



ZEBRATM
ZEBRA*invento*TM
POSITIONING CHAIR



USER MANUAL

our passion - your independence!



519032401632060

CAUTION! Manufacturer takes responsibility for proper usage of the device only when the product was purchased from qualified Akces-Med employee or at specialized medical store!



CAUTION! AKCES-MED Ltd. reserve the right to introduce technical and trading changes in the content of the instruction without warning.

Medical product first class according to the Regulation 93/42/EWG of European Parliament and Council regarding medical products. For this product the producer issued relevant declaration of conformity.

Akces-Med. Sp. z o.o. Company introduced quality management system ISO 13485 regarding production, sales and service. The system is certified by Det Norske Veritas.





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INTRODUCTION

As far as the process of rehabilitation is concerned, it is highly important for a disabled child to adopt sitting position. It has a good impact both on psychomotor as well as mental development of a young patient. What is more, it exerts a positive influence on the child's life and his family due to the fact that it makes his life more comfortable. Adopting sitting position by a child, who is disabled and suffered different illnesses, is considered as vital stage of rehabilitation process, and, moreover, it is also the beginning of upright standing.

Regarding child's development, sitting position is a highly significant stage which precedes adopting standing position. **ZEBRA™** positioning chair is universal device which are created so as to sit children who have flaccid body or suffer from spasticity. It is made of wood and its finish is colorful thanks to which children consider this product as a toy, not as rehabilitation device.

Remember to read this user manual carefully. You will find not only useful information but also guidelines regarding safe and effective use of the product.

If you have any questions or remarks, do not hesitate to contact with us:

Medical consultant: mobile +48 508 382 509

Akces-MED Sp. z o.o.: ph. +48 17 864 04 77

e-mail: export@akces-med.com

Thank you for purchasing our product.



CAUTION! Before using the product, user is obliged to familiarize himself/herself with user manual. Remember that complying with guidelines is highly important. It assures safety and extends durability as well as aesthetics of the device.



1 THE PURPOSE OF USER MANUAL

The present user manual contains basic information which is essential for proper usage, preparation, maintenance, cleaning and guarantee conditions regarding ZEBRA™ positioning chair.

User manual should be kept in easily accessible place. It is designed for people who look after disabled children, and for both doctors as well as physiotherapists who operate the device.



CAUTION! Before using the product, user is obliged to familiarize himself/herself with user manual.

Remember that complying with guidelines is highly important. It assures safety and extends durability as well as aesthetics of the device.

2 INDICATIONS FOR USE

The device is recommended for people in the following cases:

- Cerebral palsy – various types and forms.
- Brain and spinal cord injuries with lower limbs paralysis and weakness, balance and motor coordination disorders with different etiology.
- Demyelinating disease (e.g. multiple sclerosis - SM).
- Meningocele.
- Muscles diseases with weakness and paralysis (dystrophy, myasthenia gravis, myositis).
- Genetic disorders.
- Degeneration and neurological diseases.
- Other condition connected with muscles weakness, paralysis and musculoskeletal disorders.
- After head and spinal cord injuries and spine trauma with paralysis and paresis.





3 GENERAL CHARACTERISTICS OF CHAIR

Positioning chair ZEBRA is available in 2 versions:



ZEBRA



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3.1 Standard equipment



1. Frame with castors
2. Footrest with footers and feet stabilizing belts
3. Seat
4. Backrest
5. Abduction block
6. Chest pelottes
7. Pelvic belt
8. Vest
9. Upper limb support
10. Tray
11. Adjustable headrest
12. Gas spring (**only ZEBRA INVENTO**)



3.2. Additional equipment

	Safety	A black and red transfer belt with straps and buckles.	A white tray with a red and black soft cover.	A large, grey, multi-directional wheel.
	Positioning	A red and black thigh abduction harness.	A black head supporting belt with wooden handles.	Two wooden footrests with black straps.
		Black and green lower limb supporting cushions.	Black independently adjustable side supports.	
		Red and black knee stabilizer supports.	A black H-shaped harness.	A black longer headrest with wooden supports.
	Comfort	A wooden tray with various manual therapy tools.	A green seat cushion shaped like thighs.	
		A black 6-point safety vest.		





ZBA_407 Tray for nonverbal communication



ZBA_410 Headrest cotton



ZBA_412 Elastico cushion seat



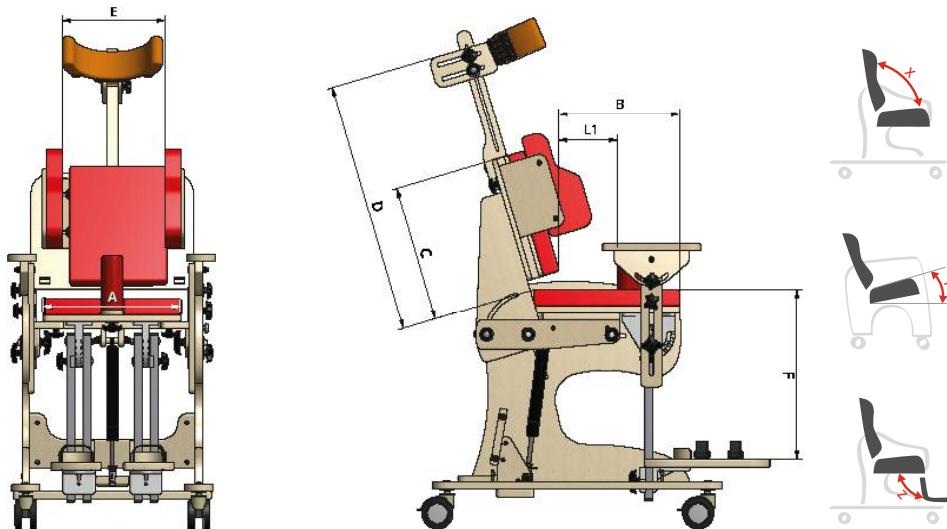
ZBA_413 Elastico cushion backrest



ZBA_421 Seat cushion (pommel shape)



4 SIZE TABLE



Symbol	Measurement	Unit	Size 1	Size 2	Size 3*
A	Seat width	[cm]	34	37	50
B	Seat depth	[cm]	15-24	21-34	24-42
L1	Seat depth to the abduction block	[cm]	5-19	7-25	7-30
C	Backrest height without headrest	[cm]	29	33	43
D	Backrest height including headrest	[cm]	40-60	45-66	49-69
E	Backrest width	[cm]	14-21	18-27	22-38
F	Footrests length	[cm]	18-33	18-40	20-50
	Footer lenght	[cm]	19	22	25
X	Backrest tilt angle	[°]	90-180	90-180	90-180
Y	Seat tilt angle	[°]	0-15	0-15	0-15
Z	Footrests tilt angle	[°]	90-180	90-180	90-180
	Max user weight	[kg]	25	45	60

Product dimensions and weight					
Width	[cm]	50	56	73	
Length	[cm]	82	100	105	
Height	[cm]	76	95	140	
Weight	[kg]	14	20	34	

Note: Measurement tolerance range is +/- 1 cm / ½ in.

*Size 3 and optional equipment are made to custom order





5 DESCRIPTION HOW TO USE CHAIR



CAUTION! Only trained staff can adjust the positioning chair to the patient!



It is necessary to adjust positioning chair to user's measurements before using the product. That's why it is important to measure the patient and adjust the product according to these measurements; all information in this chapter clearly explains how the product should be adjusted.

5.1. Footrest

5.1.1. Please follow these steps so as to adjust the height of footrest:

- loosen fastening knobs (fig.1),
- adjust the height of footer at your discretion,
- tighten knobs.



fig.1



fig.2



5.1.3. How to adjust new generation footrest tilt angle

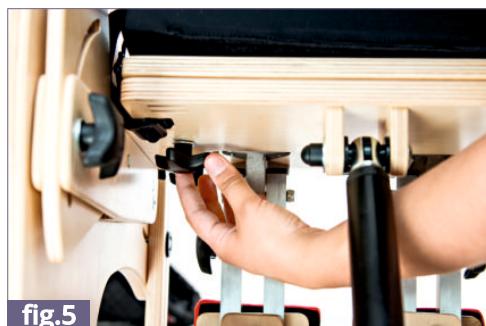
- Pull the lock pin on the footrest and adjust needed tilt angle
- Release the lock pin when the needed footrest position have been set up



5.2 Seat

5.2.1. Please follow these steps so as to adjust the depth of seat:

- loosen 4 fastening knobs situated under the seat (fig.3),
- adjust the depth of seat at your discretion (fig.4),
- tighten knobs.





5.2.2. Tilt-in-space function

ZEBRA

Please follow these steps so as to adjust the tilt angle of seat:

- loosen fastening knobs (fig. 5),
- adjust the tilt angle of seat,
- tighten firmly fastening knobs.

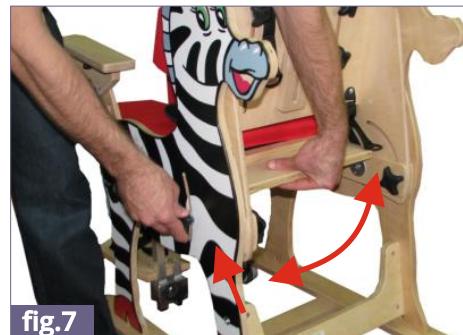


fig.7

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Please follow these steps so as to adjust the tilt angle of seat:

- press pedal situated at the back of chair and at the same time adjust the tilt angle of seat at your discretion (fig. 6),
- block seat, release pedal

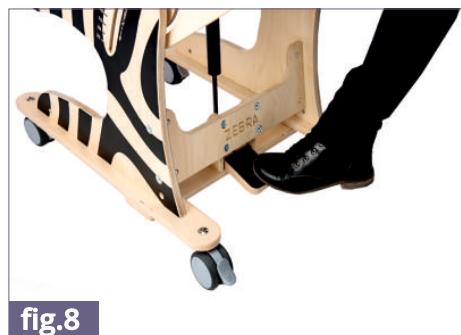


fig.8

5.3 Backrest

Please follow these steps so as to adjust the tilt angle of backrest:

- loosen fastening knobs (fig.7),
- adjust the tilt angle of backrest at your discretion (fig.8),
- tighten firmly fastening knobs.



fig.9



fig.10



5.4 Trunk pelottes

Please follow these steps so as to adjust trunk pelottes:

- measure the patient,
- loosen 4 fastening knobs (fig.9),
- adjust the width and the height of pelottes (fig.10),
- tighten knobs.



fig.12



fig.11



fig.13

5.5 Vest

Please follow these steps so as to mount vest:

- fasten 4 fastening buckles,
- pull cotters so as to adjust the vest at your discretion.

5.6 Abduction block

Please follow these steps so as to adjust abduction block:

- loosen fastening knob (fig.12),
- move abduction block either forwards or backwards (fig.13),
- tighten knob.



fig.14



fig.15





5.7 Pelvic belt

Please follow these steps so as to mount pelvic belt:

- fasten two fastening buckles,
- pull coppers so as to adjust the length of belt at your discretion



fig.16



fig.17



CAUTION! If vest and pelvic belt are mounted, it is necessary to make sure that

- buckles do not unfasten under pressure
- buckles do not shift due to incorrect assembly

5.8 Headrest

Please follow these steps so as to adjust headrest:

- loosen fastening knobs situated at both sides of headrest (fig.16),
- adjust headrest,
- tighten firmly fastening knobs.



fig.18



fig.19

Next, it is important to:

- loosen screws from headrest's ribbing with the aid of Allen key (fig.17),
- adjust the shape of headrest at your discretion,
- tighten firmly screws.



HexagonPro© Headrest

The headrest may be adjusted with Allen key. You can also change the width of the headrest. After adjustment, there is necessary to screw all of screws and bolts tightly!



fig.20



fig.21



fig.22

5.9 Upper limb support

Please follow these steps so as to adjust the height of upper limb support:

- loosen two fastening knobs that bolt batten with upper limb support (fig. 18,19),
- adjust the height and tilt angle of upper limb support at your discretion (fig. 20),
- tighten fastening knobs.

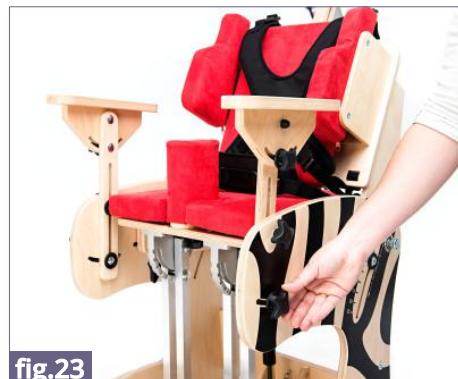


fig.23



fig.24





Please follow these steps so as to adjust the tilt angle of upper part of upper limb support:

- loosen fastening knob (fig.21),
- adjust the tilt angle at your discretion,
- tighten fastening knobs.



fig.25

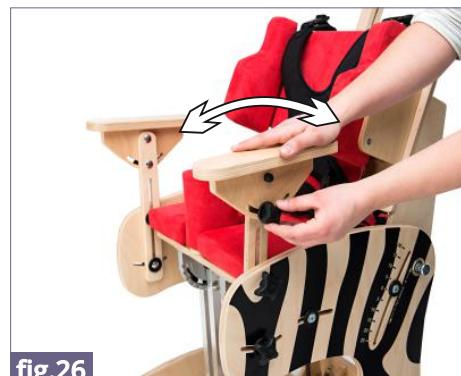


fig.26

5.10. Tray

Please follow these steps so as to mount tray:

- loosen fastening knobs situated under tray's top,
- adjust upper limb support at the same height,
- place tray on upper limb support (fig.22),
- tighten fastening knobs (fig.23).



fig.27



fig.28



6 ADDITIONAL EQUIPMENT

6.1 [REF] ZBA_103 3D foot adjustment,

Please follow these steps so as to mount footer with adjustment:

- dismantle standard footers,
- mount footers with adjustment; mount them in a places where standard footers were mounted,
- adjust footers at your discretion,
- tighten fastening knobs.



fig.29

6.2 [REF] ZBA_106 Lower limbs supporting cushions

Please follow these steps so as to mount cushions for upper limbs support:

- unscrew fastening knobs from each cushion (fig.25),
- put cushions on footrest's profiles,
- adjust the height at your discretion
- tighten fastening knobs (fig26).



fig.30

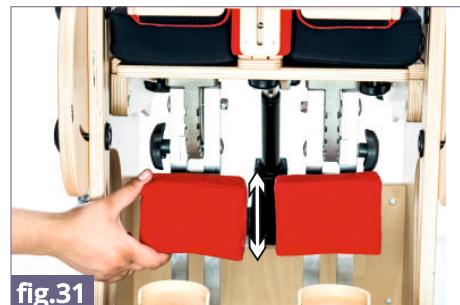


fig.31





6.3 [REF] ZBA_110 Knee support

Please follow these steps so as to mount knee support:

- unscrew significantly fastening knob situated at the front of abduction block,
- insert knee support (fig.27),
- tighten fastening knob.

Please follow these steps so as to adjust knee stabilizing pelottes:

- loosen knobs fastenings knee pelottes (fig.28),
- adjust the distance of pelottes at your discretion (fig.29),
- tighten fastening knobs.

It is also possible to adjust abduction block. If you wish to do that, please follow instructions concerning standard abduction block (see point 5.6, page 13).



fig.32



fig.33



fig.34



CAUTION! Shin cannot be squeezed by seat or any other elements of seat!





6.4 [REF ZBA_101] Thigh abduction belts

Thigh abduction belts are mounted by manufacturer.

Please follow these steps so as to adjust them:

- adjust their length at your discretion,
- fasten buckles.



CAUTION! If vest and pelvic belt are mounted, it is necessary to make sure that:

- buckles do not unfasten under pressure
- buckles do not shift due to incorrect assembly

6.5 [REF ZBA_401] Tray for manual therapy

Tray for manual therapy is mounted instead of standard tray. If you want to mount it, please follow instructions in point 5.10 (look point 5.10, page 16).



6.6 [REF ZBA_109] Independently adjustable side supports

Independent adjustable side pelottes are mounted by manufacturer. Please follow these steps so as to adjust them:

- measure patient,
- loosen fastening knobs,
- adjust the distance in compliance with patient's measurements,
- move pelottes either upwards or backwards so as to adjust them to the patient,
- tighten knobs if height is adjusted





6.8 [REF ZBA_105] Head supporting belt,

Please follow these steps so as to mount head stabilizing belt:

- fasten belt to lateral parts of headrest with the aid of Velcro tape, adjust the length of belts to patient (fig.35),
- pull belts so as to check if they are correctly mounted.



fig.39



fig.40



7 THE ADJUSTMENT OF CHAIR TO LYING POSITION



It is necessary to place two footrests as well as backrest vertically.

7.1 Knee support in lying position

Knee support in lying position is mounted on upper part of abduction block (fig.37).

Knee support can be adjusted with the aid of knob situated at the front of abduction block (fig.38, 39).



fig.41



fig.42



fig.43

c) Adjust the height of knee support with the aid of knob situated under seat (look point 5.6, page 13).





7.2 Adjustment of chair's tilt angle in lying position

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Please follow these steps so as to adjust **ZEBRA INVENTO** chair's tilt angle in lying position:

- release latch in vertical position; latch secures seat from bending forwards and is situated at the side of the product,
- at the same time press pedal that releases spring and bend seat softly
- release latch's mandrel,
- adjust seat's tilt angle in lying position at your discretion
- block seat, release pedal that releases spring



fig.44

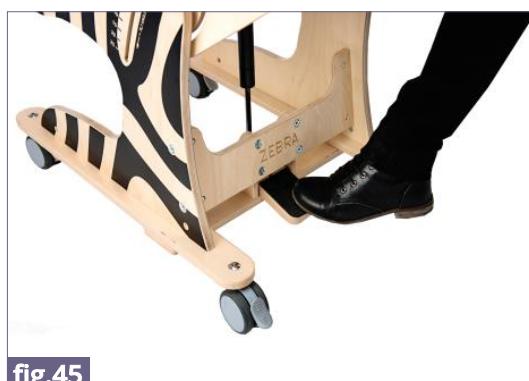


fig.45



ZEBRA

Please follow these steps so as to adjust ZEBRA seat's tilt angle in lying position:

- loosen two knobs situated at the sides of the product,
- use the other hand to adjust tilt angle at your discretion,
- block seat after the adjustment, tighten firmly knobs.



fig.46



CAUTION! It is highly significant to make sure that seat is correctly blocked. Furthermore make sure that seat doesn't move under pressure!





8 THE USE OF CHAIR



CAUTION! ZEBRA™ chair has to be used with compliance to guidelines included in this user manual. Remember to use the product only with someone who is trained and knowledgeable.

8.1. Preparation of the patient

Before using the product, it is essential to make sure that:

- patient's outfit is light and comfortable sporty clothes are advisable,
- shoes should be comfortable and, moreover, they should stabilize ankle,
- due to hygienic reason and to avoid abrasion it is advisable for the patient to always wear clothes when using the device, skin must not be naked especially in places of regular contact with upholstery,
- drains, bags, catheters etc. if applied, have to be secured to function properly and not to disturb during using the product,
- if it is necessary for a patient to wear orthopedic supply (collar, corset, orthesis, shoes) if it is recommended by doctor.



CAUTION! Outfit should protect patient's skin from direct contact with upholstery as well as other parts of equipment.

CAUTION! Only doctor can make a decision concerning using any kind of orthopedic supply!





8.2. How to use chair

1. Before use it is necessary to:

- Unfold the device;
- Place the device on even ground;
- Make sure that all parts are serviceable, correctly mounted and stable;
- Block brakes;
- Adjust the device to patient's measurements;
- Undo vest, trunk belts etc so as to place easily the patient in the device
- Place patient in the device;
- Fasten all elements which stabilize patient e.g. vest, trunk belts, feet stabilizing belts etc.;
- Mount additional equipment e.g. tray.

2. In case of patients who have problem with bladder, it is necessary to put special cloth on seat. This cloth can be purchased in pharmacy or medical shops.



CAUTION! Remember to make sure that all belts and locking and correctly adjusted and fastened. Check also if fastenings from adjustable elements are firmly tightened!

Equipment works correctly only when the device is adjusted according to patient's height as well as weight. Remember to take all these measurements into account while purchasing the product. Correct adjustment is the most important due to the fact that only then the product is safe. It is forbidden to force child to keep specific position because he/she will feel uncomfortable and it may lead to wrong posture.





8.3. Sitting position

Taking the sitting position for the first time by the little patient usually happens in the rehabilitation, neurology, neurosurgery or orthopaedic ward. Upright standing is supervised by the doctor and physiotherapist due to the possibility of occurrence such medical problems like: loss of consciousness, drop of blood pressure etc. It is very important to adjust all parts of the device to the condition of the child, taking into consideration contractures and deformations.

Taking the sitting position at home is supervised by qualified staff (physiotherapists, nurse, trained members of the family).



CAUTION! Incorrect adjustment of the device can lead to side effects such as: fainting, body deformities, overloading joints. It is highly advisable to adjust the device before every use of a standing frame. This adjustment has to be done only by a trained person or therapist. If any of these side effects appear, it is highly important to stop the upright position process, take out the patient from the device and lie him/her down. If these undesirable side-effects still occur it is necessary to contact doctor. If these side effects disappeared, remember to inform doctor so as to make decision concerning further upright position process.



9 SAFETY RULES



CAUTION! ZEBRA chiar has to be used in compliance with guidelines in this user manual.

It is highly important to consult either doctor or physiotherapist in order to make right decision concerning the choice of chair and its size. It is also essential to familiarize with the guidelines described in user manual before using the device.

1. Before use it is necessary to:

- make sure that there are no damages or different faults which could endanger patient's life; check if all parts are working and are correctly mounted and, moreover, check if they are not broken;
- check if all screws, knobs and all glued, sewed or tapped parts are tightened;
- check if brakes are operating correctly;
- check if buckles are operating correctly;
- always use safety belts, Velcro tapes should overlap min. 8cm;
- adjust the device according to patient's measurements and needs e.g. the adjustment of pelottes, footplate etc.;
- make sure that all movable parts and knobs for adjustments are stable and locked;
- secure patient with the aid of elements such as vest, foot stabilizing belts, pelottes, abduction block, headrest. It is highly important to secure patient because it safeguards him/her from falling out. If abduction contracture occurs, it is recommended to use abduction block in order to prevent ulcers between knees;





2. It is forbidden to use chair for different purposes that it is intended to.
3. It is forbidden to use chair when it is damaged or any part is missing.
4. It is forbidden to leave the patient unattended.
5. Chair should be used only when there is someone who is trained and knowledgeable.
6. It is forbidden to leave chair and the patient on unstable ground unattended, even if the brake is engaged.
7. It is forbidden to either go up or down the stairs; it doesn't matter if the patient is placed in the device or not.
8. It's important to make sure that patient doesn't stand on footer during either getting into or getting out the chair.
9. It is important to engage brake during getting into and getting out the chair.
10. Make sure that all limbs are not close to spokes or other adjustable elements.
11. Although the device and the upholstery are made of fire-resistant materials, please pay your attention when approaching to sources of fire or sources of high temperature during using the device. Moreover, chair shouldn't be stored in rooms with high humidity.
12. Secure chair during transportation in order to avoid any possible damages. Manufacturer doesn't take responsibility for damages which appeared due to improper preparation of the device during transportation.



CAUTION! Taking the sitting position for the first time by the little patient usually happens in the rehabilitation, neurology, neurosurgery or orthopaedic ward. Upright standing is supervised by the doctor and physiotherapist due to the possibility of occurrence such medical problems like: loss of consciousness, drop of blood pressure etc. It is very important to adjust all parts of the device to the condition of the child, taking into consideration contractures and deformations.



CAUTION! The product contains small parts which children may swallow.



CAUTION! It is forbidden to make any changes concerning stroller's structure due to the fact that it is dangerous and it results in loosing warranty.

CAUTION! The weight of user should not be bigger than maximal weight described on page 9 where you will find information regarding this issue.

CAUTION! This device can be only used inside the buildings!

- 1) AKCES-MED Sp. z. o. o sells products free from manufacturing defects or faults.
- 2) Manufacturer gives the purchaser 24-month guarantee from the date of purchase. All defects revealed during warranty period will be repaired free of charge.
- 3) All defects which appear after warranty period can be repaired only when the user will pay for it. This rule doesn't apply to refunded products - user can ask National Health Refund for refund.
- 4) Manufacturer claims that the product can be used for 36 months. User can use this product after this period only when he/she will send the device to manufacturer so as to service it. Next, manufacturer determines again how long the product can be used and, moreover, the date of the next service will be determined.
- 5) If product is damaged, please contact our dealer or AKCES-MED customer service (ph. 17/864 04 77).



10 MAINTENANCE AND CLEANING

Chair should be kept clean and used in compliance with the manufacturer's recommendations. The device should be kept in clean, dry and ventilated room. Maintenance as well as cleaning have to be performed at least once a month. Regular cleaning and maintenance of chair are indispensable to maintain its correct functionality as well as safety.

It is highly advisable to remember about proper maintenance in order to extend product's aesthetics. So as to do that, it is essential to comply with these guidelines:

1. It is recommended to clean upholstery with the aid of cleaning product, soft sponge and warm water. If you use sponge which is too wet, stain may get bigger, upholstery may be destroyed. It is necessary to remember that the excess of dampness should be removed from fabric before next cleaning. Please rinse upholstery with warm water and clean white cloth once stain is removed.
2. It is forbidden to soak upholstery!
3. It is forbidden to clean upholstery with the aid of hard brushes.
4. It is forbidden to clean upholstery with strong chemical agents such as solvent or caustic chemicals.



CAUTION! Akces-MED Sp z o. o takes no responsibility for damages caused by use of wrong clearing agent.

5. It is forbidden to soak upholstery during cleaning. Remember that upholstery has to be always dry before using.
6. It is forbidden to clean, make any changes and maintain chair during using it.
7. All metal as well as plastic elements should be cleaned by hand with the aid of general cleaning products. Remember to familiarize yourself with cleaning product's leaflet.



CAUTION! Remember that upholstery has to be always dry before using!

Before using it is necessary to:

- clean wheels
- check if base as well as wheels are correctly mounted; check if brake stops turning wheel;
- make sure that all wooden parts e.g. tray don't have splinters;
- check if stroller construction is free of breaks or any kinds of deformities.
- check if all movable parts are working and all screws, nuts, knobs etc. are correctly tightened;
- check if belts, vests, trunk belts, feet stabilizing belts etc are not frayed; check if buckles and clamps work correctly

CAUTION! Manufacturer takes responsibility only for hidden faults or damages which appeared despite the fact that user complied with the guidelines.



CAUTION! In case of any damages, it is essential to contact the person who sold you the product.





ORTHOPAEDIC DEVICES MANUFACTURER

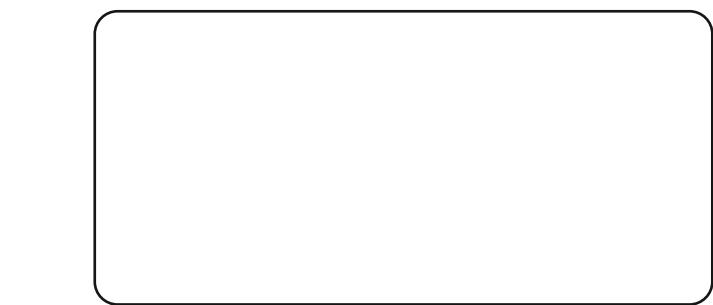


Akces-MED Sp. z o.o.
Jasionka 955B
36-002 Jasionka
tel. (17) 864 04 77

www.akces-med.com

e-mail: export@akces-med.com

Authorised Dealer



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