

Dynamis TSD



Service record

! All individual adjustments to the wheelchair are described below. Tools and specialist knowledge are required for these settings. Please leave these adjustments to a qualified rehabilitation specialist. !

Imprint

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Technical status


We reserve the right to make technical changes and misprints. The images can differ from the actual individual equipment components. The handling is to be carried out accordingly.

Gender notice

For editorial reasons for better readability, only the masculine form is used. Corresponding terms apply in the sense of equal treatment to all genders and do not represent any valuation.

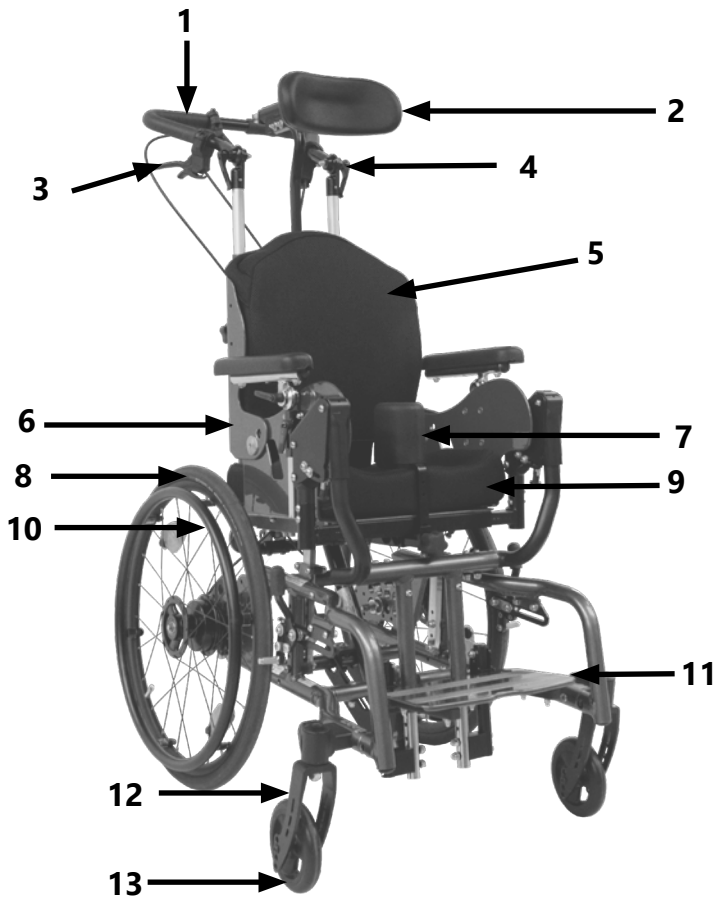
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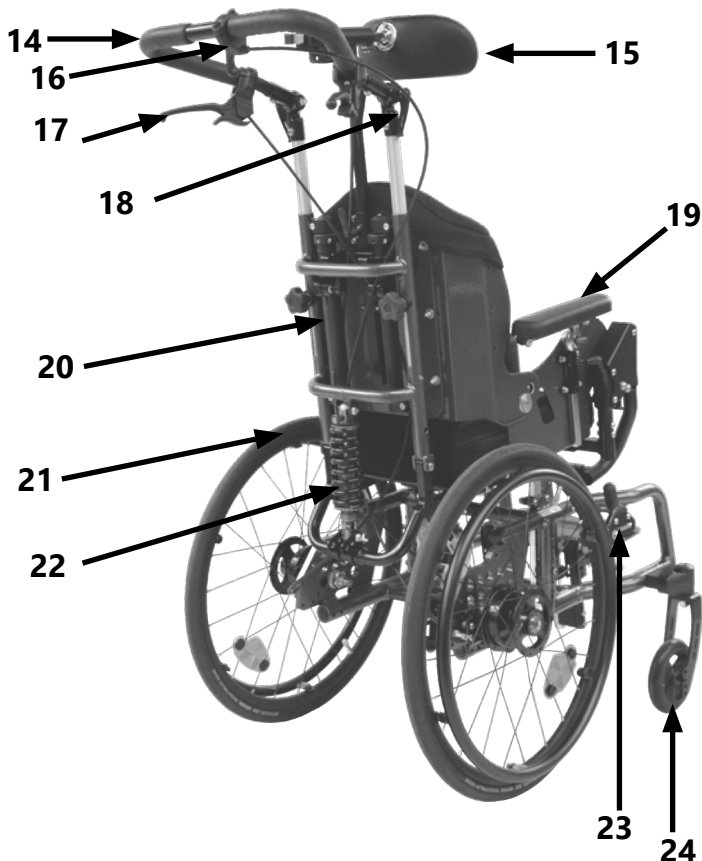
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1 Wheelchair overview



- 1 Push bow
- 2 Headrest
- 3 Drum brake control lever
- 4 Eccentric levers for angle adjustment
- 5 Molded back cushion
- 6 Ergo Seat
- 7 Abduction wedge
- 8 Wheel
- 9 Molded seat cushion
- 10 Handrim
- 11 Footplate
- 12 Caster fork
- 13 caster wheel



- 14 Push bow
- 15 Headrest
- 16 Release lever for seat tilt
- 17 Control lever for drum brake
- 18 Star handle for height adjustment, push handle
- 19 Armrests
- 20 back guide
- 21 Wheel
- 22 Shock absorbers
- 23 brake lever of the knee lever brake
- 24 caster wheel

2.1 General information service record

All individual settings, adjustments, repairs and the annual inspection of the wheelchair are described below. This requires tools and special expertise. Please leave these adjustments to a qualified specialist retailer.

Adjustments that can be made by the attendant are described in the instructions for use.

If you have any questions or comments, please contact your specialist retailer or our team (+49 7254 9279-0).

2.2 Documentation indications

Please note:

- Information for the user can be found in the instructions for use
- Maintenance instructions can be found under: Chapter 4 (Repairs & Maintenance)

2.3 Required torques and tools

Torque required for the following screws:

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

Needed tools:

- Torque wrench (5-50 Nm)
- Open-ended wrench
- Reversible ratchet with socket wrench inserts
- Hexagon screwdriver
- Phillips screwdriver
- Flat-blade screwdriver
- Plastic hammer
- Side cutter
- Thread locking liquid
- Bicycle tube repair kit
- Workbench / vice with plastic jaws
- Special open-end wrench for adjusting the shock absorber

2 General information

2.4 Explanation of symbols



DANGER! Warnings for personal safety issues, of utmost importance



CORRECT safety-relevant setting / handling



INCORRECT setting / handling



FORBIDDEN



Reference to additional / further reading.



Important detail / element



Correct or proper setting / use



Inadmissible or incorrect setting / use

(A); (B)

Reference from text to detail

Handling



Push / pull / insert / move / remove



Push in a certain direction



Set or adjust the angle



Open / close



Turn clockwise



Rotate counter clockwise



Steps to be performed at the same time



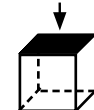
Steps to be performed in sequence



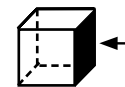
Steps to be performed on both sides



Point of view



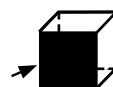
View from above



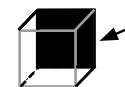
Side view



View from below



Front view



Rear view





Attach a part





Remove a part


2.5 General safety instructions


-  **Check before every trip:**
- Frame, back unit, add-on parts and accessories for visible damage, bends, cracks or missing / loose screws,
 - Wheels / thru axles on tight fit ,
 - sufficient tire pressure, tire profile,
 - Functionality of the brakes,
 - tight fit of the angle adjustment elements / eccentric clamps,
 - firm closure of the seat plate / back / foot plate,
 - Functionality of the anti-tipper / seat and back straps,
 - whether all previously dismantled parts are reinserted and firmly locked.


 There is a risk of injuries (e.g. crushing) on all rotating, rotatable or foldable parts, also during adjustment and repair work as well as during transport.

 All wheelchair parts are to be handled properly. Do not throw or drop removable parts!


 Before starting the check, repair or adjustment work, clean / disinfect the wheelchair and secure it against tipping over and / or falling.

 Use only original spare parts.


 Safety nuts may only be used once. Safety nuts that have been loosened must be replaced with new ones.


 Only 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 service life leads to an increase in the residual risks and should only be carried out after careful, qualified consideration by the operator. If the service life is reached, the user or a responsible person should contact the specialist retailer. There you can get information about the possibility of reconditioning the product.

Combination with products from other manufacturers

 The wheelchair may only be combined with the additional electrical drives approved by the manufacturer. Restrictions or adjustments as well as the cultivation itself are the responsibility of the provider of the additional system or the commissioned specialist trade. Please ask the manufacturer of the additional drives for the requirements.

 In the combination of a wheelchair and an additional electric drive, particular loads occur that can lead to damage to the wheelchair. Approach obstacles only slowly and overcome them carefully so that little force is exerted on the steering wheel, drive wheel and the wheelchair as a whole.

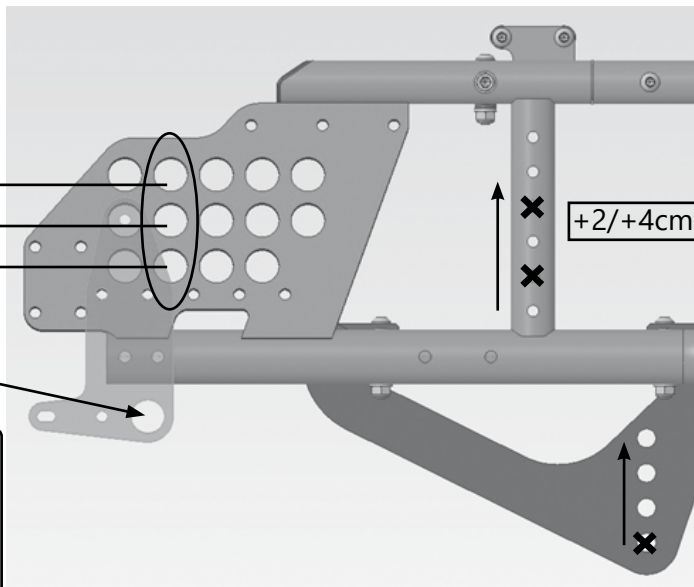
3.1 Assembly group wheels

3.1.1 Wheel position

Seat height adjustment up to seat depth 32 & 34 (size 1)

(Frame parts size 1/2)

16"	20"	22"	24"
45 cm	43 cm	45 cm	48 cm
X	45,5 cm	47,5 cm	50,5 cm
X	47,5 cm	50 cm	52,5 cm



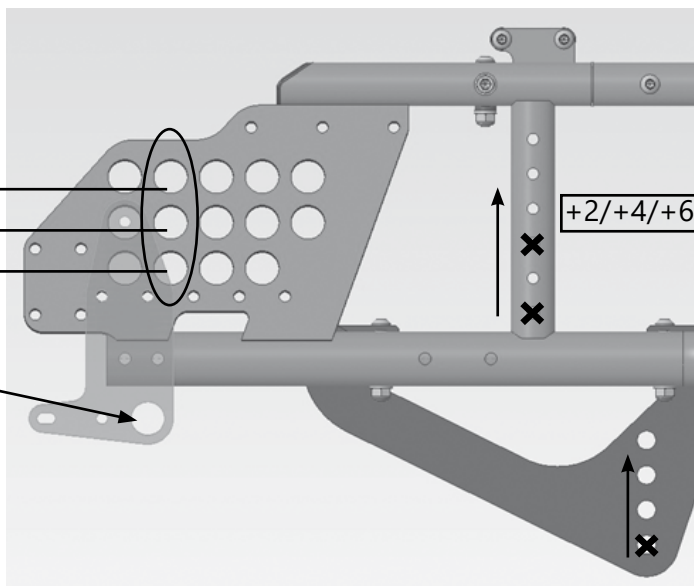
Standard position

! For larger seat heights: primarily adjust via the position of the wheel. With 24" wheel mounted at the bottom: anti-tipper 26" mounted in the inner holes.

Seat height adjustment up to seat depth 48 (size 1 - 3)

(Frame parts size 1/2 and size. 3)

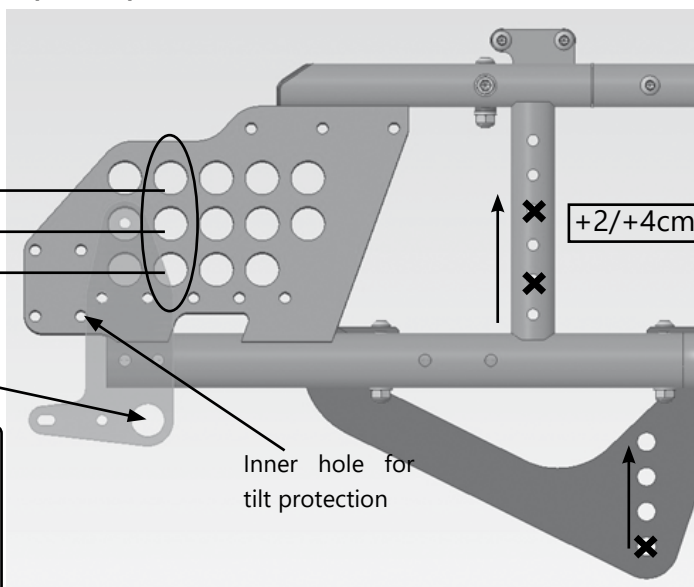
16"	20"	22"	24"
47,5 cm	41 cm	43 cm	46 cm
X	43,5 cm	45,5 cm	48 cm
X	45,5 cm	48 cm	50,5 cm



Standard position

Seat height adjustment from seat depth 50 (size 4)

16"	20"	22"	24"
49,5 cm	43 cm	45 cm	48 cm
X	45,5 cm	47,5 cm	50,5 cm
X	48 cm	50 cm	53 cm



Standard position

! After all position changes, check the tilt stability with the patient when fully tilted and modify the position if necessary!

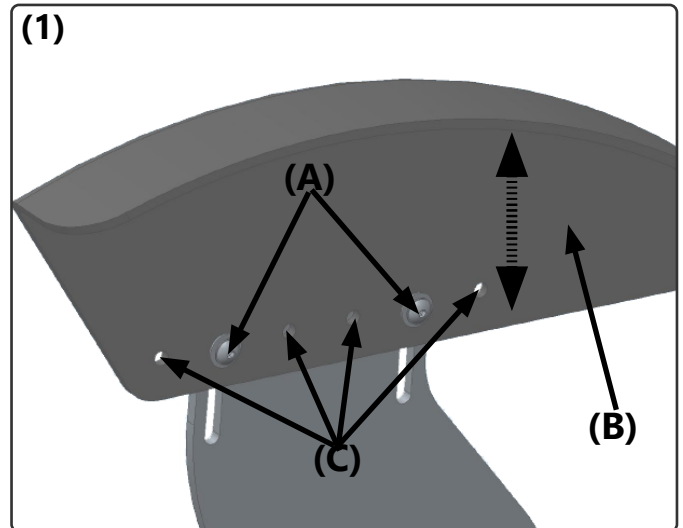
Inner hole for tilt protection

3.1 Assembly group wheels

3.1.2 Adjusting the height and position of the wheel cover when the wheel changes position

(1) With vertical adjustment:

- Remove wheel,
- Loosen the screw connections **(A)** on the side guard
- and push the side guard **(B)** all the way up.
- Adjust the wheel position.
- Reinsert the wheel
- and slide the side guard **(B)** into the required position. Then remove the wheel gain
- and tighten the screws **(A)** on the side guard **(B)** again.



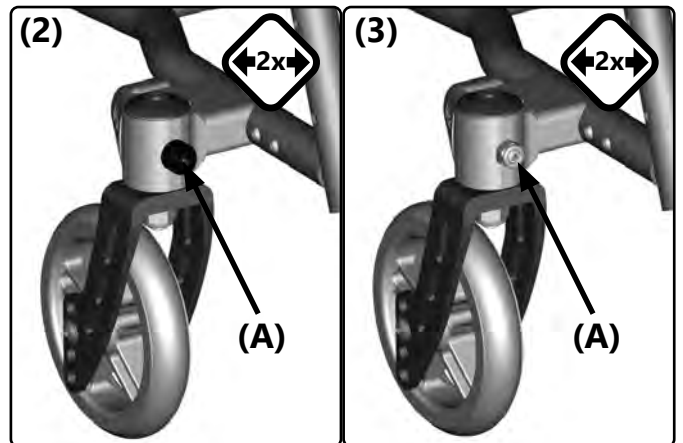
With horizontal adjustment:

- Remove wheel,
- Remove the screw connection **(A)** on the side guard **(B)**.
- Move the side guard **(B)** into the alternative holes **(C)** according to the desired position of the wheel and screw it on a little so that the height of the side guard can still be moved.
- Then proceed according to the vertical adjustment.

3.1.3 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 **(2A)**,
- Use an M8 Allen key to tighten the spring-loaded pressure piece **(3A)** on both sides until you can feel the ball compressing the wheel in a straight-ahead direction.

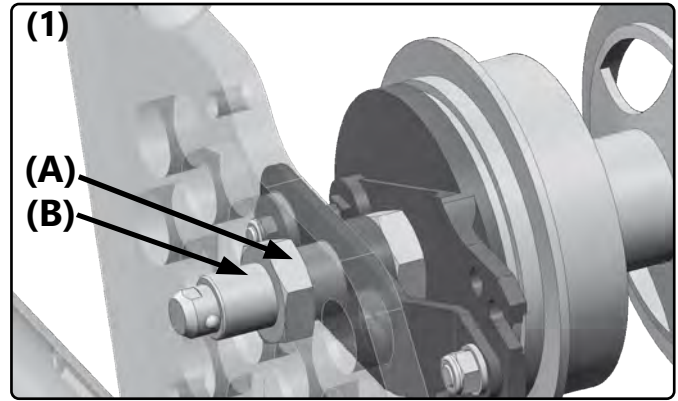


Do not turn the pressure spring piece onto the steering axle with the threaded end of the pressure ball. Otherwise the function will be lost.

3.1 Assembly group wheels

3.1.4 Moving the wheels WITHOUT camber adapter(20",22",24")

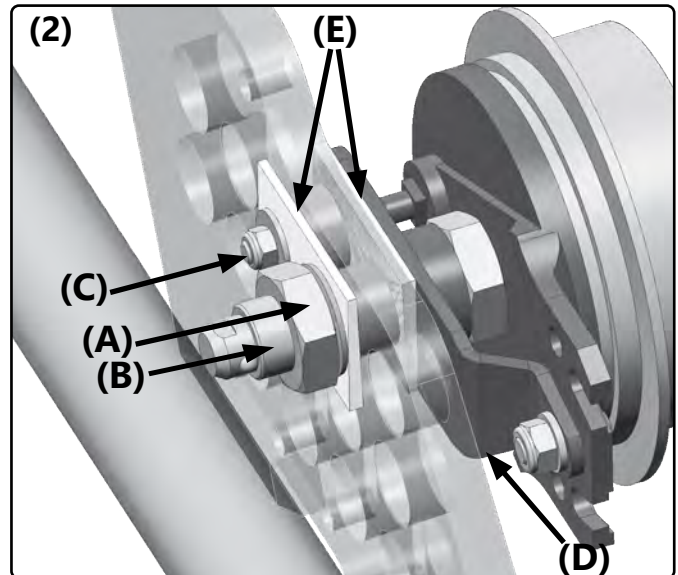
- (1) Remove the wheels and the hex nut (A) from the thru axle fitting (B),
- Place the fitting (B) in the new hole,
- Put the hexagon nut 35 Nm (A) back on, tighten it and insert the wheels again.



Correct the position of the knee lever brake and then check that it is working properly.

3.1.5 Moving the wheels WITH camber adapter (20",22",24")

- (2) Remove the wheels and the hex nut (A) from the thru axle fitting (B),
- remove the nut (C) of the brake counter-holder (D) including the inner sleeve,
- Remove both lintel adapters (E) and place them in front of the new position.
- Fix both lintel adapters (E) in the new position with the fitting (B) and the sleeve,
- Put the hexagon nut 35 Nm (A) back on and tighten it,
- Put on the nut (C) of the drum brake counter holder and tighten it.



The lintel adapters must always be mounted "in opposite directions". At 0 °: inside = thick end below / outside = thick end above.

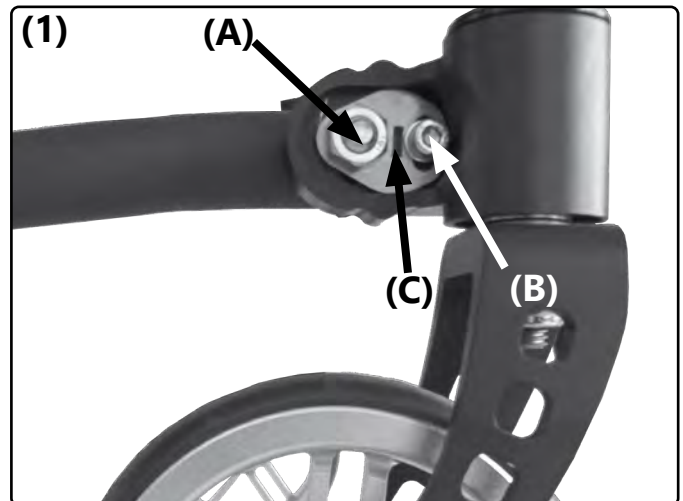
Correct the position of the knee lever brake and then check that it is working properly.

3.1 Assembly group wheels

3.1.6 Caster wheels

To adjust the steering wheel adapter:

- **(1)** loosen the screw **(A)**, also the one on the inside of the frame, with which the adapter is attached to the frame tube,
- loosen the screw **(B)**,
- bring the adapter into an exactly vertical position by turning the adjusting washer **(C)** (with a slotted screwdriver),
- check the position by creating an angle.
- tighten all screws tightly again; Screws **(A)** with 9 Nm, screw **(B)** with 7 Nm



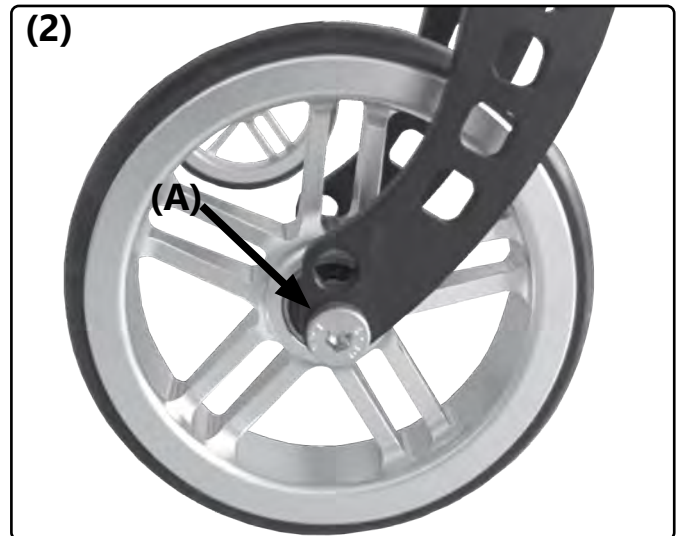
The steering head inclination must be readjusted after every change to the wheel.

Safety nuts may only be used once. Safety nuts that have been loosened must be replaced with new ones.

An incorrectly set steering head inclination leads to annoying and cumbersome "uphill and downhill ride" when cornering due to the wheel caster.

To replace the steering wheels:

- **(2)** loosen the screw **(A)** on both sides,
- remove the caster wheel,
- put the new caster wheel on the sleeves.
- Then set up the appropriate distances for the existing caster fork / - wheel combination
- and tighten the screws **(A)** again.



Note:

Depending on the size of the new caster wheel, the caster fork may also have to be replaced.

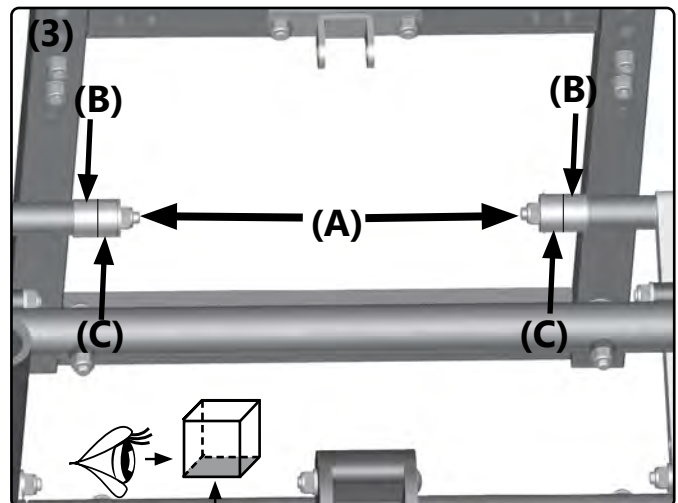
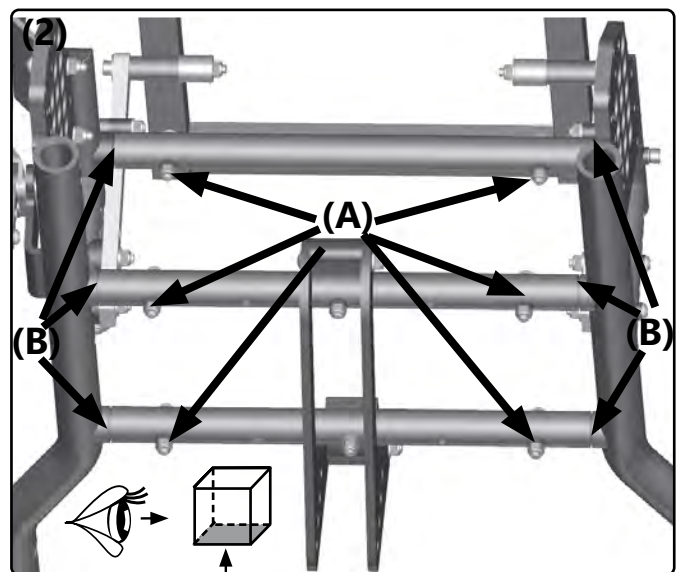
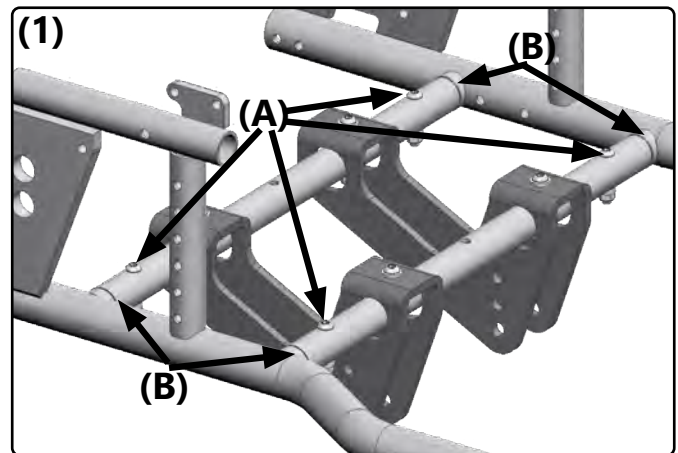
3.2 Assembly group frame

3.2.1 Frame widening

To widen the frame, first remove the Ergo seat. (see chapter Ergo seat assembly 3.6.2.).

To widen the frame:

- Remove both wheels.
- Remove the screw connections of the crossbars **(1A+2A)** on one side.
- Remove the screw connection of the pivot point. **(3A)**
- Now pull the frame apart **(1B+2B)**(half the desired widening)
- and reinsert the screw loosely.
- Move the sockets at the pivot point (either one or two sockets on the left and right) **(3B/3C)**. Now screw the previously loosened screws back on.
- Proceed in the same way with all screw connections on the opposite side.
- then tighten the screws again.



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

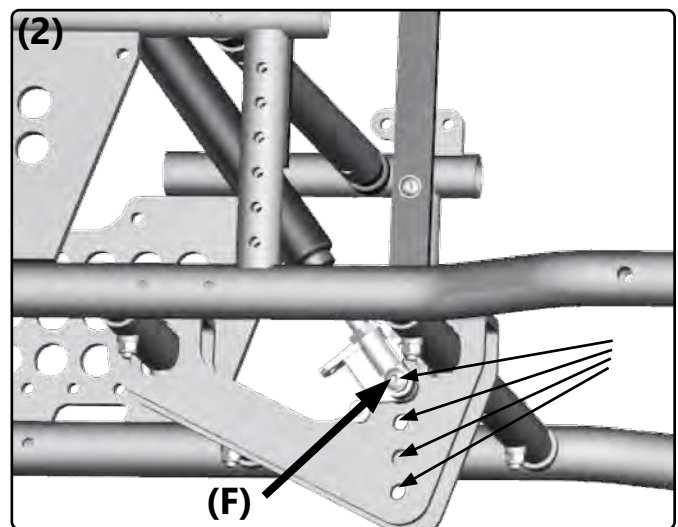
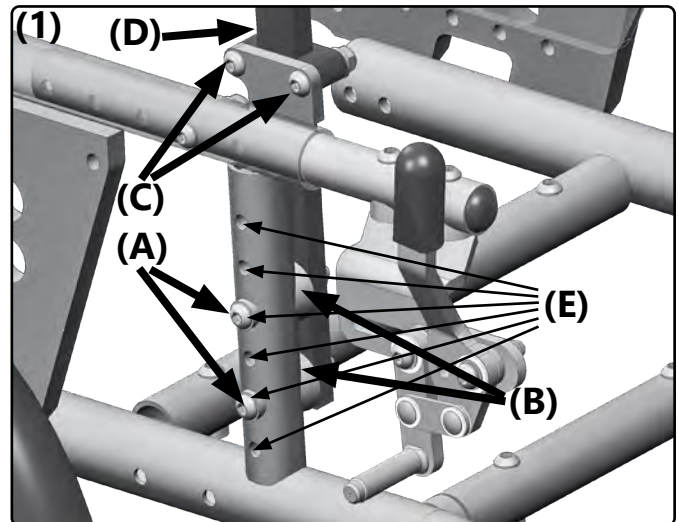
3.3 Assembly group seat

3.3.1 Vertical adjustment of the seat height

In addition to the possibility of defining the seat height through the positioning and size of the drive and steering wheels, it can also be changed by vertically moving the seat plate.

For changing the seat height in 20 mm steps with the same tilting path:

- **(1)** Loosen both screws **(C)** of the guide clamp on both sides and
- completely remove both screws of the screw connection **(A)** of the seat unit including the saddle washers **(B)** on both sides.
- **(2)** Completely remove the screw connection of the gas pressure spring **(F)** incl. the sleeves.
- **(2)** Move the seat unit with the brackets **(D)** by the desired dimension in the drilling pattern **(E)** (by ± 20 mm/ 2 cm per hole),
- **(2)** move the gas spring in the hole pattern **(G)** (by ± 20 mm/ 2 cm per hole) to the same extent.
- Insert the screws **(1A)** with the saddle washers **(1B)** in the new position and tighten them tightly.
- Insert the screw **(2F)** with the sleeves into the connection of the gas pressure spring and tighten them tightly.

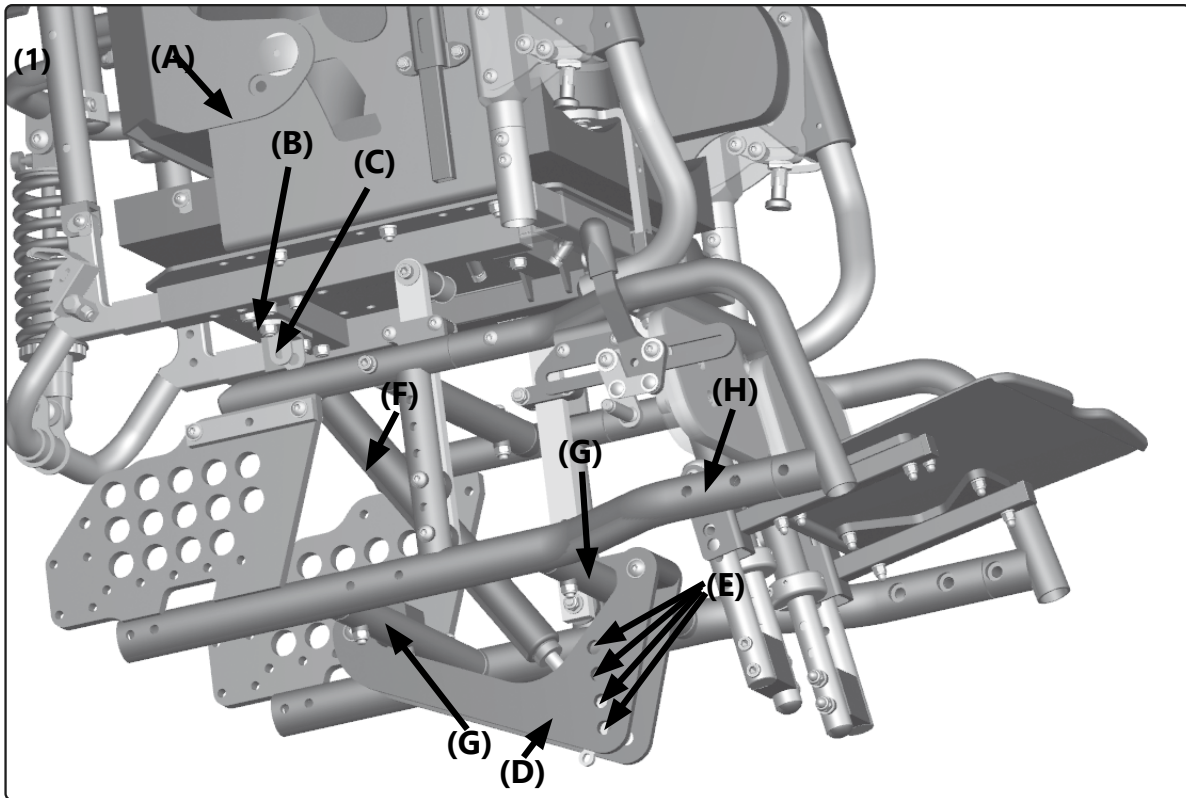


⚠ After every change to the seat unit and / or the tilt, the tilting behavior of the Dynamis TSD must be retested and practiced with the occupant and the support of an experienced, strong helper.

⚠ If you do not move the seat unit with the gas pressure spring in parallel, the result is a wrong tilting path and possibly a different seat inclination, which endangers the tilt stability of the Dynamis TSD. (see table on page 8)

3.3 Assembly group seat

3.3.2 Conversion to double gas pressure spring



Step 1: Remove the Ergo seat:

- Remove the Ergo seat according to chapter 3.6.2.

Step 2: Control lever

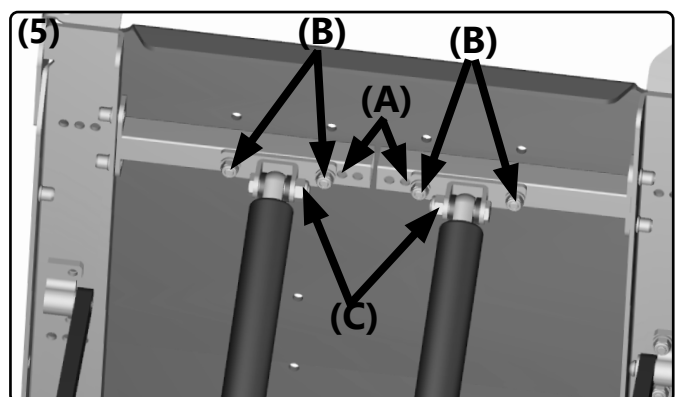
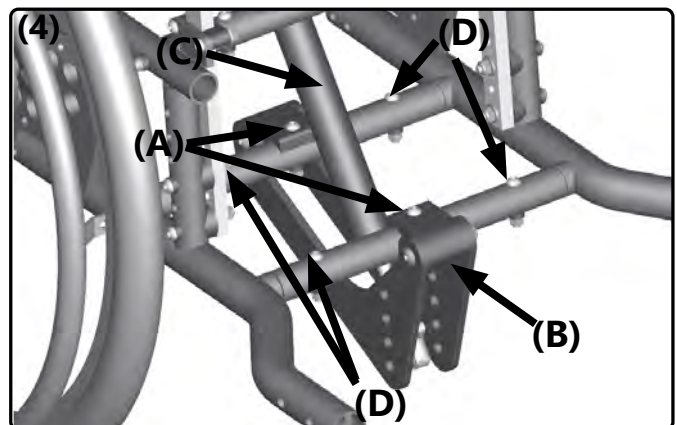
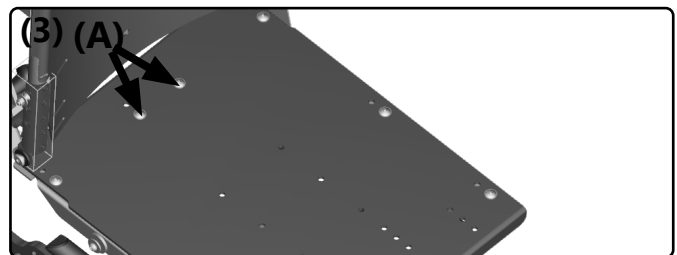
- **(2)** Remove the two screws **(A)** of the operating lever and the spiral cable sheath from the bowden cables.

Step 3: Relocate the gas pressure spring

- **(3)** Remove the upper mounting of the gas pressure spring with the screws **(A)**.
- **(4)** Remove the two screws **(A)**.
- Move the mount **(B)** including the gas pressure spring **(C)** into the alternative holes **(D)**.
- **(5)** Move the upper mount **(A)** into the alternative holes **(B)**.
- **(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 pull out the complete bowden cable **(A)**.

Step 5: Insert new lower mounts

- **(7)** Attach the second lower mount **(A)** of the gas pressure spring to the two cross members **(B)** and



3.3 Assembly group seat

- screw the mount with the screws **(C)** tightly into the prepared holes in the crossbars **(3D)**.

Pay attention to the symmetry of the attachment of the crossbar adapters (right and left side in the same hole!).

Step 7: Assemble the upper mounts

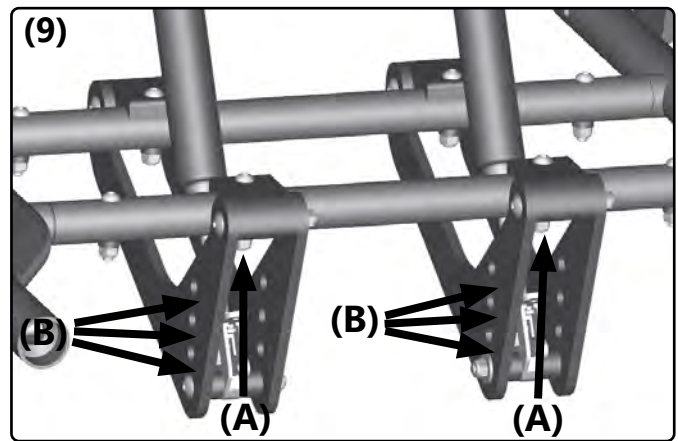
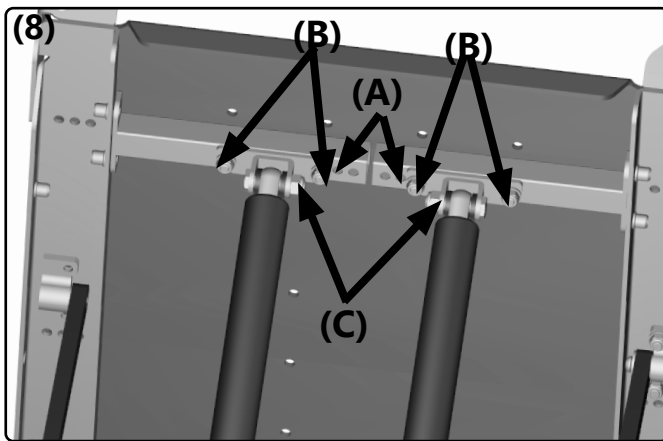
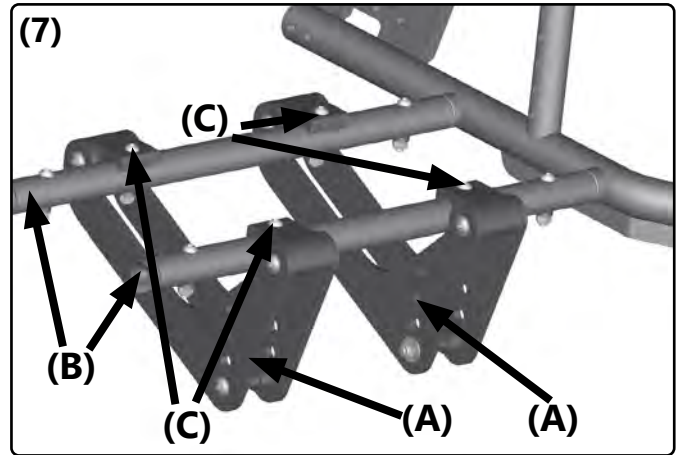
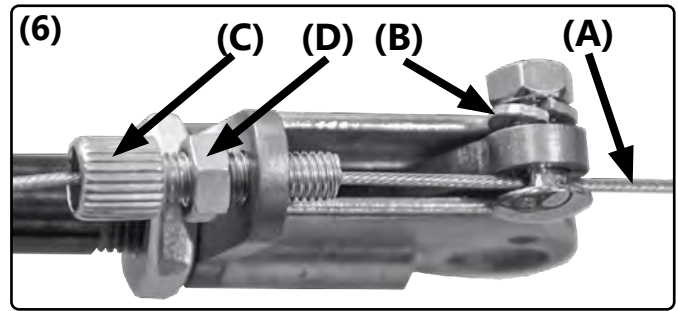
- **(8)** Screw the second upper mount **(A)** of the gas pressure spring with the two screws **(B)** under the seat plate into the prepared holes.

Step 8: Mount new gas pressure spring on top

- **(9)** Screw the gas pressure spring to the upper mount **(A)** with the screw **(C)**.

Step 9: Mount new gas pressure spring below

- **(9)** Screw the gas pressure spring into the lower mounts with the screw **(A)** in the prepared holes **(B)**.



Both gas pressure springs must be installed in the same assembly points on the mount.

Use the same mounting points as before. Otherwise there will be an incorrect tilting path.

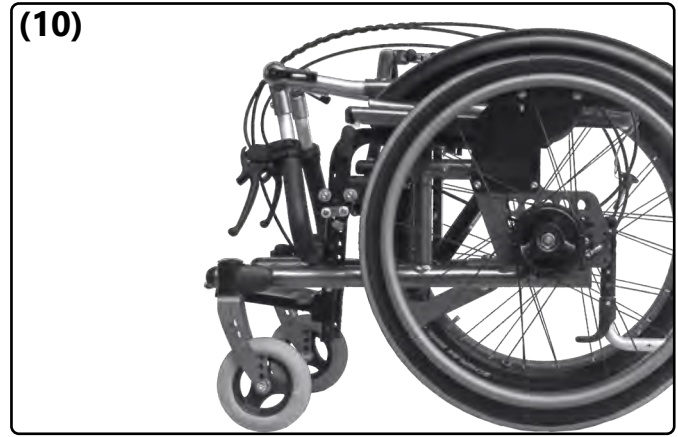
Step 10: A Screw the release lever back on

- Mount the new release lever for the gas pressure springs on the push bar again.

3.3 Assembly group seat

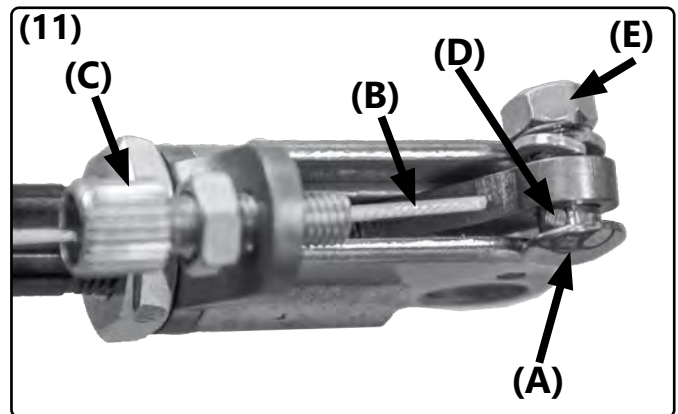
Step 11: Set the maximum length of the bowden cable

- Set the push bow to its maximum push height,
- **(10)** fold the back of the Dynamis TSD forward around and
- also place the push bow forward towards the legrest (see illustration) so that you get the maximum length for the bowden cable.
- Now guide the new Bowden cable from the release lever over the seat to the rear and then back to the front under the Dynamis TSD to the respective release device of the gas pressure springs.
- Fold the back of the Dynamis TSD back into a vertical position and
- cut the outer sleeves of the two Bowden cables to the required size.



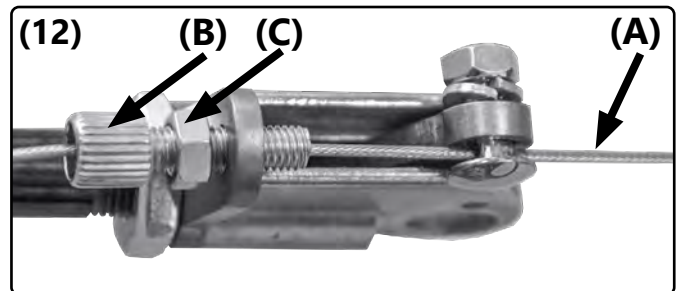
Step 12:

- **(10)** Fold the back of the Dynamis TSD back into a vertical position



Step 13: Mount bowden cables

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



Step 14

- Check the functionality of the release mechanism and adjust the release torque using the adjusting screw **(12 B)** and the lock nut **(11C)**.

Step 15:

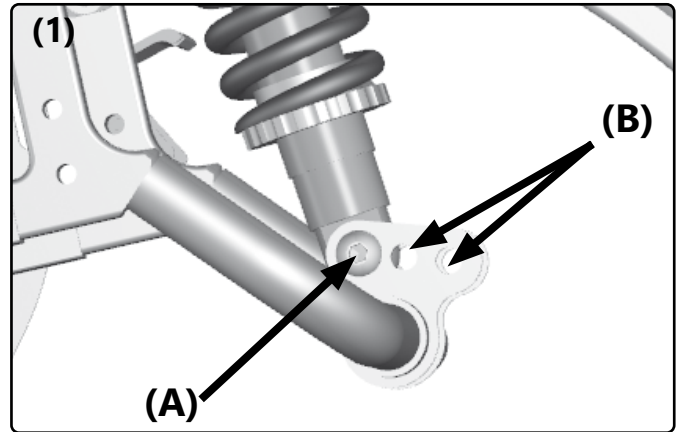
- Reinstall the Ergo seat.

After every change to the seat unit and / or the tilt, the tilting behavior of the Dynamis TSD must be retested and practiced with the occupant and the support of an experienced, strong helper.

3.4 Assembly group back

3.4.1 Back angle adjustment

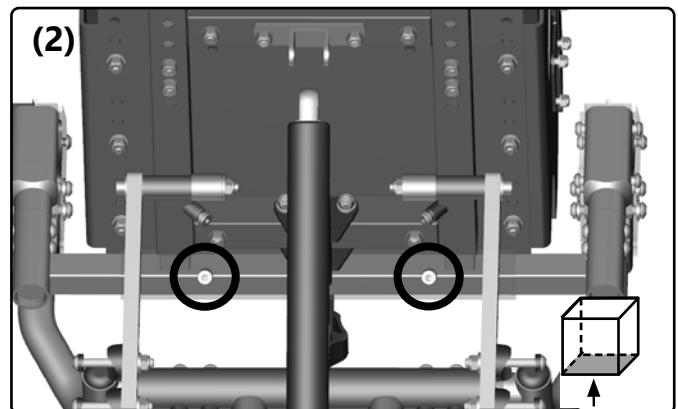
The basic setting of the back angle can be changed via the row of drillings in the suspension of the spring damping. The setting can be changed to 90°, 95° and 100° from the inside to the outside. To do this, the screw **(A)** - in this picture in the 90° setting - is loosened and fastened again in an outer hole **(B)** with the spring damping. Please tighten the screw firmly.



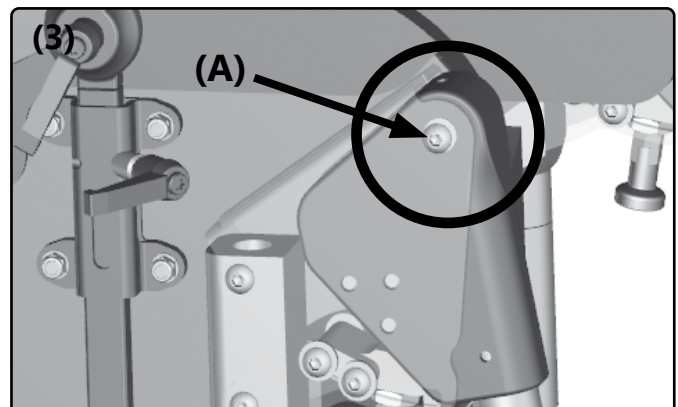
3.5 Assembly group leg support

3.5.1 Adjusting the leg support

(2) The legrest, which can be swiveled upwards, is mounted under the seat frame with the aid of a traverse and clamping screws.



(3) When adjusting the legrest, make sure that the axis of rotation of the legrest **(A)** is as close as possible to the anatomical axis of rotation of the user's knee.

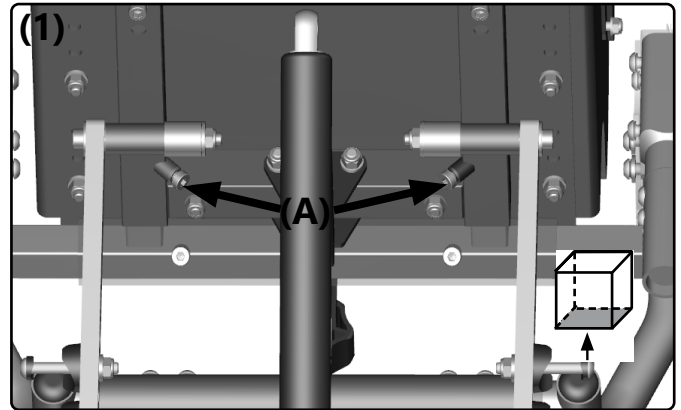


After every change to the legrest, check whether the caster wheels can still turn freely through 360° when tilted to the front. You may have to make corrections either using the caster wheels or the leg rests.

3.5.2 Adjusting the depth

The depth of the legrest can be continuously adjusted up to 8 cm. To do this, please follow the steps below:

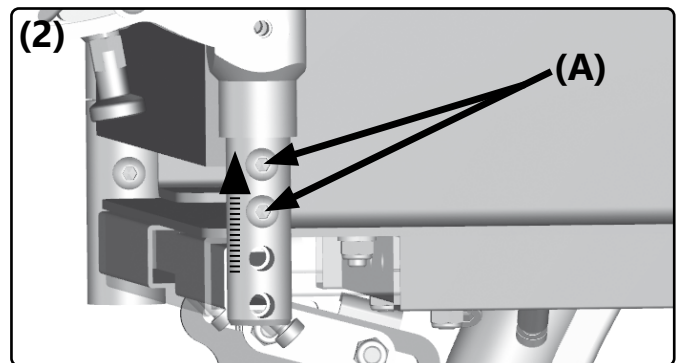
1. Loosen the clamping screws **(1A)** on the seat frame, then
2. Adjust the depth as desired.
3. Tighten the screws again and check.



3.5.3 Adjusting the height

The height of the legrest can be continuously adjusted to 1.5 or 3 cm. To do this, please follow the steps below:

1. Remove the screws **(2A)** on the journal part,
2. Adjust the height as desired by lifting and
3. Replace the screws, tighten them and then check them.

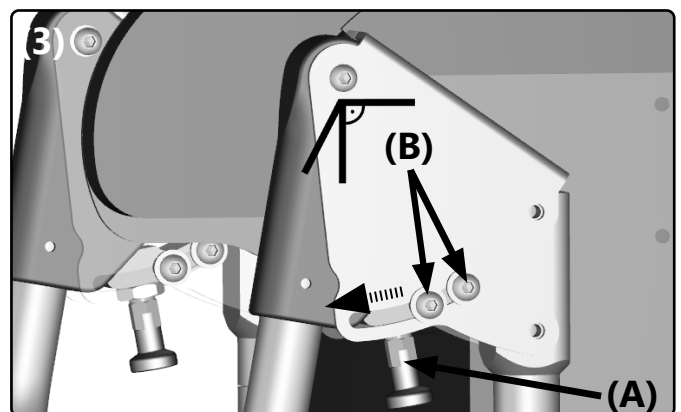


Height adjustment not possible in combination with an abduction wedge.

3.5.4 Presetting the opening angle

The opening angle of the legrest can be adjusted continuously between 90 ° and 117 ° as follows:

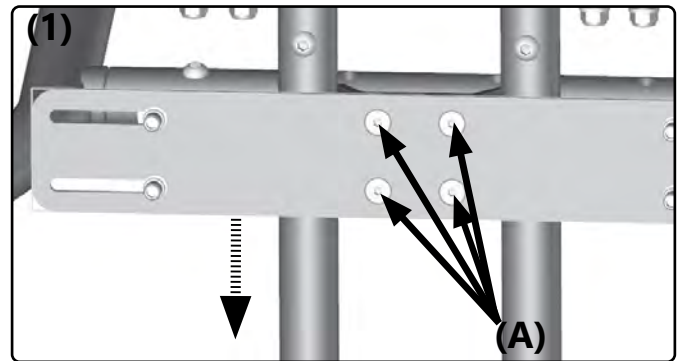
1. Engage the pull latch by turning it 90 ° **(3A)**
2. Loosen the screws **(3B)** on the grid plate on both sides, inside and outside.
3. Adjust the legrest to the desired position.
4. Tighten the screws again firmly.



3.5.5 Height adjustment of the calf support

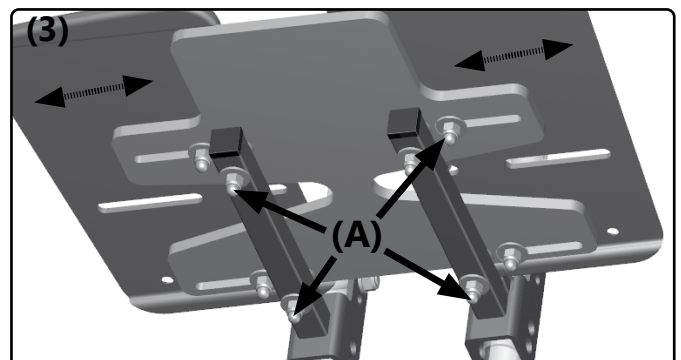
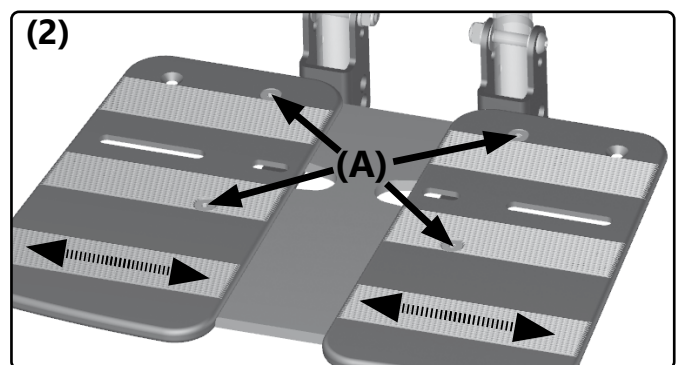
To change the height of the calf support, please follow the steps below:

1. Loosen the screws. **(1A)**
2. Now move the calf clamping plate and attach the removed elements in reverse order.
3. Make sure that all screws are properly tightened.



3.5.6 Width-adjustable footplate

To adjust the width of the footplate, loosen the countersunk screws **(2A)** and the lock nuts **(3A)**. Now bring the footplate into the desired position by pulling or pushing it and tighten the countersunk screws and lock the nuts again.



3.5.7 Height adjustment of the footrest

Setting the distance between the foot and seat plate (LLL)

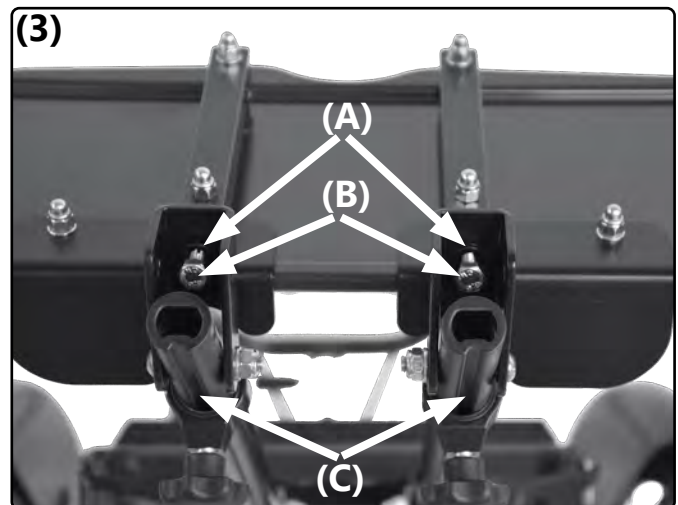
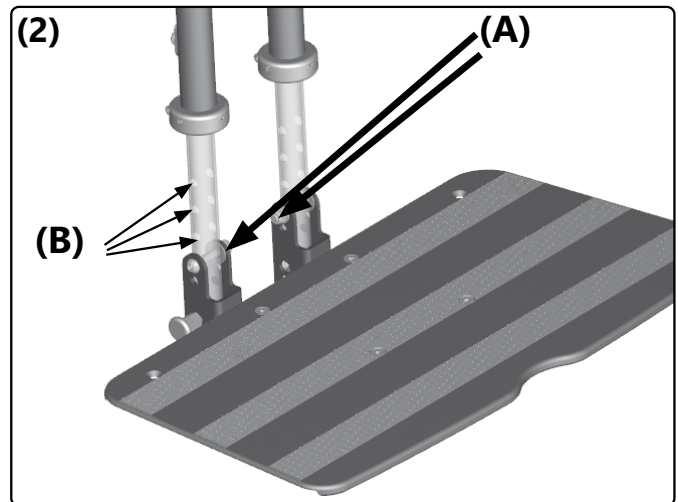
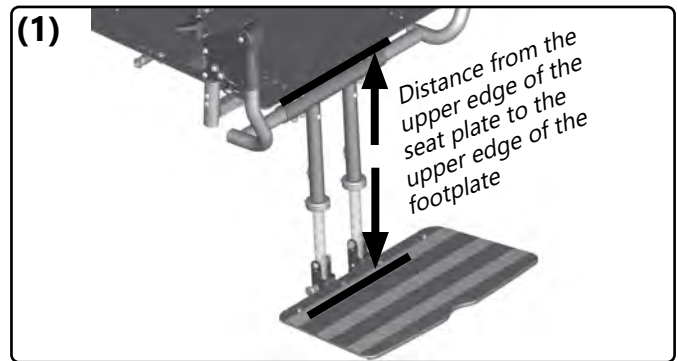
With the standard legrest, the distance between the upper edge of the seat plate and the upper edge of the footplate is changed as follows:


- **(2)** Remove the screws **(A)**,
- remove the footplate / s and
- move the footplate/s along the holes **(B)** to the new position.
- Reinstall the two screws **(A)** and tighten them tightly.

Setting the stop angle of the footplate/s

(3) Use the two adjusting screws **(B)** to adjust the stop angle of this footplate/s.

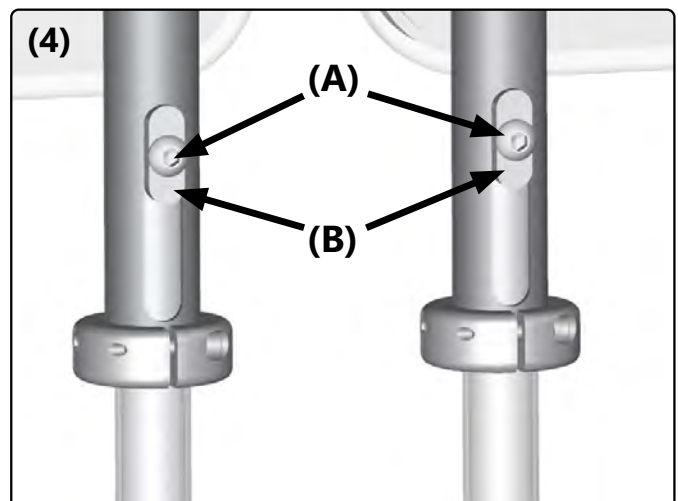
- Fold the footplate/s back,
- loosen the lock nuts **(A)**,
- turn the two adjusting screws **(B)**, until you have reached the desired angle,
- tighten the lock nuts **(A)** again.



 When the footplate/s are in use, both adjusting screws must lie firmly against the tubes **(C)** of the leg support. It is essential to avoid an uneven contact point for the adjusting screws.

Alternatively:

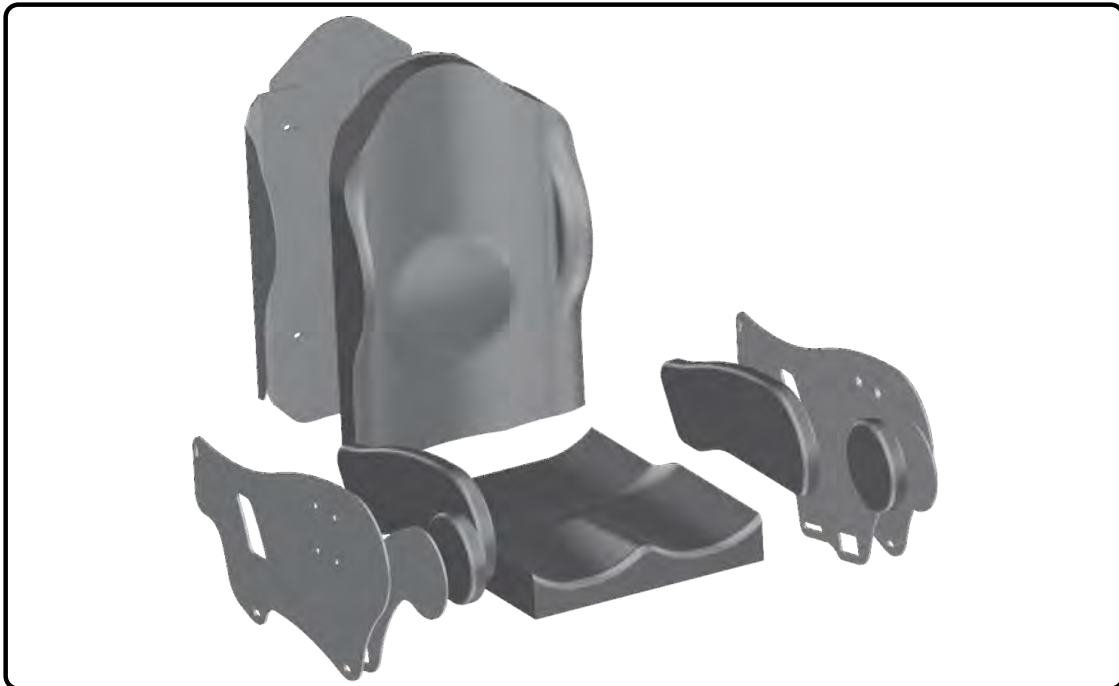
1. Remove the screws **(4A)**
2. and bring the stirrup to the desired height.
3. Screw in the screws **(4A)** and the stop parts **(4B)** up to the outer tube.
4. Now pull the stirrup down a little
5. and screw in the stop part **(4B)** completely.



3.6 Assembly group ERGO seat

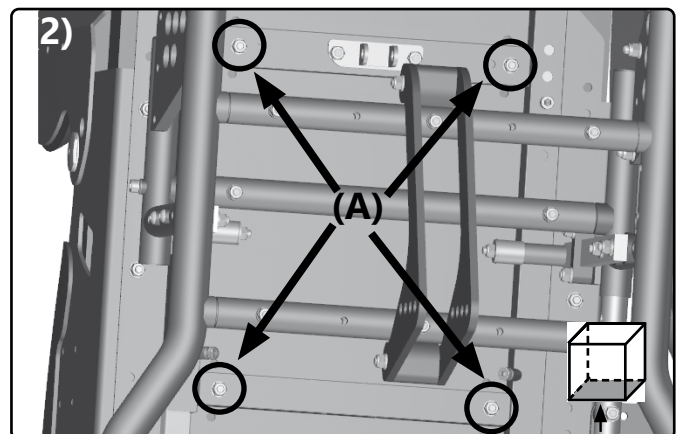
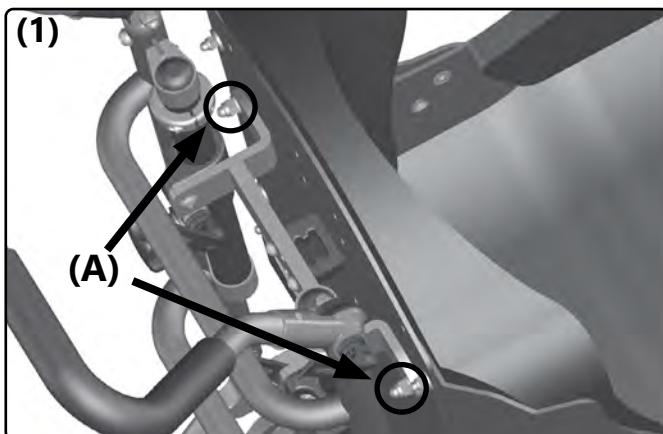
3.6.1 General information about the ERGO seat

The ERGO seat offers installation and attachment options for seat and back cushions, side cushions, side supports, armrests, headrests and belt holders.



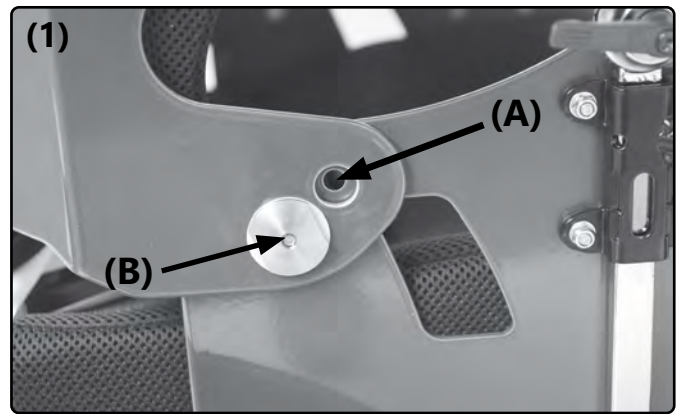
3.6.2 Removing the ERGO seat


To remove the ERGO seat, the screw connection of the back guide must be removed **(1A)**. In the next step, the screw connection on the seat frame must be removed **(2A)**.



3.6.3 Axis of rotation seat part/back part

The axis of rotation should be aligned as close as possible to the patient's hip joint. We recommend using the upper hole **(A)** for a body height of up to 150 cm and the lower hole **(B)** for larger body sizes.



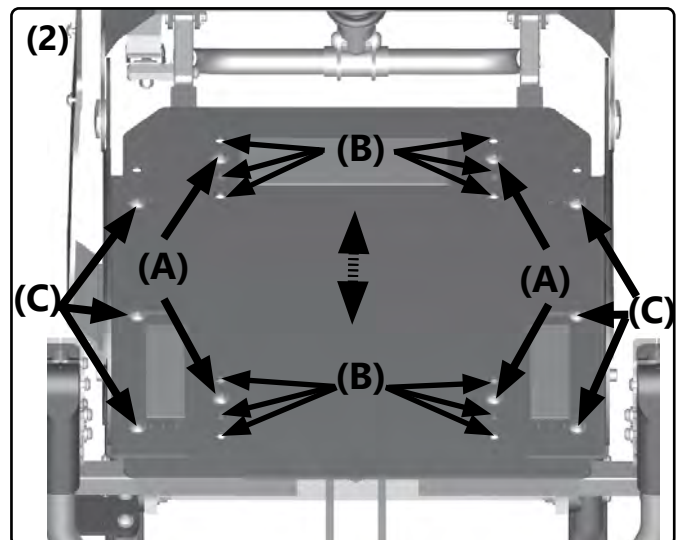
 If the screw connection is removed in order to determine a new position, the screw connection must be secured with medium-strength screw locking.

3.6.4 Growth in seat depth ERGO seat

The seat depth of the ERGO seat can be adjusted by + 2cm.

To do this, the following steps should be observed:

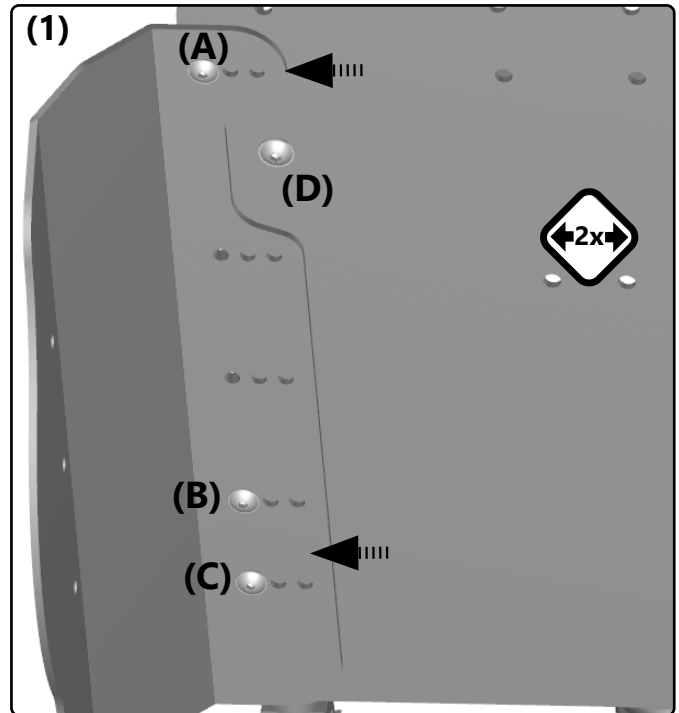
- Remove the seat plate screws. **(A)**
- Bring the seat plate into the desired position and insert the screws in the respective holes. **(B)**
- **Remove the screws of the seat center section / side section and screw them back into the center hole. (C)**
- Check all screws to ensure that they are firmly tightened.



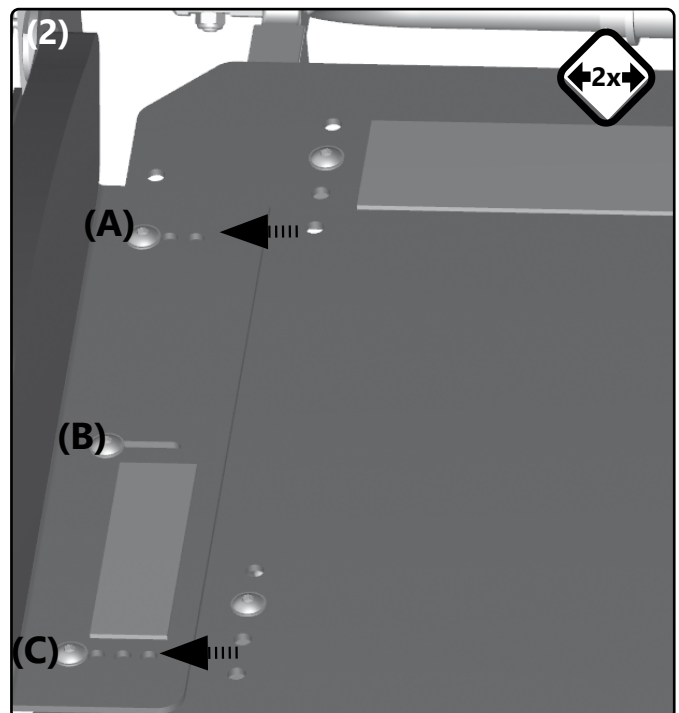
3.6 Assembly group ERGO seat

3.6.5 Increase seat width ERGO seat and back unit

Loosen the screw connection of the back angle part **(A, B, C)** and back middle part **(D)**. Move the back angle parts so that the desired width is achieved. Now the previously removed screws are screwed back in order to reconnect the back middle and back angle parts. Please repeat the same steps with the other back angle part



Loosen the screw connection of the seat side cover **(A, B, C)** and seat center section. Move the seat side cover so that the desired seat width is achieved. Now the previously removed screws are screwed back in to reconnect the seat side cover with the seat center part. Please repeat the same step with the other side cover.



3.7 Assembly group brakes

3.7.1 Drum brake

The braking force of the drum brakes is optimally adjusted by our fitters.

For safety reasons, regular checking of their functionality is necessary, as permanent use may require readjustment of the braking force or even the replacement of a bowden cable.

(1+2) The following drum brake components are important for adjusting the braking force: adjusting screw **(A)**, lock nut **(B)**, adjusting nipple **(C)**, holder **(D)**, inner cable **(E)**, locking lever **(F)**, clamping nipple **(G)**, brake shoes **(H)**.

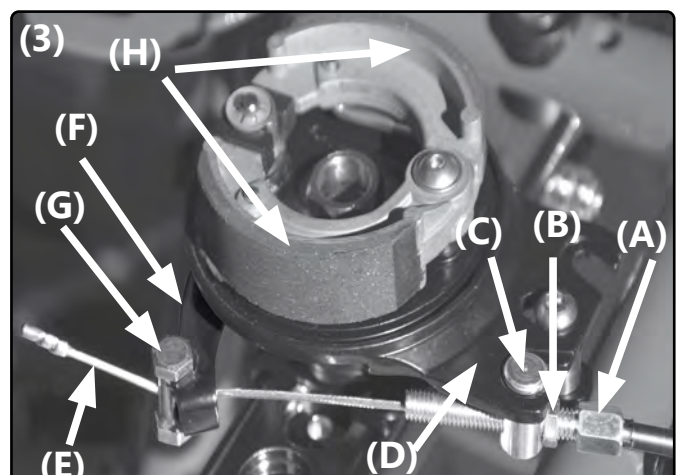
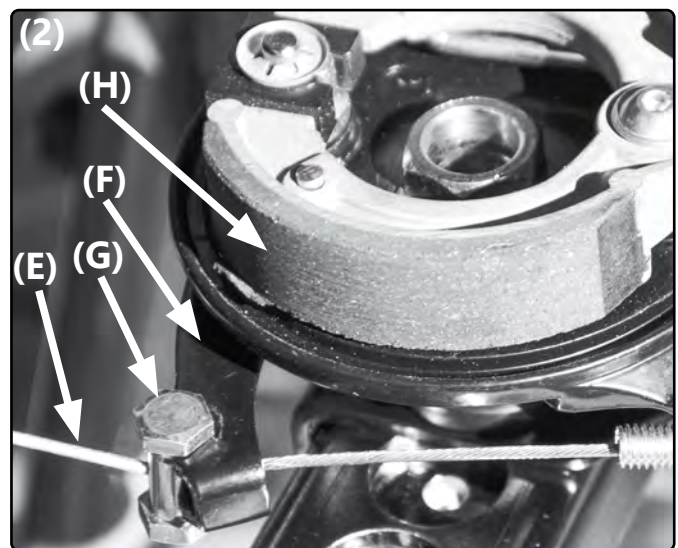
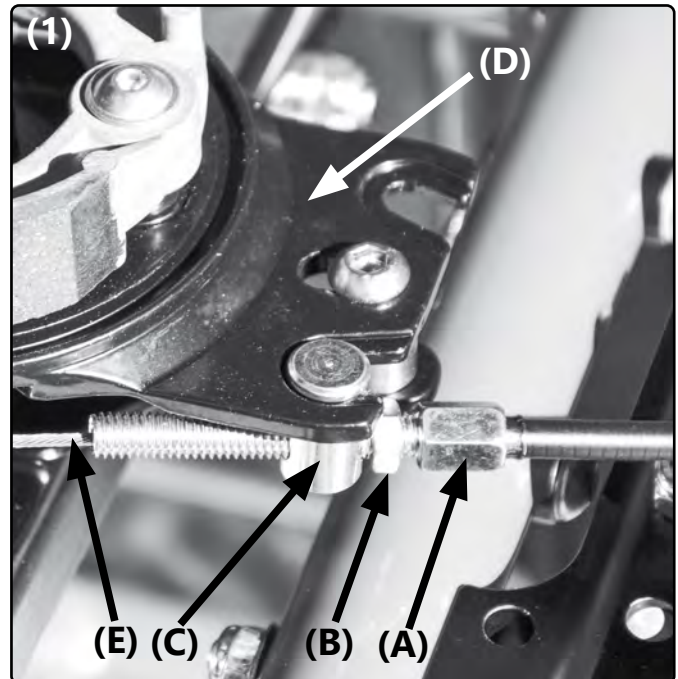
For inserting the bowden cable:

- **(3)** place the adjusting nipple **(C)** with the adjusting screw **(A)** and lock nut **(B)** at the lower end in the counter holder **(D)**,
- thread the inner cable **(E)** through the clamping nipple **(G)**,
- insert the clamping nipple **(G)** into the locking lever **(F)** and
- push the locking lever **(F)** slightly forward towards the adjusting nipple **(C)** so that there is a slight pull between the nipples.
- Tighten the clamping nipple **(G)** tightly.
- Put the wheel back on and check whether the brake shoes **(H)** are already rubbing against the brake body.
- To do this, jack up the wheelchair or hold it up to the side. The wheel must be able to turn freely.
- If the brake shoes are already grinding (without having activated the operating lever), loosen the clamping nipple **(G)** and again
- give the locking lever **(F)** more play.
- Then tighten the clamping nipple **(G)** again.

To adjust the braking force:

- loosen the lock nut **(B)** on the adjusting screw,
- tension or relax the inner cable **(E)** of the bowden cable by turning the adjusting screw **(A)**,
- test the pulling force at the top of the control lever and
- tighten the lock nut **(B)** again.

Possible impairment of the braking force can result from incorrectly adjusted pulling force of the bowden cable, defective bowden cable, or dirty brake bodies / brake shoes.



3.7 Assembly group brakes

3.7.2 Knee lever brake

When the knee lever brake is closed, the wheelchair with the occupant must not move on a gradient of 7% (= 4 °). All variants of the knee lever brake are set in the same way.

The correct functioning of the knee lever brakes can be impaired by: insufficient air pressure in the tires, moisture, dirt, snow, ice, etc. or a worn tire profile or too large a distance between the brake pressure bolt and the tire.

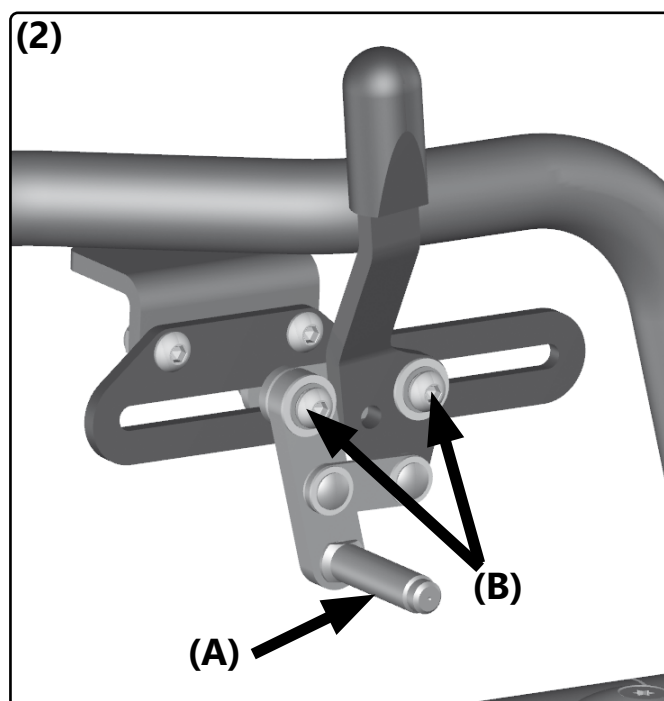
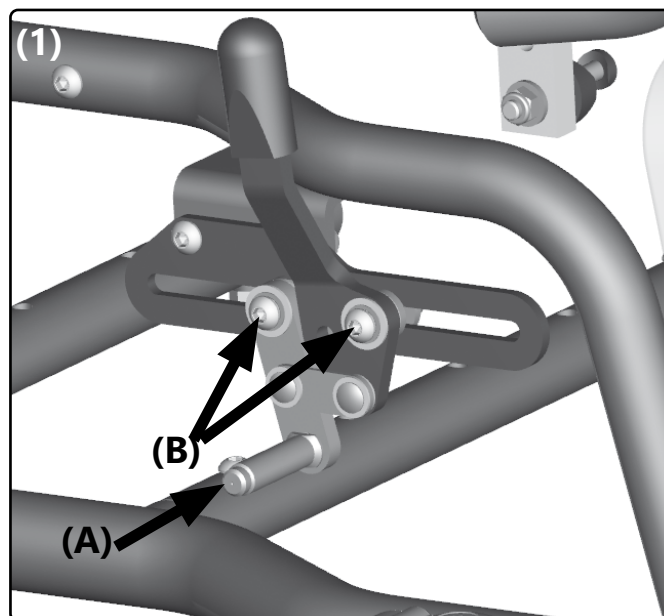
When the brakes are open, the maximum distance between the brake pressure pin (A) and the tires is:

- Standard-KLB max. 21 mm,
- Pull-to-lock-brake max. 11 mm,
- KLB with rollback max. 11 mm,
(Technical changes reserved)

(1) To change the distance between the brake pressure bolt (A) and the tires:

- First check the tire pressure of the wheels (required information on the tire casing),
- put the brake in an open position,
- loosen the two screws (B) on both sides,
- move the brakes to the required position (attention max. distance!),
- tighten both screws again and
- control the braking force of the brake.

Readjust the brakes after making any changes to the wheels.



3.8.1 Anti tipper

Anti tipper height:

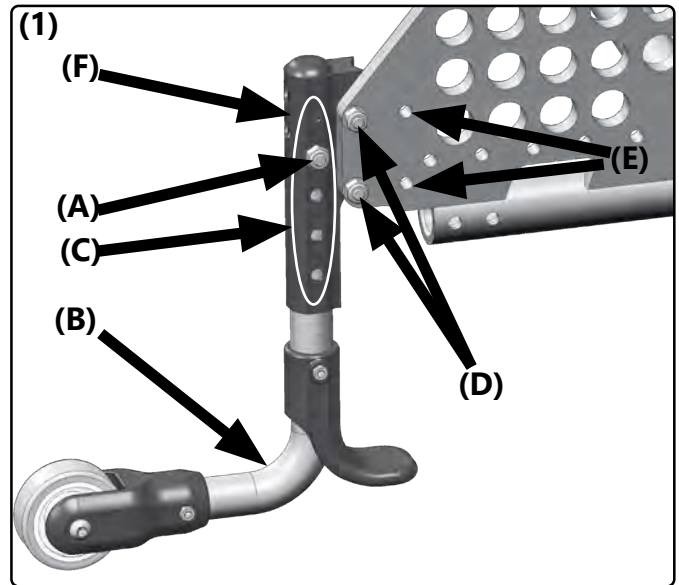
- **(1)** Remove the screws **(A)**.
- Pull the anti tipper bar **(B)** down
- and move the screw **(A)** into the alternative holes **(C)**,
- tighten the screw **(A)** again
- and let go of the anti tipper bar **(B)** wieder los.
-

Moving the anti-tip device into the hole **(E)**:

- **(1)** Remove the screws **(D)**,
- insert the spacers between the perforated plate and holder **(F)**,
- reinsert the screws **(D)**
- and tighten it firmly.
-

Subsequent / additional installation of the anti tipper device:

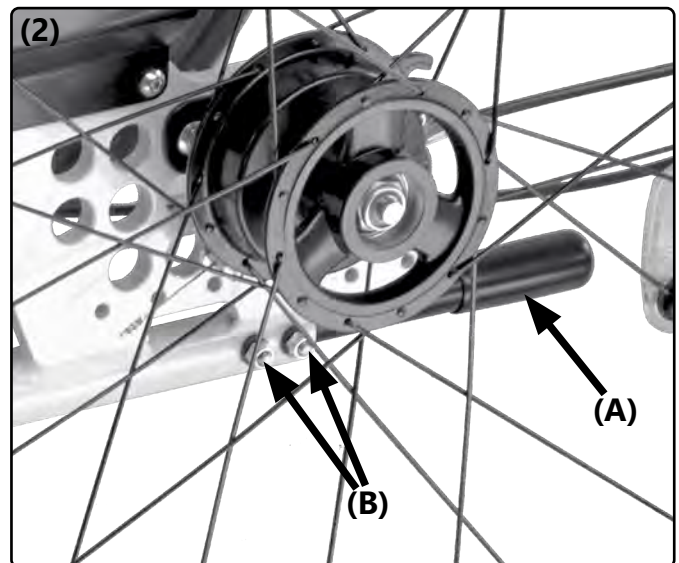
- **(1)** Place the holder **(F)** on the holes **(D)**,
- insert the screws **(D)** provided for this purpose and tighten it firmly.



3.8.2 Step tube

(2) Attachment of the step tube

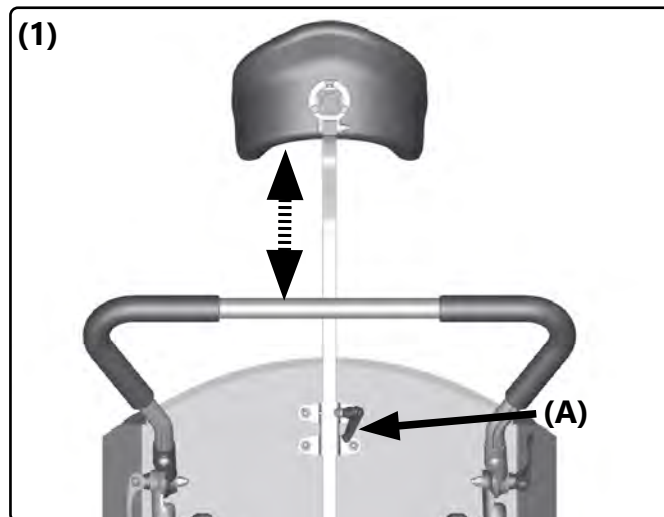
- Guide the step tube **(A)** into the right or left frame tube,
- insert the self-locking nuts **(B)** as well as the saddle and lock washer into the holes
- and tighten the nuts **(B)** firmly.



3.9 Assembly group headrest

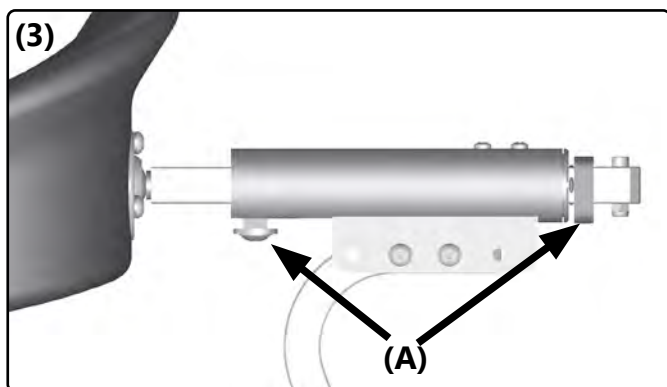
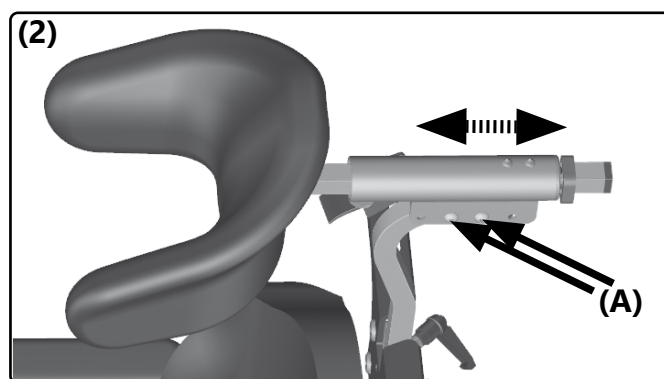
3.9.1 Height adjustment

To adjust the height of the headrest, loosen the clamping lever **(1A)** on the square tube. Move the headrest up or down to the desired position and tighten the clamping lever again.



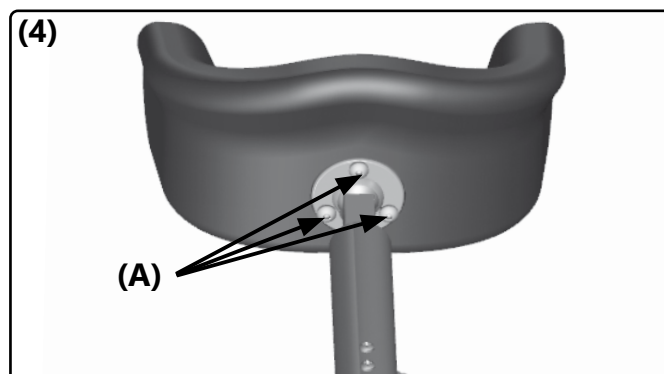
3.9.2 Depth adjustment and dynamics of the headrest

1st option: To adjust the depth of the headrest, loosen the two screws **(2A)** on the square tube. Next move the headrest slide forwards or backwards and screw everything tight again. 2nd option: Use the adjusting rings **(3A)** to adjust the depth of the headrest. Loosen the screw connection of the adjusting rings, put the headrest in the desired position and fasten the adjusting rings again.



3.9.3 Adjusting the inclination

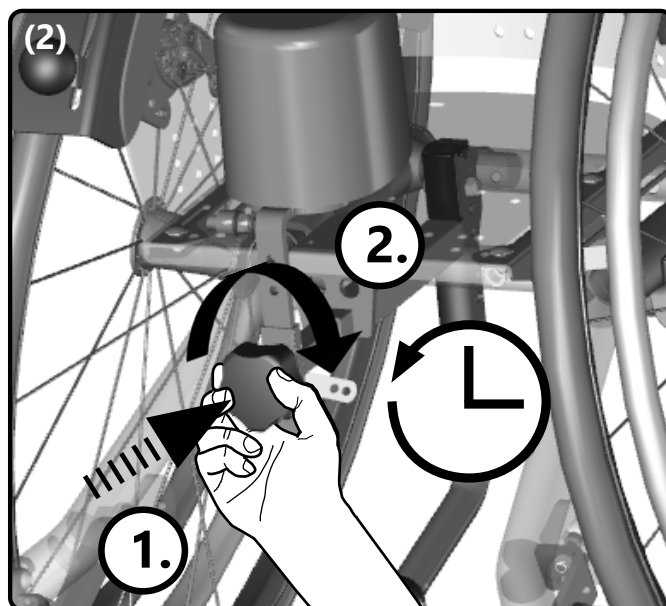
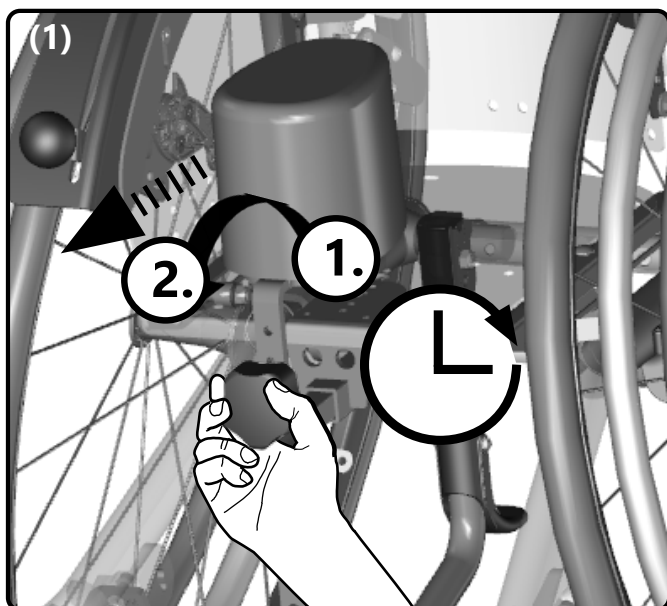
The inclination of the headrest can be brought into the desired orientation by loosening the three screws **(4A)** on the spherical head and then adjusting the head molding. Then the screws must be tightened again.



3.10 Assembly group abduction wedge

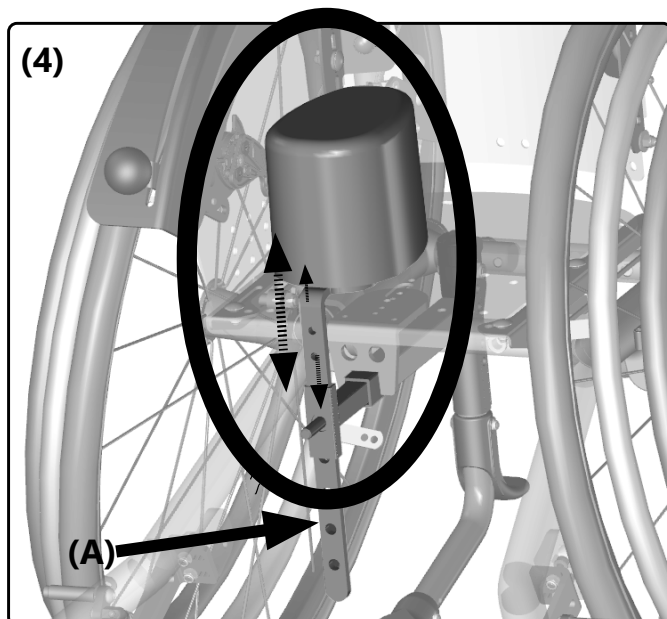
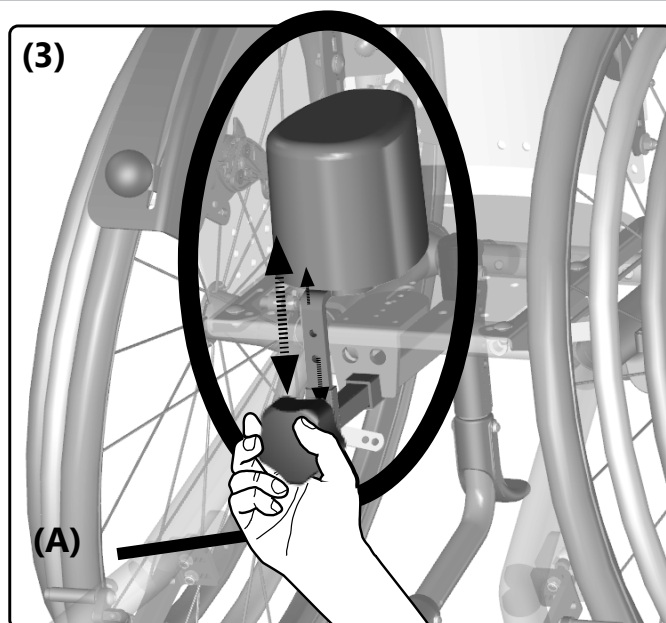
3.10.1 Depth adjustment

Adjust the height of the abduction wedge using the star grip.



3.10.2 Height adjustment

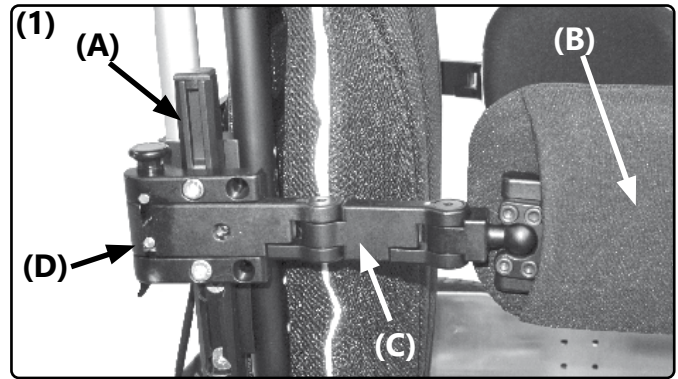
1. Open the star grip and pull out the abduction wedge completely.
 2. Remove the clamping crown and pull out the star grip with the threaded rod.
 3. Set the desired height and
 4. put everything back together in reverse order.
- The protruding adjustment part **(3A)** must now be sawed off.



3.11.1 Nomenclature

(1) The pads consist of the following parts:

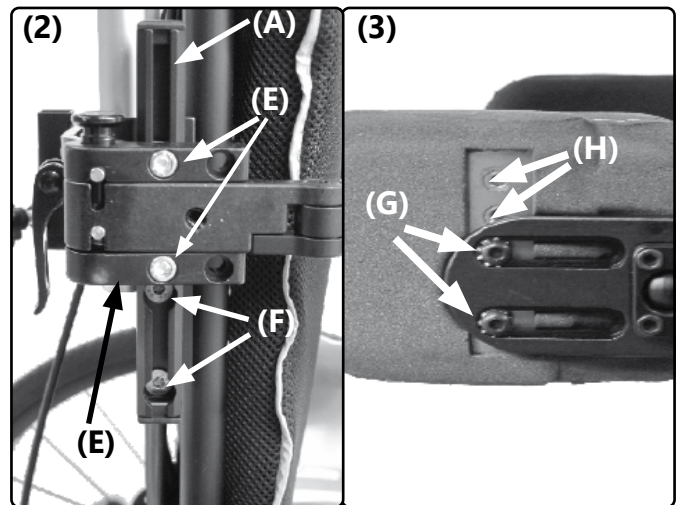
- (A) connection
- (B) pads
- (C) pad holder
- (D) locking joint



3.11.2 Vertical adjustment

(2) On the one hand, the vertical adjustment of the pads is done continuously by moving the locking joint (1D). Loosen the screws (2E), move the locking joint to the desired position, tighten the screws (2F) again.

(3) The vertical adjustment of the pads can also be changed on the upholstery. Remove the screws (3G), position the bracket in the desired position with the holes (3H) and fasten the screws (3G) again.



3.11.3 Horizontal adjustment

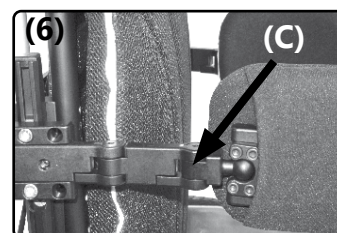
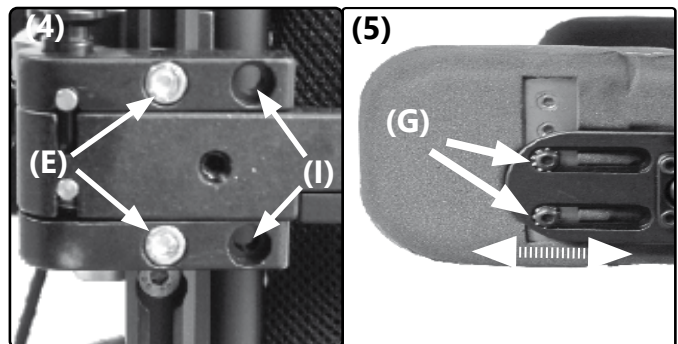
(4) The horizontal adjustment can be done on the one hand by offsetting the locking joint. Remove the screws (4E), move the locking joint into the holes (4I) (or vice versa), reinsert the screws and tighten firmly.

Horizontal setting

(5) On the other hand, the horizontal adjustment can be done by moving the upholstery. Remove covers, loosen screws (5G), move upholstery, tighten screws again, put covers back on.

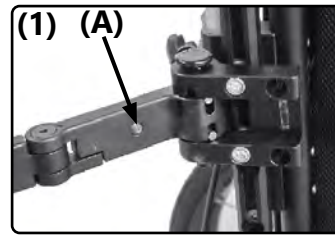
Horizontal extension

(6) An additional horizontal extension can be achieved by inserting an extension piece (spare part). Remove screw (6C) insert extension piece and screw tight again at both ends.



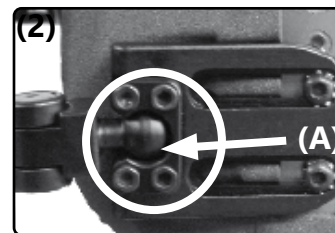
3.11.4 Fine adjustment of the pad holder

(1) The fine adjustment of the play between the locking joint and the pad holder is carried out using the adjusting screw **(A)**.




3.11.5 Adaption to the user

(8) When all positioning and extension work has been carried out, close the pads, align the joints in the required position **(A)** and tighten all joint screws **(6A)** firmly. You fix the ball joint by tightening the four screws **(B)**.




4.1 Repairs

 Repairs are to be carried out by the specialist retailer.

4.2 Spare parts

Only original spare parts may be used. You can obtain these from your specialist retailer.

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

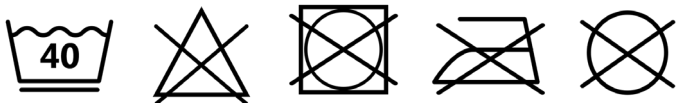
For a correct delivery of spare parts, the serial no. Of your wheelchair. It is located on the label on the frame.

4.3 Cleaning

Clean the wheelchair and all components regularly with a mild household cleaning agent on a water base and then dry it thoroughly..

In addition, clean the drive and caster wheels and remove dirt and contamination (e.g. hair, etc.) from the axles.

Wash textile parts:
Care instructions:



Wipe synthetic leather, straps and other upholstery
Care instructions:



4.4 Disinfection

Before each disinfection, cleaning must be carried out. Use a common household water-based agent for disinfection. Observe the application instructions of the respective manufacturer.

4.5 Storage

- Perform cleaning
- Fold the folding wheelchair (if available)
- Set the seat tilt (if available) to 90 °
- removable textile parts, if necessary in foil or similar pack
- Secure the wheelchair against rolling away and soiling
- Storage in a dry environment without aggressive environmental influences

4.6 Lifespan

The expected normal service life, depending on the intensity of use and the number of re-uses, is 5 years. For this purpose, the product must be used for its intended use, the specifications 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 usual, theoretical service life is not a guaranteed service life and is subject to a case-by-case check by the specialist trade, as is the reusability.

Use beyond the specified service life leads to an increase in the residual risks and should only be carried out after careful, qualified consideration by the operator.

The service life can also be shortened depending on the frequency of use, the operating environment and the care.

The usual service life does not refer to wearing parts such as B. 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 warranty or guarantee.

4.7 Reinstatement

Before re-use, a complete inspection according to the checklist must be carried out by a qualified specialist retailer. All disinfection measures for re-use must be carried out according to a validated hygiene plan.

4.8 Disposal

The wheelchair may only be disposed of with the approval of the insurance provider. The wheelchair must be disposed of in accordance with the applicable national statutory provisions.

4.9 Maintenance / inspection

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

Maintenance and care checklist (user)



Inadequate or neglected maintenance of the wheelchair represents a significant safety

Before every trip:

Check:

- Frame, back unit, add-on parts and accessories for visible damage, bends, cracks or missing / loose screws,
- Wheels / thru axles on tight fit ,
- sufficient tire pressure, tire profile,
- Functionality of the brakes,
- tight fit of the angle adjustment elements / eccentric clamps,
- firm closure of the seat plate / back / foot plate,
- Functionality of the anti tipper / seat and back straps,
- whether all previously dismantled parts are reinserted and firmly locked.

Every 3 months:

(earlier depending on mileage)

Check:

- Screw connections for tight fit,
- Weld seams, attachments and accessories for hidden damage, bends or cracks,
- tire tread,
- the firm fit of third-party systems (if any).

Clean and oil all moving parts.



If you discover deficiencies during maintenance, please contact your specialist retailer immediately and do not use the wheelchair any more.

Annual inspection checklist (specialist retailer)

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

Preparation:

- Cleaning carried out

Check:

- Frame, back unit, add-on parts and accessories checked for damage, bending, cracks and corrosion,
- checked fastening screws for completeness and tight fit,
- LCaster and drive wheels as well as the associated attachments for condition and functionality and running properties controlled,
- spokes for tight fit and completeness,
- Brakes cleaned and serviced,
- Locking mechanisms (tripod springs of the push handles, quick-release axles, eccentric clamps, etc.) checked for functionality,
- Anti tipper checked for tight fit and functionality.

Oil:

- Moving parts and bearings are oiled

Final check:

- Functional check of all mechanical adjustment devices carried out

5.1 Data and measurements

Model: Dynamis TSD

HmVz-No.:

Type: 804

Dimensions ± 5%

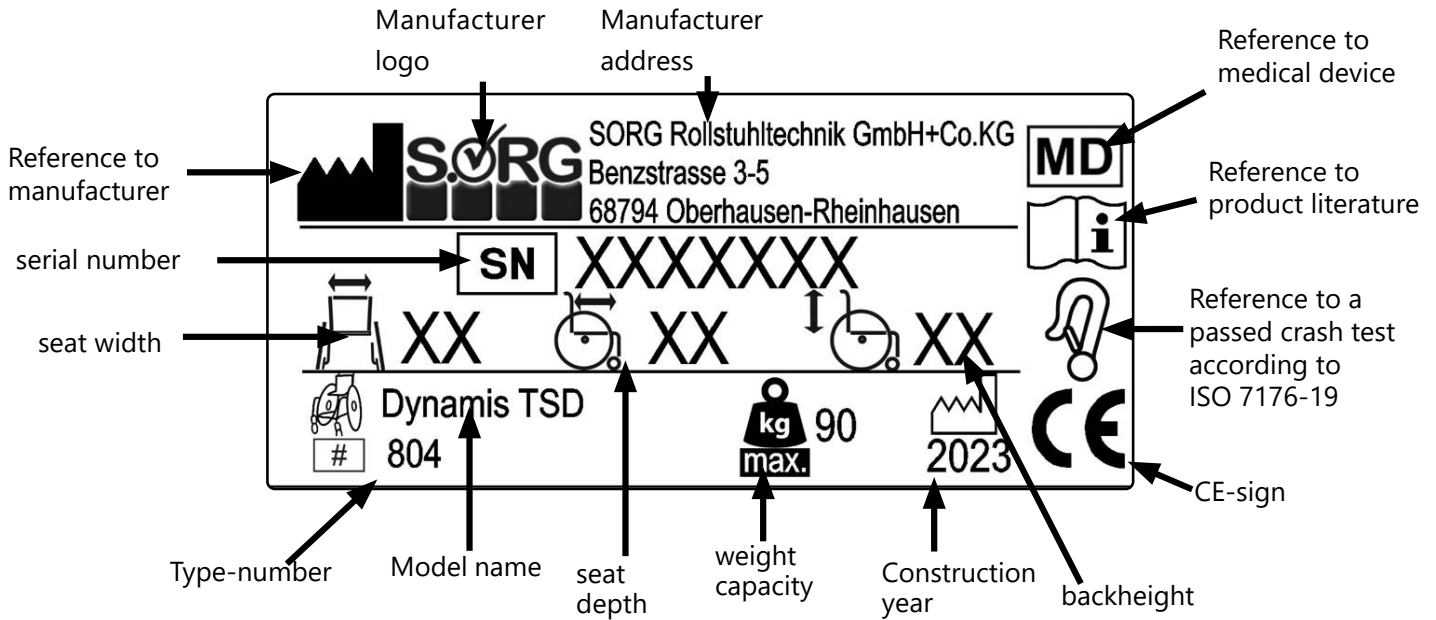
Description		Measurements	Comment
Seat width (SW)	Ergo-seat	300 - 500 mm in 20 mm steps	+ 40 mm growing with the child
Seat depth (SD)	Ergo-seat	320 - 520 mm in 20 mm steps	+ 20 mm growing with the child
Back height (BH)	Underfrage	430 or 500 mm	
	Ergo-seat	400-650 mm in 50 mm steps	
Back unit:		adjustable in depth by +40/ -20 mm	
Seat tilt		-3° to 30°	
Back angle	Presetting	90° / 95° / 100°	
	Dynamic	from the present angle up to 120°	
Lower leg length		220-450 mm	Upper edge of seat plate to foot plate
ETRTO wheelsize	at 16"	Ø 400 mm	
ETRTO wheelsize	at 20"	Ø 451 mm	
ETRTO wheelsize	at 22"	Ø 489 mm	
ETRTO wheelsize	at 24"	Ø 540 mm	
Hand rim diameter	at 20"	Ø 444 mm	
	at 22"	Ø 481 mm	
	at 24"	Ø 533 mm	
Hand rims		Ø 19 mm	Pipe diameter
camber		0° or 2°	
Seat height with a horizontal seat and horizontal frame (see chapter 3.1.1. Position of wheels)	Seat depth 360 - 480 mm	16": 475 - 535 mm 20": 410-515 mm 22": 430-540 mm 24": 460-565 mm	
	Seat depth 500 - 520 mm	16": 495 - 535 mm 20": 430 - 515 mm 22": 450 - 540 mm 24": 480 - 565 mm	
	Seat depth 500 - 520 mm	16": 495 - 535 mm 20": 430 - 515 mm 22": 450 - 540 mm 24": 480 - 565 mm	
Overall width	min.	RB + 220 mm	
	max.	RB + 320 mm	
Overall length	min.	840 mm	Frame size 1 16" rear wheels
	max.	1200 mm	Frame size 4 24" rear wheels
Total height (including push handle in 45 ° position)	min.	1140 mm	RH43 16" rear wheels
	max.	1400 mm	RH50 24" rear wheels
Weight capacity	max.	90 kg	
Permissible slope		12% = 7°	with 0 ° tilt and 0 ° inclination of the back angle
Permissible inclines		12% = 7°	
Security against tipping		12% = 7°	
Turning circle		ca. 1100 mm	depending on the wheelchair size
Individual weights	Wheels	1,2 - 2,2 kg	depending on the design and size
Tires	Commercially available pneumatic tires (1 " or puncture-proof tires (same dimensions), tire pressure usually 3-10 bar.		
Corrosion protection	Material	Stainless steel, Aluminum	
	Coating	Powder coating, galvanizing	
Service life	3 years	if the wheelchair is not used excessively	
lifespan	5 years		
normative requirements	The wheelchair meets the requirements of ISO 7176-8 and the requirements against ignition		
Empty weight	Suitable for driving with RB 300 mm, 12 " rear wheels, 4 " PU castor wheels	24,85 kg	Frame size 1, seat frame, 12 " wheels with drum brakes, caster wheels, legrests, push bars

5.2 Meaning of the labels

The meaning of the individual labels results directly from the respective text at the relevant point.

If the label is damaged or lost, a new label can be obtained from SORG Rollstuhltechnik.

Label:



5.3 Declaration of conformity

SORG Rollstuhltechnik declares that the Dynamis TSD product is a class 1 device and that it complies with the relevant provisions of EU regulation (EU) 2017/745 on medical products.

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



This declaration loses its validity if changes are made to the product that have not been approved by SORG Rollstuhltechnik.



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Stamp retailer