sessio

adaptable wheelchair

made in Germany by

SITZ!GMBH

Maintainance Instructions V1105

Manufacturer:

SITZ!GMBH

SITZ!GMBH
Goethestr. 58
38440 Wolfsburg
Germany
www.sitz-sessio.de

CE

INTRODUCTION

Regular Maintainance will exceed the life cycle and the safety of the wheelchair. We recommend to cleaning and service like discribed in the users manual fort he wheelchair routinely. In addition the wheelchair should be checked and maintained by a sessio wheelchair technician. If you use the wheelchair very intensively it is recommended to do the maintainance in shorter time periods.
For repair and maintainance it is only allowed to use original spareparts released by Sitz!GmbH.

Signs and symbols

Attention! Shows very safety relevant advice. Follow stricly the manual!.

Important! Shows very inportant information.

TABLE OF CONTENTS

IMPORTANT SAFETY ADVICE

Read the user manual and the maintainance instructions very carfully before using and maintaining the wheelchair and get familiar with all functions of the wheelchair prior to any use.

You can downolad all neccessary information on the manufacturers website www.sitz-sessio.de .

Use only appropriate tools in a appropriate manner.

Wear appropriate cloth and use safety equipment while working on the wheelchair.

The wheelchair needs to be protected from rolling away and falling down or tilting over.

Prior to any maintainance the wheelchair needs to be cleaned properly.

MAINTAINANCE ADVICE

After unthightening nuts with threadlock insert use a new nut with threadlock insert before rethightening in any case.
After unthightening threads with liquid threadlock clean the threads properly from the threadlock-medium as no particles of this old medium remain in the thread. If you thighten the thread again use exactly the threadlock-medium listed in this maintainance instructions.
The maximum life cylce of this wheelchair is 5 years, depending on the intensity of use and maintainance.

It is recommended to give the wheelchair for check and maintainance to a sessio wheelchair expert at least once a year. If any mal-funtion or defects occur on the wheelchair Stopp using it immediately and call your dealer for assistance and repair.
To find a dealer or sessio technician nearest to you call +495374-9311460 or send mail to info@sitzgmbh.de.

Dealers and technicians will be provided with all neccessary information on demand.

MAINTAINANCE PLAN

Maintainance plan fort he adaptable wheelchair sessio					
customer:					
	part	**OK**	**Adjustments**	**Replaced**	**notes**
1	**frame**				
	frametubes plastic joints glue sections screws				
2	**attachments**				
	Anti tilt device Mud guards screws				
3	**brakes**				
	function wear kinematics screws				
4	**rear wheels**				
	Wear of tyres Profile of tyres air pressure air valve cycling behaviour bearings quick release axle spokes hand rim camber				

watch 2nd page

	part	OK	Adjustments	Replaced	notes
5	**front rollers**				
	wear profile cycling behaviour bearings quick release axle				
6	**seat**				
	suspension cushion				
7	**seatback**				
	suspension backframe tubes adjustable bar folding mechanism backframe locking pushing bar				
8	**footrest**				
	Tilting mechanism locking footplate screws				
9	**accessories**				
	cane holders				
Check done by:					Date:
Signature					

ADJUSTMENTS AND REPLACEMENTS

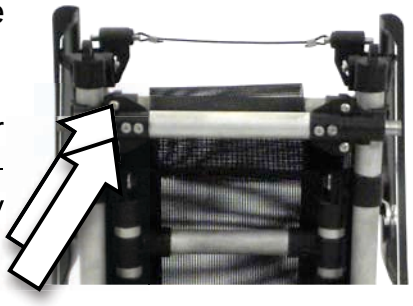
Attention: Every screwing point on the sessio should only be unthightened and thightened by an expert trained on and familiar with the sessio wheelchair. Inadequate modified or rethightened screwings after service, repair or maintainance on the wheelchair may cause mal-function or decfects and may cause a safety risk. The inadequate unthightening and thightening of screwings on the wheelchair is a infringement to the users manual and causes a immediate loss of all warranties given by the manufacturer.

The effective thightening torque needs to be within the given range.
Lower torque may cause a unintended unthighening of the screw, higher torque may cause defects or mal-function.
In any case the threadlock-medium from Henkel´s locktite series described for every screwing point needs to be used on clean, dry and oil- and greasefree threads.

1. Frame

Crossmember for rear wheels

The rear wheels are mounted to the crossmember, clamped to the mainframe.
These clamps are fixed with four screws.
To adjust or to release the crossmember unthighten the screws. (Torx T30, torque 7,5 – 8 Nm) Make sure, that the screws are finally thightened with the right torque.
This screwing doesn´t need a threadlock.



2. Attachments

Anti tilt device

The Anti tilt device is mounted to the rear axle with a clamp, that is fixed with two screws.
When you attach the anti tilt device, make sure, that the front end is cliped securely on the front cross tube of the frame before you thighten the screws with the right torque (Torx T30, torque 7,5 – 8 Nm).
This screwing doesn´t need a threadlock.

Mudguard

To disassemble the mudguard you need to screw off the braking bolt first like discribed under pt. 3. After screwing off the braking bolt completely you pull the mudguard taht much to the front, that the nut appears (see arrow). Now you unthighten the nut. To assemle the mudguard work exactly the other way around.
(Tools SW17 and Torx T25, torque 0,6 – 0,8 Nm, threadlock with Loctite 243).

Adjustable mudguard support

To adjust the height of the mudguard you need to unthighten the lower screw of the mudguard support bracket (see arrow). Now you can adjust the height of the mudguard. In the ideal position there´s 10 mm space between the mudguard and the tyre. To disassemble the support bracket unscrew also the upper screw. Both screwings: (Tool Torx T25, torque 3,5 – 4,0 Nm, threadlock with Loctite 243).

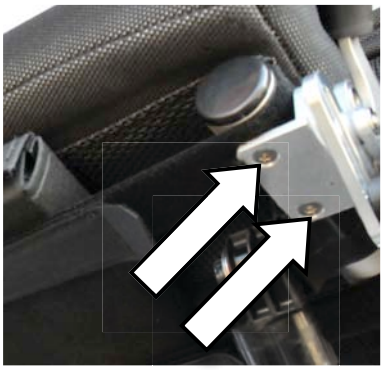
3. Brake

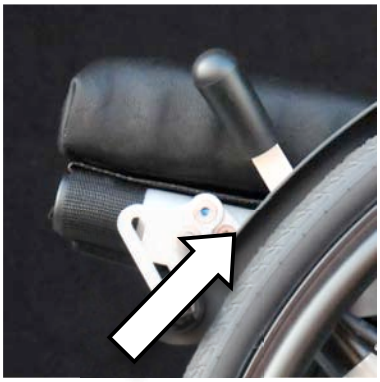
Adjusting the brake

To adjust the brake you need to unthighten the brakingbolt first. Now you can slide the brakingbolt back and forth. In the ideal position the movement of the brakingbolt provides half of its way space to the tyre and the other half of its way pressure on the tyre for a save locking. After adjustment thighten the braking bolt again and check the function of the brake.
(Tool SW17, torque 15 – 16 Nm, no thread-lock).

Replacing the brakesystem

The complete brakesystem is fixed with two screws from the bottomand one from the outer side (see arrows). Unscrew these screws to take off the whole brakesystem. Mounting the brakesystem or a new brakesystem make sure, that the screws get thightened correctly. Attention: Never try to unthighten a screw within the brakesystem! Don´t forget the threadlock.
(Tool Torx T25, torque 3,5 – 4,0 Nm, threadlock with Loctite 2701).





Replacing the braking bolt

The braking bolt is fixed with a squareheadbolt on the inner side. The disassemble the braking bolt simply unthighten the bolt and screw it fully of. Keep the squareheadbolt in place to prevent it from falling down. For assembly just screw the braking bolt onto the squareheadbolt again. Make sure that the squarehead fits exactly in its slot. Now adjust the braking bolt and thighten the bolt correctly. (Tool SW17, torque 15 – 16 Nm, no threadlock).

4. Rear wheel

Replacing the tyre

Take off the wheel by using the quick release function of the axle. Open the air valve and make the tyre airless.
Now lift the tyre over the rim with softedged tool to prevent the hose and the rim from any damage. Tyre and hose can get replaced after that.

Quickrelease axle rear

The quick release axle can be replaced very easily. Pull off the wheel and than simply pull off the axle from the wheel.
You need to push the button to get it through the bearings.

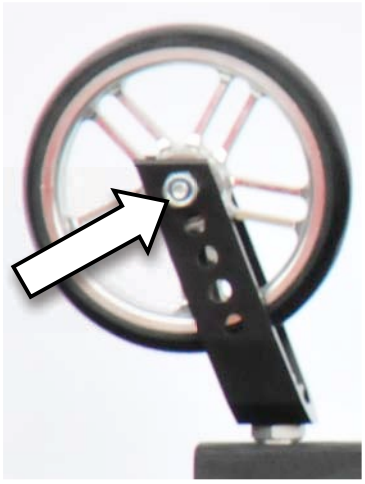
Handrim

The handrim is fixed with six screws. You need to unthighten all six screws to get the handrim off. After replacement make sure that all six screws are correctly thightened again and check the proper mounting of the handrim.
Use threadlock Loctite 243 to secure the screws.

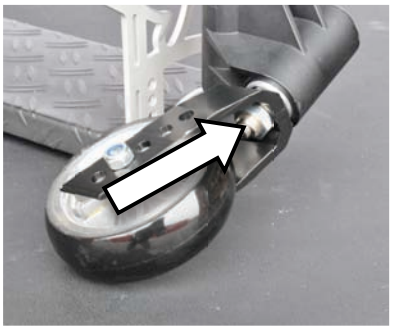
5. Front rollers

Replacing the front rollers

To replace a front roller you need screw off the nut from the screw completely. Pull out the screw from the fork, than pull out the roller. If you assemble the system again make sure, that the washers left and right from the roller ar back in place. Use a new nut with solid threadlock (blue) in any case.
(Tools HX6/SW13, torque 5 – 6 Nm).



Replacing quick release axle front



Take off the whole fork by pulling out the quick release axle. Now disassemble the front roller. The quick release axle is fixed with two nuts. Put a tool on each of them and counterdrill them to unthighten the screwing. Now turn off both of the nuts and replace the axle. After replacing the axle adjust the nuts the way, that the axle can safely lock into the frame without recognizable play. Thighten the nuts correctly with threadlock and check the locking in the frame again. Now assemble the front roller again.
(Tool SW 19, torque 25 – 30 Nm, threadlock with Loctite 2701).

6. Seat

Suspension

The suspension is fixed with 6 (or 7 on large seats) velcro belts. You can adjust the tension of the net by placing the velcro strips different. To replace the suspension just open all velcro strips and take the suspension off. On some versions of the frame the brakes need to be take off before you can replace the suspension.

7. Seatback

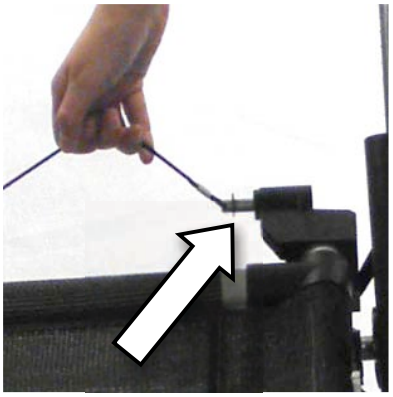
Height adjustable pushing bar (optional)

To replace the pushing bar just open the speed lockers and unscrew them completely. The nuts within the tubes are secured and can not fall out. Assembling the bar again just screw in the opened speed lockers into the nuts that far, that closing the speed lockers clamps the system safely.

Suspension

The tension of the suspension can be adjusted by fastening the velcro strips in different positions. The suspension can easily be replaced by opening all of the velcro-strips. Take care, that all strips are fastened correctly again after replacement.

Backframe release



To replace the cord between the locking bolts you need to cutt he loops on both sides. Use new cord and new aluminum sleeves to create a new loop on each side. Crimp the cord carefully between the alu sleeve. To soft crimp may cause a slipping of the cord, to heavy crimp may cause a damage of the sleeve or the cord.
To replace the locking bolts you need to take off the safety washer than you can pull the bolt out to the outer side. Reassembling the bolt don´t forget to place the spring back inside and don´t forget to fasten the safety washer. Uncorrectly assembled locking bolts may cause a safety risk.

8. Footrest

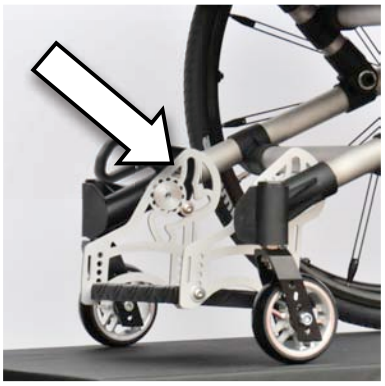
Height adjustable footplate

The footplate can easily be adjusted in height. Just screw off the four screws completely, place the footplate in the new position and place the screws again. Take care, that all screws are placed in the same height. Now tighten the screws correctly. Check the tightness of the screws at least once a month. (Tool Torx T30, torque 3,5 – 4,5 Nm, to threadlock)

Replacing the footrest

To replace the footrest you need to screw off the footplace like discribed first.
Now screw off the screw that holds the washer on the sidemembers motion link (see arrow). Now you can take off both sidemembers to the inner side. Reassembling the sidemembers use a little graphite lubricant for the bearing to prevent from squeaking. Don´t forget to tighten the screw with the washer correctly.
(Tool Torx T25, torque 5 – 6 Nm, threadlock Loctite 2701)

Replacing the handle of the footrest



First you need to disassemble the footrest like discribed. Now you can untighten the screw of the handle. Than you can pull of the handle. Reassembling the handle don´t forget to place the screw with the washer and tighten it correctly.
(Tool crosstip PZ2, torque 5 – 6 Nm, thread-lock Loctite 2701)

TECHNICAL DATA

measurements & weights		
max. load		100 kg
seating width [1]	in 10mm steps	360 - 500 mm
seating length [1]	in 10mm steps	380 - 440 mm
seating height rear / front 1)2)4)	kinematics S	450 / 450-470-490 mm
	kinematics M	470 / 470-490-510 mm
	kinematics L	490 / 490-510 mm
seating angle [1)4)]	d.o. height front & axle pos.	2° / 5° / 8°
backframeangle [1)4)]	in center axle position	95°
backframeheight [1)2)]	in 20mm steps	160 - 440 mm
total width [1]	at 0° camber	seating width + 180 mm
	at 4° camber	seating width + 250 mm
total length [1]	in rearmost axle position	810 mm
total height [1)4)]	depending on choosen features	630 - 900 mm
heigth seat-footrest [1)2)4)]	dep. on choosen seating height	340 - 440 mm
camber	d.o. used connector	0° / 2° / 3° / 4°
total weight unloaded [1)3)]	d.o. features/measurements	9,5 - 12 kg
frameweight [1)3)]	d.o. features/measurements	5,0 - 7,0 kg
weight single rearwheel [1]	24" basic line	ca. 1,5 kg
turning circle [1]	d.o. wheelsize / camber	max. 950 mm
framewidth folded [1]		seating width + 130 mm
framelength folded [1]		640 mm
frameheight folded [1]	w/o pushing bar	180 mm
static stability	max tilt angle	10°
rims rearwheels	golz lightwheel or twinstar	24" / 25"
tyres rearwheels	schwalbe, diff. types	24"x1" / 25"x1", 6-10 bar
steering rollers	diff. types, flatproof	100x24 mm - 125x32 mm
main materials	frame	MgMnE21, PA6GF30

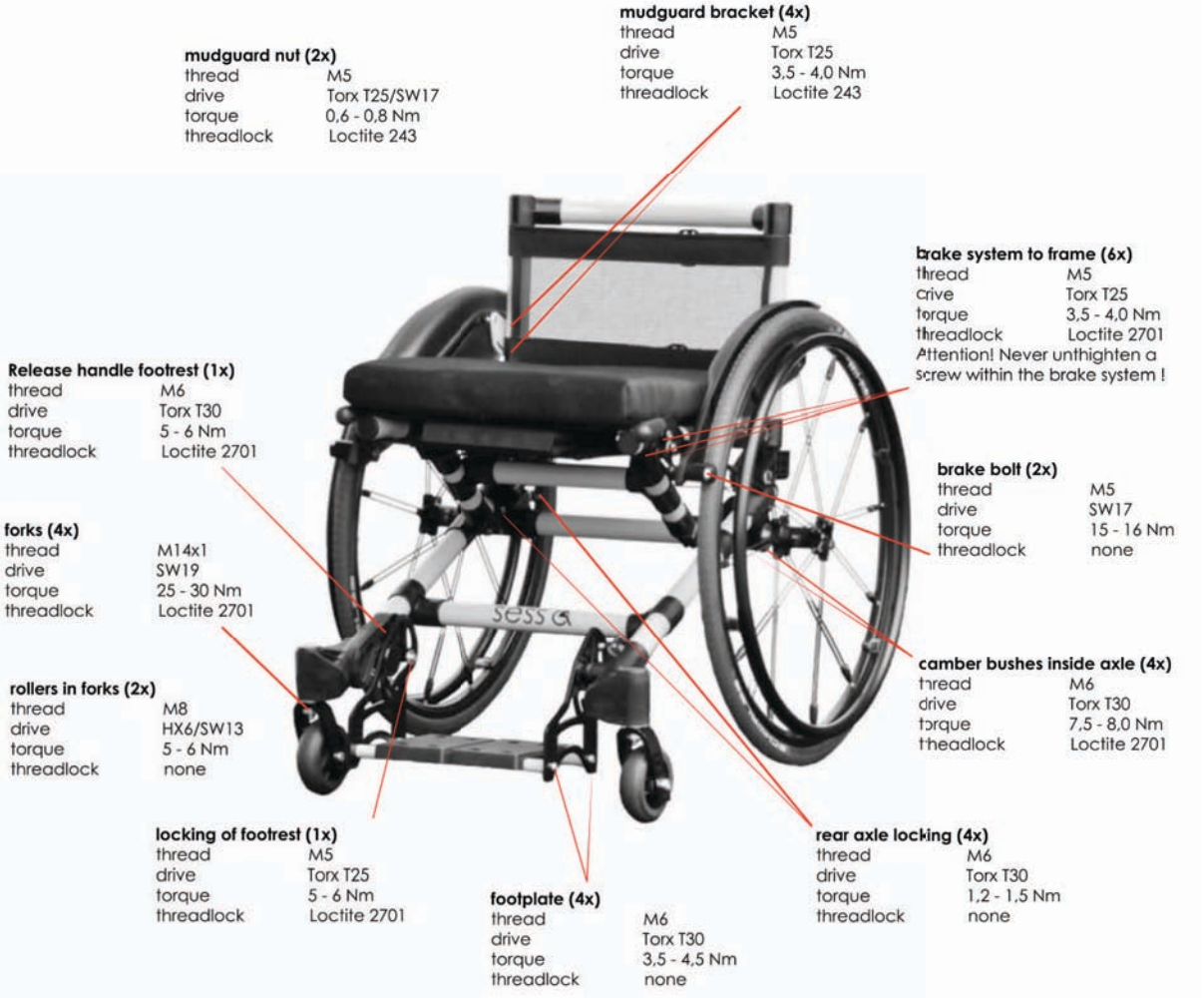
1) The sessio is a handmade product. Even under highest care there may occur the following tolerances: Lengths ±10 mm, angles ±1°, wheel-weight ±0,15 kg, frame-weight ±0,5 kg.

2) This height is measured without seatcushion. The cushion we provide has a height of 50 mm and will reduce it´s height under load down to appr. 25 mm, depending on the occupants weight.
so using our standard cushion will increase the effective seating height by appr. 25 mm. Other cushions may effect another seating height.

3) The effective weight depends on the choosen dimensions and features. Higher & wider frames are heavier than lower & smaler ones. Larger rollers are heavier than smaler ones.
Features like pushing bar, tilt protection, bags, etc. raise the weight. The provided seating cushion is not included in the weight figures.

4) These dimensions are related to the basic layout of the sessio with 24" rearwheels, 4" frontwheels, 0° camber, 400 mm seating length and rear axle in center position.
By using other parameters there may occur differences going beyond the named tolerances.

Attention: Every screwing point on the sessio classic is only allowed to be untightened and tightened by a technichian trained in service works on the sessio. Non-accurate srewings after an adjustment or after a service may cause a defect or mal-function and may cause a serious safety risk.
Incorrect untightening and tightening of screws is a noncompliance to the user manual and our general terms and conditions (GTC) and causes a immediate loss of all warranties given by the manufacturer.



The effective tightening torque needs to be within the given range. Lower torque may cause a self-untightening of the screw, higher torque may cause defects or mal-function. In any case the giver threadlockers of Henkel (Loctite) needs to be used on dry, clean and lubricant- and oilfree threads.

SITZ!GMBH
Goethestr. 58
38440 Wolfsburg
Germany
Tel.: +495361 - 464673
Fax.: +495361 - 4646749
www.sitz-sessio.de / www.sitzgmbh.de
E-mail: info@sitzgmbh.de

Stand: 04.12.2011