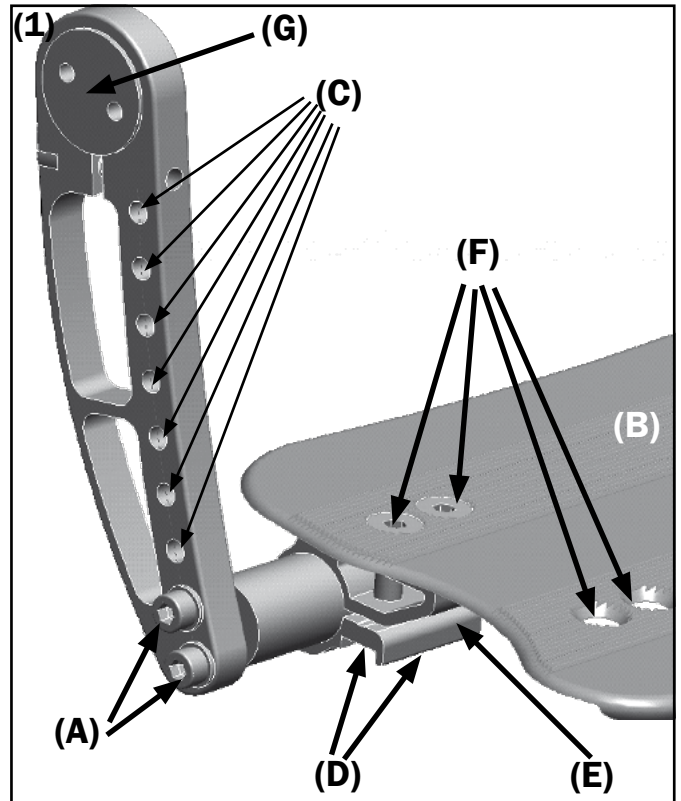
Horizontal setting of the foot plate (angle adjustment of the foot plate)

- **(1)** Loosen the screws **(D)** on both sides,
- place the foot plate in the wanted position,
- retighten screws.

Horizontal setting of the distance of the foot plate

(1+3) To change the distance 3 or 6 cm turn the clamping parts **(E)** 180° and/or screw them to the front bores **(F)** of the foot plate.

- **To displace the locking parts** remove the screws **(D)** on both sides,
- turn the clamping parts **(E)** 180°,
- replace the screws and tighten them.
- **To displace the foot plate** remove the screws **(D)** in the bores **(F)** on both sides,
- displace foot plate,
- replace the screws and tighten them.



2.6.2 Removable leg support

The mounting of the leg supports takes place in the middle under the seat plate.

Setting the lower leg length:

- **(1)** Loosen both screws on both sides **(A+B)**,
- push both foot plate holders (clamping profile) **(C)** in the position wanted,
- retighten the screws **(B)**,
- but only tighten the screws **(A)** so tight that the foot plate can still be folded back.

Setting the depth:

- **(2)** Loosen all four screws **(A)** under the seat plate,
- slide the leg support holder **(B)** in the position wanted
- and retighten the screws **(A)**.

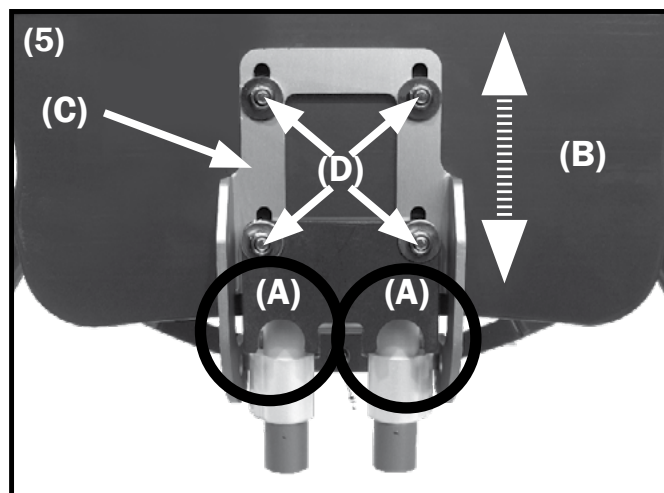
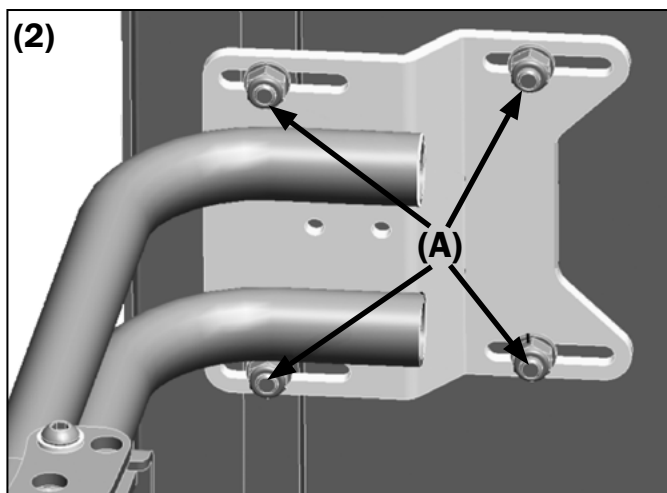
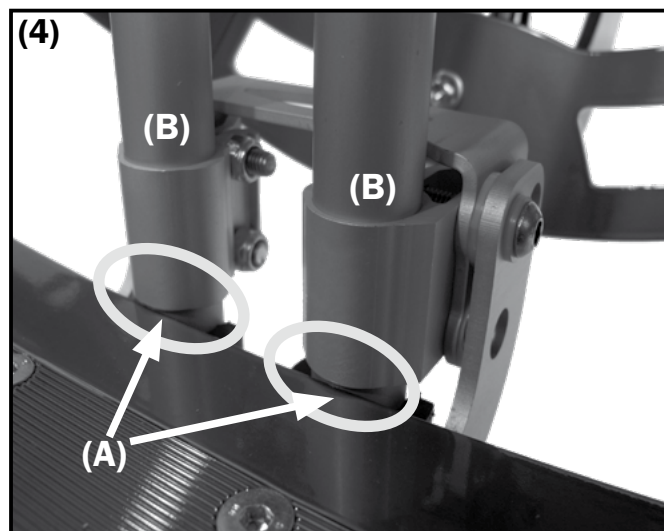
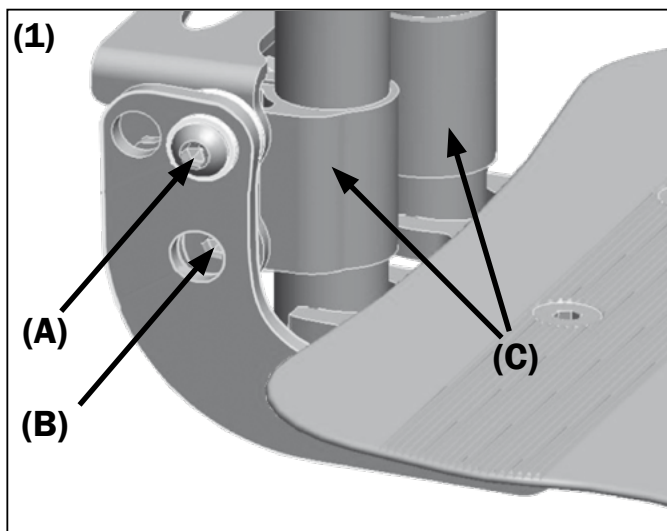
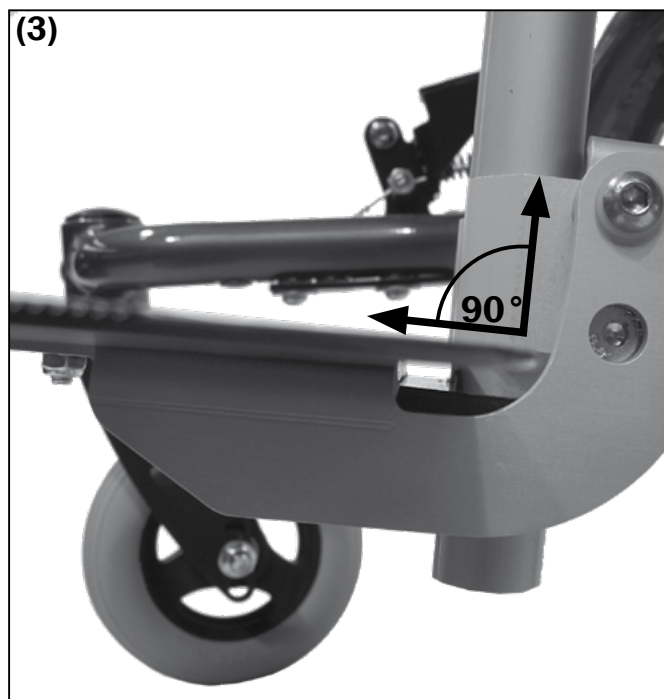
Setting the angle:

(3) The angle of the foot plate is set by us at 90° ex works.

(4) By changing the end stop **(A)** on the tubes **(B)** the angle of the foot plate can be adjusted up to $\pm 15^\circ$.

(5) For this, the position of the foot plate **(B)** must be moved forward (= slanting foot plate) or backward (= rising foot plate) on the holder unit **(C)**.

- Loosen all four screws **(D)**,
- put the foot plate in the position wanted
- and retighten the screws.



2.7 ASSEMBLY GROUP SIDE GUARDS

The side guards on the Mio cannot be changed.

Adjusting the skirt guard

(1) The skirt guard (A) can be adjusted in height:

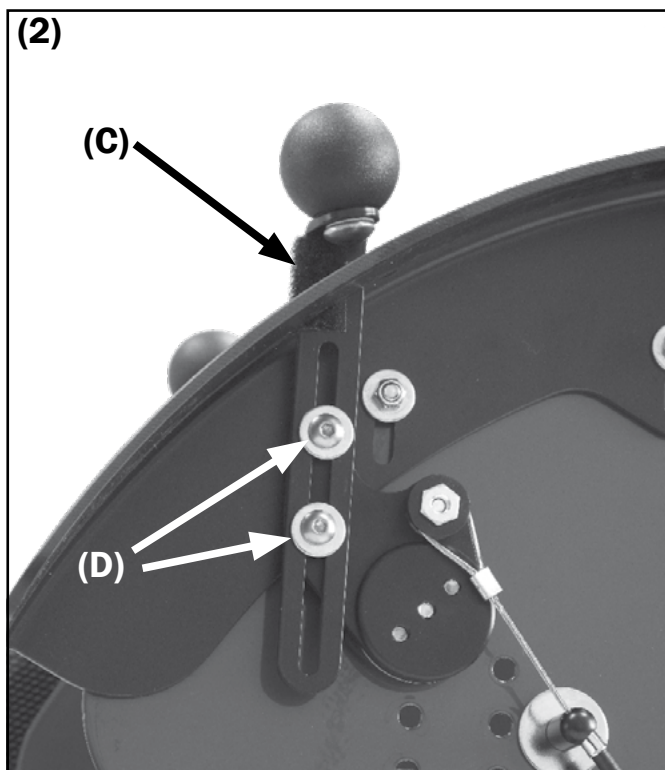
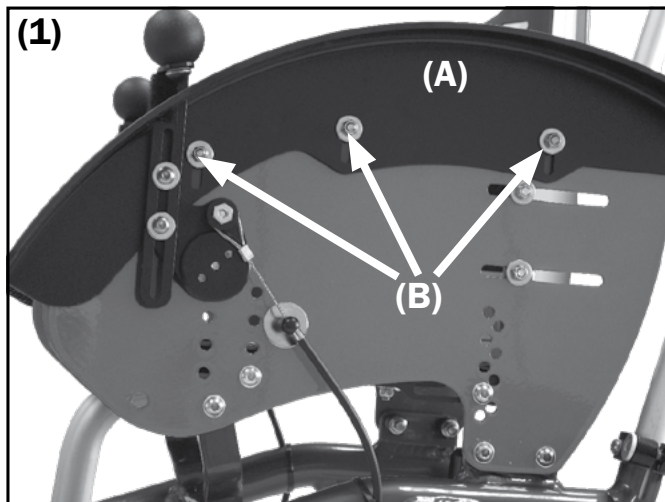
- Loosen the screws (B) on both sides,
- set the height of the skirt guard (A)
- and retighten the screws (B).

(2) If necessary, the length of the brake lever (C) needs to be adjusted to the new position of the skirt guard:

- Loosen the screws (D) on both sides,
- align the brake lever (C)
- and retighten all of the screws (D).

⚠ ATTENTION

Afterwards, be sure to check the functionality of the brakes!



2.8 ASSEMBLY GROUP BRAKES

2.8.1 Wheel lock/service brake

(1 next page) Each wheelchair is equipped with two wheel locks. They consist of brake pressing bolt (A), Brake lever (B) (if necessary, with extension), adjustment screws (C) and if need be the Bowden cables (D).

⚠ ATTENTION

WHEEL LOCKS ONLY SERVE THE PURPOSE OF PUTTING THE WHEELS IN A RESTING POSITION. THEY ARE NOT MADE TO BRAKE THE WHEELCHAIR WHILE DRIVING.

⚠ ATTENTION

The correct function of the brake can be impaired by :

- too low air pressure,
- wetness, dirt, snow, ice, etc.
- worn tires,
- worn brake bolts,
- dirty brake bolt screws,
- a defected Bowden cable,
- too big of a distance between brake pressing bolt and tire.

i INFORMATION

BE SURE TO CHECK THE FUNCTIONALITY OF THE BRAKES AFTER EVERY ADJUSTMENT ON THE DRIVING WHEELS.

⚠ ATTENTION

The wheelchair with passenger (max. load capacity) must stand securely, with drawn brake, on a ramp with a 12,3% (= 7°) decent.

i INFORMATION

The maximum distance between the brake pressing bolt and the tires, with opened brake, is as follows:

Standard KLB	21mm
Pull to lock brake	11mm
KLB with rollback blocking	about 10mm
cable brake	6mm

(technical changes reserved).

2.8.2 Cable brake

The cable brake is built in to the side guard and is operated with a cable. The functionality must be checked regularly and if necessary reset.

(2) To **retention** the cable control you must turn the set-screw (A): clockwise= tighten, counter clockwise= loosen.

(3) In order to change the distance between the brake pressing bolt and the driving wheel:

- Loosen both screws (D),
- move the whole brake pad ,while the brake is open, in the new position
- and retighten the screws (D).

⚠ ATTENTION

AFTERWARDS, CHECK THE FUNCTIONALITY OF THE BRAKE.

2.8.3 Setting the length of the brake lever

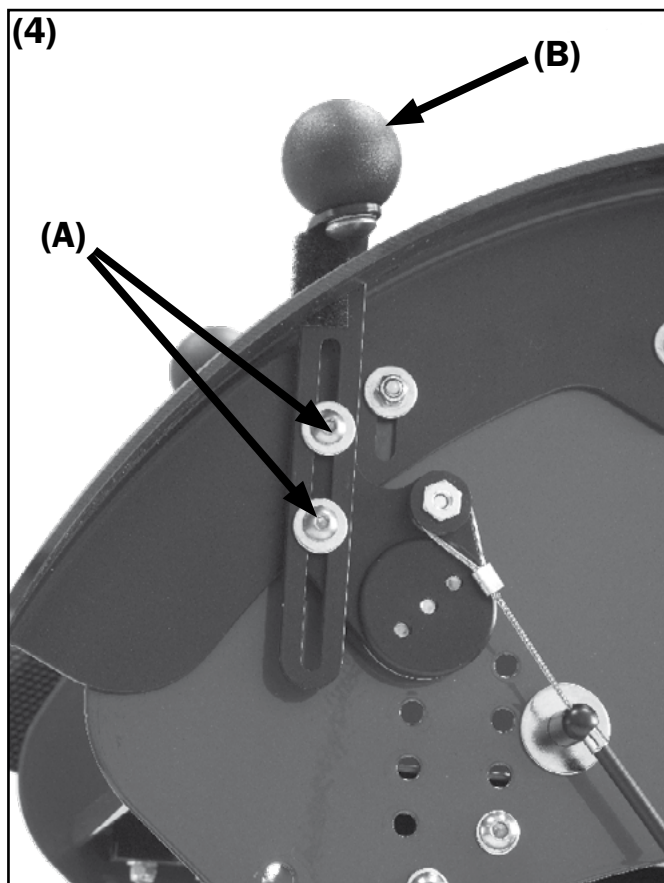
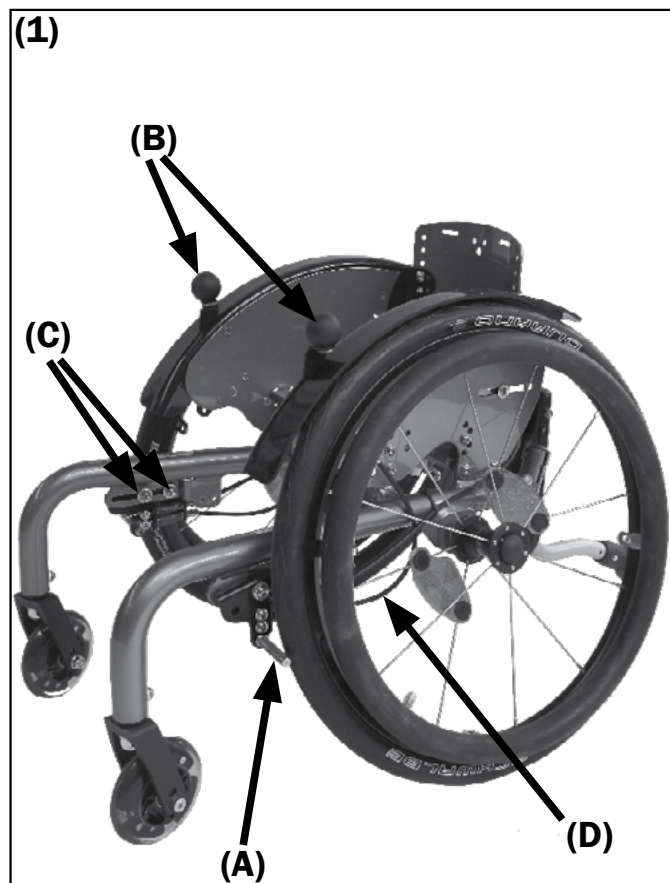
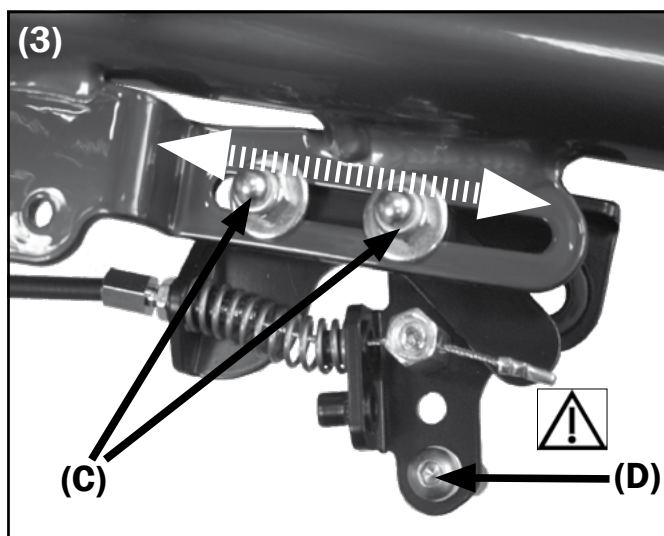
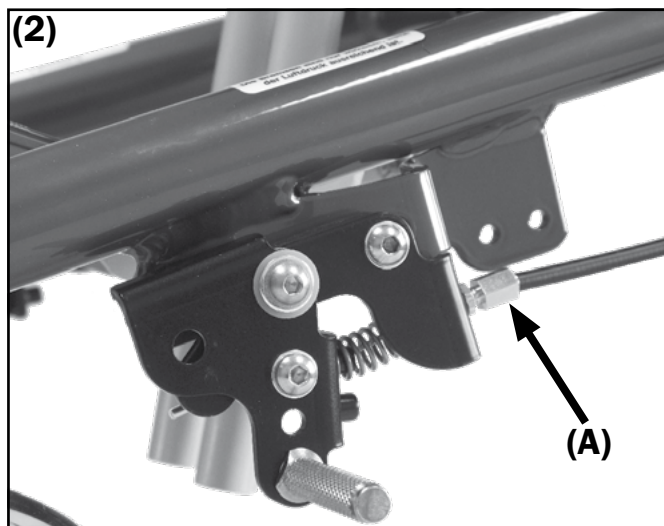
(4) In order to set the length of the brake lever:

- Loosen both screws (A), if necessary, on both sides,
- align the brake lever (B)
- and retighten all the screws (A).

⚠ ATTENTION

AFTERWARDS, CHECK THE FUNCTIONALITY OF THE BRAKE.

The wheelchair with passenger (max. load capacity) must stand securely, with drawn brake, on a ramp with a 12,3% (= 7°) descent.



2.9 ASSEMBLY GROUP ANTI-TIPPER

(1) The anti-tipper consists of 4 parts: Anti-tipper holder (A), foot lever (B), anti-tipper wheel (C) with holder and the anti-tipper bail (D) which can be pulled down and turned 180° (partly sticking in the anti-tipper holder).

(2) The height of the anti-tipper can be changed by the screw (A):

- Remove the driving wheels,
- remove the screws (A) and the case (B),
- displace the anti-tipper wheel (C) in the holder (D) in the position wanted (E),
- replace the case (B) and the screw (A)
- and retighten the screw.

ATTENTION

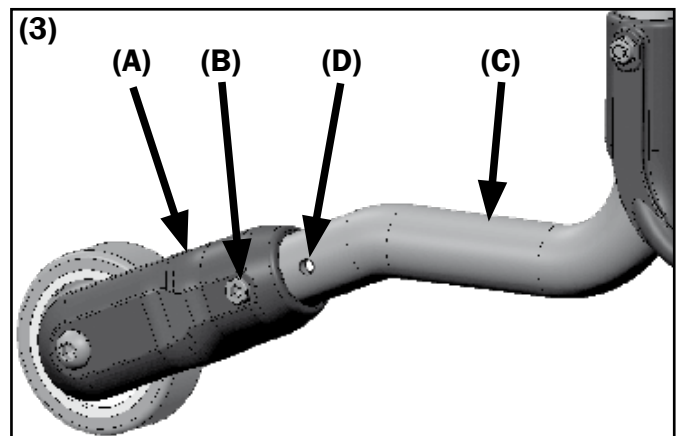
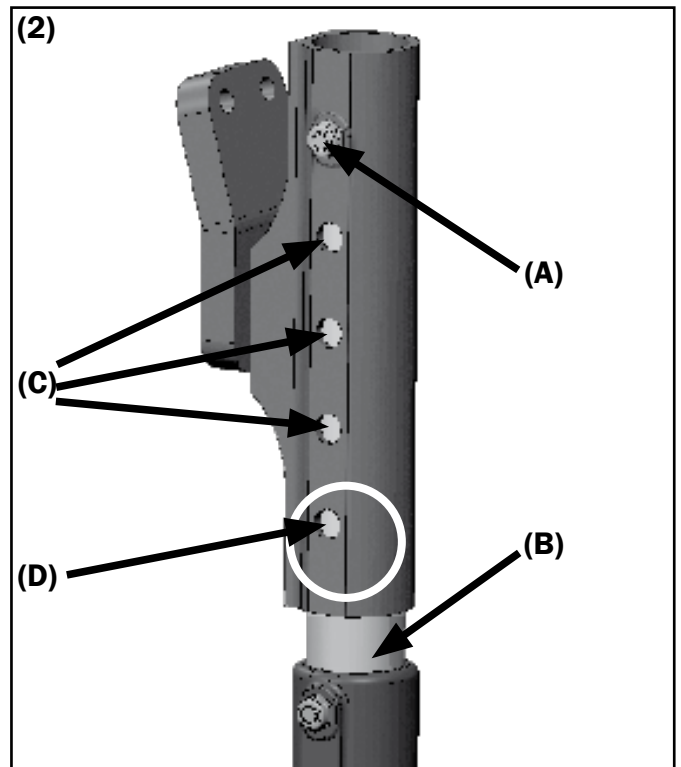
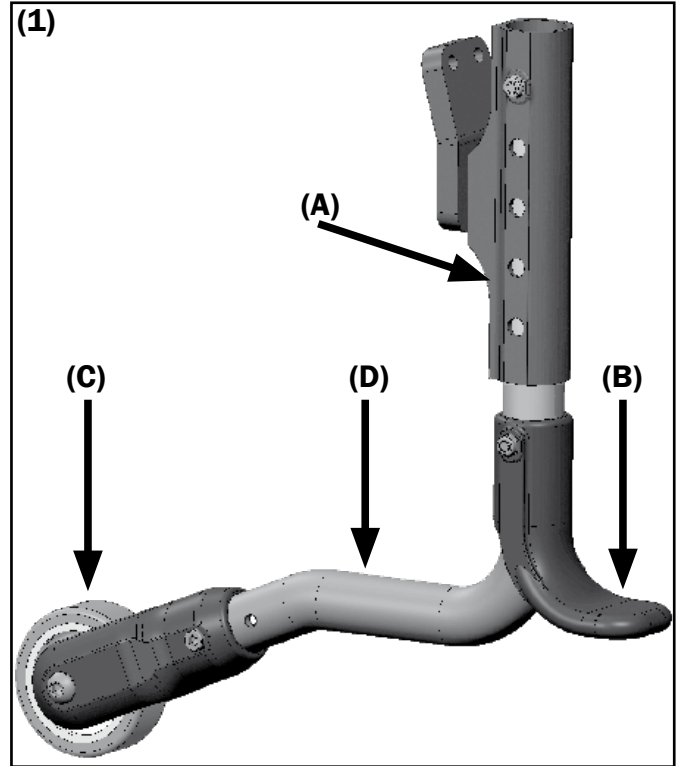
AFTER THE FIRST REMOVAL, THE SAFETY NUTS ARE TO BE REPLACED!

INFORMATION

The bottom hole (D) is design related and cannot be used. The anti-tipper bail could slide out of the holder when turning/activating the anti-tipper.

(3) If the wheelchair is set very active and the activated anti-tipper sticks out too far back, then the anti-tipper bail can be shortened.

- Remove the screw (B)
- remove the anti-tipper wheel and the holder (A),
- shorten the anti-tipper bail (C) with a saw to the length wanted,
- place the anti-tipper wheel and the holder back on the anti-tipper bail (C),
- place the screws (B) in the hole (D) and tighten them.



2.10. ASSEMBLY GROUP PUSH AIDS

2.10.1 Extendable push handle/s/push bail

⚠ ATTENTION

The push handles have black caps. Under adverse conditions the caps could fall off – for example in hot weather, if moisture gets under the caps or with extreme strain.

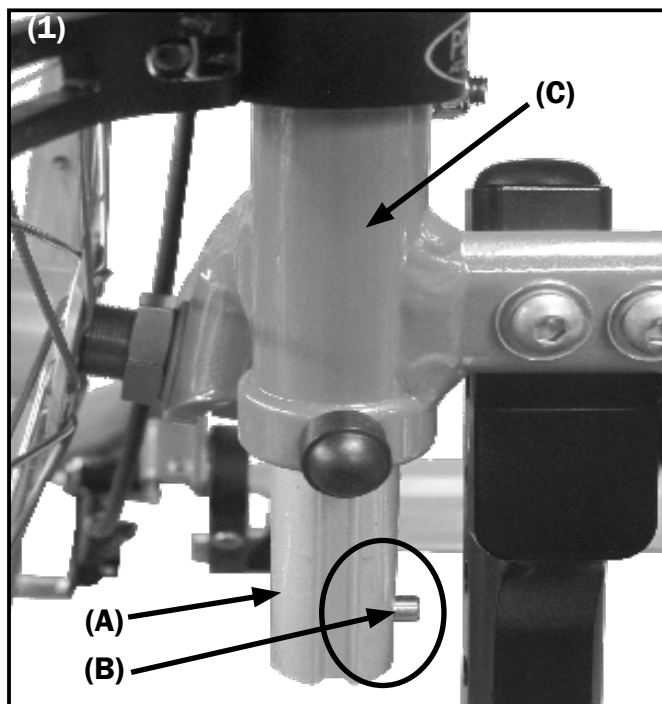
(1) At the bottom end of the height adjustable push bail tubes (A) there are tripod springs (B) with which an unwanted sliding out of the holders (C) by the tubes is prevented.

⚠ ATTENTION

The push bail (A) can only be used if the tripod springs (B) are visible under the holder (C). A non functioning tripod spring must be replaced immediately.

⚠ ATTENTION

Check the tight fit of the push handles before each use (e.g. overcoming obstacles).



2.10.2 Clamping force of the eccentric clamp

⚠ ATTENTION

(2) The clamp lever (A) of the eccentric clamp is fixated with a nut on the opposite side of the holder (B). When turning the clamp lever (A) the clamping force of the eccentric clamps changes. The nut may get lost under adverse circumstances. THE PUSH AID IS THEN NOT FUNCTIONABLE.

This is why you must make sure that the user checks the functionality and the completeness of the eccentric clamp regularly and in short intervals.

In order to set the locking force of the eccentric clamp:

- Open the clamp lever (A),
- turn it so far on its own axis that it reliably fixates the push bail;
- clockwise= tighten,
- counterclockwise= loosen.

Afterwards test its functionality.

⚠ ATTENTION

(3) The curve of the saddle washer (A) must be concise with the curve of the clamp lever with a closed eccentric clamp (B).

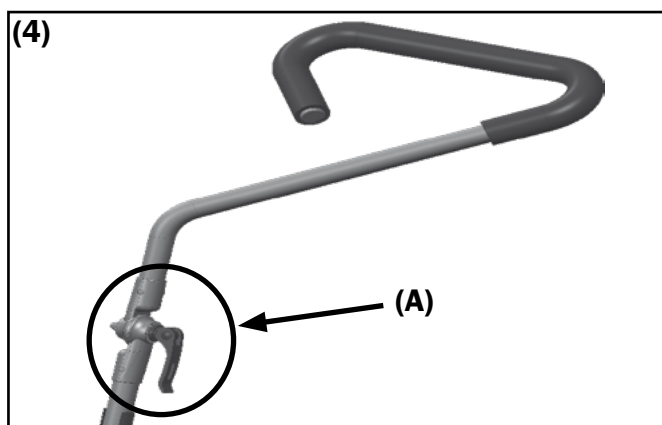
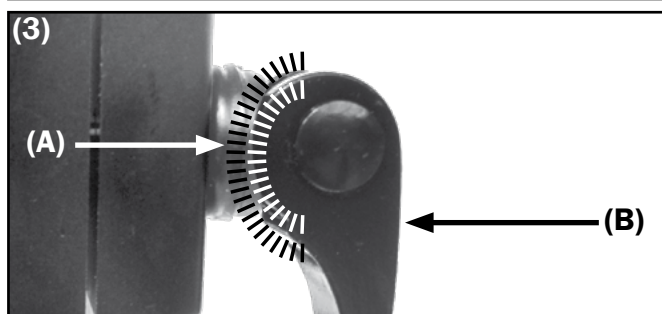
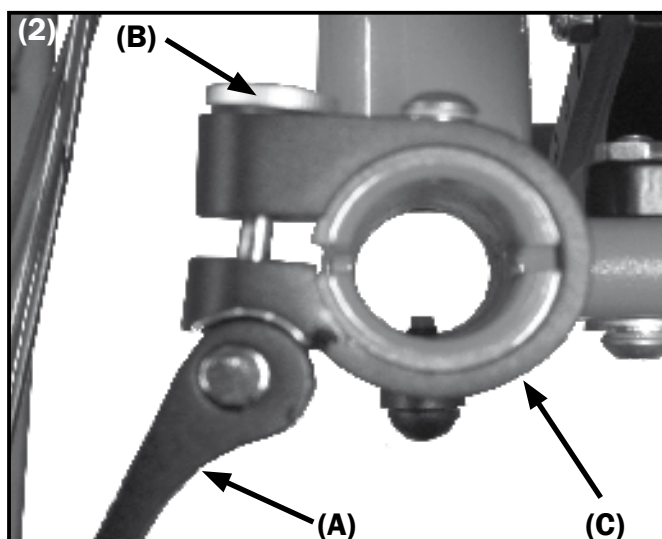
⚠ ATTENTION

Check the functionality of the nuts (2B) on the opposite side, regularly in short intervals.

2.10.3 Removable one-hand push bail

⚠ ATTENTION

(4) Check the functionality of the angle adjustment element (A) on the push bails (removable push bail) in regular short intervals.

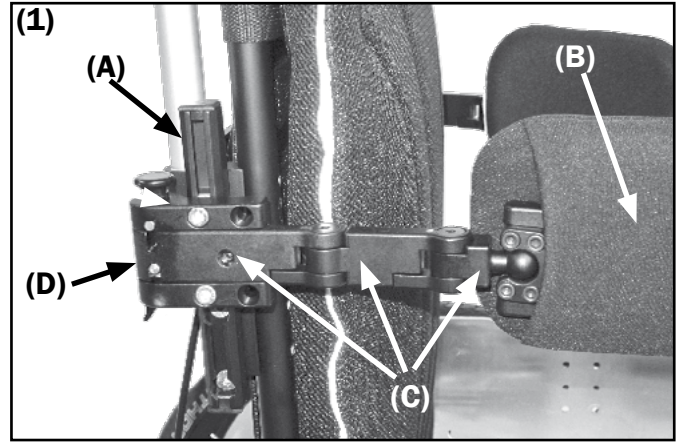


2.11 ASSEMBLY GROUP TRUSS PADS

2.11.1 Classification

(1) The truss pads consist of the following parts:

- (A) connection (C-bar)
- (B) truss pad cushion
- (C) truss pad holder
- (D) locking joint



2.11.2 Vertical setting

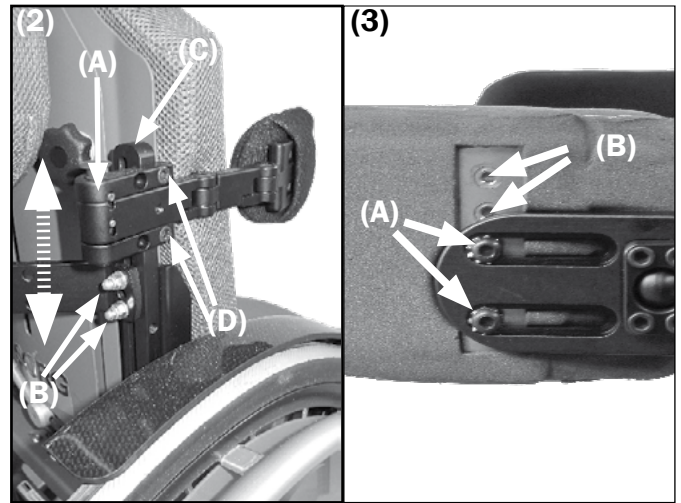
(2) The vertical setting of the truss pads occurs on the one hand by moving the locking joint (A). Loosen both screws (B), move the locking joint (A), and retighten the screws (B).

vertical setting

(2) On the other hand, the truss pads can be adjusted by turning the c-bar (D). Remove the locking joint (A) by unscrewing the screws (B). Remove screws (D), turn the c-bar 180° and retighten the screws (D). Remount the locking joint (A) to the c-bar and retighten the screws (B).

vertical setting

(3) Additionally, with truss pad size II the height can be adjusted by displacing the cushions. Remove the screws (A), place the cushion on the holes (B), replace and retighten the screws (A).

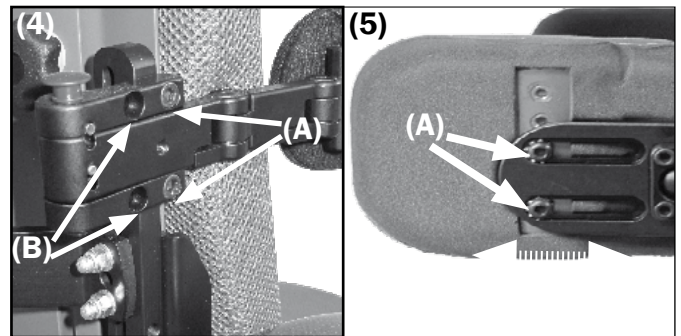


2.11.3 Horizontal setting

(4) The horizontal setting occurs on the one hand by displacing the locking joint. Remove both screws (A), place the locking joint in the alternate holes (B), replace and retighten the screws.

horizontal setting

(5) On the other hand, it can occur by displacing the cushions. Remove the covers, remove the screws (A), displace the cushion and retighten the screws (A). After, replace the covers.



Horizontal extension

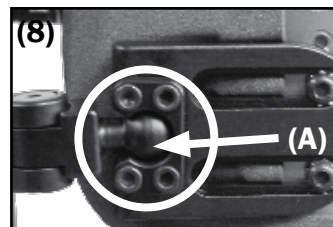
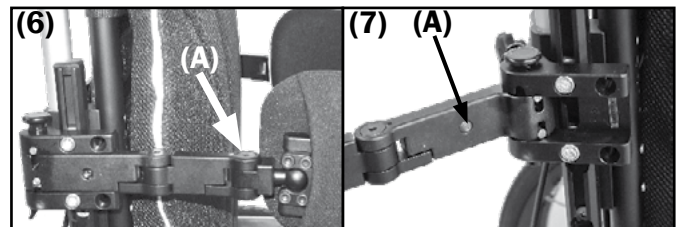
(6) For the horizontal extension add an extension piece (spare part): Remove the screw (A), add the extension piece and screw it together on both ends.

2.11.4 Fine adjustment of the truss pad holder

(7) The fine adjustment of the room between locking joint and truss pad holder occurs with the adjustment screw (A).

2.11.5 Adjusting to the user

(8) If all positioning and extension works are finished close the truss pads, adjust the joints in the necessary position and tighten all joint screws (6A). The ball joint is then fixated by tighten the four screws (B).



3 REPAIRS AND MAINTENANCE

►► INDICATION

For safety reasons, when using the wheelchair regularly a yearly inspection according to the following maintenance checklist is necessary. It is to be documented in the following.

3.1 CHECK LIST

PREPARATORY WORK

If necessary, we recommend cleaning the wheelchair or individual parts of it prior to inspection.

VISUAL INSPECTION

Check frame, mounting parts and accessories for damage, defects in paint work and corrosion.

GENERAL CHECK-UP

- Check all fixing screws for firm fit and retighten them if necessary.
- Check fixation of all mounted parts and readjust if necessary.
- Check fixation of all plastic parts, handles, mounted parts spoke guard covers etc. and readjust if necessary.
- Check brake lever device and extension for deflection and readjust if necessary.
- Check all spring loaded devices (quick release axle, stand spring on push handle etc.) for proper functioning and replace if necessary.

CARRIAGE

- Check fixation of caster and rear wheels.
- Check functionality of the quick release axles.
- Check tires, air pressure and valve, replace if needed.
- Check caster bearing, caster fork and caster mounting bracket for condition, proper functioning and running characteristics.
- Check the firm fitting of the anti-tipper and its functionality.

BRAKES

- Make sure the brakes function properly
- Make sure the Bowden cables function properly and replace if necessary.
- Make sure the brake lever extension functions properly.

OILING AND GREASING

- Clean and grease all pivot points of control levers and versatile parts as well as all bearings.

FINAL CHECK-UP

- General functional check-up of all mechanical adjusting devices.
- Additional braking, steering and driving tests uphill and downhill.

3.2 TECHNICAL DATA

Misprints and technical changes reserved.

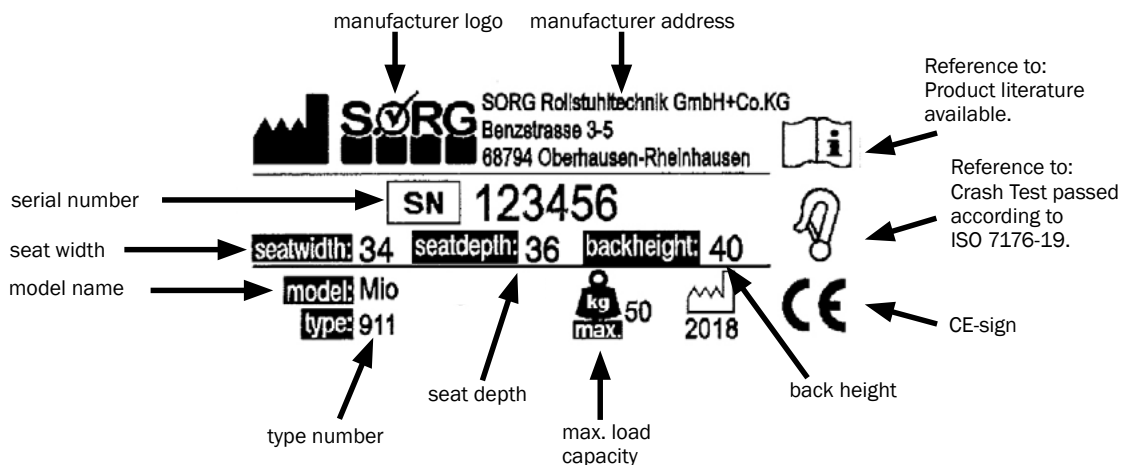
seat width (SW) in 2-cm steps		18 to 30 cm	every seat width 2 cm extendable
seat depth (SD) in 2-cm steps		18 to 30 cm	every seat depth at least 4 cm extendable
back height (BH) in 2,5-cm steps		17,5 to 35 cm	every back height 5 cm extendable
back angle:		± 10°	
length frame:	size 1	515,2 mm	length measured without push handles, firm curved back plate, wheels or foot plate
	size 2	555,2 mm	
	size 3	580,2 mm	
length wheelchair:	with 20" wheels	630 mm	without push handles or push balls
	with 22" wheels	695 mm	
	with 24" wheels	745 mm	
width frame:		min. SW + 310 mm	dependent on wheel type, the mounting of the quick release axle fitting and the camber
		max. SW + 365 mm	
height wheelchair:		500 mm - 875 mm	without push handles
Polsterstärke Sitzkissen:		3 cm or 5 cm	
Polsterstärke Sitzformteil:		front 5, back 3 cm	
upper edge (UE) seat to upper edge (UE) foot plate:	retro-frame:	min. 10 cm	LLL= UE seat to UE foot plate PLUS seat cushion
		max. 30 cm	
	taurus-frame:	min. 15 cm	
seat height = upper edge seat to floor:	with 20" wheels	34,0 cm - 38,5 cm	All measurements done without seat cushion!
	with 22" wheels	36,0 cm - 40,5 cm	
	with 24" wheels	38,5 cm - 43,0 cm	
ETRTO wheel size:	from 20"	Ø 451 mm	
ETRTO wheel size:	from 22"	Ø 489 mm	
ETRTO wheel size:	from 24"	Ø 540 mm	
camber:		9° (opt. 11°)	
wheel types:	standard wheels light weight wheels tread wheels		The tread wheels are with built-in hand rims
pneumatic tire sizes:	20"	25-451	
	22"	25-489,	
	24"	25-540	
air pressure:			Regard the data on the wheels (6-8 bar)
casters:		4", 5", 5,5"	
caster types:	transparent with LED, full rubber black with alloy wheels, PU gray with plastic rim		
incline:		12% (7°)	
descent:		12% (7°)	
stability:		12% (7°)	
turning circle:		1020 mm	with 24" wheels
vehicle load capacity:		max. 50 kg	
empty weight:*		min. 6,9 kg	
heaviest piece:		driving wheels 1,2-2 kg	
support point:	back frame cross bar		

* A usable wheelchair is equipped with: frame, driving wheels, hand rims, casters, wheel lock, foot plate, side guards, skirt guard and anti-tipper.

3.3 TYPE LABEL

The type label is on the bottom frame tube, in the right front facing the driving direction.

The serial number consists of:
XXX XXXXXX XX
Type-Nr. Order-Nr. Year



3.4 DECLARATION OF CONFORMITY

SORG Rollstuhltechnik GmbH & Co.KG

Benzstraße 3-5
 D-68794 Oberhausen-Rheinhausen
 Tel.: +49 7254 9279.0
 Fax: +49 7254 9279.10
 e-mail: info@sorgrollstuhltechnik.de
 Web: www.sorgrollstuhltechnik.de

declares with this in sole responsibility, that the following aid

Mio

Type Nr.: 910

meets the relevant regulations in the following guidelines and standards listed:

EG guideline 93/42/EWG for medical devices from 14. Juni 1993
 DIN EN 12182 (Technical aids for impaired people)
 EN ISO 14971 (medical devices- use of the risk management on medical devices)

This conformity declaration only applies to the here stated aid.

Oberhausen-Rheinhausen on 25.09.18

3.5 **RETAILER VERIFICATION**

company stamp



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GmbH + Co. KG
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