HOGGI®

CE

CESA / CESA Abdu

Service instructions

en

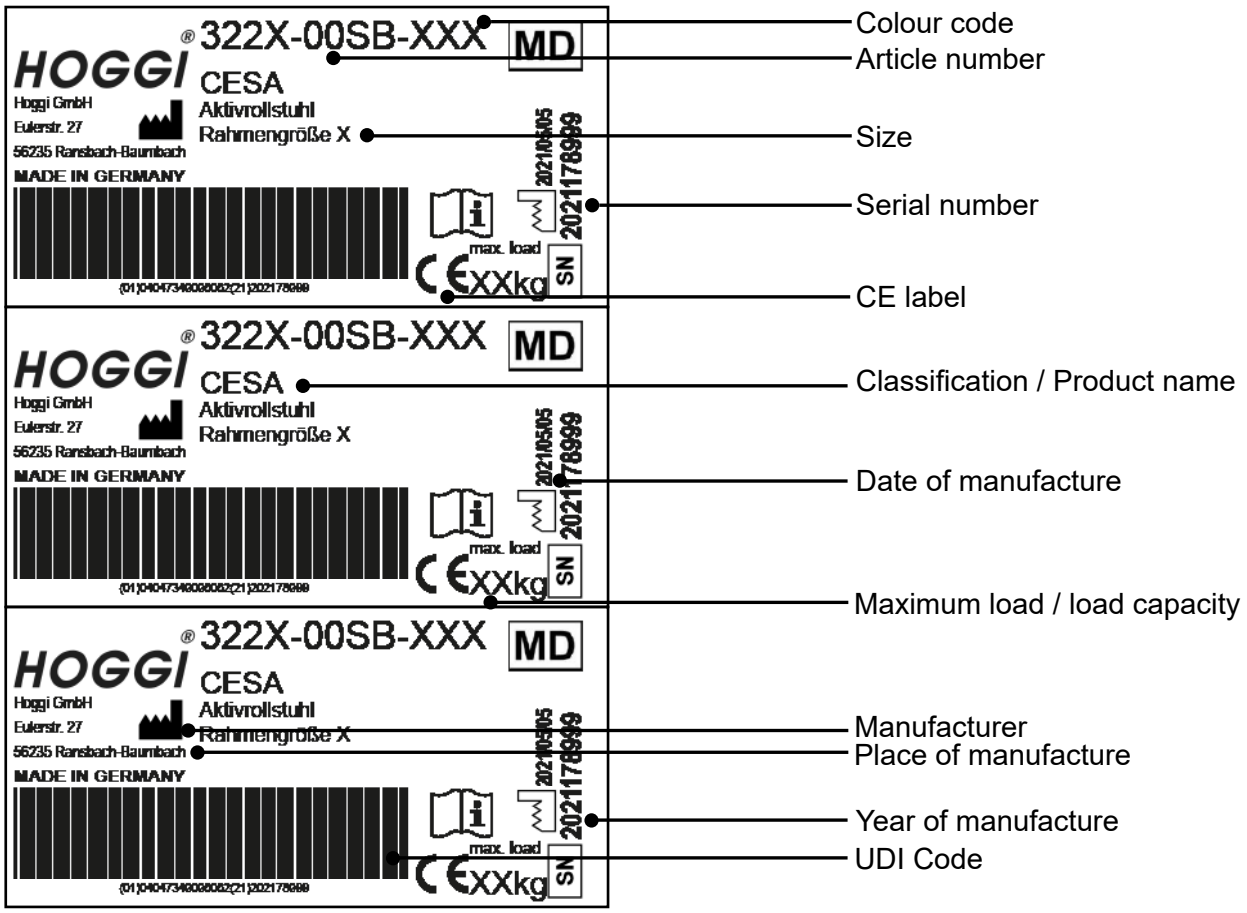
CESA - Service and maintenance instructions

Content Page

1 Model identification

1.1 Model identification (label)

(The label is attached to the axle tube)



1.2 Basic configuration

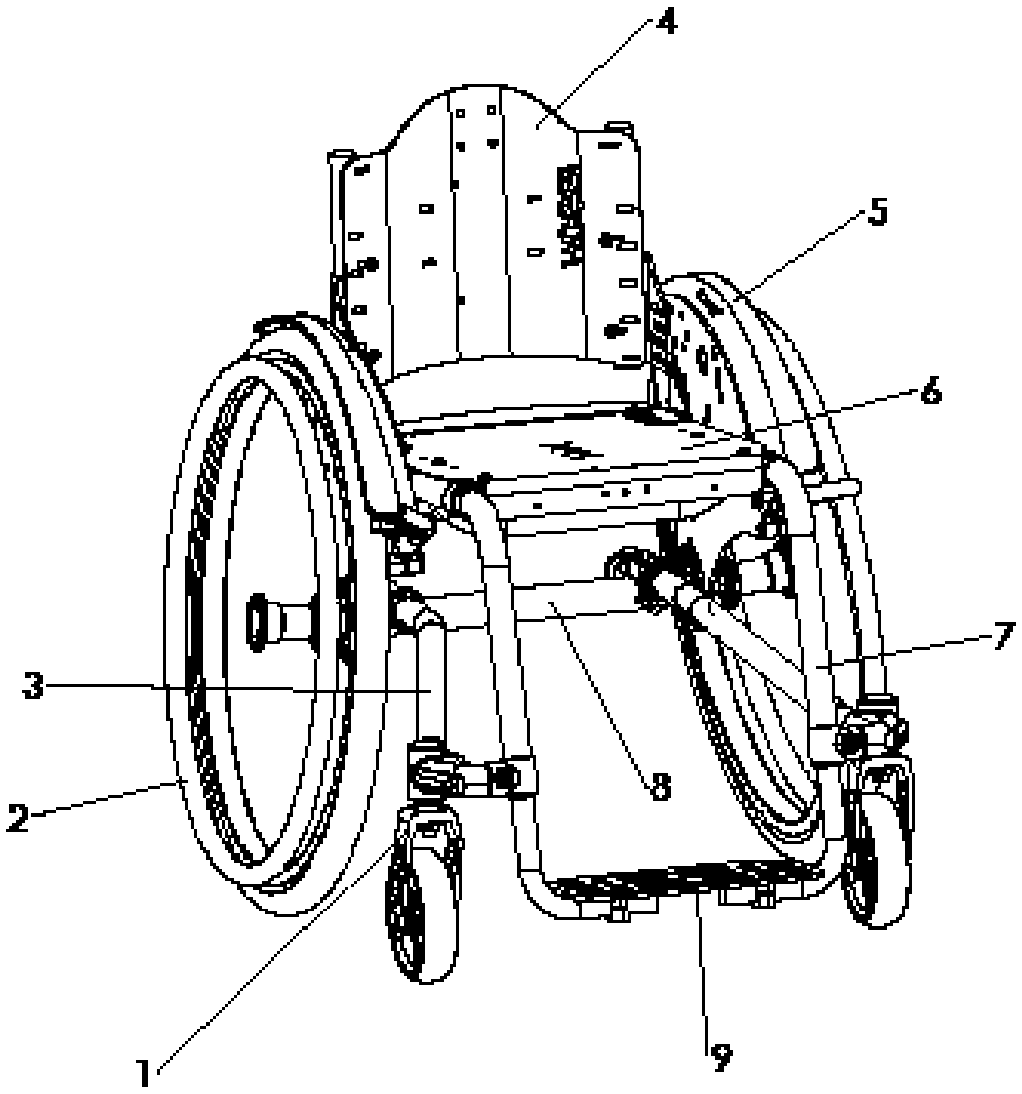
- Box frame active wheelchair in aluminium construction, powder coated
- seat depth grows with the child
- 3 frame sizes:
  Frame size 1: SW 24-30 cm in 2 cm steps
  Frame size 2: SW 26-36 cm in 2 cm steps
  Frame size 3: SW 30-44 cm in 2 cm steps
- Convertible to other seat widths
- Front seat heights: 36 cm up to 49cm
- Seat angle: 0° up to 12°
- Footrest hanger incl. aluminium footboard
- Backrest angle: -10°up to +10°
- Seat- and back panel
- Clothes cover
- ***HOGGI*** light rear wheels inclusive push rims (removable via quick-release axle)
- ***HOGGI*** light wheel locks
- Camber 3°, 6°, 9° or 12°
- Load capacity: 100 kg

1.3 Environmental conditions

Environmental factors such as temperature and humidity can damage the wheelchair. The manufacturer recommends not condensing the **CESA** at ambient temperatures between -20 ° C and + 40 ° C and a humidity of 5 to 100%.

Caution: prolonged exposure to the sun may cause parts of the wheelchair to become hot. Be sure to!

2 Overview CESA



Pos	Articel number	Articel description
1	12XX-100X	Wheel fork and Wheels
2	129X-XXXX	Rear wheels
3	3220-11XX	Beam Cesa
4	3220-XXXX	Back
5	327X-16XX	Wheel cover
6	3220-21XX	Seat panel
7	322X-13SB	Seat frame
8	3221-12SB	Axel tube
9	3221-4XSB	Foot rest

3 Common Information

3.1 Preface

Thank you for selecting the **CESA** wheechair. We have designed this high-quality product to make your life safer and easier, and we've included this manual to help you use and care for it.
Please read the following instructions to make sure you use this product as recommended. If you have any further questions, or if you have any problems, please contact your health-care provider.
We hope that **CESA** meets your expectations.
We reserve technical modifi cations regarding the specifi ed model in this manual. Before using the wheechair the fi rst time, this manual has to be read and understood by patient and support personnel in oder to ensure a safe handling with the wheelchair.

Regular maintenance is important - it increases safety and prolongs the life of the product. Every rehab product should be checked and serviced once a year.
However, it is recommended to check, readjust and, if necessary, service products with a high frequency of use, with users in growth or users with a changing clinical picture at 6-month intervals.
Only original spare parts should be used for all service and maintenance work.
The service and maintenance work described here should only be carried out by trained specialist personnel and not by the user of the aid.
These service and maintenance instructions refer to the respective spare parts catalogs and operating instructions of the products described. Please use all documents together.
Use the maintenance schedule (Chapter 5.2, Checklist to tick off) as a copy template.
Retain completed maintenance schedules and provide a copy to the customer.

CESA	User manual	1910-0047-EN
CESA	Spare parts catalog	1910-1047-EN

3.2 Application

CESA wheelchair is designed solely for individual indoor and outdoor use by childern and adolescents who are unable to walk or who have a walking impediment, and can be operated by the patient or by another person.
Assistance may be required due to:
- Paralysis (paraplegia / tetraplegia or tetraparesis)
- Loss of limbs (dysmelia/lower limb amputation)
- Infantile/spastic cerebral palsy
- Spina Bifida
- Muscle and nerve disorders
- Osteogenesis Imperfecta
- Poliomyeliti

CESA wheelchair is able to be used for further service. For further service the product has to be cleaned and sanitised efficiently. Afterwards the product has to be checked concerning condition, wearout and damage by an authorised technician. All damaged and inapropptiate parts need to be changed. Some components can be used again, e.g. Rear wheels, steering wheels or push handles. Please see also the service manual for detailled information.n.

3.3 Declaration of Conformity

HOGGI GmbH as manufacturer declares under sole responsibility that the ***CESA*** active wheelchair meets the general safety and performance requirements to Annex I of the Regulation (EU) 2017/745 of the European Parliament and of the Council. Applicable harmonized standards have been applied. ***CESA*** meets the requirements of ISO 7176-8, DIN EN ISO 12182 and DIN EN ISO 12183.

3.4 Terms of Warranty

Warranty applies only when the product is used according to the specified conditions and for the intended purposes, following all manufacturer’s recommendations.The manufacturer is not responsible for damages caused by components and spare parts not approved by the manufacturer. See also § 8 of terms and conditions on:
www.hoggi.de

3.5 Customer service

Our customer service will be happy to answer any technical questions you may have. Please refer to the last page for contact addresses and telephone numbers.

3.6 Service and repairs

Service and repairs on the ***CESA*** wheelchair may only be carried out by your specialist dealer. In case of problems, contact your responsible specialist dealer. In case of repairs, you will only receive original spare parts there.
Spare parts and replacement units are available during the entire service life of the product, but only for a maximum of 2 years after the sale of the last product in this series.
The wheelchair is custom made for the first time user. Therefore, no replacement wheelchair is available in the initial configuration. In order to ensure a correct spare parts delivery the serial no. of your wheelchair is required.
We are happy to help you find a dealer near you.
You can reach us at: **info@hoggi.de**

3.7 Packing and shipping instructions

If ***CESA*** has to be sent back to the manufacturer for repair or exchange the product must be thoroughly cleaned/disinfected beforehand and put in a hygienically safe condition.
Packaging is done by wrapping the product in a clean film, ideally with air cushions and the subsequent use of a sufficiently large cardboard box, so that no transport damage can occur.

4 Safety instructions

4.1 Meaning of symbols

Caution!
Warning of possible danger of accident and injury. Warning of possible technical damage.

Information!
About use of product.

Information!
For service-personnel.

Attention!
Read manual before use!

4.2 Common safety instructions

For all maintenance and repair work, you should generally observe a few points:

Attention!
Familiarize yourself with the functions of the product. If you are not familiar with the product, study the user manual before testing. If no user manuals are available, request them from us. You can also download documents from our homepage at: **www.hoggi.de**

Attention!
Study the service and maintenance instructions before starting work.

Attention!
Use suitable tools (see page 4 ff.).

Attention!
Wear suitable clothing and, if necessary, gloves and protective goggles.

Attention!
Secure the product from tipping over or falling down, e.g. from the workbench.

Attention!
Clean / disinfect the product before starting the test. If necessary, observe the instructions in the user manual and product-specific test instructions.

Note!
Screws and nuts with thread locking are used for a large number of screw connections. If you have to open such screw connections, replace the respective nut or screw with one with new thread locking. If new nuts or bolts with thread locking are not available, use liquid thread locking compound with medium strength (e.g. Loctite 241 or Euro Lock A24.20).

5 Required tools and maintenance schedule

5.1 Required tools

The following list shows the tools and utilities required for service.

Reversible ratchet and sockets
size 8-24

Torque wrench
Measuring ranges 5-50 Nm

Wrench
Size 6 - 24

Hexagon wrench
Gr. 3 - 6

Screwdriver
Blade width 2.5 3.5 and 5.5

Phillips screwdriver
Size 2

Plastic hammer

Hammer approx. 300 g

Carpet knife with sickle and
standard blade

Side cutter

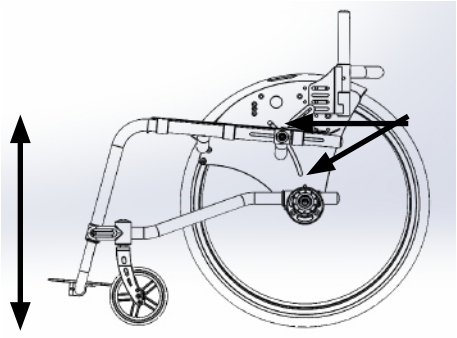
Liquid thread locking
„medium strength

Riveting pliers for rivets up to
5 mm

Maintenance schedule for regular inspection		***CESA*** Active wheelchair		Customer:	
Pos.	Area	Check (Checklist to tick off ☑)			
	Serial number:	1.) Function / Setting (see instruction manual)		2.) none damage / deformation	3.) Screw connections
1. Basic product					
1.1	Seat frames and beams	- Damages	☐	☐	☐
1.2	Base plates and axle tube	- Seat depth	☐	☐	☐
		- Seat height	☐	☐	☐
		- Seat angle	☐	☐	☐
1.3	Seat unit	- Seat cover or panel	☐	☐	☐
		- Seat depth	☐	☐	☐
1.4	Back unit	- Back angle / Fold down	☐	☐	☐
		- Back height	☐	☐	☐
		- Active degree	☐	☐	☐
1.5	Braking system	- Brakes	☐	☐	☐
1.6	Wheel fork holder	- Swivelling the wheel forks	☐	☐	☐
1.7	Front wheels	- Tires	☐	☐	☐
		- Air pressure	☐		
		- Running behavior of the wheels	☐		
1.8	Rear wheels	- Tires	☐	☐	☐
		- Air pressure	☐		
		- Running behavior of the wheels	☐		
		- Quick release	☐	☐	
1.9	Push rim	- Mounting position	☐	☐	☐
		- Cover	☐	☐	
	Do the settings on the wheelchair meet the user‘s requirements?		☐		
Notes:					

		1.) Function / Setting		2.) none damage / defor- mation	3.) Screw connections
2. Accessories					
2.1	Push bar and handles, One hand push-handle	- Height adjustment - Angle adjustment handle bracket - Removal	☐ ☐ ☐	☐ ☐ ☐	☐
2.2	Tie down kit	- Bracket	☐	☐	☐
2.3	Backrest extension	- Height adjustment - Cushion	☐ ☐	☐ ☐	☐
2.4	Footrest hanger & footrest	- Lower leg length - Folding away the footrest - Footrest angle adjustment	☐ ☐ ☐	 ☐ ☐	☐ ☐ ☐
2.5	Fender	- Height adjustment - Pads	☐ ☐	☐ ☐	 ☐
2.6	Therapy tray	- Clamping unit	☐	☐	☐
2.7	Spoke guards	- Spoke guards	☐	☐	☐
2.8	Calf strap	-Tension and hold	☐	☐	
2.9	Anti tip and tip assist	- Anti tip - Swivel away - Angle adjustment	☐ ☐ ☐	☐	☐
2.10	Abduction block	- Bracket - Swivel mechanism	☐ ☐	☐ ☐	☐
2.11	Seat / back cushion	- Cushion	☐	☐	
2.12	Headrest	- Removal - Height adjustment - Angle adjustment - Cushion	☐ ☐ ☐ ☐	 ☐ ☐ ☐	☐
2.13	Back cover & edge protection	- Pads - Velcro	☐ ☐	☐ ☐	
2.14	Belt fixings: Lap belt, 4-point lap belt, ankle hugger	- Closures	☐	☐	☐

Notes:
The maintenance was performed by: ..... on:.....



6. Seat settings

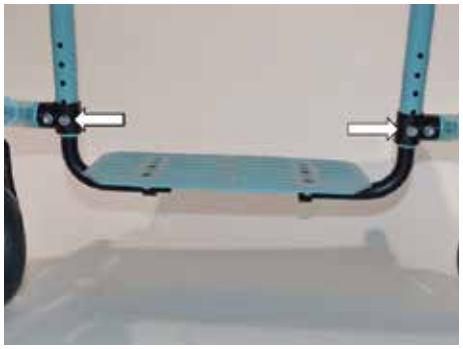
6.1 Seat height & seat angle

With CESA, seat height and seat angle are adjusted by moving the front frame vertically in relation to the beams and moving the seat frame in the gridded slot of the base plate.

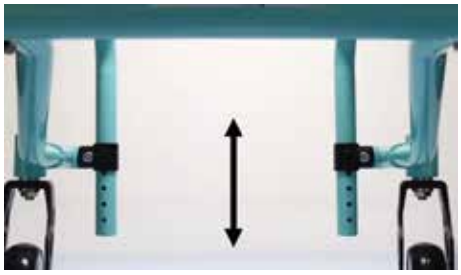
Depending on the frame size and the selected footrest system, the following adjustment options are available:

CESA Seat height and Lower leg length depending on frame size							
Frame size	SH	Foot rest versions					
		3221-41SB	3221-43SB	3221-45SB	3221-46SB	3221-47SB	3221-40SB
		Footrest system one piece angle adjustable fixed	Footrest system one piece angle adjustable foldable	Footrest system two piece angle adjustable foldable	Footrest system one piece angle adjustable for short LLL	Footrest system one piece angle adjustable for short LLL	Footrest system one piece fold backwards
CESA size 1 (SA 5")	36	27 - 33	27 - 33	27 - 33	15 - 22	19 - 25	27 - 34
	38	27 - 35	27 - 35	27 - 35	15 - 24	19 - 27	27 - 36
	40	27 - 37	27 - 37	27 - 37	15 - 26	19 - 29	27 - 38
	42	27 - 39	27 - 39	27 - 39	15 - 28	19 - 31	27 - 40
CESA size 2 (SA 5")	37	30 - 34	30 - 34	30 - 34	19 - 24	23 - 27	30 - 35
	39	30 - 36	30 - 36	30 - 36	19 - 26	23 - 29	30 - 37
	41	30 - 38	30 - 38	30 - 38	19 - 28	23 - 31	30 - 39
	43	30 - 40	30 - 40	30 - 40	19 - 30	23 - 33	30 - 41
	45	30 - 42	30 - 42	30 - 42	19 - 32	23 - 35	30 - 43
CESA size 3 (SA 5")	41	34 - 40	34 - 40	34 - 40	23 - 28	27 - 32	34 - 41
	43	34 - 42	34 - 42	34 - 42	23 - 30	27 - 34	34 - 43
	45	34 - 44	34 - 44	34 - 44	23 - 32	27 - 36	34 - 45
	47	34 - 44	34 - 44	34 - 44	23 - 34	27 - 38	34 - 45
	49	34 - 46	34 - 46	34 - 46	23 - 36	27 - 40	34 - 47

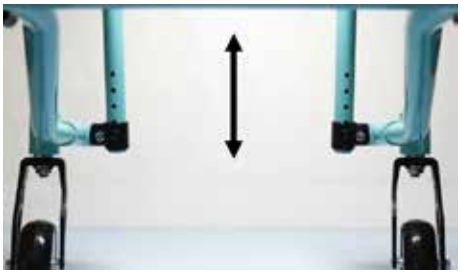
First, remove the front cover caps on the left and right.



Loosen the screw connections on the left and right and remove the screws.



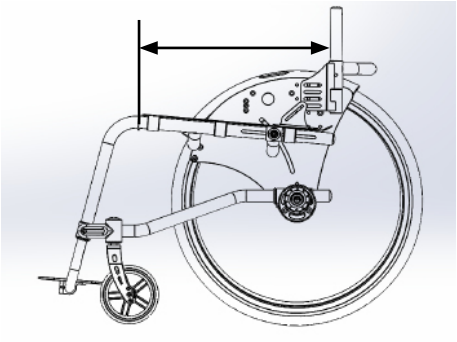
After removing the foot-rest, set the desired front seat height and screw it back in place



Then loosen the screw on the front frame

Then, by loosening the screw connection to the base plate, move the seat frame up and down within the slotted hole and thus adjust or adapt the seat angle/rear seat height.
Then tighten the screw connection again.
0° - 12° adjustment range

Finally, tighten the side screw connection again.



6.2 Seat depth

The seat depth is basically adjusted by moving the cross tube and the wheel axle relative to the frame.

Seat depths between 24 and 48 cm can be realised.
For a larger adjustment range, the seat plate may have to be removed beforehand.

The measuring point is the front edge of the backrest tube to the front edge of the seat plate/covering.

Small changes to the seat depth can also be made by moving the clamps on the seat frame.
The front edge of the seat plate always follows the curvature of the front frame.

Depending on the seat width and active degree, the following seat depth ranges result

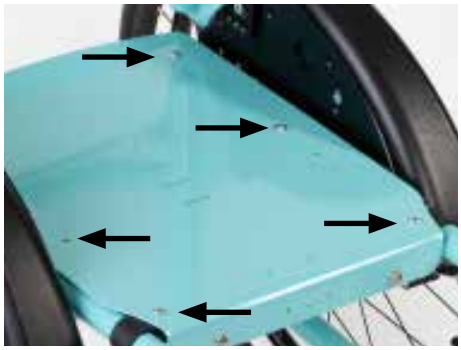
CESA Seat depth range depending on seat width and active degree (AD)

	AD	Seat width (cm)										
		24	26	28	30	32	34	36	38	40	42	44
CESA size 1 (SH 38, SA 5")	1	24-30	24-32	26-34	28-36							
	2	25-30	25-32	26-34	28-36							
	3	26-30	26-32	26-34	28-36							
	4	27-30	27-32	27-34	28-36							
	5	28-30	28-32	28-34	28-36							
	6	29-30	29-32	29-34	29-36							
	7	30-30	30-32	30-34	30-36							
	8		31-32	31-34	31-36							
CESA size 2 (SH 41, SA 5")	1		26-32	26-34	28-36	30-38	32-40	34-42				
	2		26-32	26-34	28-36	30-38	32-40	34-42				
	3		27-32	27-34	28-36	30-38	32-40	34-42				
	4		28-32	28-34	28-36	30-38	32-40	34-42				
	5		29-32	29-34	29-36	30-38	32-40	34-42				
	6		30-32	30-34	30-36	30-38	32-40	34-42				
	7		31-32	31-34	31-36	31-38	32-40	34-42				
	8		32	32-34	32-36	32-38	32-40	34-42				
CESA size 3 (SH 45, SA 5")	1				32-36	32-38	32-40	34-42	36-44	38-46	40-48	42-48
	2				32-36	32-38	32-40	34-42	36-44	38-46	40-48	42-48
	3				32-36	32-38	32-40	34-42	36-44	38-46	40-48	42-48
	4				33-36	33-38	33-40	34-42	36-44	38-46	40-48	42-48
	5				34-36	34-38	34-40	34-42	36-44	38-46	40-48	42-48
	6				35-36	35-38	35-40	35-42	36-44	38-46	40-48	42-48
	7				36	36-38	36-40	36-42	36-44	38-46	40-48	42-48
	8					38	37-40	37-42	37-44	38-46	40-48	42-48

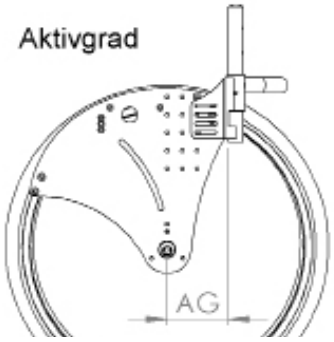
Loosen the screw connection on the right and left at the clamps of the axle tube.

Loosening the screw connection on the right and left to the base plate.

The frame can now be adjusted to the appropriate depth



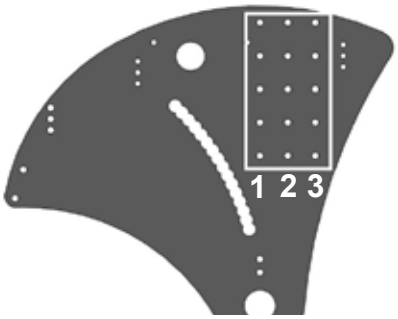
The seat plate itself can be moved slightly via the clamps.
To do this, the marked screw connections must be loosened.
The seat plate can then be realigned.



6.3 Active degree

The active degree describes the ratio of the position of the backrest relative to the drive wheel axis. The further the backrest is set behind the the drive wheel axle, the more active CESA can be driven. Conversely, a setting above, or in front of, the drive axle means a more stable driving position.

CESA offers an adjustment range of 1 - 8 cm.
The larger the value the more active.



The active level is set via the installation position of the back plate on the base plate. There is a choice of 3 different rows of holes, each with a spacing of 2.5 cm.

The elongated holes in the back base give an adjustment range of 3 cm. This results in a total adjustment range of 5 cm + 3 cm = 8 cm.

6.4 Back height

CESA is equipped with either an adjustable back covering or a back panel.

The back panel is available in different heights.
However, small adjustments can be made by moving the back base to the base plates and sliding the panel along the tubes.

The adjustable back upholstery is attached to the back tubes accordingly.

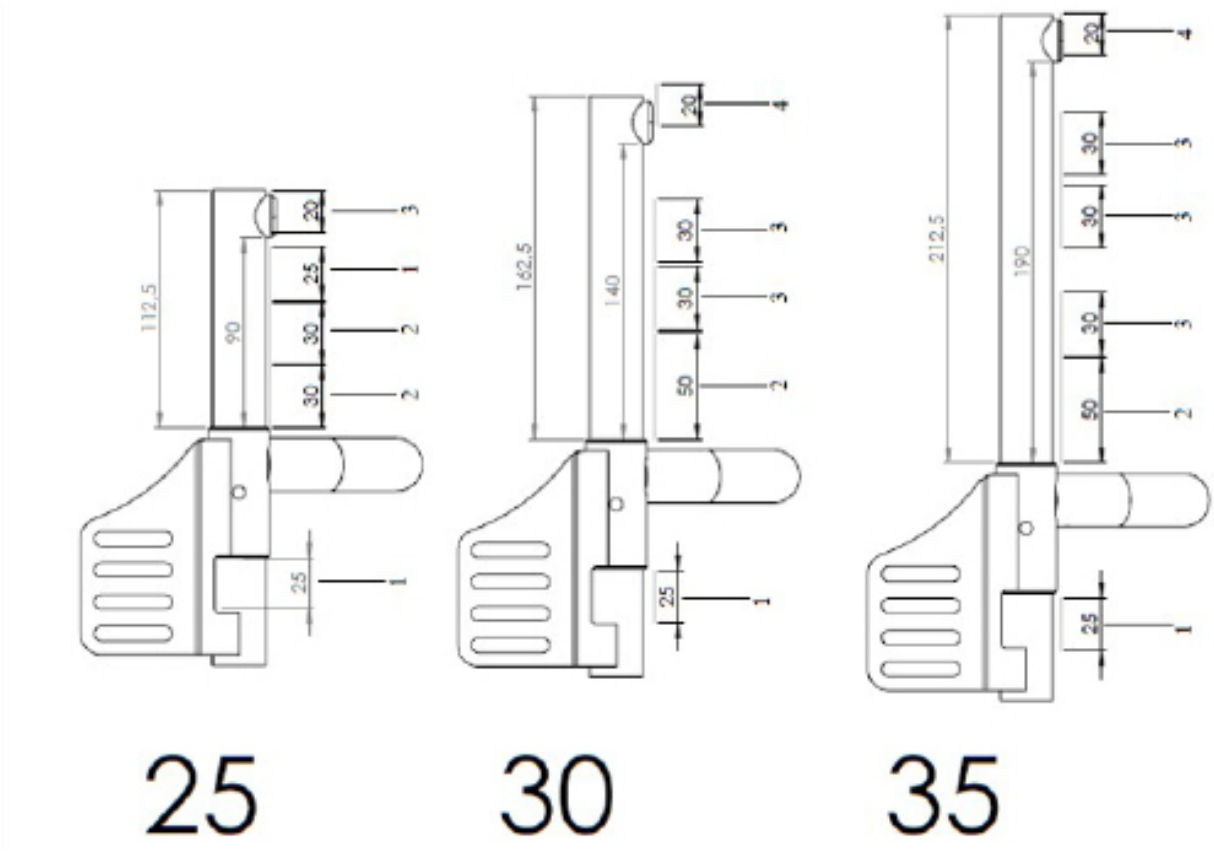
The back height can be changed by means of individual push handles or telescopic tubes.
If installed, the screw on the rear back tube must be opened.
These provide 10 cm additional length (for back height 20 cm only 5 cm possible for structural reasons).

This results in the following adjustment range

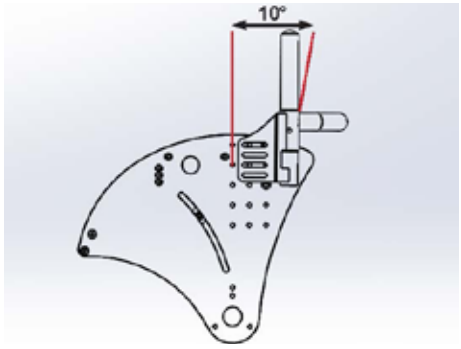
- 20 up to 25 cm
- 25 up to 35 cm
- 30 up to 40 cm
- 35 up to 45 cm

The height can then be readjusted and additional Velcro strips added.

The following basis applies for the dimensions of the Velcro strips

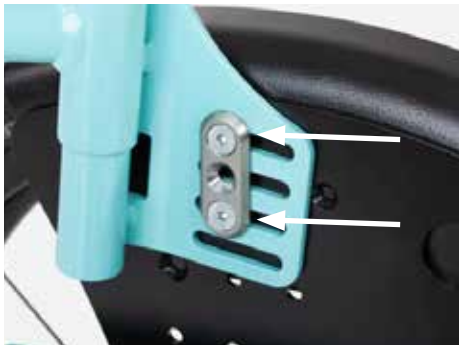


SW =	24	26	28	30	32	34	36	38	40	42	44
Back to Back länge	0,65m	0,72m	0,80m	0,87m	0,95m	1,2m	1,10m	1,17m	1,25m	1,32m	1,40m



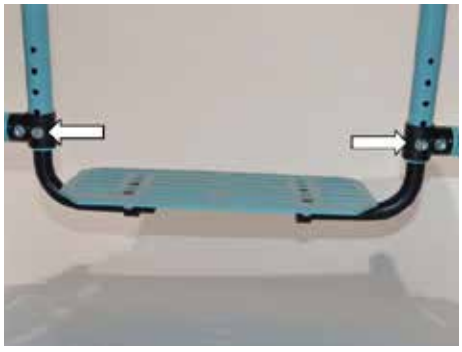
6.5 Backrest angle

The back angle is measured in relation to the seat surface.
The „rigid“ back base allows an adjustment range of +- 10°, whereas the „angle-adjustable“ back base offers a range of 80° - 105°.



If CESA is not equipped with the backrest base „angle-adjustable and foldable“, the backrest angle is adjusted by loosening the marked screw connection.

The „angle-adjustable“ backrest base is operated by a locking bolt on the back.
6° each hole position

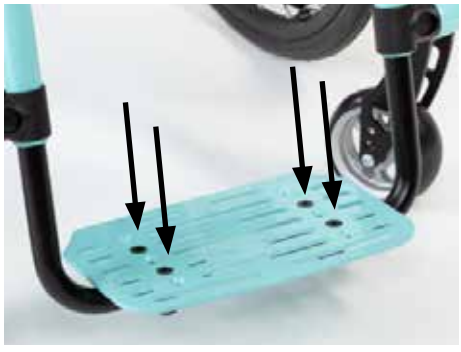


6.6 Lower leg length

The lower leg length can be adjusted between 15 and 46 cm depending on the frame size and footrest variant.

Adjustment is made by loosening the screw connection on the frame tube

With the variant for short lower leg lengths it may be necessary to shorten the tubes, as otherwise contact with the floor may occur!



6.7 Footrest angle and depth

Depending on the footboard version, the angle can be adjusted by loosening the front screw.

The depth can be realised by repositioning the footrest and using the other the other holes.

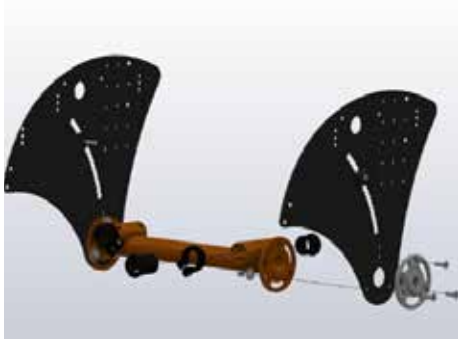
7. Maintenance schedule

7.1 Seat frame and beams

Functional test:

- Checking for general damage to the frame or the beams

Check the screw connection between the beams and the seat frame.



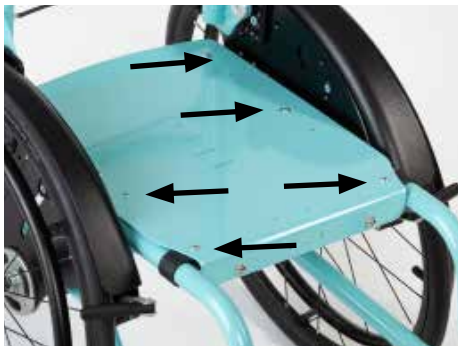
7.2 Base plates and axle tube

Functional test:

- Checking for general damage
- Checking the seat angle, seat height and seat depth
- Sliding of the axle tube on the beams

Check of the screw connections:

- Connecting bolt from base plate to seat frame
- Saddle clamping ring on the axle tube
- Bracket HOGGI light brakes
- Screw connection of wheel cover



7.3 Seat unit

- Check for general damage
- Seat depth adjustment via the clamps on the seat frame
- Rivets for fastening the seat cushion

- Screw connections of the seat frame to the clamps

Seat cover

- Hold of the Velcro strip
- Screw connections to the seat frame

7.4 Back unit

Functional test:

- Check for general damage
- Active degree
- Backrest height via back base or via clamps with existing Back panel
- Hold of the Velcro back cover
- Screw conncetions of the base to the base plates

Backrest angle adjustable and foldable

- Function and condition of the locking bolt
- Angle adjustment
- Folding down

7.5 Braking system

Brake HOGGI light

Functional test:

- Brake closure
- Faultless operation
- Visible damage

Brake closed

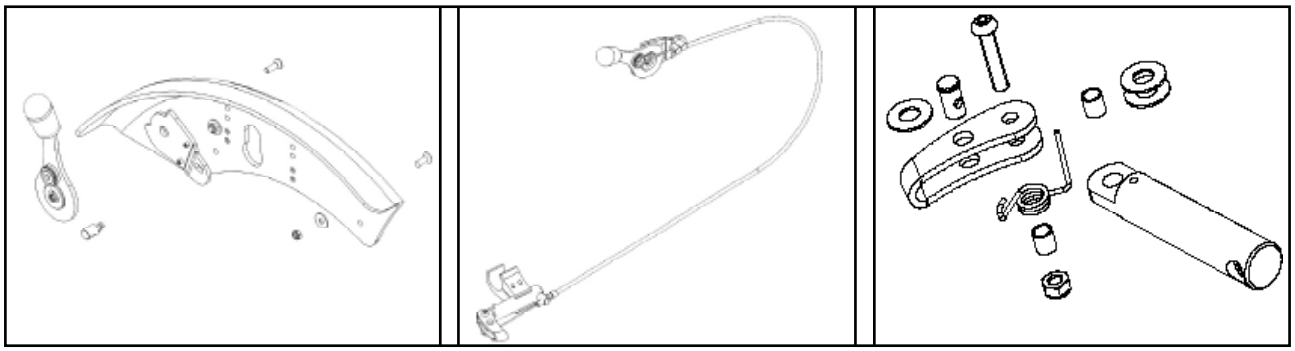
Brake opened

Check of the screw connections:

- Fixing the brake to the brake holder
- Fastening the brake holder to the base plates

Integrated brake system

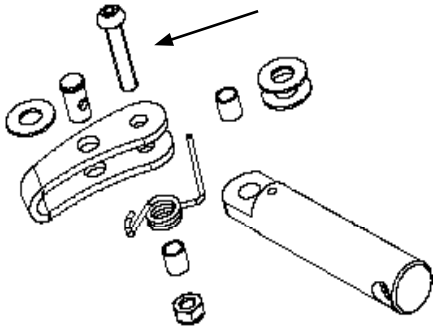
Consisting of:
- Fender with integrated brake system
- Brake cable
- Brake



Functional test:

- Operability of the brake lever and smooth glide
- Good brake closure and contact pressure of the brake bracket
- Correct positioning of the brake lever in relation to the wheel. 90° angle and 3-5 mm wheel protrusion
- Check for general damage in the area of the fender and the rubber grip

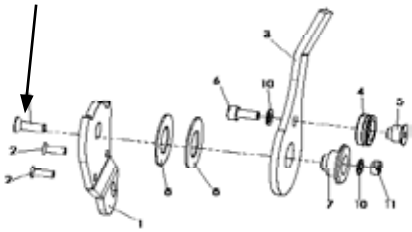
- Good brake closure and contact pressure of the brake bracket
- Correct positioning of the brake lever in relation to the wheel.
- Check for general damage in the area of the cable run and the brake unit

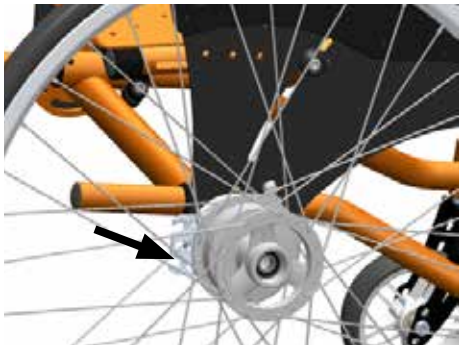


Check of the screw connections:

- Fastening the brake lever in the clamp on the frame

- Fastening the brake bracket to the brake bracket holder
- Bowden cable correctly looped in the cable pulley

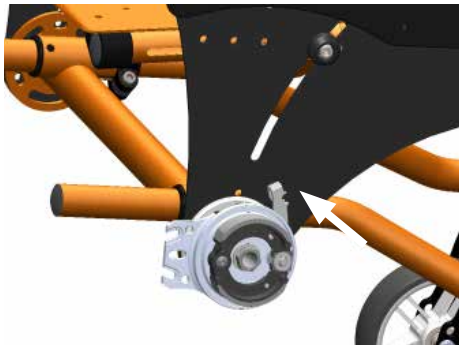




Drum brake

Functional test:

- Build-up of brake pressure (readjustment at adjusting screw)
- Checking the brake lever for general damage (locking lever, cracks)
- Checking the Bowden cable (kinks or cracks)
- Check the brake anchor and brake pads (contamination, wear)



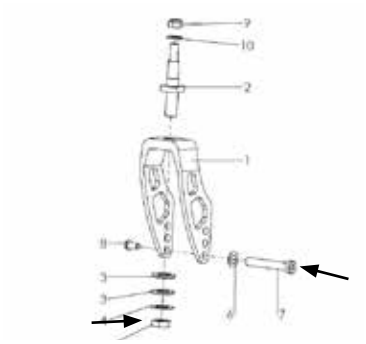
Check of the screw connections:

- Connection brake anchor with adapter
- Connection of brake anchor adapter with base plate
- Bowden cable correctly hooked in
- Screw connection of the brake handle to the handle unit

7.6 Wheel fork holder

Functional test:

- Swivelling of the wheel fork
- Smooth running or fluttering -> Checking the alignment
- Check for general damage to the forks



Check of the screw connections:

- Screw connection of the wheel axle
- Bolting the steering fork axle to the frame

7.7 Front wheels

Functional test:

- Check for general damage
- Check of the tread or profile (cracks, heavy wear)
- Wheel curvature too worn (tread max. up to 5mm to edge of wheel)
- Contamination in the area of the wheel bearing or the axle

7.8 Rear wheels

Functional test:

- Check for general damage
- Checking the treads and air pressure
- Checking the locking
- Checking the running behaviour of the wheel, clearance, mechanics of the axle
- Checking of the correct alignment of the camber adapter and its bolting

Adjustment of the quick-release axle:

- The axle should be fitted with a minimum of clearance. If too much movement is possible, the front nut is closed slightly clockwise with a 19 mm open-ended spanner in a clockwise direction, while the rear axle is secured with an 11 mm open-ended spanner
- If the wheel is too tight, proceed in reverse order

7.9 Push rim

Functional test:

- Check for general damage
- Severe scratching and sharp edges

Checking the screw connections:

- Attachment of handrim to rim, also at correct distance

7.10 Push bar and handles, One hand push handle

Push bar

Functional test:

- Attachment and removal
- Clamping
- Height adjustment
- Height adjustment of the upper part by means of ratchet joints
- Checking for general damage

Push handles

Functional test:

- Attachment and removal
- Clamping
- Height adjustment
- Straight alignment of the bars
- Checking for general damage

One hand push handle

Functional test:

- Attachment and removal
- Clamping
- Height adjustment
- Checking for general damage

Height-adjustable individual push handles

Functional test:

- Check for general damage
- Height adjustment

Check of the screw connections:

- Fastening the handle holders to the base plate
- Fastening the cross tube for stabilisation
- Fastening the clamp to the back base

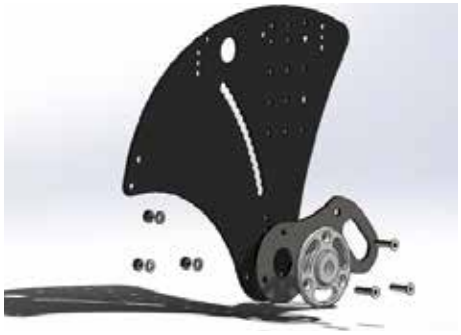
7.11 Tie down kit (ISO 7176-19)

Functional test:

- Check for general damage (deformation, sharp edges)

Check of the screw connections:

- Connection of the front and rear fuse to the base plate



- Connecting the rear fuse to the bracket.

7.12 Backrest extension

Functional test:

- Check for general damage
- Height adjustment and clamping

Check of the screw connections:

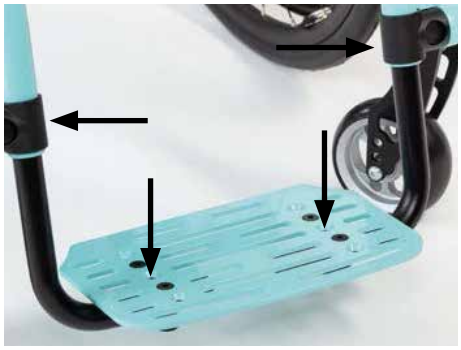
- Connection of the bracket to the back panel

7.13 Footrest hanger

Pipe bracket footrest

Functional test:

- Check for general damage
- Height adjustment
- Screw connection to the frame



Footrest hanger with footrest, one piece

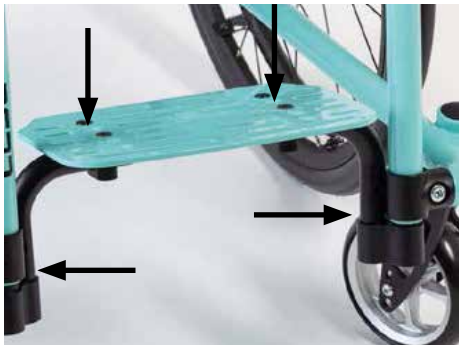
Functional test:

- Check for general damage
- Height adjustment
- Depth adjustment of the footboard
- Angle adjustment of the footrest
- Screw connection of the height adjustment and the footrest bracket

Footrest hanger, one piece, angle adjustable, foldable

Functional test:

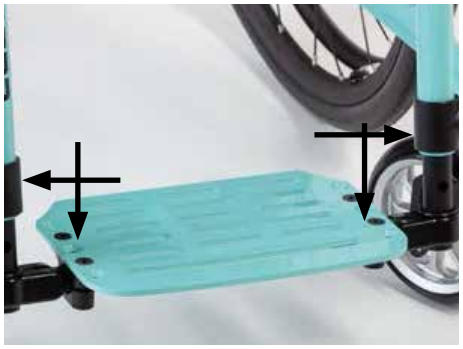
- Check for general damage
- Height adjustment
- Depth adjustment of the footboard
- Folding mechanism
- Screw connection of the height adjustment and the footrest bracket



Footrest hanger for short LLL

Functional test:

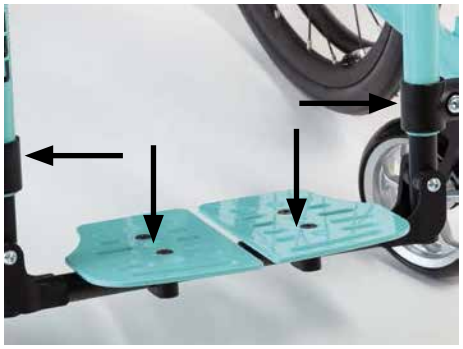
- Check for general damage
- Height adjustment
- Depth adjustment of the footboard
- Angle adjustment of the footrest
- Screw connection of the height adjustment and the footrest bracket



Footrest hanger foldable

Functional test:

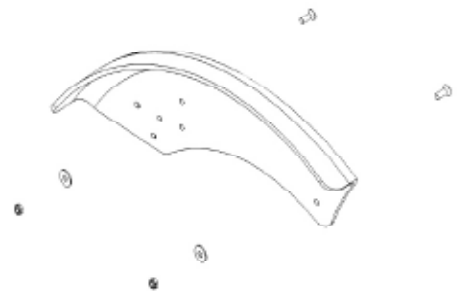
- Check for general damage
- Height adjustment
- Depth adjustment of the footboard
- Angle adjustment of the footrest
- Folding mechanism
- Screw connection of the height adjustment and the footrest bracket



Single foot plate footrest system

Functional test:

- Check for general damage
- Height adjustment
- Depth adjustment of the footboard
- Angle adjustment of the footrest
- Folding mechanism
- Screw connection of the height adjustment and the footrest bracket

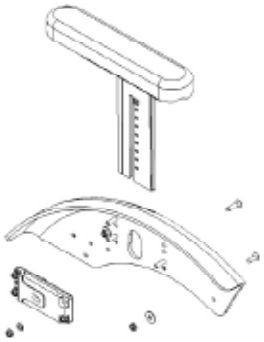


7.14 Fender

Standard fender

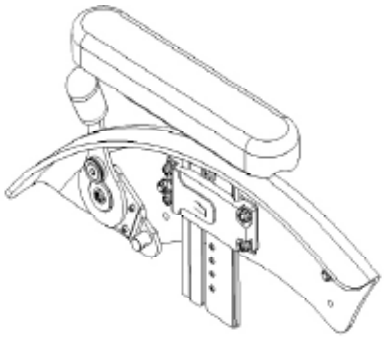
Functional test:

- Check for general damage
- Screw connection to the base plate firmly tightened



Fender with integrated armrests

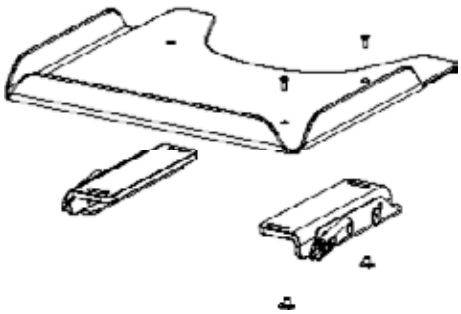
Functional test:
- Height adjustment and latching of the armrest
- Damage to the armrest cushion
- Damage to the release button
- Screw connection to base plate firmly tightened
- Armrest holder firmly screwed to wheel cover



Fender with integrated brake system and armrests

Functional test:

- Check for general damage
- Height adjustment and latching of the armrest
- Damage to the armrest cushion
- Damage to the release button
- Checking the brake unit (see 6.4 Brake system)
- Screw connection to base plate firmly tightened
- Armrest holder firmly screwed to wheel cover



7.15 Therapy tray

Functional test:

- Attachability and fixation of the table on the armrests
- Checking for general damage (cracks, sharp edges, etc.)

Checking the screw connections:

- Connection of the table top to the clamping units

7.16 Spoke guards

Functional test:

- Check for general damage (cracks)
- Fastening clips complete or defective
- Spoke guards suitable for wheel (drum brake or normal)

7.17 Calf strap

Functional test:

- Check for general damage
- Velcro

7.18 Anti tip and tip assist

Anti tip

Functional test:

- Check for general damage
- Correct positioning (beyond the wheel radius, 2-3 cm above the floor)
- Checking the swivel mechanism
- Checking the length adjustment

Tip assist

Functional test:

- Check for general damage
- Good grip of the rubber cap

Check of the screw connections:

- Screw connection of the anti tipper or tip assist mounting bracket to the base plate
- Screw connection of the anti tipper or the tip assist to the base plate.

7.19 Abduction block

Functional test:

- Check for general damage
- Pivoting and latching mechanism
- Removal

Check of the screw connections:

- Bracket abduction block to the seat panel

7.20 Seat- and back cushion

Standard seat cushion

- Check for general damage (Velcro fastening, seams, holes or strapped-through areas)
- Check for contamination

Seat cushion contoured

- Check for general damage (Velcro fastening, seams, holes or strapped-through areas)
- Check for contamination

Back cushion

- Check for general damage (Velcro fastening, seams, holes or strapped-through areas)
- Check for contamination

7.21 Headrest

Headrest bracketr

Functional test:

- Check for general damage
- Checking the clamping ability
- Checking the screw connection to the back panel

Headrest with upholstery

Functional test:

- Adjustment possibilities
- Check for general damage (wear, cracks, etc.)
- Clamping ability

Checking the screw connections:

- Attachment of pad to support

7.22 Back cover & edge protection

Functional test:

- Check for general damage
- Velcro straps for support on the back cover

7.23 Belt fixations

Lap belt

Functional test:

- Check for general damage
- Check of the fastener
- Check of the screw connection of the bracket

4-point lap belt

Functional test:

- Check for general damage
- Check of the fastener
- Check of the screw connection of the bracket

Ankle hugger

Functional test:

- Check for general damage
- Check of the fastener
- Check of the screw connection of the bracket to the footrest

8 CESA operating life::

The expected operating life of the **CESA** is 6 years, depending on the intensity of use, care as well as maintenance. We recommend an annual inspection by the authorized specialist dealer.
In case of malfunctions or defects of the wheelchair, it must be immediately handed over to the medical supply store or the specialist dealer.

9 Speficications

	Frame size 1	**Frame size 2**	**Frame size 3**
Seat width	240 - 300 mm	260 - 360 mm	300 - 440 mm
Seat depth	240 - 360 mm	260 - 420 mm	320 - 480 mm
Back height	200, 250, 300, 350 mm	200, 250, 300, 350 mm	200, 250, 300, 350 mm
Seat height* (front)	360 - 420 mm	370 - 450 mm	410 - 490 mm
Seat angle	approx. 0° up to 12°	approx. 0° up to 12°	approx. 0° up to 12°
Back angle, rigid back base	-10° up to +10°	-10° up to +10°	-10° up to +10°
Back angle, adjustable back base	80° up to 105° in 5° steps	80° up to 105° in 5° steps	80° up to 105° in 5° steps
Lower leg length	150 - 400 mm	190 - 430 mm	230 - 470 mm
Footrest angle	adjustable approx. +/- 10°	adjustable approx. +/- 10°	adjustable approx. +/- 10°
Rear wheel diameter	20“ (508 mm)	22“ (559 mm)	24“ (610 mm)
Front wheel diameter	100, 125, 140 mm	100, 125, 140 mm	100, 125, 140 mm
Camber	3°,6°, 9°, 12°	3°, 6°, 9°, 12°	3°, 6°, 9°, 12°
User weight/ Maximum load**	60 kg	80 kg	100 kg
Weight***	12,5 kg	13,0 kg	13,5 kg
Total length maximum / minimum	800 mm / 740 mm	1090 mm / 935 mm	1090 mm / 965 mm
Total width maximum / minimum	660 mm / 515 mm	730 mm / 525 mm	850 mm / 655 mm
Height maximum / minimum	850 mm / 550 mm	880 / 580 mm	920 mm / 620 mm
Weight (of the heaviest part)	8,95 kg	9,45 kg	9,95 kg

CAUTION!
*The seat height depends on the frame size, the wheel diameter and the wheel camber.

CAUTION!
**Accessories and add-on parts reduce the remaining load capacity for the occupant.

CAUTION!
*** The weight specifications refer to a **CESA** in basic equipment and maximum seat width.

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