ENG

Loop[SORG]

Service Record

In the following all individual adjustments of the wheelchair are described. These adjustments require tools and specialised knowledge. Please leave the adjustments to a qualified rehab consultant.

MADE IN GERMANY

Unique people, unique solutions.

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Revision status
2023-07-31

Technical status
Technical changes and misprints reserved. The pictures in this Instructions for use can differ from the actual equipment components. However, a corresponding conduction is possible.

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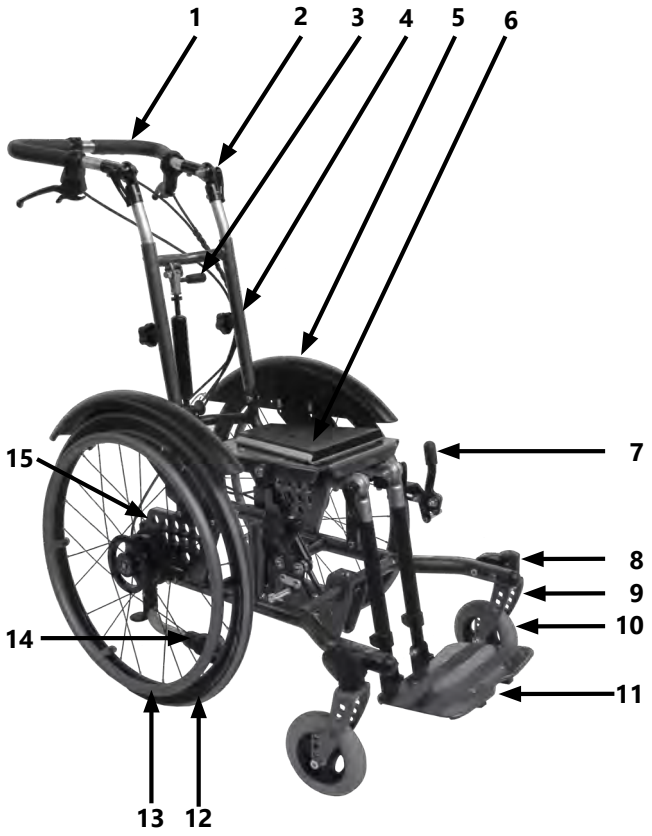

1 push handle
2 eccentric tensioner for angle adjustment of the push handle
3 gas pressure spring
4 handle for height adjustment of the push handle
5 wheel cover
6 wedge and wedge adapter
7 brake lever
8 caster housing
9 caster fork
10 caster
11 Foot plate
12 rear wheel
13 handrim
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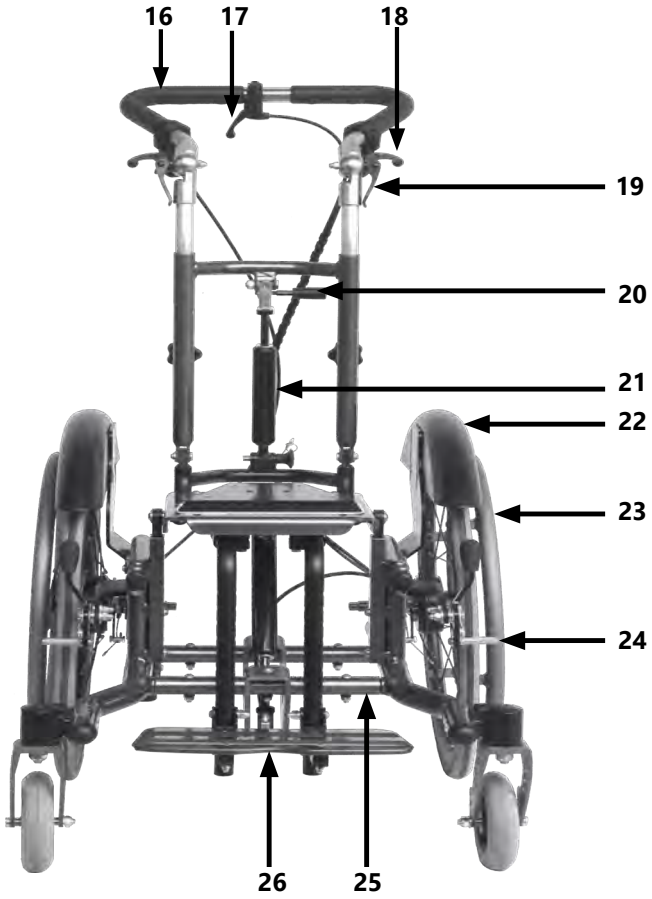
15 axle plate



16 push handle
17 release lever for seat tilt
18 control lever for drum brake
19 rccentric tensioner for angle adjustment of the push handle
20 control lever for angle adjustment of the back
21 gas pressure spring to adjust the back angle
22 wheel cover
23 handrim
24 brake pressure pin of the cable brake
25 bar to widen the frame
26 foot plate

2 General information

2.1 General indications

In the following all individual settings, adjustments and repairs as well as the yearly inspection of the wheelchair are described. These adjustments require tools and specialised knowledge. Please leave the adjustments to a qualified rehab consultant.

Should questions or suggestions come up then please contact your medical supply store or our team (+49 7254 9279-0).

2.2 Documentation indications

Please note:

- Information about before sale can be found in the instructions for use
- Infomation for the user can be found in the instructions for use
- For maintenance instructions see: Chapter 4 (Repair & Maintenance)

2.3 Required torques and tools

For the following screws needed torque:

- M5: 5 Nm;
- M6: 7 Nm;
- M6 (axle plate) 10 Nm
- M8: 20 Nm;
- M10 (nut): 25 Nm; (caster)
- quick release axle fitting 40 Nm

Needed tools:

- 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

2.4 Explanation of symbols

ATTENTION! Warnings for personal Safety aspects that are of the utmost importance.

CORRECT safety adjustment/ use

WRONG adjustment/ use

NOT ALLOWED

References to additional/continuing reading.

important detail

correct or proper use/setting

incorrect or improper use/setting

(A); (B) reference from text to detail

Use

push/ pull/ insert / move/

Push in specific direction

Setting or adjusting the angle

open/ close

Turn clockwise

Turn counter-clockwise

steps to be done at the same time

steps to be done after each other

steps to be done on both sides

point of view

view from top

view from the side

view from the bottom

view from the front

view from the back

fasten parts

remove parts

2.5 General safety instructions

⚠ **Before each use be sure to check:**
- frame, back tubes, attachments and accessories for visible damage, bends, cracks or missing/loose scews,
- wheels/quick release axles for firm fit,
- sufficient tire pressure, tire tread,
- functionality of the brakes,
- firm fit of the angle adjustment elements/ eccentric clamps,
- firm fit of the seat plate/ the back/ the foot plate,
- functionality of the anti-tipper/ seat and back straps,
- if all previously disassembled parts are re-inserted or firmly locked.

⚠ There is a risk of injuries (e. g. such as bruising) on all rotating or folding parts, including adjustments, repairs and transport.

⚠ All wheelchair parts are to be handled with care. Do not throw or drop removable parts.

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

⚠ Only use original spare parts.

⚠ Safety nuts may only be used once. Lossened safety nuts must be replaced by new ones.

⚠ Only the regular maintenance of all safety-relevant parts on the wheelchair by a qualified rehab workshop protects against damage and maintains our manufacturer's warranty.

Lifespan

⚠ Use beyond the specified lifespan increases the residual risks and should only be carried out after careful, qualified consideration by the operator. If the useful life is reached, the user or a responsible person should contact the specialist dealer. There you can be informed about the possibility of reprocessing the product.

Combination with products from other manufacturers

⚠ The wheelchair may only be combined with the electrical auxiliary drives approved by the manufacturer. The responsibility of restrictions or adjustmens as well as the attachment itself lies with the supplier of the additional system or the specialized retailer. Please ask about the conditions with the manufacturer of the auxiliary drives.

⚠ In combination of wheelchair and electric auxiliary drive, certain strains occur that can lead to damage to the wheelchair. Slowly approach abstacles and carefully overcome them so that little force is applied to the casters, rear wheels and the wheelchair as a whole.

3.1 Assembly Group Wheels

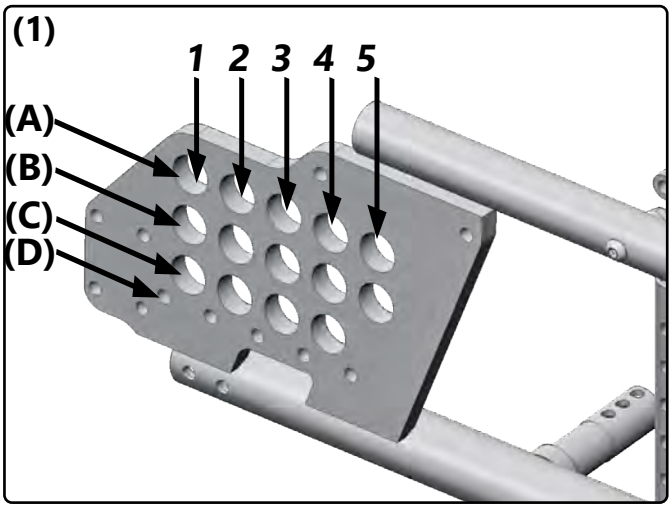
3.1.1 Position rear wheel

⚠ Check the tilt stability of Loop while fully tilted and with the patient, after alle positioning adjustments of the rear wheels have been made and, if necessary, modify the position.

(1) We mount:

- 24" wheels in row **(A)**,
- 22" wheels in row **(B)**,
- 20" wheels in row **(C)**,
- the adapters for 12"/16" wheels are mounted in row **(D)**.

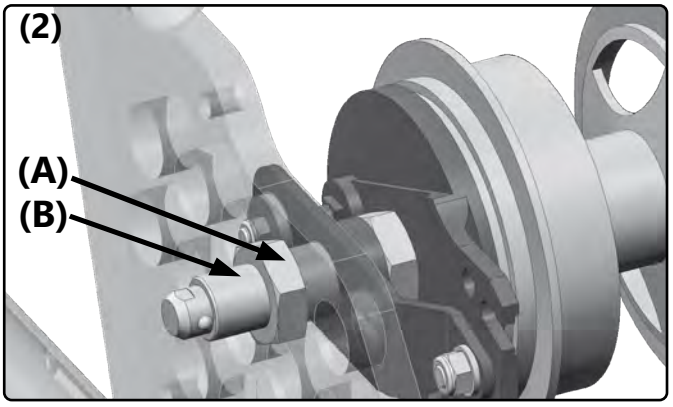
Position 1 is the most passive (most stable), position 5 is the most active (most wobbly). The wheels are factory-set in position 2. In this position, you receive a horizontal frame position with corresponding caster. Other constellations are possible. The horizontal frame position can be reached through the adjustment of the casters.



3.1.2 Displacing the wheels without a camber adapter (20",22",24")

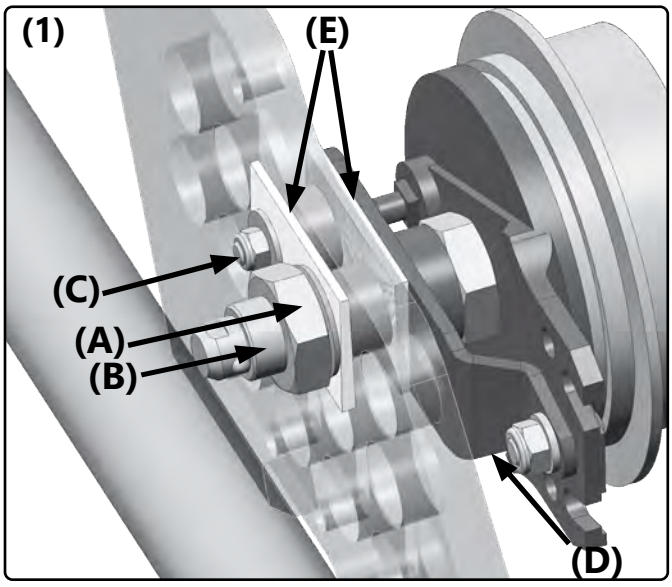
- **(2)** Remove the wheels,
- remove the hexagon nut **(A)** of the quick-release axle fitting **(B)**,
- place the fitting **(B)** in the new hole,
- put the hexagon nut **(A)** back on, tighten it and
- place the wheels back on.

⚠ Correct the position of the knee lever brake and be sure that it functions properly.



3.1.3 Displacing the wheels with a camber adapter (20",22",24")

- **(1)** Remove the wheels,
- remove the hexagon nut **(A)** of the quick-release axle fitting **(B)**,
- remove the nut **(C)** from the brake arm **(D)** including the inner shell,
- remove both camber adapters **(E)** and place them in front of the new position.
- Fixate both camber adapters **(E)** with the fitting **(B)** and the shell in the new position,
- replace the hexagon nut **(A)** and tighten it,
- replace and tighten the nut **(C)** from the spacer.



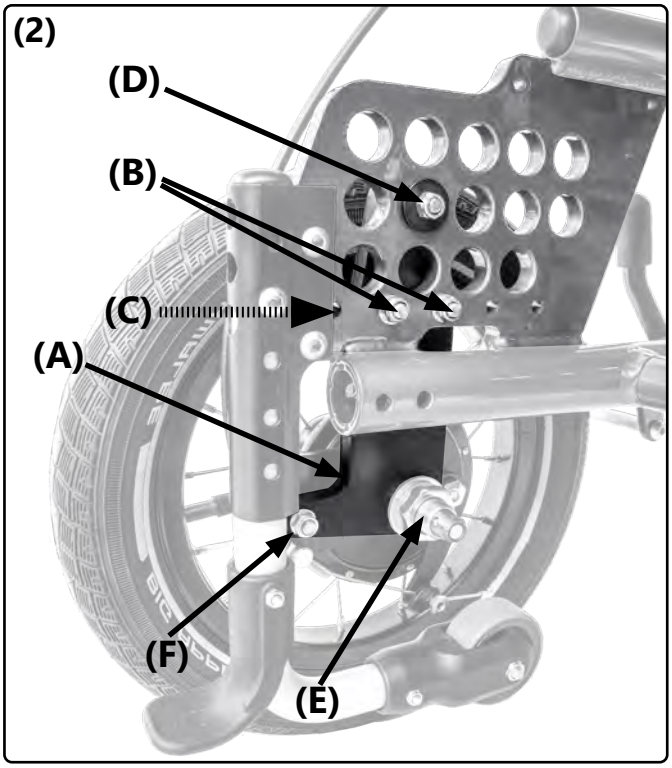
⚠ The Camber adapters must always be mounted opposite. At 0°: inner surface= thick end facing up.

⚠ Correct the position of the knee lever and be sure that it functions properly.

3.1.4 12"/16" wheels

Changing to 12”/16” wheels subsequently:

- **(2)** Remove the big wheels including the brake pad, fitting and drum brake arm,
- mount the adapter **(A)** for the 12”/16” wheels with the screws **(B)** in the bottom hole row **(C)**
- mount the screw **(D)** with the delivered discs in the proper hole.
- Mount the quick-release axle fitting **(E)** with the brake pad and the drum brake arm **(F)** analogously as described above and
- put the 12”/16” wheels on.



⚠ Be sure that the drum brake functions properly and if necessary establish its functionality (see drum brake).

⚠ Whe using a knee lever brake, this must be displaced (see knee lever brake). Correct the position and be sure that if functions properly.

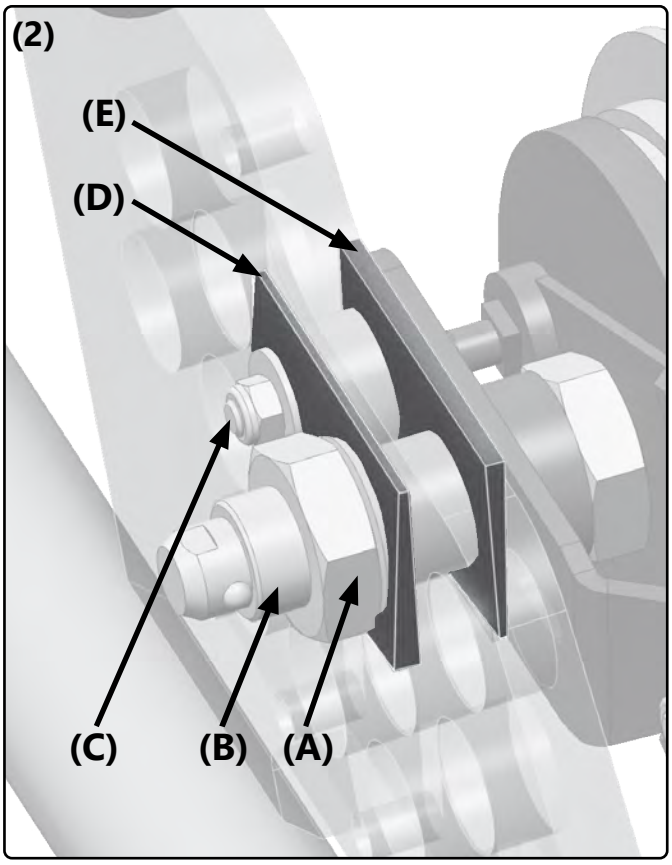
To change the camber to 0°, please proceed as described.

3.1.5 Camber

To change the camber with a wheel base extension, please proceed as described here.

Changing the camber subsequently:

- **(2)** remove the rear wheels,
- remove the hexagon nut **(A)** of the quick-release axle fitting **(B)**,
- remove the nut **(C)** from the drum brake arm including the inner surface shell.
- Place both camber adaptors **(D+E)** in front of the position wanted: **(D)** thick end down; **(E)** thick end up-
- Fixate both with the fitting **(B)** and the shell from the drum brake spacer in the new position,
- replace the hexagon nut **(A)** and tighten it,
- replace the nut **(C)** of the drum brake arm and tighten it.



⚠ Be sure that the drum brake functions properly and if necessary, establish its functionality (see drum brake).

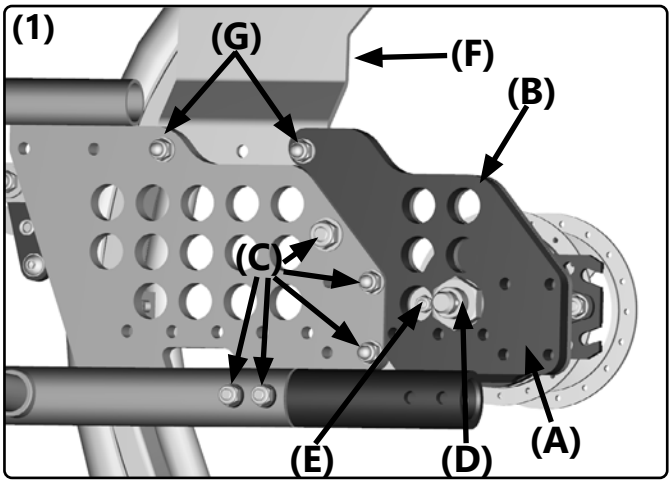
⚠ Correct the position of the knee lever brake an be sure that it functions properly (see knee lever brake).

3.1.6 Wheel base extension for 20" + 22"

To prepare the extension of the wheelbase:
remove the wheels completely on both sides incl. brake body, fitting etc.
remove the wheel guard completely,
if necessary remove the anti-tipper completely.

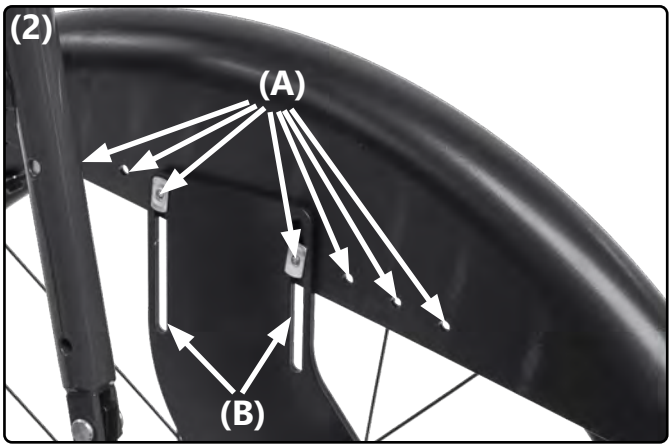
To extend the wheelbase

- **(1)** mount the wheelbase extension **(A)** and the connecting plate **(B)** with the screws **(C)**,
- Mount the quick-release axle fitting **(D)** in the corresponding hole and
- Adjust the drum brake counterholder **(E)** in the corresponding hole.



To move the clothes guard:

- **(1)** Move the clothes guard **(F)** back and secure it with the corresponding screws **(G)**.

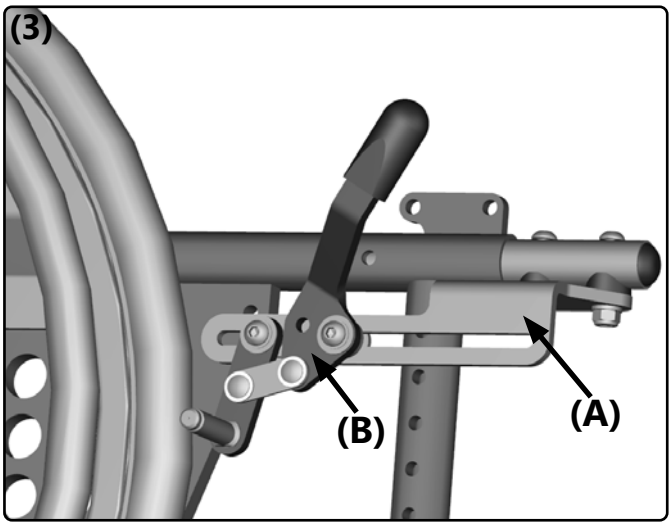


To adjust the clothing protection:

- **(2)** Replace the wheels and adjust the clothes guard on the existing holes **(A)** and slots **(B)**.

To move the knee lever brake:

- **(3)** Replace the standard brake adapter with the brake adapter for wheelbase extensions **(A)**.
- Adjust the knee lever brakes **(B)**



⚠ Check the functionality of the drum brake and restore it if necessary.

⚠ Correct the position of the knee lever brake and then check its functionality.

To change the camber to 0 ° please proceed as described there.

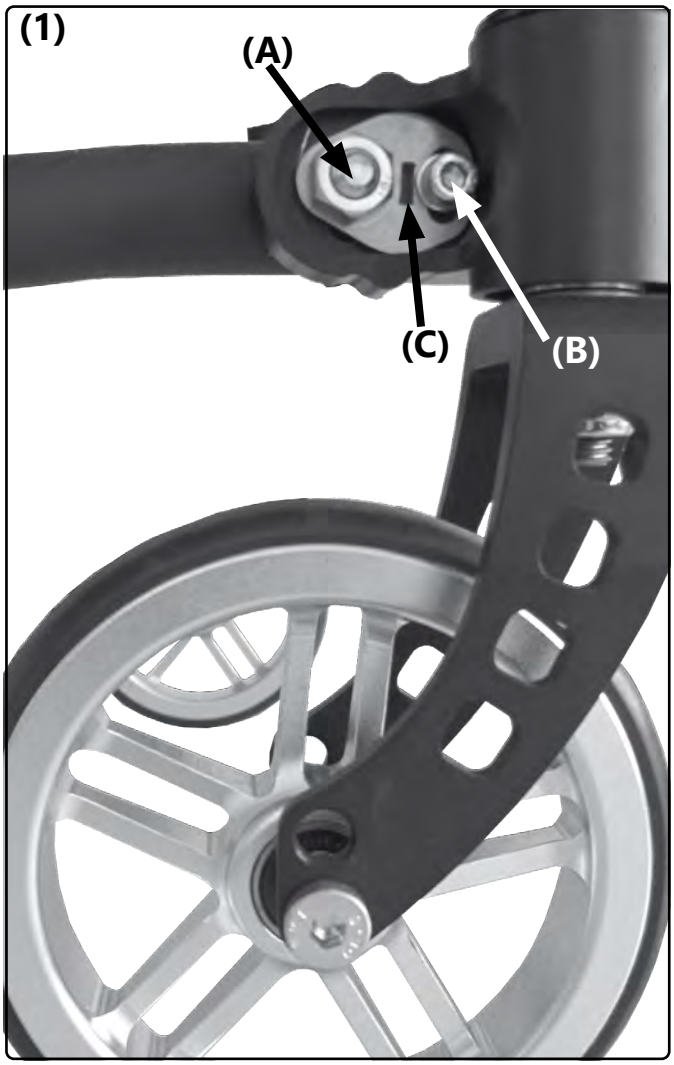
3.1.7 Casters

If you would like to add a frame arch so that the frame is closed in the front and more resilient:

- **(2)** Remove the caster adapters from both sides **(A)** including the half shells (B),
- put the frame arch **(C)** on and attach it from the top with the screws **(D)**,
- move the caster adapters **(A)** out of the old holes **(E+F)** into the new holes **(F+G)**,
- mount the adapters **(A)** including half shells **(B)** with the screws **(H)** in the new position and adjust as described above the casters in an absolute vertical position.

⚠ Correct the position of the knee lever brake and be sure that if functions properly (see knee lever brake)

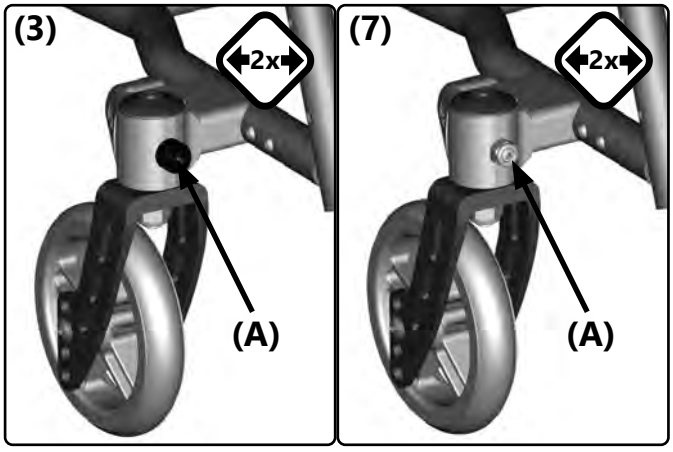
⚠ After every change made on the casters the steering head tendency must be newly adjusted.



3.1.8 Activation of track fixation

With the help of the track fixation, straight-ahead driving can be supported. The pressure spring keeps the steering axle in a straight line. When you countersteer, this support is released again. To set this particular support, proceed as follows:

- Loosen the protective cap **(3A)**,
- Use an M8 Allen key to tighten the spring-loaded pressure piece **(7A)** on both sides until you can feel the ball compressing the wheel in a straight-ahead direction.



⚠ Do not turn the pressure spring piece onto the steering axle with the threaded end of the pressure ball. Otherwise the function will be lost.

3.2.1 Frame arch for closed frames

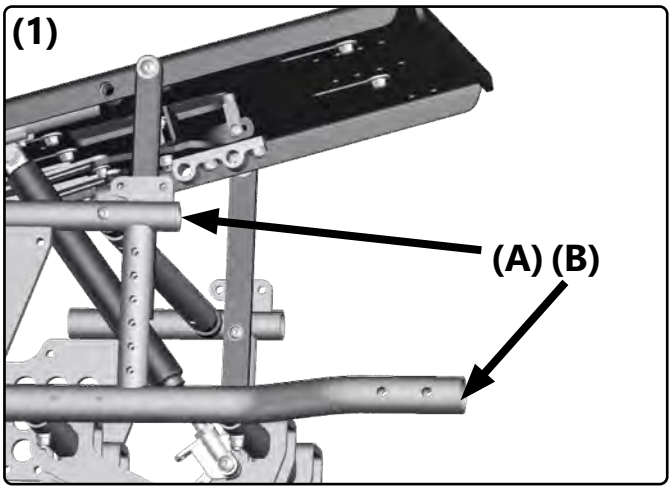
For retrofitting the frame bow for a frame closed at the front, proceed as follows on both sides of the frame:

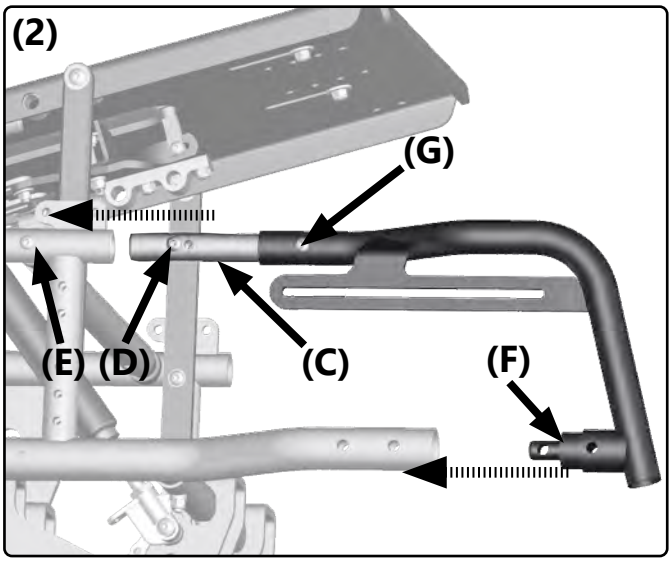
- **(1)** Remove on both sides the steering wheel adapter **(3A)** incl. Half-shells **(3B)**,
- if necessary, remove the knee lever brakes
- and remove the caps at the end of the frame tubes **(A)** and **(B)**.

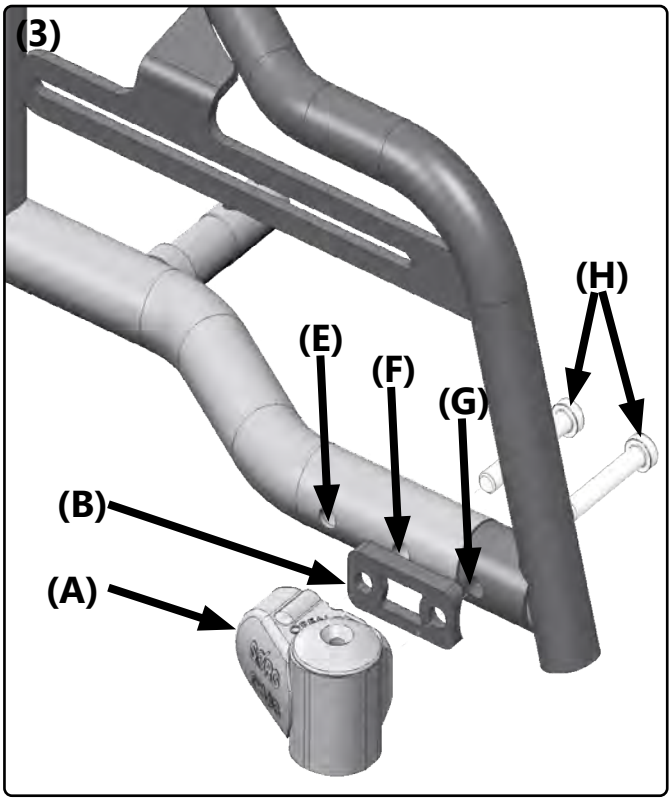
- **(2)** Secure the supplied sleeve **(C)** with the screw **(D)** in the hole **(E)** provided.
- Insert the frame into the bottom frame tube **(C)** with the bottom frame tube **(F)**.
- Screw the frame bow at the top with the **(G)** screw to the sleeve **(C)**.
- Check the tightness of the fittings **(D+G)**.

- **(3)** Move the steering wheel adapters **(A)** and half shells **(B)** from the old holes **(E+F)** into the new holes **(F+G)**,
- Mount the adapters **(A)** of the half-shells **(B)** with the screws **(H)** in the new position **(F+G)**
- and adjust as described
- Possibly. you must re-assemble and adjust the toggle brakes

⚠ Every change made on the seat and/ or the tilting, the tilt behavior of the Loop must be newly tested and practiced with a passenger and the help of an experienced and strong person.







3.2.2 Widening the frame

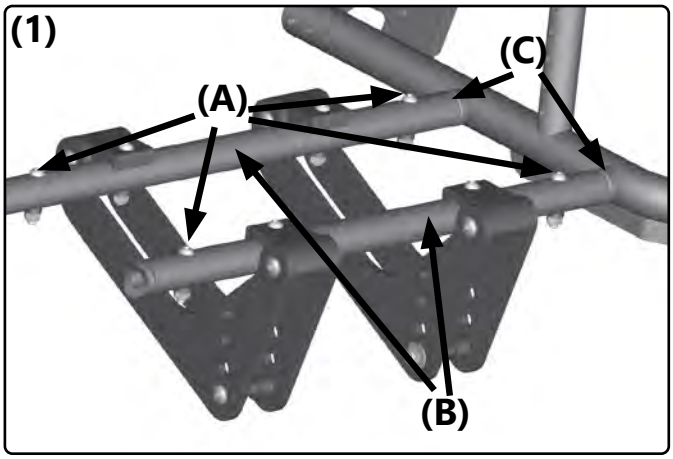
To widen the frame:

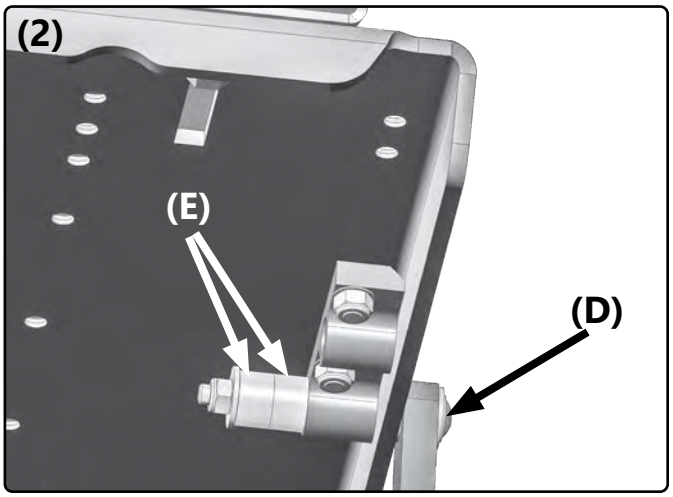
- **(1+2)** remove both drive wheels,
- remove the screw connection **(1A)** fof the trusses **(1B)** on one side,
- **(2)** completely remove the screw connection **(2D)** of the seat plate including the sleeves **(2E)** on ine side .

- Move the twor trusses **(1B)** to the required extent along the prepared drillings on the traverse adapters **(1C)** by 1 or 2 cm by loosely reinserting the screw connections **(1A)**
- Place one or both sleeves **(2D)** outwards (1 sleeve = 1 cm, 2 sleeves = 2 cm),
- reinsert the fitting **(2D)** through the sleeves.
- Tighten all screw connections **(1A and 2D)**.
- Proceed in the same way with all screw connections **(1A and 2E)** on the opposite side.

If the Loop[SORG] has an additional truss, please note the following chapter.

⚠ The traverses must be offset at the same distance on both sides.



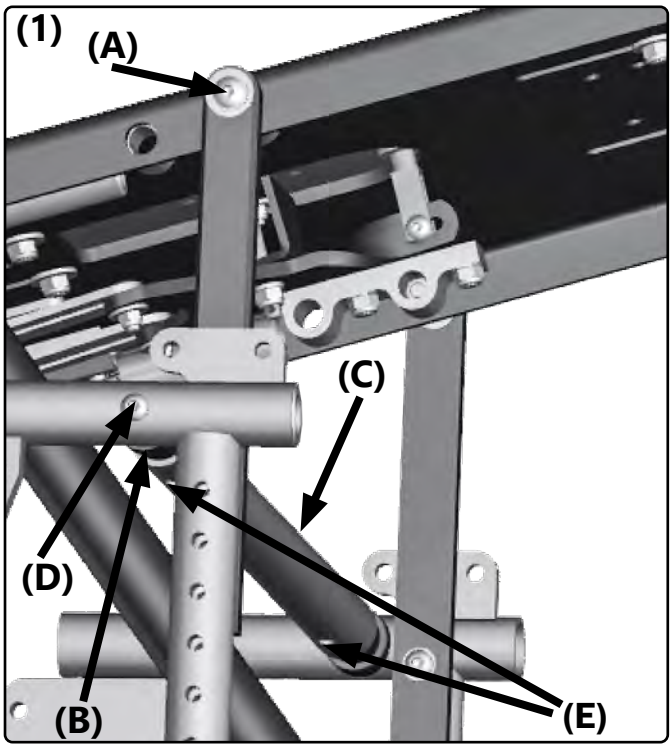


3.2.3 Additional crossbar

To fixate the additional crossbar under the seat:

- **(1)** remove both wheels,
- then remove the screw connections, completely on one side, of the bottom crossbar as described above,
- on the same side, remove the screw connections **(A)** for the seat board,
- place the crossbar adapter **(B)** for the top crossbar **(C)** in and screw it onto the frame pipe with the screw **(D)**.

- Place the top crossbar **(C)** in the wanted hole of the crossbar adapter **(B)**,
- with the screws **(E)**, screw them together in the same hole as the bottom crossbar,
- place or displace the shells from the seat screwing **(A)** as described above,
- put the screws **(A)** back into the seat board and tighten them firmly.
- Precede the same way on the opposite side.



⚠ The crossbars must be displaced in the same distance on both sides. An asymmetrical assembly is dangerous and not allowed.

3.3.1 Adjusting the tilting direction

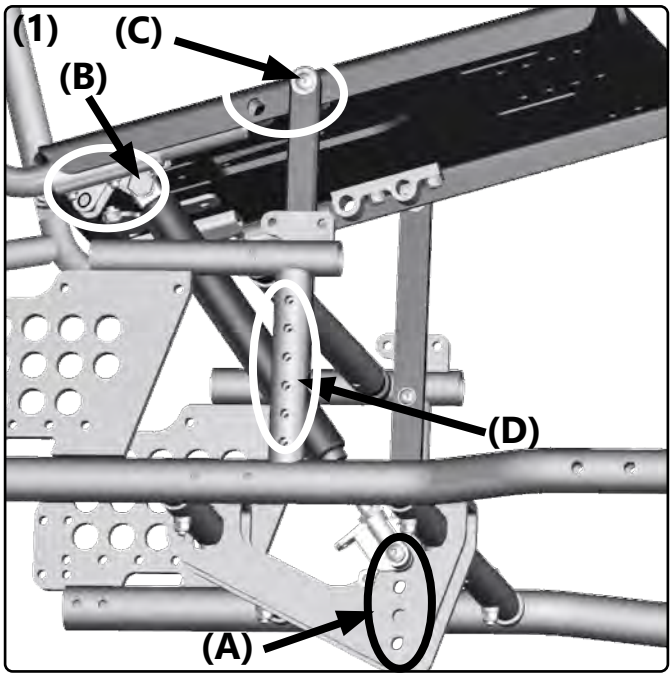
(1) The tilting direction is determined by the position of the gas spring at the bottom of the carrier **(A)** and on top on the holders under the seat board **(B)** as well as by the horizontal **(C)** and vertical **(D)** position of the seat.

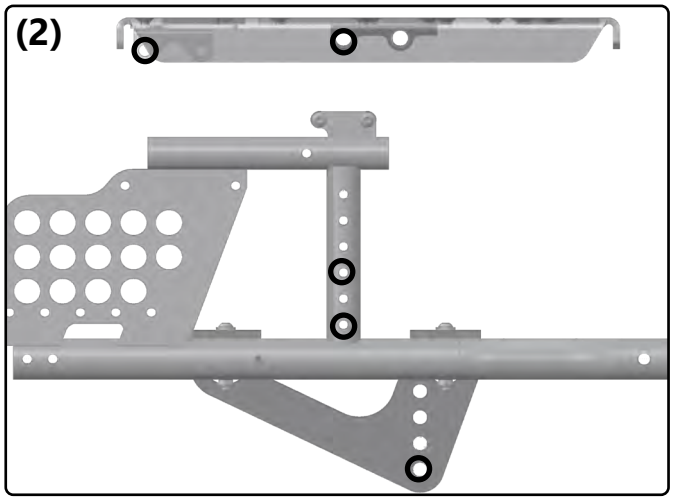
We mount standardly as follows:

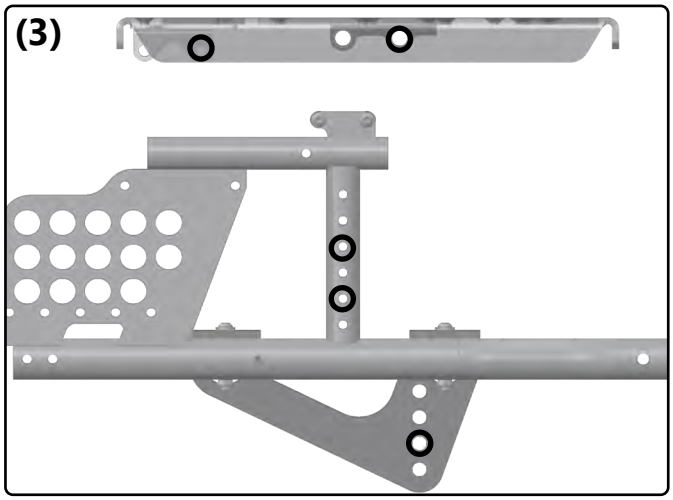
For tilting from -5° to +35°:
- **(2)** with frame size 1 and 2,
- **(3)** with frame size 3.

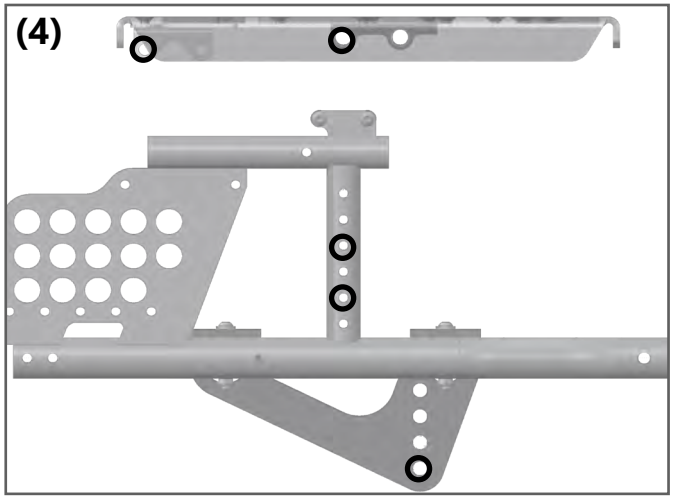
For tilting from +2,5° to +40°:
- **(4)** with frame size 1 and 2,
- **(5)** with frame size 3.

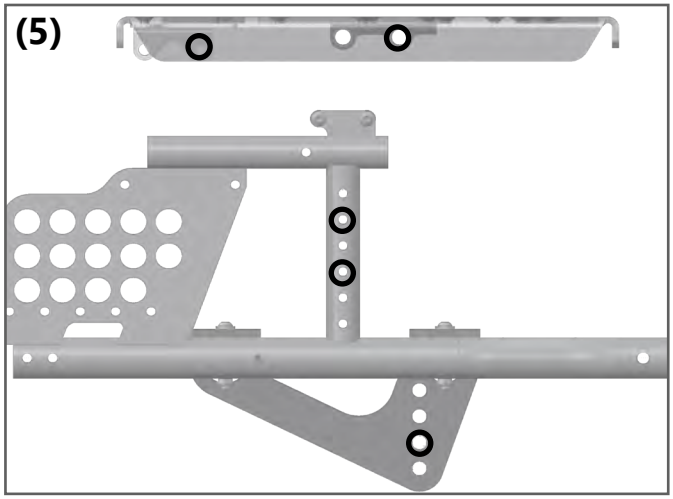
⚠ After every change made on the seat and/ or the tilting, the tilt behaviour of the Loop must be newly tested and practised with a passenger and the help of an experienced and strong person.







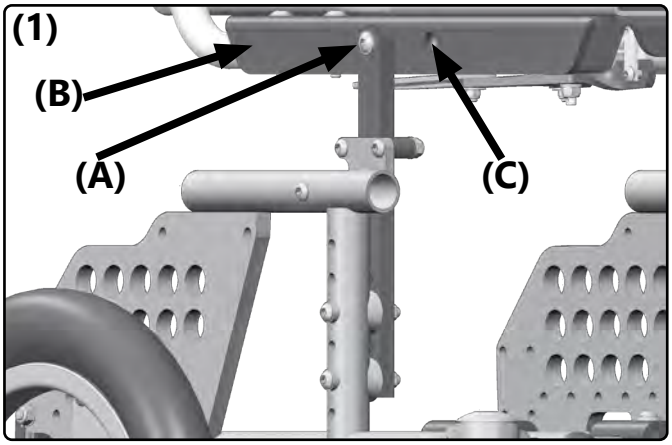


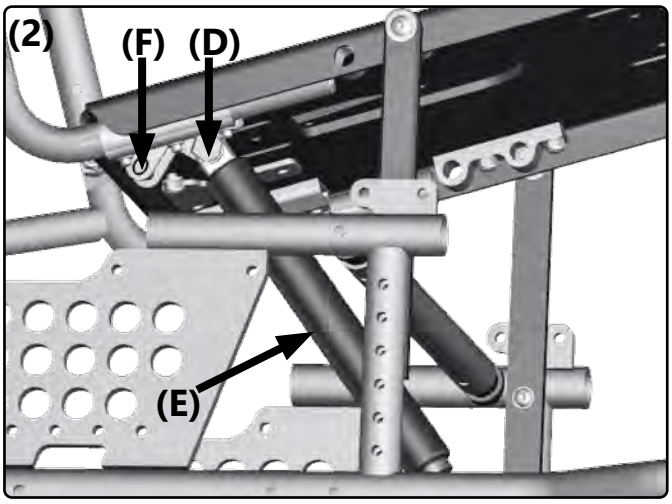


3.3.2 Displacing the seat plate horizontally

In order to displace the seat plate by 2 cm with the same tilting direction (only possible with frame sizes 2 and 3):

- **(1)** remove the screws **(A)** from the seat plate **(B)** on both sides including the inner shells completely.
- **(2)** Remove the screws **(F and D)** from the gas spring **(E)** completely,
- move the seat plate **(1B)** to the alternative position,
- replace the shells,
- replace the screws **(1A)** through the shell
- and retighten the screw connections **(1A)**.
- Place the gas spring **(2E)** in the alternative position **(2F and 2D)**,
- replace the screw
- and tighten it.





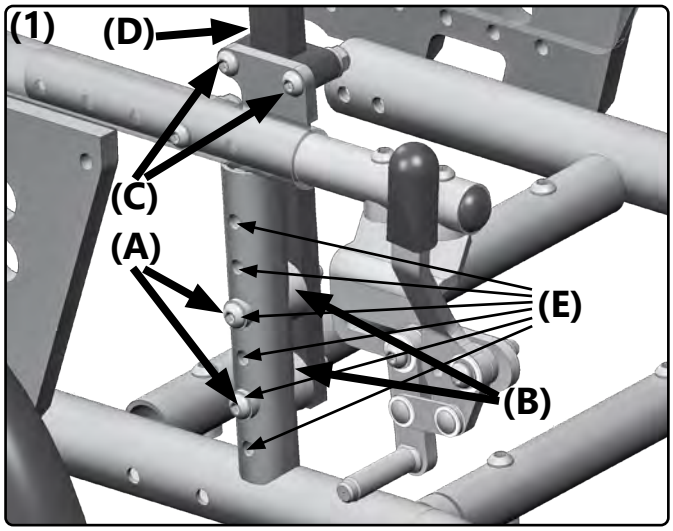
⚠ After every change made on the seat and/ or the tilting, the tilt behaviour of the loop must be newly tested and practised with a passenger and the help of an experienced and strong person.

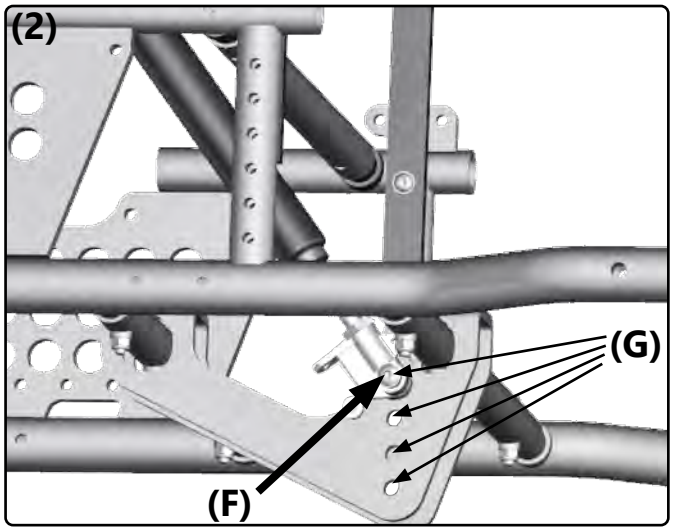
If the Loop^{SORG} equipped with two gas springs then please precede the same.

3.3.3 Displacing the seat plate vertically

In order to displace the seat plate by 2 cm with the same tilting direction:

- **(3)** loosen both screws **(C)** from the guide clip on both sides and
- remove both screws from the screw connection **(A)** of the seat unit including the half shells (B) on both sides completely.
- **(4)** Remove the screw connections of the gas spring **(F)** including the shells completely.
- **(3)** Move the seat unit with the carriers **(D)** to the desired measurements in the holes **(E)** (each hole is ± 2 cm),
- **(4)** Displace the gas spring in the holes **(G)** (each hole is ± 2 cm) in the same measurement.
- Place the screws **(3A)** with the half shells **(3B)** in the new position and tighten them firmly.
- Place the screws **(4F)** with the shells in the connection of the gas spring and tighten them firmly.





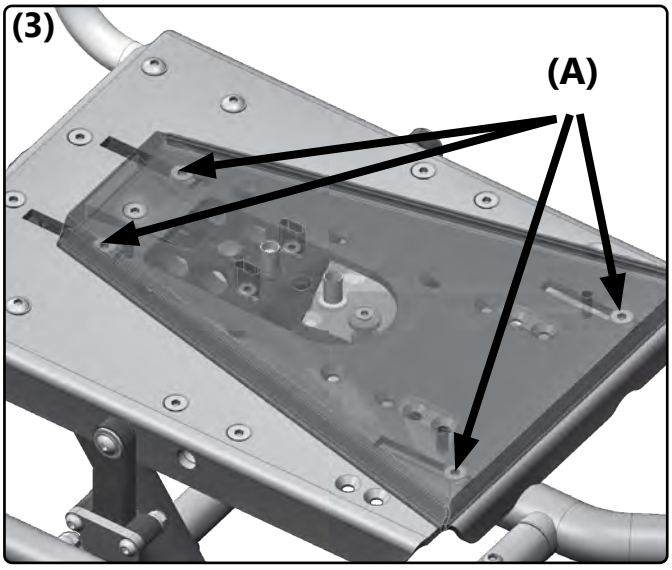
⚠ After every change made on the seat and/or the tilting, the tilt behaviour of the loop must be newly tested and practised with a passanger and the help of an experienced and strong person.

⚠ If you do not displace the seat unit and the gas spring parallel, a different tilting direction and a different seat adjustment will result.

3.3.4 Position wedge adapter

You can adjust the seat position as described in the chapter before, horizontally and vertically through the seat plate. In addition, you can change the position of the wedge adapter.
In order to change the position of the wedge adapter:

- **(3)** loosen all four screws **(A)**,
- push the wedge in the wanted position
- and retighten all four screws **(A)**.



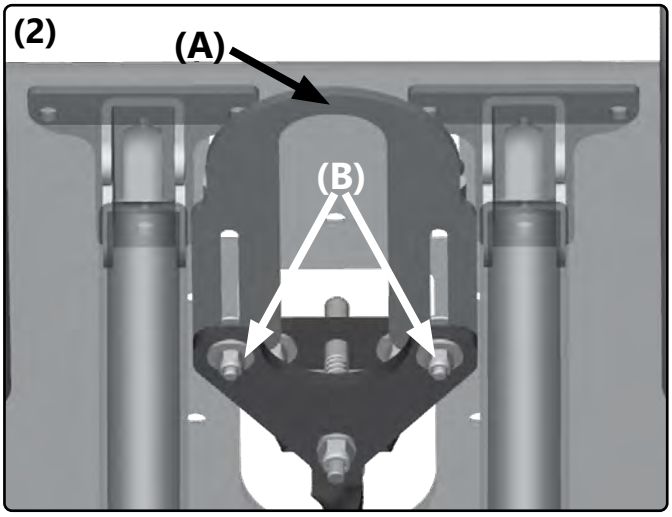
⚠ After every change made on the seat and/ or the tilting, the tilt behaviour of the loop must be newly tested and practised with a passanger and the help of an experienced and strong person.

3.3.5 Release lever-seat wedge

(1) The red release lever **(A)** of the wedge adapter should stick out of the seat plate about 1 cm.
To change the position:

- **(2)** loosen both screws **(B)**,
- guide the release lever in the wanted position and
- retighten the screws **(B)**.

With certain tilt adjustments "collisions" between gas spring and release lever can occur. In this case, be sure that the gas spring has enough room when the max. tilt angle is in use; see chapter tilting

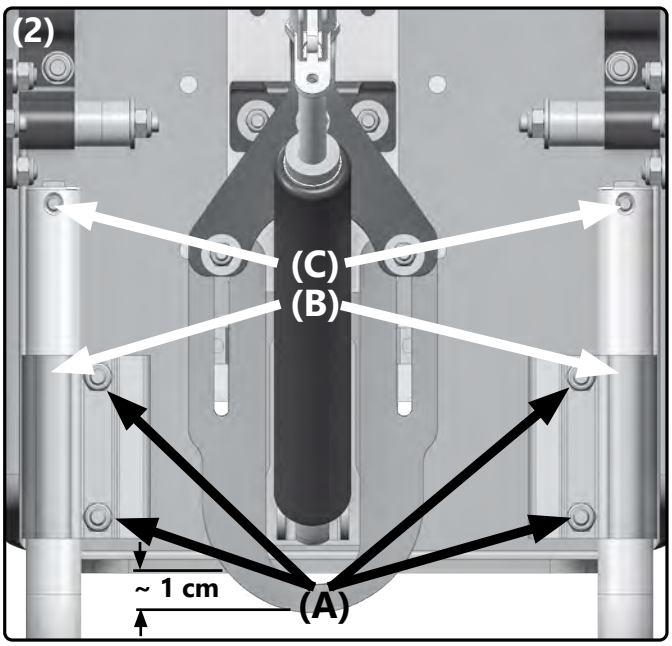


3.3.6 Position push bar

If, for example, you have a great structure depth of the seat shell on the back, the structure depth can be compensated through the position of the push handles.
For this:

- **(2)** loosen the four screws **(A)** of the push bar adapter **(B)**,
- push the ends of the pipes from the push bar in the wanted position, forward or backward
- and retighten all four screws **(A)**.

⚠ After, it is important that you check the tilt behaviour of the loop with full strain (with a passanger) and the help of an experienced and strong person.
If necessary, the centre of gravity must be changed (wheelbase extension) and the positon of the anti-tipper must be renewed.



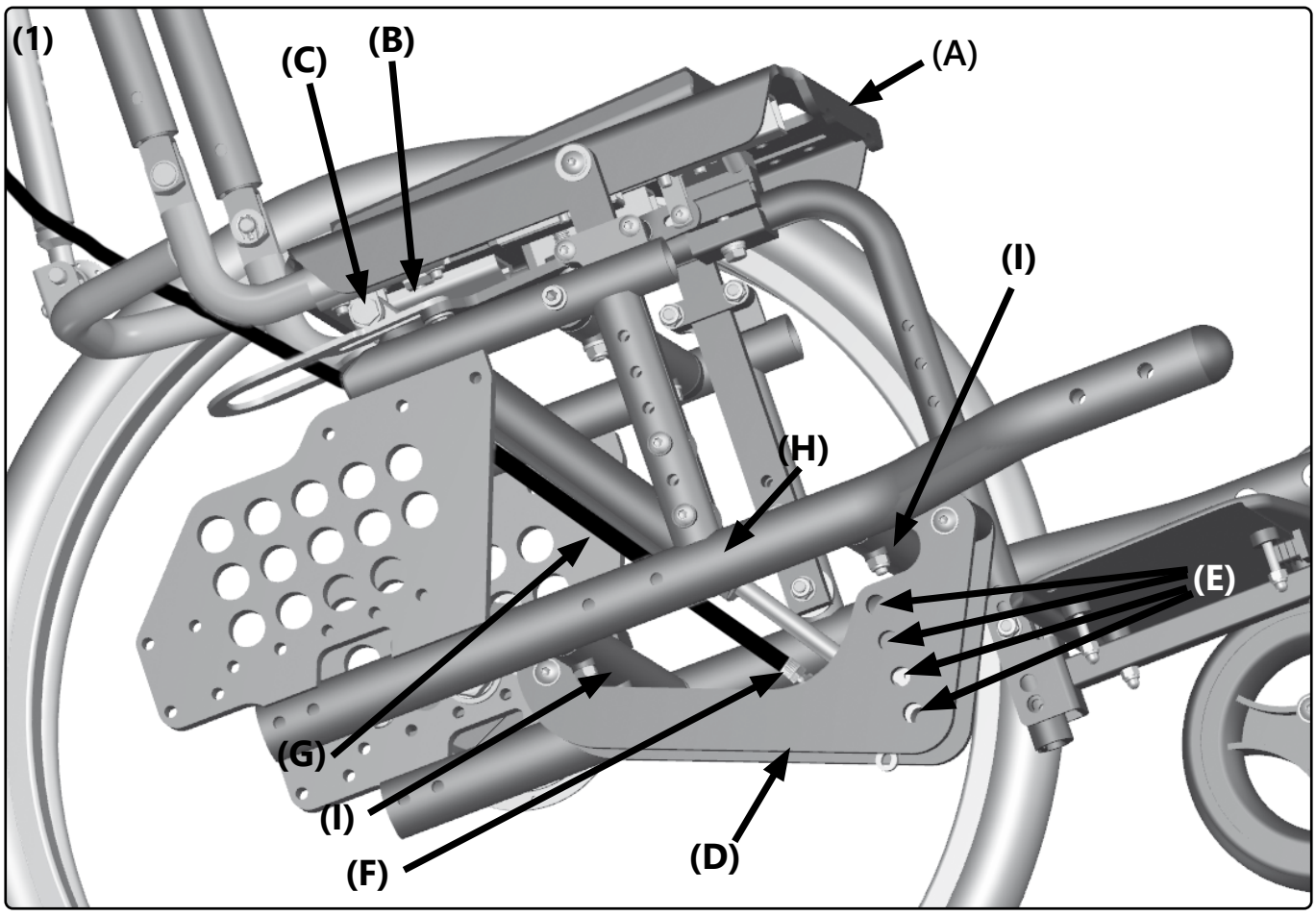
3.3.7 Double gas spring

The components involved:

(1) **(A)** seatplate
(B) upper mount of the gas pressure spring
(C) top mounting points for the gas spring
(D) Lower gas spring mount
(E) llwer mounting point for gas spring
(F) gas spring release mechanism
(G) Bowden cable (with release lever on the handlebar)
(H) gas pressure spring
(I) frame trusses

Overview of the individual steps for inserting a second gas spring in brief:

1. Remove the operating lever for the gas pressure spring and the wedge mount,
2. move existing gas pressure spring,
3. insert new mount fpr gas pressure spring,
4. mount the upper mounts for the gas pressure spring under the seatplate,
5. mount a new gas pressure spring on the upper mount,
6. mount a new gas pressure spring on the lower mount,
7. mount the release lever for the double gas spring on the handle,
8. determine and set up the maximum length of the new Bowden cable, cut the Bowden cables to size,
9. straighten the back of the LoopSORG again,
10. mount a new Bowden cable on the respective release mechanism of the two gas pressure springs,
11. Adjust the tensile force of the release mechanism,,
12. if necessary, tighten the wedge mount again,
13. test the tilt under full load and adjust if necessary.



3.3 Assembly Group Seat

Step 1: Operating lever

- **(2)** Remove the two screws **(A)** of the control lever and the spiral cable housing from the bowden cables and
- remove the release lever of the seat wedge under the seat plate.

Step 2: Move gas pressure spring

- **(3)** Loosen the four screws **(A)** and move **(B)** of the upper mount is visible through the mounting hole **(C)**.
- Use the screws **(B)** to remove the upper mount of the gas pressure spring.

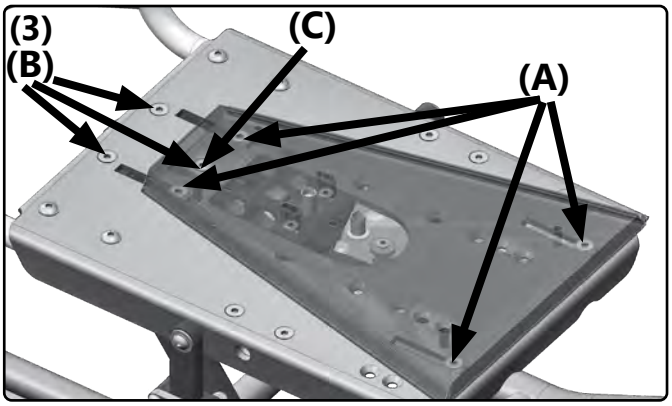
With frame size 1 there are only the two rear screws **(B)**, which is why you do not have to loosen the wedge mount in this case.

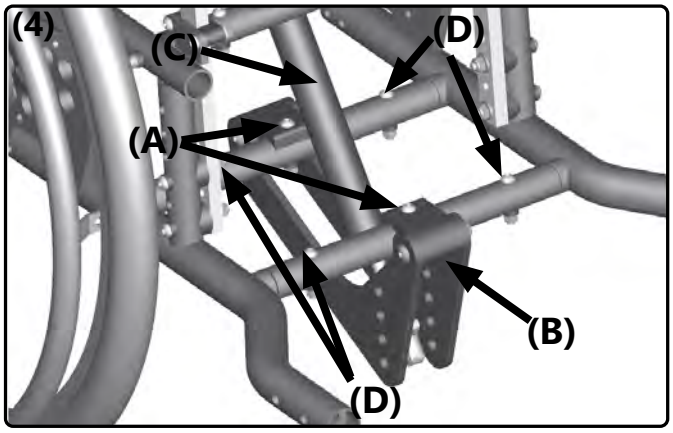
- **(4)** Remove the two screws **(A)**. Move the mount **(B)** inluding the gas pressure spring **(C)** to the alternative drillings **(D)**.
- **(5)** Relocate the top mount **(A)** to the alternative drillings **(B)** and fix the gas spring back in the upper mount with the screw **(C)** in the same mounting point as before.
- **(6)** Remove the inner cable of the bowden cable **(A)** on the release mechanism of the gas pressure spring by loosening the clamping nipple **(B)** and the adjusting screw **(C)** and/or the lock nut **(D)** and pulling out the entire bowden cable **(A)**.

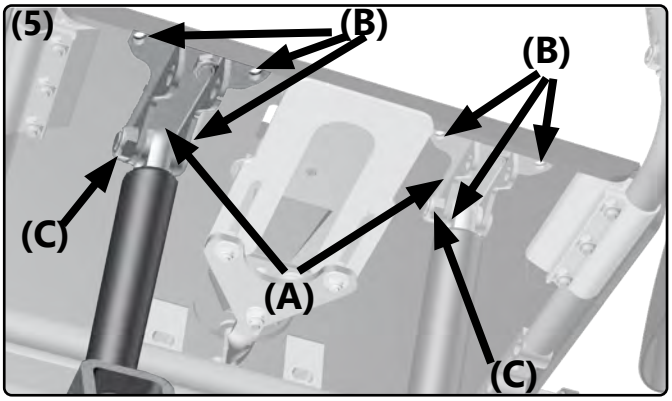
Step 4: insert new mounts

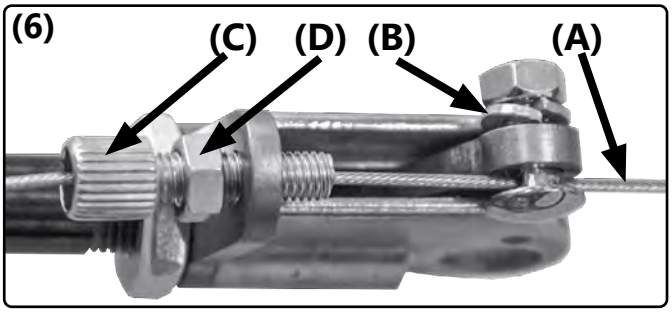
- **(7)** „Thread" the second mount **(A)** of the gas pressure spring over the two trusses **(B)** and use the screws **(C)** to screw the holder firmly into the prepared drillings in the trusses (see also figure **4 D**)

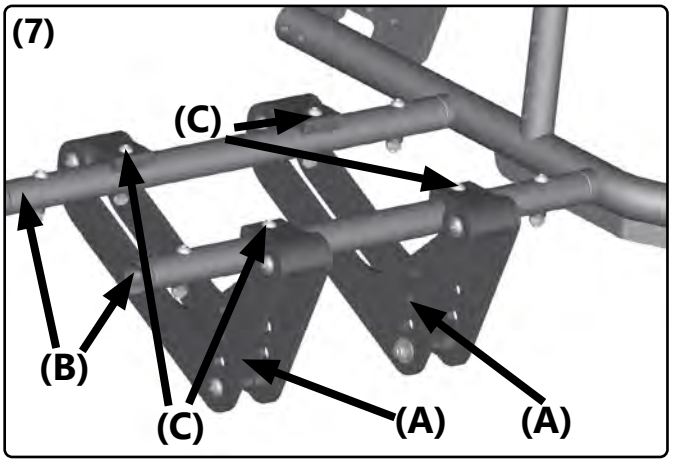
Pay attention to the symmetry of the attachment of the truss adapters (right and left side in the same drilling!)

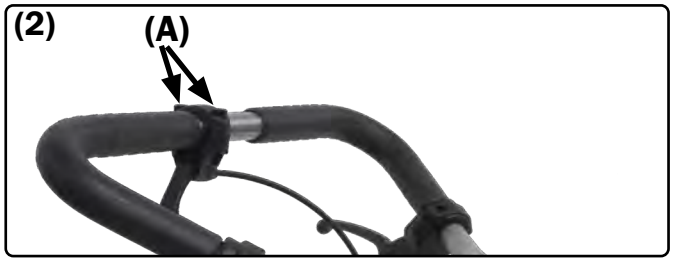












Step 6: Mount upper mounts
- **(8)** Both alternative mounting options for the gas pressure spring are shown in figure 8.
- Screw the second upper mount **(A)** of the gas spring with the three screws **(B)** under the seat plate into the prepared drillings

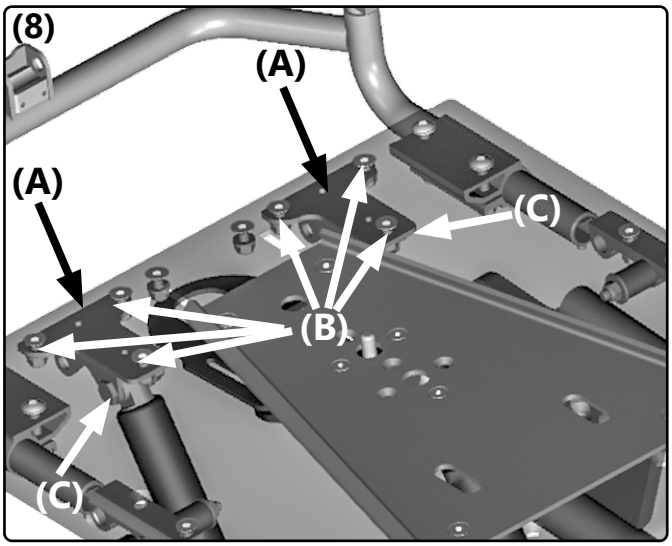
Step 7: Mount new gas pressure spring on top
- **(8)** Screw the gas pressure spring to the upper mount **(A)** with the screw **(C)**.

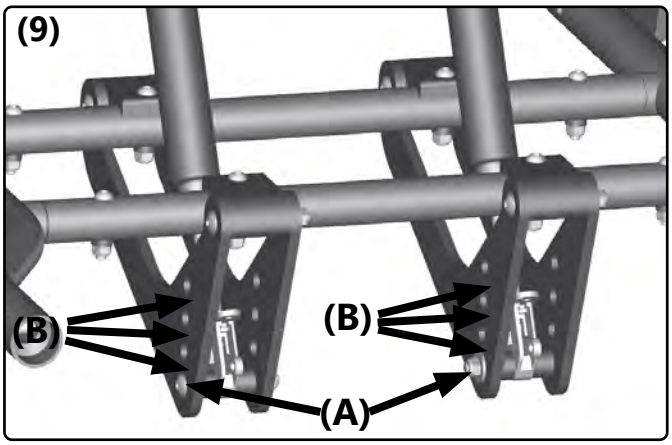
Step 8: Mount new gas pressure spring below
- **(9)** Figure 9 also shows both alternative mounting options for the gas pressure spring..
- Screw the gas pressure spring into the lower mount with the screw **(A)** into the prepared drilling **(B)**.

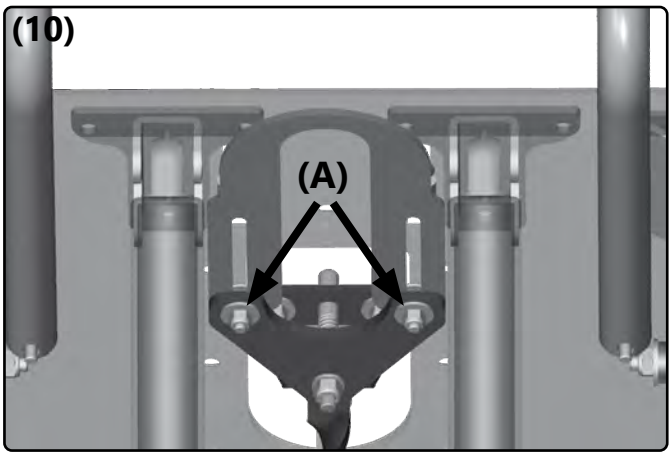
Both gas springs must be mounted in the same mounting points of the mount.
Use the same mounting points as before.
Otherwise you will reach a different tilt path.

Step 9: Screw the release lever back on
- Mount the new release lever for the gas pressure springs on the push bar as described in step 1 and
- **(10)** mount the release lever of the seat wedge with the two screws **(A)** again under the seat plate.

If the gas pressure spring is installed in the middle, please check the position of the release lever. This must not collide with the gas pressure spring at either the minimum or maximum tilt.







Step 10: set up the maximum length of the Bowden cable

- Set the push bar to its maximum pushing height,
- **(11)** fold the back of the Loop-SORG forward and
- also place the push bar forwards in the direction of the legrest (see illustration) so that you have the maximum length for the bowden cable.
- Now route the new bowden cable from the release lever over the seat back-wrds and then forwards again under the LoopSORG to the respective release device of the gas pressure spring.
- Fold the back of the LoopSORG back into a vertical position and
- cut the outer sleeves of the two bowden cables to the required size.

Step 11:

- **(12)** Fold the back of the Loop-SORG back into a vertical position

Step 12: Install bowden cables

- **(13)** Mount the ends **(A)** of the two
- inner cables to the release mechanism of the gas springs.
- First thread the inner cables **(B)** through the adjusting screw **(C)**, then through the drilling **(D)** of the clamp nipple **(E)**.
- Use your thumb to push the release lever **(A)** up a little towards the adjusting screw **(C)**.
- Tighten the clamping nipple **(D)** while simultaneously pressing the release lever upwards.
- **(13)** Shorten the protruding piece of Bowden cable **(A)** only so far that you can readjust the release torque with the clamp nipple if necessary.

Step 13:

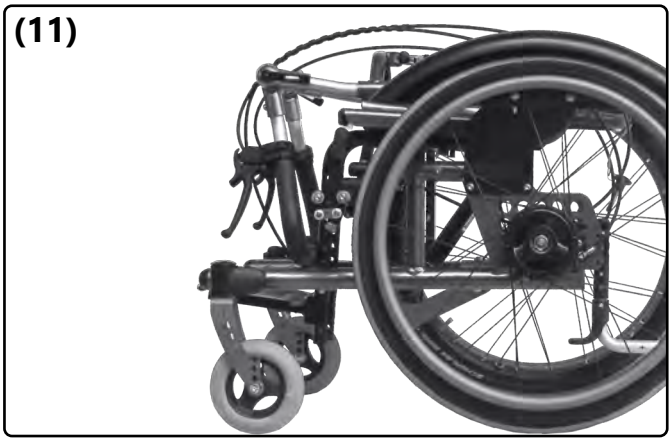
- Check the functionality of the release mechanism and adjust the release torque using the adjusting screw **(13B)** and the lock nut **(13C)**.

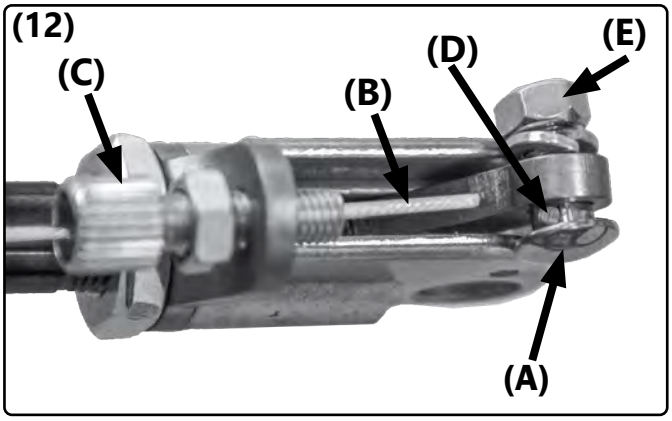
Step 14:

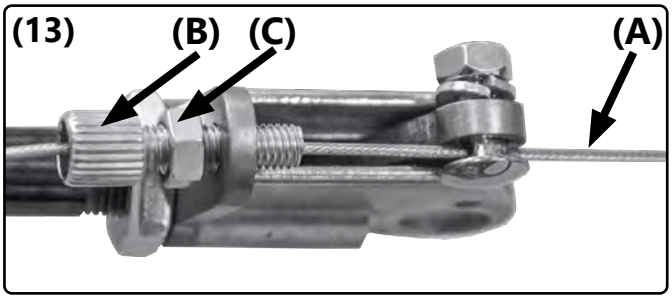
- Straighten the back again.

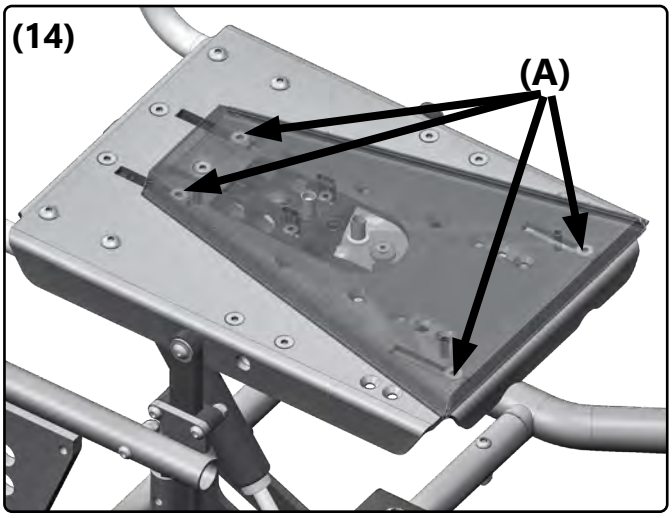
Step 15:

- **(14)** slide the wedge mount back into the desired position and
- retighten the four screws **(A)** to fix the wedge mount.









⚠ After every change to the seat unit and/of the tilt, the tipping behavior of the LoopSORG must be retested and practiced with the occupant and the support of an experienced, strong assistant.

3.4 Assembly Group Back

3.4.1 Setting back depth

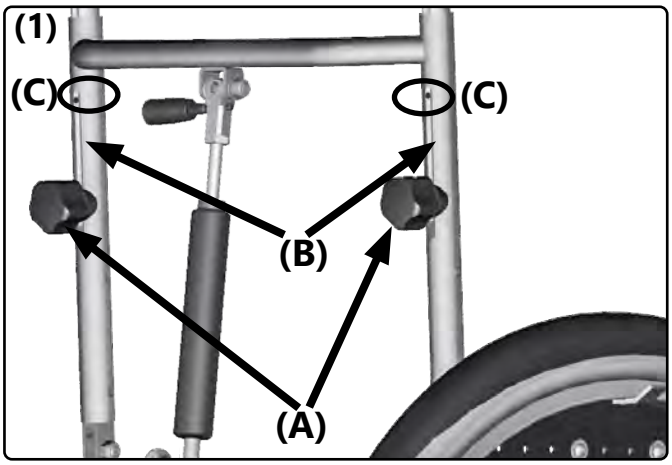
To fixate the back depth see chapter 2.3.6 Position push bar.

⚠ Tilt stability (see there)

3.4.2 Setting height of the push bar

The basic setting of the height adjustable push bar can be changed as follows:

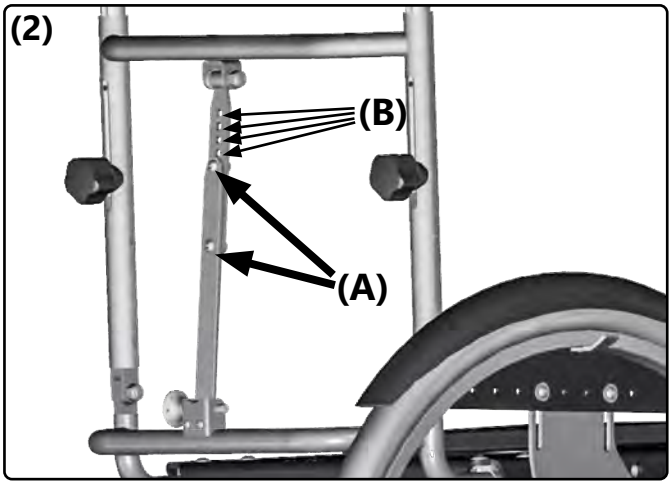
- **(1)** Remove both star knob screws **(A)** from the bush bar,
- push the push bar up or down in the guide slots **(B)** until the alternative hole **(C)** is visible.
- There, place the star knob screws **(A)** in and tighten them.



3.4.3 Setting back angle

If you have a seat shell with a fixed back angle you can adjust the back angle of the Loop to it as follows:

- **(2)** place the seat shell with the wedge on the wedge adapter and be sure that the shell snaps in tightly.
- Remove both screws **(A)**,
- bring the back of the Loop and the back of the seat shell in a parallel position,
- fixate this position by placing both screws **(A)** in the alternative holes **(B)** and
- retighten the screws **(A)**.



3.4.4 Adjustment of back guide

(1) To add the back guide:

- place the clamping part **(A)** including the connection part **(B)** on the traverse **(C)** of the back pipes,
- place the back pipes of the Loop as close as needed to the back of the seat shell.

To change the distance between shell and back you have three options:

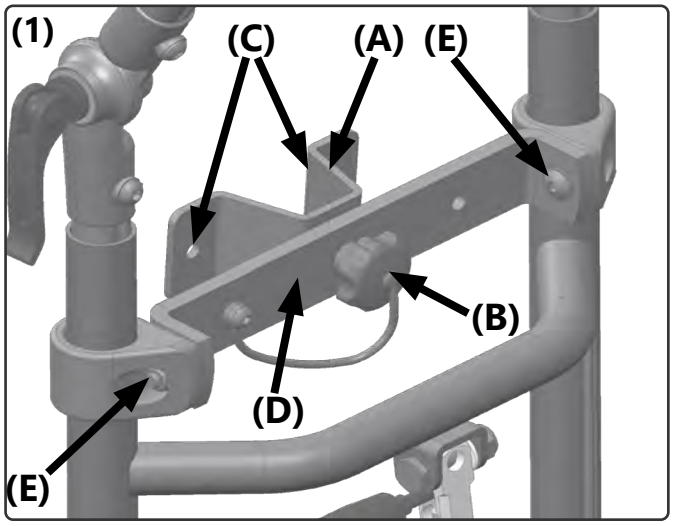
1. Displace the back of the Loop (see chapter position push bar),

⚠ 2. displace the wedge adapter (see chapter position wedge adapter),

⚠ 3. displace the wedge under your seat shell.

- After, mark the four holes **(D)** of the connection part with a marker (also on the opposite side, here not visible),
- remove the seat shell out of the wedge adapter
- place the holes on the back of the seat shell and in that, screw the connection part **(B)**.

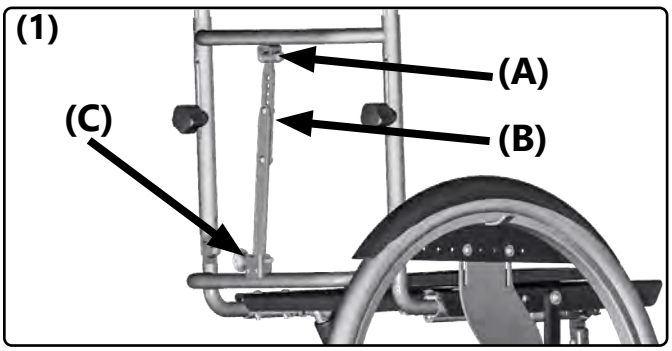
Put the seat shell in and test if the lock element is tight in the connection part and if necessary correct it with the four screws **(E)** of both runners **(F)**.

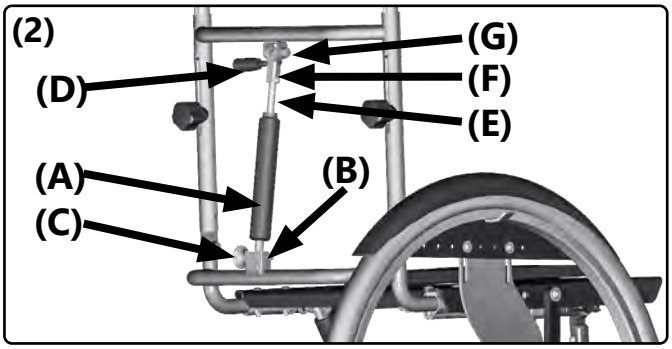


3.4.5 Conversion from back angle setting to back angle adjustment

If you want to convert the seat shell from an angle setting **(1)** to and angle adjustment **(2)**, then proceed as follows:

- **(1)** Remove the screws **(A)**,
- remove the lock element **(B)** and
- remove the old angle setting element **(C)**.
- **(2)** Place the gas spring **(A)** at the bottom in the adapter **(B)** and lock it with the lock element **(C)**,
- push the release lever **(D)** of the gas spring **(A)** and adjust the length of the piston rod **(E)** to where the connection fits in the adapter **(F)**,
- replace the screws **(G)**,
- now let go of the release lever **(D)** and tighten the screw **(G)**.





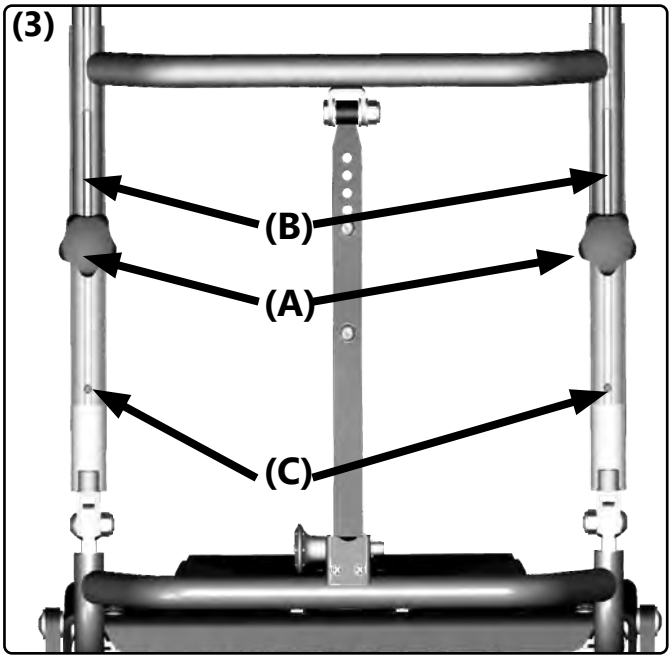
3.4.6 Changing the basic setting of the push height

Ex works, the push bar is mounted in the lowest setting.

(3) Here, the back pipes are shown transparent so that you can see the holes in the section tube.

To change the height up to 10 cm higher:

- Remove the star knob screws **(A)** on both sides completely (including half shells),
- push the push bar so far up until the two holes **(C)** are visible guide slots **(B)** at the bottom end of the section tube,
- place the star knob screws **(A)** (including half shells) in both of these holes **(B)** and retighten them.



⚠ Leg supports with a divided footres are not suitable for users with tone dysregulation.

3.5.1 Positioning the leg supports

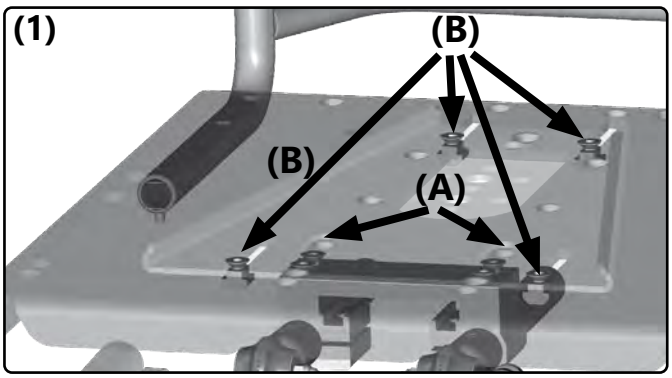
All leg supports are mounted under the seat plate, which is shown transparent here. You have two scenarios available with which you can adjust the distance of the adapter to the seat shell.

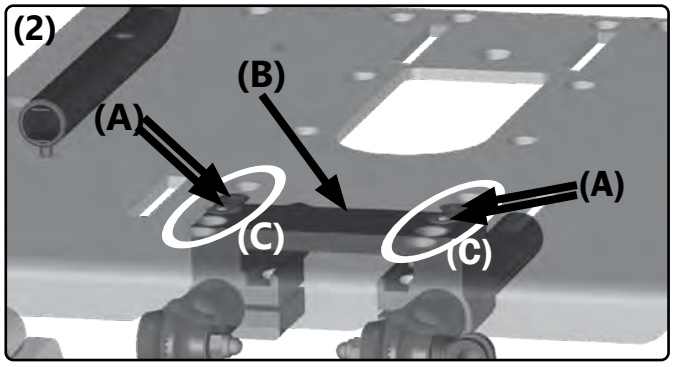
1. Displacing the leg support adapter:
   - **(1)** If necessary, you must move the wedge adapter (here displayed transparent), so that through the mounting holes **(A)** the holes underneath **(2A)** between adapter **(2B)** and seat plate are accessible.
   - Remove all four screws **(B)** and
   - move the wedge adapter as stated above.
   - **(2)** Remove the screwing **(A)** between adapter **(B)** and seat plate on both sides,
   - move the adapter **(B)** along the drilled holes **(C)** (= per hole about 2 cm),
   - replace the screwing **(A)** back through the seat plate and retighten the screws.
   - Correct the position of the wedge adapter and
   - screw it back on to the seat plate tightly.

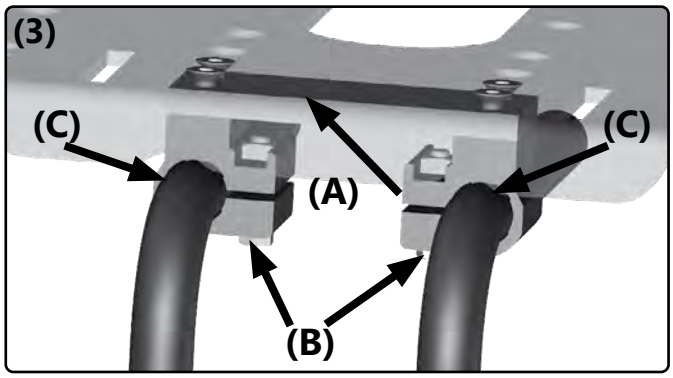
2. Displacing the leg support in the adapter:
   - **(3)** Loosen both screws **(B)** on the leg support adapter **(A)** and slide the leg support bars in the desired position.
   - Retighten both screws **(B)**.
   - **(4)** When it comes to the leg supports which swing to the side, loosen the headless screw **(A)**
   - push the leg support bars **(B)** in the desired position and
   - retighten both screws **(A)**.
   - **(5)** So that the top end of the leg support bars **(A)** is stabilized under the footrest, two square tubes **(B)** are mounted under the seat plate.

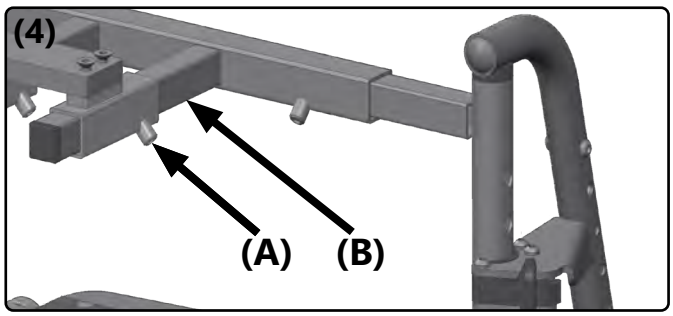
(5) The end of the leg support bar must always overlap the stabilizing tube at least 1 cm.

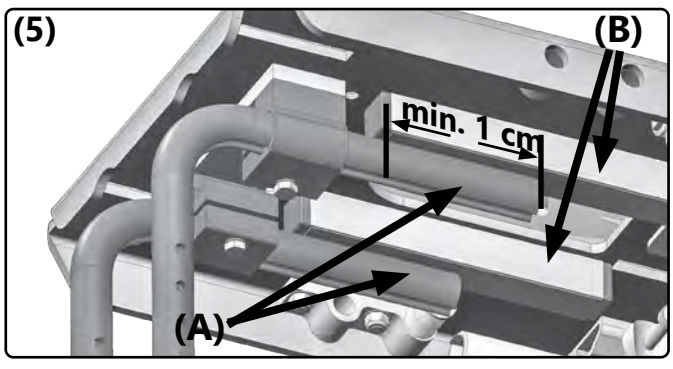
⚠ After every change on the leg support be sure to make sure that the casters can freely turn 360° by maximum tilting. If necessary, make corrections on the casters or on the leg support.











3.5.2 Leg supports: standard or angle adjustable

Setting distance between footrest and seat board

The distance between top edge of the seat board and the top edge of the footrest can be adjusted in the same way by standard leg supports **(1)** continuous or divided and angle adjustable leg supports **(2)** continuous or divided:

- **(3)** Remove both screws **(A)**,
- remove the footrest/s and
- move the footrest/s along the holes **(B)** in the new position/s.
- Replace both screws **(A)** and tighten them.

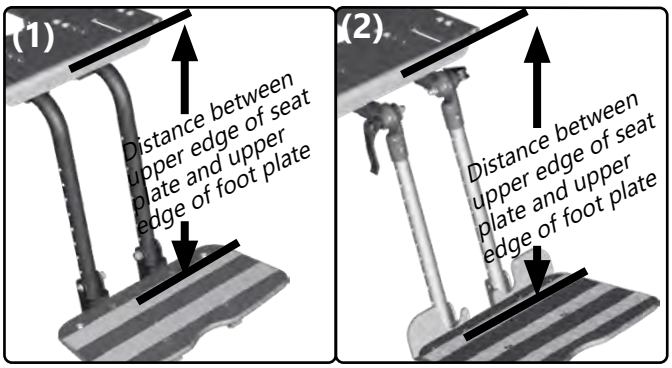
When it comes to a continuous footrest you must move both connections of the footrest parallel on the leg support.

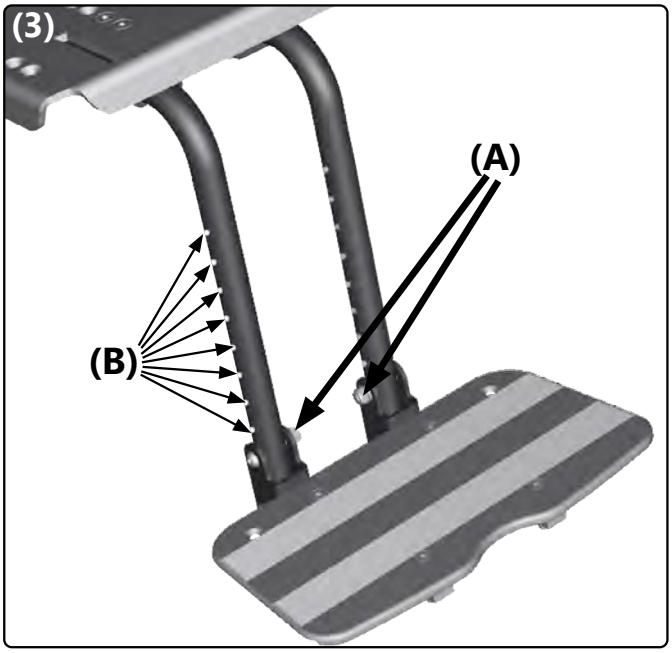
Setting the stop angle of the footrest/s

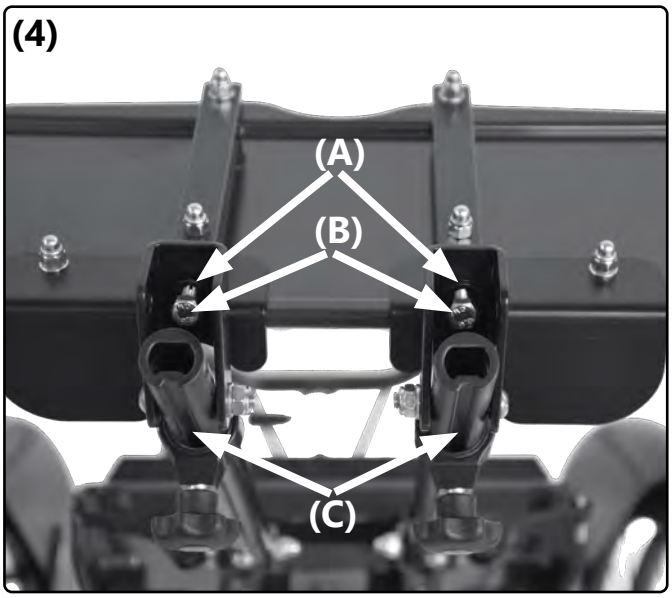
(4) With both adjusting screws you can adjust the stop angle of the footrest/s.

- Flip the footrest/s back,
- loosen the lock nut **(A)**
- turn both adjusting screws **(B)** until you have reached the wanted angle,
- retighten the lock nut **(A)**.

⚠ Both adjusting screws must fit close to the tubes **(C)** when the footrest/s is/are in use. Avoid an uneven fitting position of the adjusting screws.







3.5.3 Leg supports which swing to the side

Setting distance between footrest and seat plate

- **(1)** Remove both screws **(A)**,
- move the footrest/s and the alternative holes **(B)**,
- replace both screws **(A)** and tighten them.

When it comes to a continuous footrest you must move both connections of the footrest parallel on the leg support.

Angle setting

- **(2)** If possible, close the footrest.
- Loosen the cylinder bolt **(A)** on both sides until the clamp connection **(B)** loosens,
- set wanted angle,
- retighten cylinder bolt **(A)**.

Fine adjustment of the try square

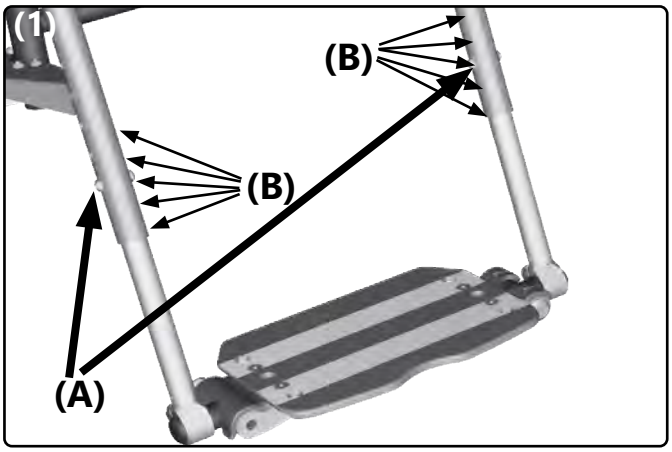
- **(3)** loosen lock nut **(A)**,
- turn the stop screw **(B)** in the wanted position,
- retighten the lock nut **(A)**.

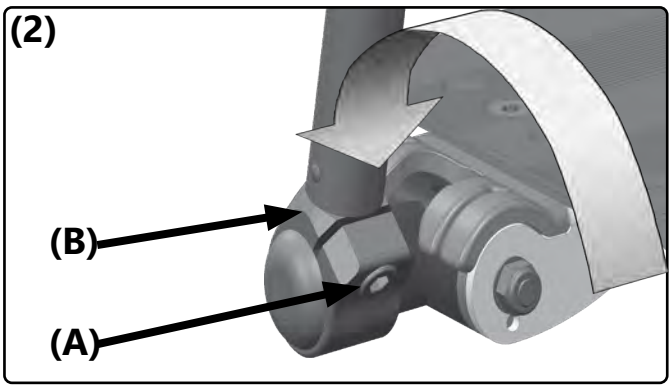
Depth adjustment of the footrest/s

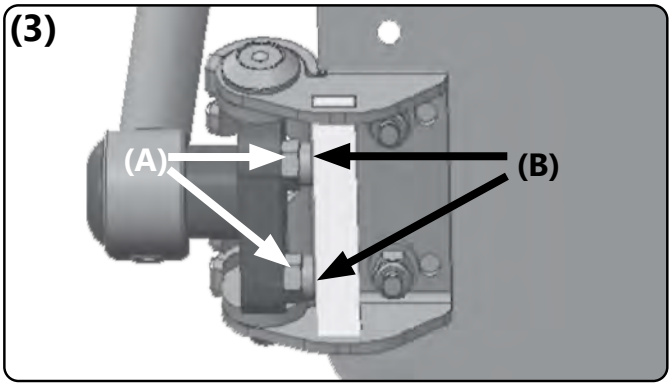
- **(4)** Remove the screws **(A)** on the footrest/s,
- move the footrest/s in the holes **(B)** and
- retighten the screws.

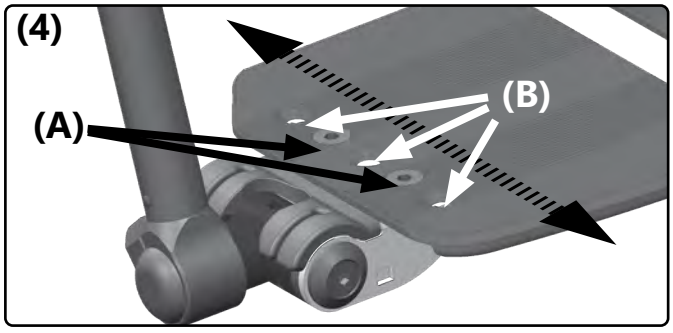
Fine adjustment of the locking claw

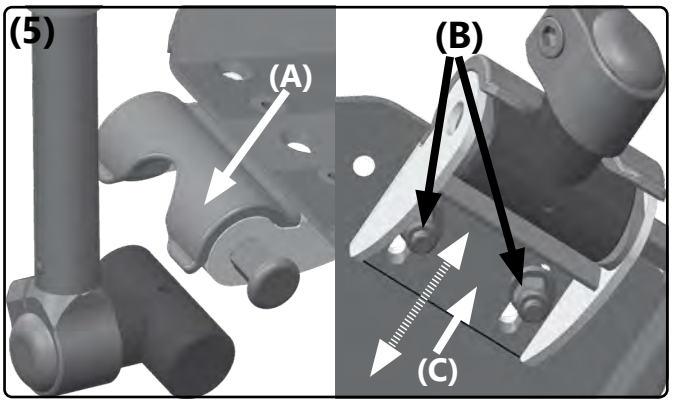
- **(5)** To do fine adjustments on the locking claw **(A)**
- loosen the nuts **(B)** on the bottom,
- move the holder **(C)** until the footrest closes.
- Retighten the nuts.











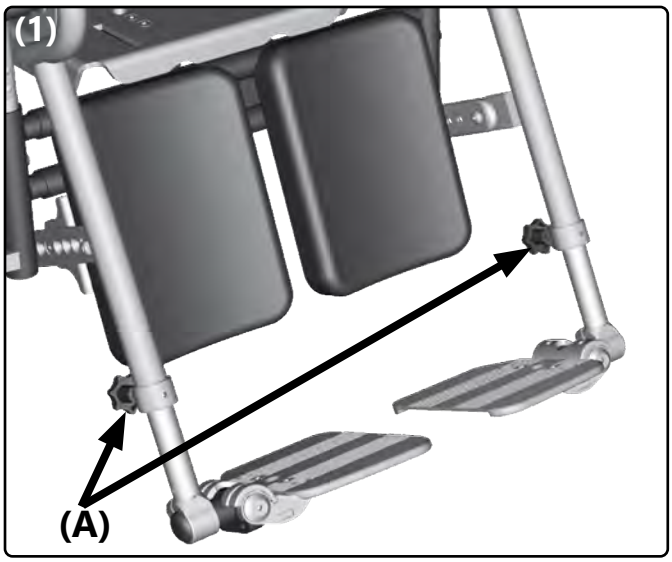
3.5.4 Leg support can be elevated with a physiological turning point

Setting distance between footrest and seat plate

- **(1)** Loosen both star knob screws **(A)**,
- move the footrest/s in the new position
- and retighten the star knob screws.

The star knob screws allow a flexible setting (length compensation) for the lower leg length also when flipping the leg supports up.

⚠ After every change/setting made on the lower leg length, the star knob screws must be screwed on tight.

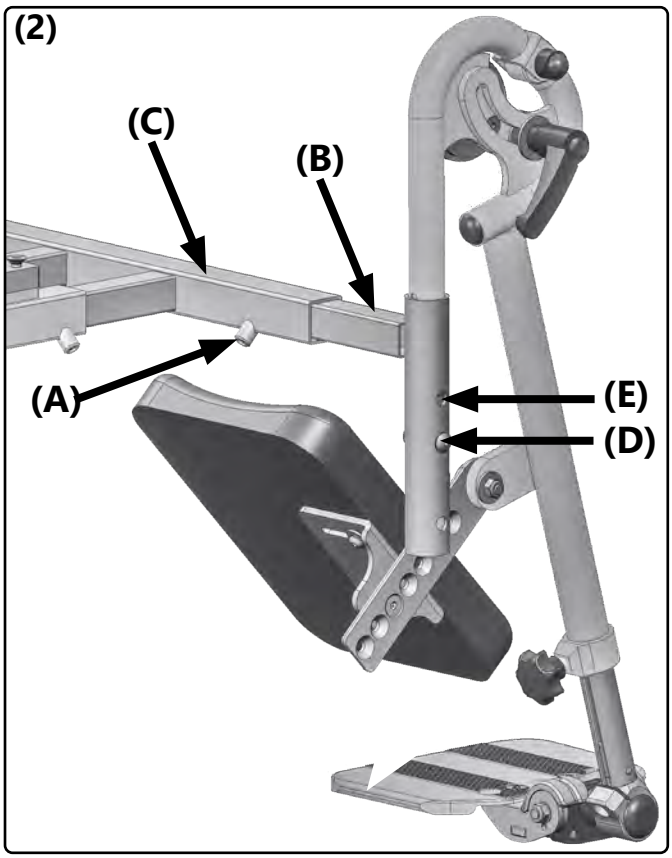


For the following work:

- angle setting,
- stop angle,
- depth setting

please proceed as already described in chapter before.

Both leg supports can be differently positioned, left or right, free from one another.



Setting the width of the leg support

- **(2)** Loosen the headless screws **(A)**,
- pull/push the leg support adapter **(B)** out of the adapter **(C)** in the desired position
- and retighten the headless screws.

- To change the height, remove the leg support,
- move the screw **(D)** in the hole **(E)**
- and retighten the screw **(D)**.

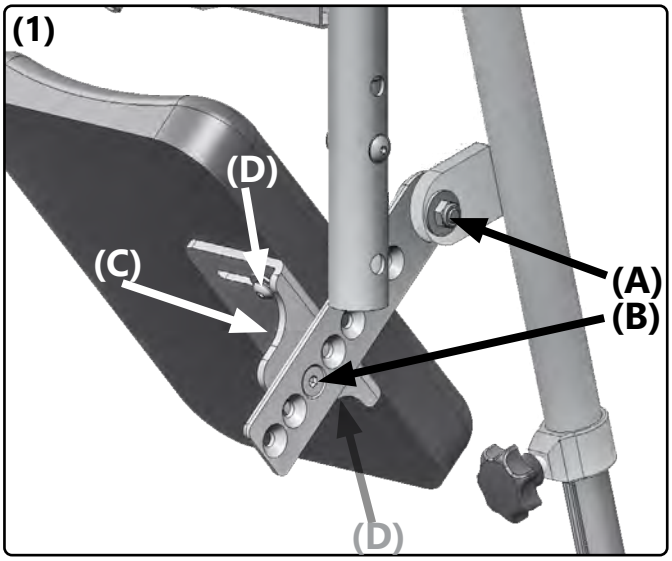
Put the leg support back in the holder.

Setting thigh cushion

- **(3)** To adjust the angle setting of the thigh cushion loosen the screw **(A)** and/or this screw **(B)**,
- place the thigh cushion in the desired position
- and retighten the screw **(A)** and/or **(B)**.

- To adjust the holder **(C)** of the thigh cushion, remove the screw **(B)**,
- place the holder **(C)** in the wanted hole,
- set the screw **(B)** back in
- and tighten it.

- To adjust the thigh cushion in the holder **(C)** loosen both screws **(D)** (the second is not visible here),
- move the thigh cushion in the desired position
- and retighten the screw **(D)**.



3.5.5 Multidirectional leg support

The multidirectional leg support has eight different setting possibilities which are stated by roman numerals (I-VIII). Each side, right and left, can be individually set.

Setting I (abduction width)
- **(2)** Loosen both nuts **(A)** on both sides under the seat plate,
- turn the leg support/s inward/outward in the position wanted and
- retighten the screws **(A)**.

Setting II (distance to seat plate)
- Proceed as described in chapter before.

Setting III (leg support angle)
- **(3)** By loosening the eccentric clamp/s on the raster element **(A)** the angle can be set.

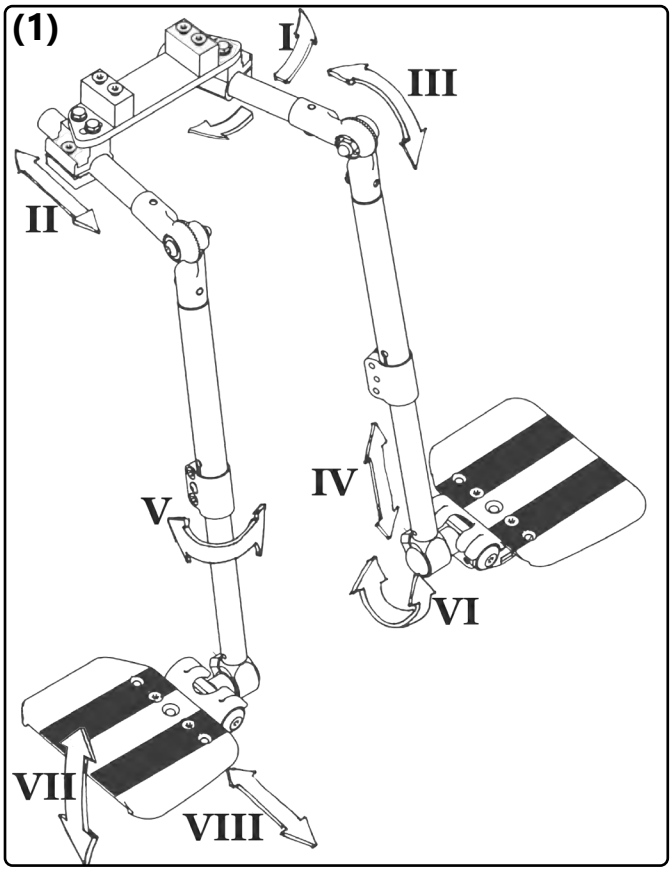
Setting IV (distance seat and foot plate)
- **(4)** At the end of the top leg support pipe is a milled slot **(A)**. Here, the bottom leg support pipe is fixated or loosened by the clamp **(B)**.
- Loosen both screws **(C)** on each clamp **(B)**,
- put the foot board in the needed distance to the seat plate and
- retighten the screws **(C)**.

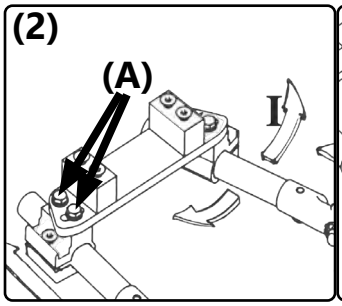
Setting V (turning the foot plate)
- **(4)** Loosen both screws **(C)** on each clamp **(B)**,
- turn the foot plate in the needed position and
- retighten the screws **(C)**.

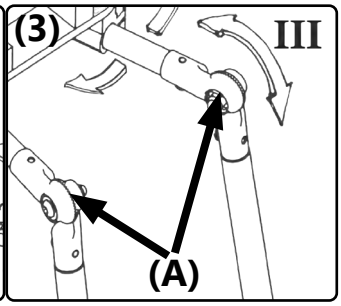
Setting VI-VIII (turning the foot board)
- **(5)** Proceed as described in chapter before

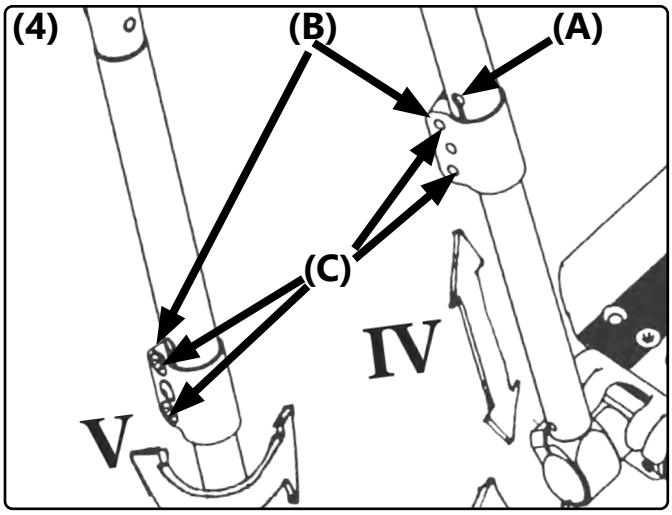
Setting thigh cushion
- Please proceed as described in chapter before

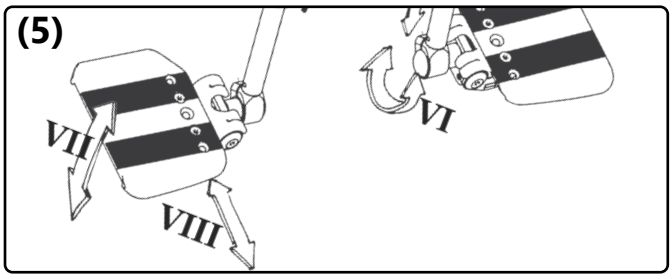
⚠ After every adjustment/setting on the lower leg length, the clamp **(4B)** must be tightened firmly.





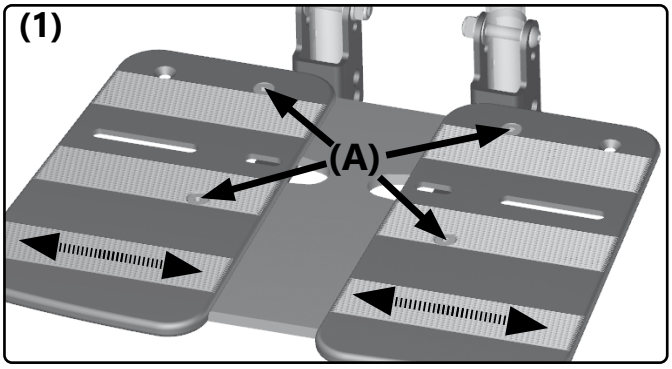


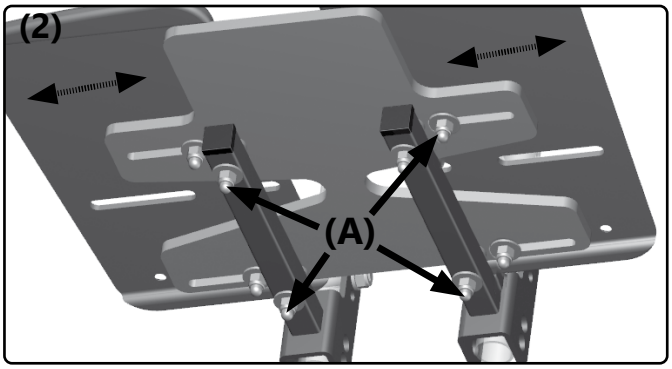




3.5.6 Width-adjustable footplate

To adjustjustable footplate, loosen the countersunk screws **(1A)** and the lock nuts **(2A)**. Now bring the footplate into the desired position by pulling or pushing it and tighten the countersunk screws and lock the nuts again.





3.6.1 Trum brake

The brake force of the drum brakes is set ideally by our technicians.

⚠ For safety reasons it is recommended to check the functionality regularly since a readjustment of the brake force or even a replacement of the Bowden cables becomes necessary from permanent use.

(1+2) The following parts of the drum brake are of importance in order to adjust the brake force.

- setscrew **(A)**
- lock nut **(B)**
- push-on nipple **(C)**
- holder **(D)**
- inner cable **(E)**
- locking lever **(F)**
- clamp **(G)**
- brake shoe **(H)**

To install the Bowden cable:

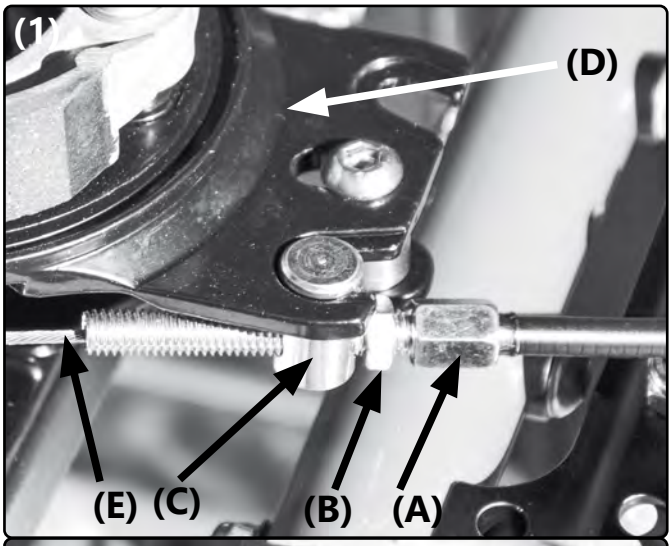
- **(3)** place the push-on nipple **(C)** with the setscrew **(A)** and the lock nut **(B)** at the bottom end in the holder **(D)**,
- guide the inner cable **(E)** through the clamp **(G)**,
- place the clamp **(G)** in the locking lever **(F)** and
- push the locking lever **(F)** slightly forward toward push-on nipple **(C)**, so that a slight pull between clamp and push-on nipple occurs.
- Tighten the clamp **(G)**.
- Put the wheel back on and check if the brake shoes **(H)** already grind against the brake pad.
- For this, jack up the wheelchair or tilt it to the side. The wheel must be able to turn unhindered.
- Should the brake shoes grind (without using the control lever), loosen the clamp **(G)** and
- give the locking lever **(F)** more room.
- After, retighten the clamp **(G)**.

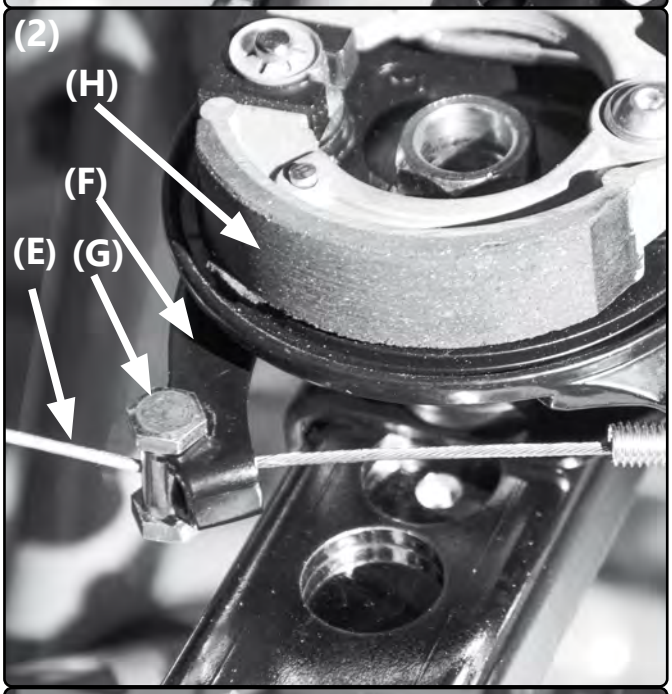
(1) To set the brake force:

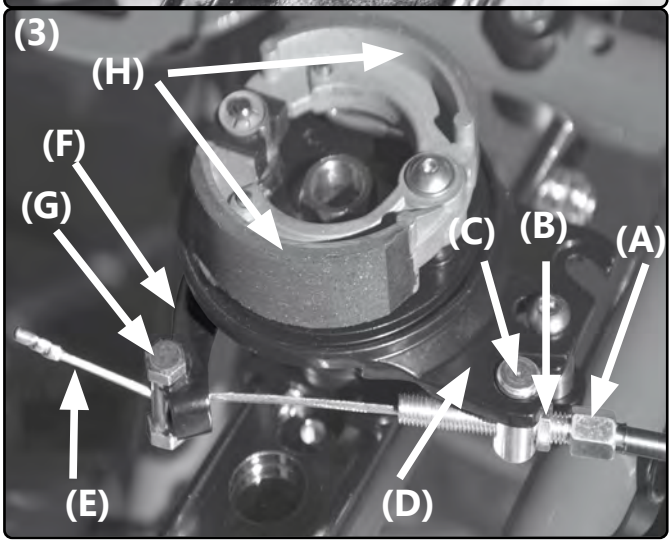
- loosen the lock nut **(B)** on the drum brake pad,
- tighten or loosen the inner cable **(E)** of the Bowden cable and turn the setscrew **(A)**,
- test the traction on the control lever and
- retighten the lock nut **(B)**.

Possible impairments of the brake force can occur from:

- wrongfully adjusted traction of the Bowden cables,
- defected Bowden cable,
- dirty brake pads/brake shoes

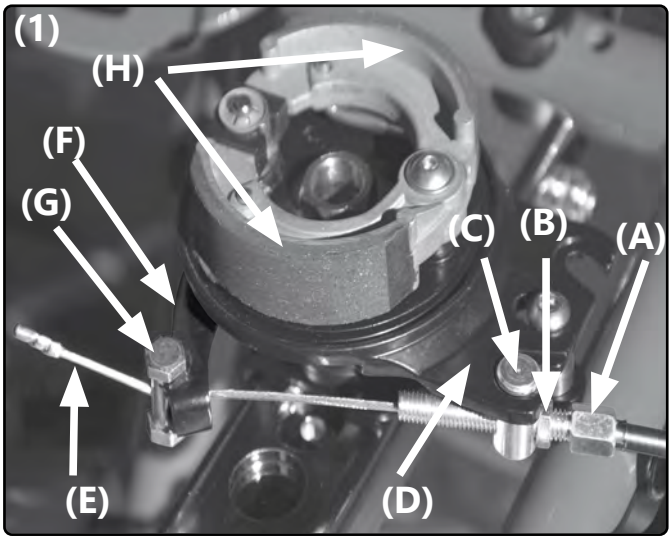






(1) To set the brake force:

- loosen the lock nut **(B)** on the drum brake pad,
- tighten or loosen the inner cable **(E)** of the Bowden cable and turn the setscrew **(A)**,
- test the traction on the control lever and
- retighten the lock nut **(B)**.



Possible impairments of the brake force can occur from:

- wrongfully adjusted traction of the Bowden cables,
- defected Bowden cable,
- dirty brake pads/brake shoes.

3.6.2 Knee lever brake

With a closed knee lever brake, the wheelchair with passenger should not be able to move on a slope of 7% (=6°). All variations of the knee lever brake are set in the same way.

⚠ The correct manner of functioning of the knee lever brakes can be impaired from:
- too low air pressure in the tires,
- wetness, dirt, snow, ice, etc.
- worn tires or
- too great of a distance between brake pressing bolt and tire.

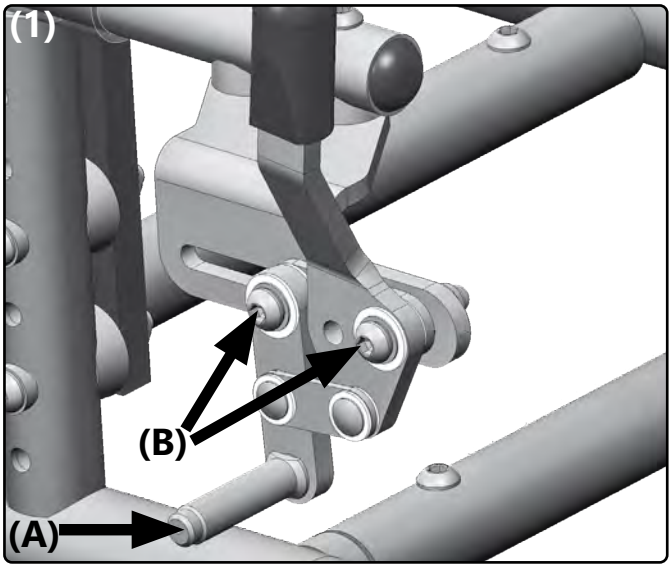
When the brake is open, the maximum distance between brake pressing bolt (A) and tire is:
- standard knee lever brake max. 21 mm,
- pull-to-lock brake max. 11 mm,
- knee lever brake with rollback blocking max. 11 mm,
- (technical changes reserved).

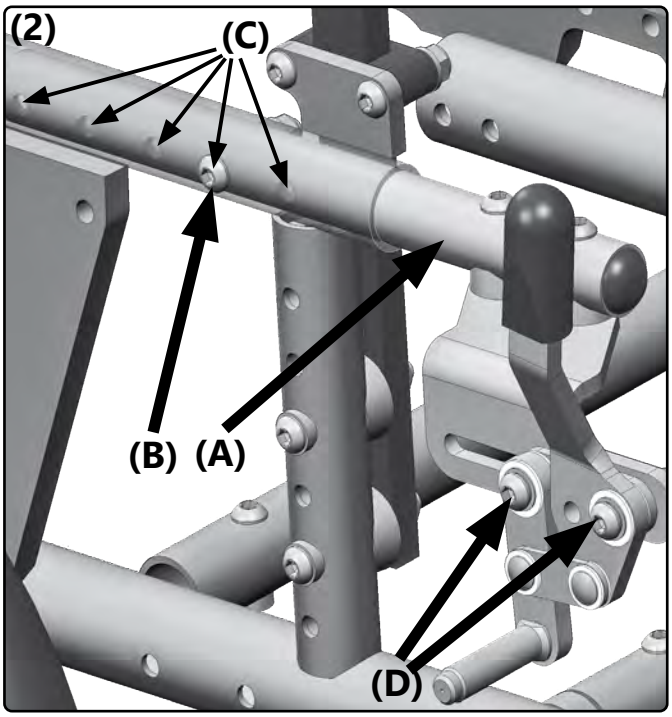
(1) In order to change the distance between brake pressing bolt **(A)** and tire:
- first check the tire pressure in the rear wheels (necessary information is found on the tire cover),
- place the brakes in an opened position,
- loosen both screws **(B)** on both sides,
- then move the brakes in the necessary position
- retighten both screws and
- check the brake force.

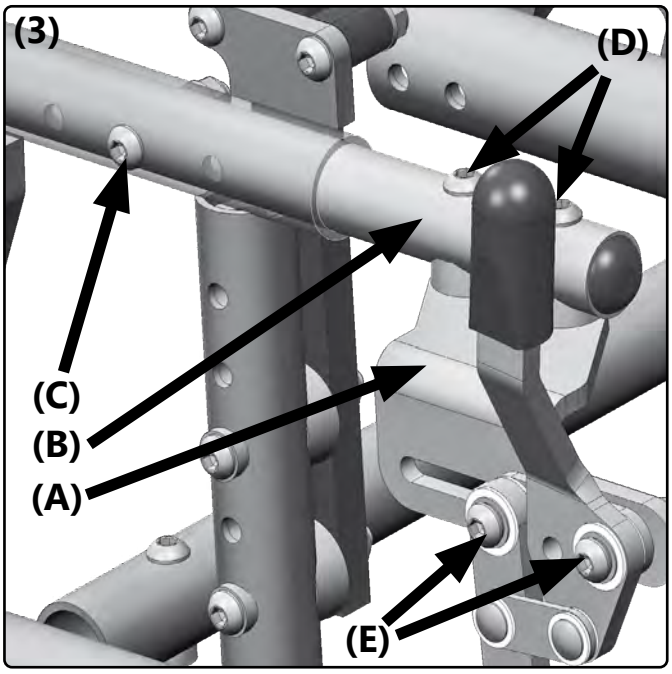
⚠ After every change made on the rear wheels, reset the brakes.

(2) In order to attaching a knee lever brake later:
- place the holding pipe **(A)**, of the knee lever brake, forward in the upper frame pipe (here shown transparent) and
- glide the holding pipe so far in the frame pipe that the distance is small enough.
- Put the screw **(B)** in one of the holes **(C)**,
- tighten the screw **(B)** and
- adjust the brake force with the screw **(D)** on the brake pad as described above.

(3) When modifying to 12”/16” wheels:
- remove the screws **(D)** on the holder **(A),**
- remove the screws **(E)**,
- switch the holders **(A)** left and right,
- mount the holders **(A)** back on the holding pipes **(B)**,
- mount the brakes back on to the holders **(A)**,
- remove the screws **(C)** and
- place the holding pipes **(B)** as far back as possible.
- Readjust the brakes as described above.



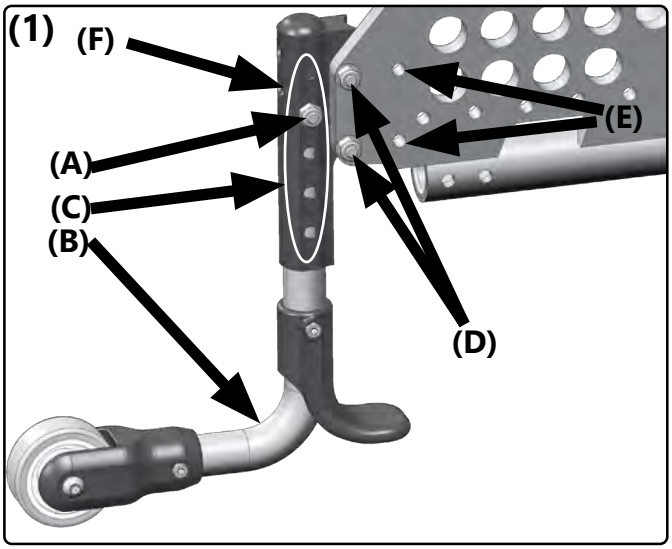




3.7.1 Anti-tipper

Height of anti-tipper:

- **(1)** Remove the screws **(A)**.
- Pull the anti-tipper bar **(B)** down
- and displace the screw **(A)** in the alternative holes **(C)**,
- retighten the screws **(A)**
- and release the anti-tipper bar **(B)**.
- Displacing the anti-tipper in the holes **(E)**:
- **(1)** Remove the screws **(D)**,
- place the distance pieces in between the hole board and the holder **(F)**,
- replace the screws **(D)**
- and tighten them.



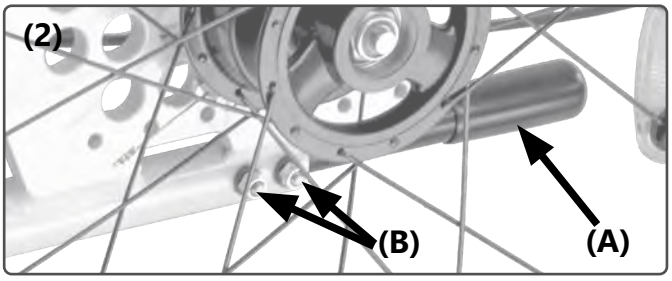
Mounting the anti-tipper afterwards/additionally:

- **(1)** Place the holder **(F)** on the holes **(D)**,
- put in the screws **(D)**
- and tighten them.

3.7.2 Tipping lever

(2) Assembling the tipping lever:

- Guide the tipping lever **(A)** in the right or left frame pipe,
- place the self-locking nuts **(B)** as well as the saddle washer and locking washer in the holes
- and tighten the nuts **(B)**.

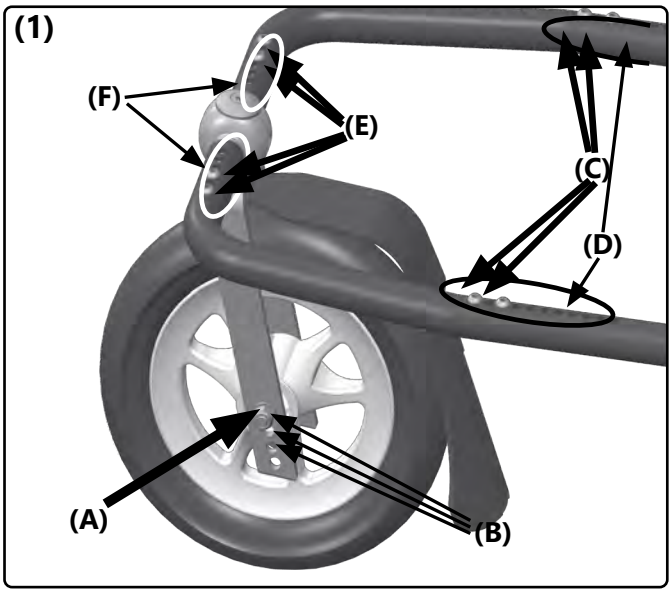


3.7.3 Outdoor Front End

The greater the seat tilt angle, the higher the tractability but also the more wobbly the wheelchair!

(1) Setting the height of the casters:
- Remove the axle with the screw **(A)**,
- place the axle in the alternative holes **(B)** of the caster fork and
- retighten the screw **(A)**.

(1) Setting the length and/or width:
- In order to change the length between the wheelchair and caster remove the screws **(C)** on both sides,
- telescope the outdoor front end along the alternative holes **(D)** to the length wanted,
- replace the screws **(C)** and retighten them.
- In order to change width of the outdoor front end, proceed the same way with the screws **(E)** along the alternative holes **(F)**.



⚠ The screw pairs **(A)** and **(B)** must be moved parallel and symmetrical. There must be at least one hole free between the screws of each screw pair

⚠ The tilting behavior changes crucially when using the outdoor front end and must be practiced!

4.1 Repairs

⚠ Repairs are to be done by your specialized retailer.

4.2 Spare parts

Only original spare parts can be used! They are available at your medical supply store.

The spare parts list can be downloaded at www.sorgrollstuhltechnik.de or can be requested directly from us.

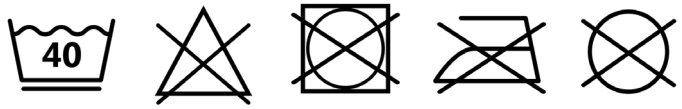
For a correct delivery of spare parts the appropriate serial number of the wheelchair is to be stated. You will find the number on the type label on the wheelchair's frame.

4.3 Maintenance

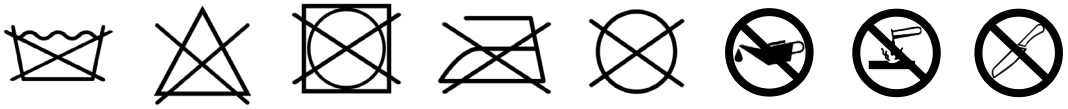
Clean the wheelchair and all components regularly with a mild household water-based cleaner and then dry it thoroughly.

In addition, clean the rear wheels and the casters and free the axles of dirt and impurities e.g. hair etc.).

Wash textile parts:
care directions:



Wipe off pleather, straps and other upholstery:
Care directions:



4.4 Disinfection

Before each disinfection the parts should be cleaned off first. For disinfection use a household water-based agent. Observe the instructions of the respective manufacturer.

4.5 Storage

- Carry out cleaning
- Fold foldable wheelchair (if available)
- Adjust seat tilt to 90° (if available)
- If necessary, pack removable textile parts in foil or similar
- Secure the wheelchair from rolling away and getting dirty
- Store in a dry environment without aggressive environmental influences.

4.6 Lifespan

The expected lifespan, depending on the intensity of use and the number of re-uses, is 5 years. For this purpose, the product must be used within the intended purpose and intended use, the instructions in the instructions for use must be followed and all maintenance and service intervals must be observed.
The product can be used beyond this period if it is in a safe condition. This theoretical lifespan is not a guaranteed lifespan and is subject to a case-by-case check by specialist retailers, as is reusability.
Use beyond the specified lifespan leads to an increase in residual risks and should only be carried out after careful and qualified consideration by the operator.
The lifespan can also be shortened depending on the frequency of use, the environment and care. The usual service life does not refer to wear parts such as textile parts, wheels and plastic parts that are subject to material-specific aging and / or wear. This specified service life does not constitute an additional guarantee or guarantee.

4.7 Reinstatement

Before reuse, a full inspection according the the checklist must be carried out by a specialized retailer. All disinfection measures for reuse must be carried out according to a validated hygiene plan.

4.8 Disposal

The wheelchair my only be disposed of with the approval of the benefactor. Disposal of the wheelchair mus be in accordance with the applicable national regulations

4.9 Maintenance/Inspection

For safety reason and to maintain product liability, an inspection by your retailer is required at least once a year. This must be carried out and documented according to the following checklist.

Checklist maintenance and care (user)

⚠ A poor or neglected maintenance of the wheelchair represents a significant safety risk.

Before each use:
Please check:

- frame, back tubes, mounting parts and accessories for visible damages, deflections, cracks or missing/loose screws,
- wheels/quick release axles for firm fit,
- the airpressure of the tires, tire tread,
- the function of the brakes,
- firm fit of the angle adjustements/eccentric clamps,
- firm fit of seat plate/back/foot plate,
- the function of the anti-tipper/seat and back straps,
- if all previously dismantled parts are put on again or firmly locked.

Every 3 months:
(depending on use, earlier)
Please check:

- screws for firm fitting
- welds, attachments and accessories for hidden damages, deflections or cracks
- tire tread
- the firm fit of third-party systems (if available)

Clean the wheelchair and oil all moving parts.

⚠ If you notice any defects during maintenance, please contact your specialist retailer immediately and do not use the wheelchair anymore.

Checklist yearly inspection (specialized retailer)

Template (available for download at www.sorgrollstuhltechnik.de/downloadportal)

Preparatory Work
☐ cleaning done

Check:
☐ Frame, back, mounted parts and accessories checked for damage, bends, cracks and corrosion,
☐ all fixing screws checked for firm fit and completeness,
☐ casters and rear wheels as well as the associated attachments checked for good condition, functionality and proper running qualities,
☐ spokes checked for firm fit and completeness,
☐ brakes cleaned and maintained,
☐ Locking mechanisms (tripod springs of push handles, quick-release axles, eccentric clamps, etc.) checked for functionality,
☐ anti-tipper checked for firm fit and fuctionality.

Oiling:
☐ moving parts and bearings oiled

Final check:
☐ functional check of all mechanical adjusting devices carried out.

5 Technical specifications

5.1 Data and measurements

Model: Loop[SORG]
Type: 802
German Aid Index Nr.: 26.99.01.1078/ German Aid Index Nr.: 26.99.01.1045 with 12"/16"-wheels

All measurements ± 5%

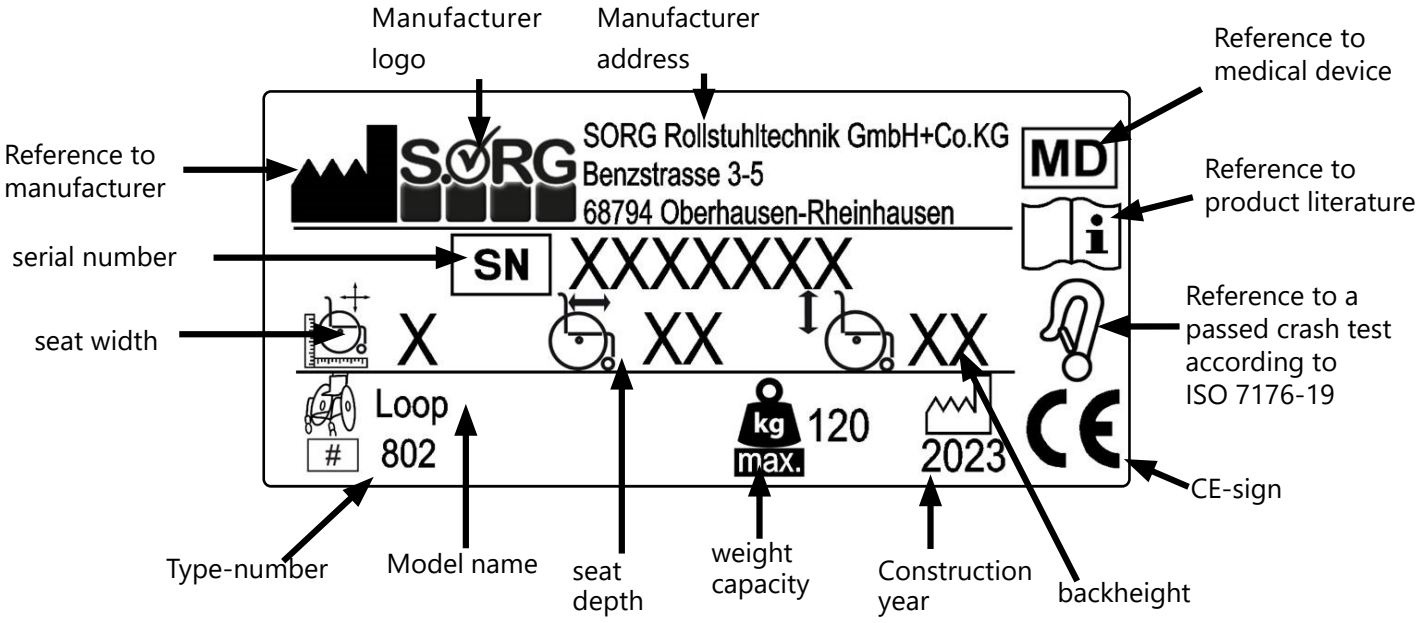
Indication		Measurements	Comment
size 1	usable width = frame width + 40 mm	BH 300-420 mm in 40 mm steps	suitable from SD 320 mm, each BH + 40 mm growable
size 2	usable width = frame width + 40 mm	BH 340-460 mm in 40 mm steps	suitable from SD 380 mm, each BH + 40 mm growable
size 3	usable width = frame width + 40 mm	BH 380-500 mm in 40 mm steps	suitable from SD 440 mm, each BH + 40 mm growable
back height		430 or 580 mm	optionally
back unit		can be moved back by approx. 60 mm	
leg supports recording		about 60 mm forward displaceable	
tilting		from -5° to +35° from +2,5° to +40°	optionally
back angle	90 - 120°		
lower leg length	120 - 550 mm		
ETRTO wheel size	at 16"	Ø 400 mm	with drum brakes, Commercially available pneumatic tires in sizes 1 "(25.4mm), 1 3/8" (35mm) - sizes 355mm (20 "), 451mm (22"), 540mm, (24 ") All puncture-proof tires in the specified dimensions and 12"in size ETRTO 47-203
ETRTO wheel size	at 20"	Ø 451 mm	
ETRTO wheel size	at 22"	Ø 489 mm	
ETRTO wheel size	at 24"	Ø 540 mm	
ETRTO wheel size	at 12"	Ø 203 mm	
diameter handrim	at 20"	444 mm	
	at 22"	481 mm	
	at 24"	533 mm	
handrim		Ø 19 mm	diameter pipe
camber		0° or 2°	4° limited
Seat height (SH) with horizontal seat and horizontal frame	rear wheel 20"/22" caster 5"/5,5"	410 mm size 1 430 mm size 3	height adjustment +20/+40/+60 mm
	rear wheel 20"/22" caster 6"/7"	420 mm size 1 440 mm size 3	height adjustment +20/+40/+60 mm
	rear wheel 24" caster 5"/6"	430 mm size 1 450 mm size 3	height adjustment +20/+40/+60 mm
	rear wheel 24" caster 7"	445 mm size 1 465 mm size 3	height adjustment +20/+40 mm
Wide seat shell base absolutely	min.	BH + 220 mm	depending on camber and wheels
	max.	BH + 300 mm	
Length of seat shell base frame absolutely	min.	610 mm at frame size 1, 12"-rear wheel and normal foot plate (160 mm)	
	max.	1130 mm at frame size 3, 24"-rear wheel, wheel base extension and wide footplate (230 mm)	
Height seat shell base frame absolutely	min.	900 - 1000 mm	at BH 430 mm and 45° push handle
	max.	1050 - 1150 mm	
	min.	1000 - 1100 mm	at BH 580 mm and 45° push handle
		1150 - 1250 mm	
Height of seat shell base frame folded back	min.	550 mm	
	max.	620 mm	
incline		12% = 7°	at 0° tilting and 0° back angle
descent		12% = 7°	
stability		12% = 7°	
turning circle		ca. 1100 mm	depending on the size
load capacity (max.)/ weight testdummy		120 kg	inkl. seat shell
tare	suitable for driving: BH 300 mm, rear wheel 12", caster 4"PU	15,1 kg	frame, seat plate, trum brake, hand-rim, caster, leg support, push handle, tilting-mechanism
heaviest piece	rear wheel	1,2 - 2,2 kg	
wheel	commercial pneumatic tires, sizes 1 ", 1 3/8" or puncture-proof tires (same dimensions), tire inflation pressure usually 3-10 bar		
corrosion protection	material	Stainless steel, aluminum	
	coating	Powder coating, galvanizing	
length of use of the wheelchair	3 years	at not excessive demand	
life cycle of the wheelchair	5 years		
Normative requirements	The wheelchair meets the requirements of ISO 7176-8 and the requirements against ignition.		

5.2 Meaning of labels

The meaning of the individual labes is explained in the texts at the respective place.

If the type plate is damaged or gets lost, a new one can be ordered from SORG Rollstuhltechnik.

Type plate:



5.3 Declaration of conformity

SORG Rollstuhltechnik declares that the product Loop[SORG] a class 1 device is and it complies with the EU regulation (EU) 2017/745 on medical devices.

This was confirmed by a conformity assessment procedure according to the medical Product Guidelines.

CE

If the product is not modified with SORG wheelchair technology, this declaration will lose its validity.

company stamp

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