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USER AND MAINTENANCE MANUAL

Shower trolley – electrical art.155030, art. 155030G and 155030C



USER AND MAINTENANCE MANUAL

The shower trolley is manufactured in accordance with the requirements of Regulation 2017/745 for medical devices and the technical standards for SIST EN 60601-1, SIST EN 60601-1-2, SIST EN 60601-2-52.



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**Carefully read the manual before
you start using this product**

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ATTENTION!



This manual must be read carefully before starting the installation, moving and using the **shower trolley art. 155030, 155030G and art. 155030C**.

- # This manual must be safely stored and always available to the person who is responsible for the installation, transport, use, maintenance and repairs, as well as to the person operating the shower trolley etc.
- # This manual describes how the shower trolley should be used, and gives details of how the shower trolley must be installed, transported, assembled and used. It also describes how to install or replace the necessary accessories, as well as provides descriptions of the parts that expose of outstanding risks, etc.
- # It should be noted that the manual cannot always fully describe the appropriate interventions and repairs to technical staff and users who do not have the adequate skills for certain complex operations. For this reason, the manual contains information about the authorized service provider who was trained and is authorized by the manufacturer to perform complex procedures.
- # This manual must be an integral part of the shower trolley equipment and must be stored for as long as the trolley is in operation i.e. until it is discarded. In case you lose the manual, ask the manufacturer/distributor for another copy.
- # Make sure that all users are aware of the proper functioning of the shower trolley as well as all the symbols - the labels on the shower trolley.
- # All accidents can be avoided by taking into account the technical instructions that are prepared and written in accordance with the applicable **EU** legislation.
- # In any case, it is necessary to also take into account the applicable regulations in the country where the product is used.
- # Do not use the shower trolley in oxygen rich environment, in presence of heat source or flammable anaesthetic gases, to avoid explosion or fire.
- # Never leave the patient alone on the shower trolley without the supervision of nursing staff!
- # To prevent the movement of the shower trolley - art. 155030, 155030G and 155030C, and the fall of the patient, do not use this shower trolley - art. 155030, 155030G and 155030C on surfaces with depressed drains, holes or inclined surfaces that exceed a ratio of 1: 50 (1,15°).
- # To avoid electric shock, do not use other electrical equipment. near the shower trolley - art. 155030, 155030G and 155030C
- # Make sure that patient has hair and limbs close to the body, to avoid pinch or grip. Make sure also that in case of moving patient the side rails are raised up.
- # In case of moving a patient from the bed to a shower trolley - art. 155030, 155030G and 155030C and vice versa ago, and during showering, always make sure that the wheels are locked and the brake pedal position is blocked as shown in figure 20 in Section 6.2., in order to avoid a fall of the patient.
- # That shower trolley - art. 155030, 155030G and 155030C do not tip over, do not lift or lower the other equipment near to the shower trolley - art. 155030, 155030G and 155030C. Take also attention to a stationary object in the case of regulation of height of shower trolley - art. 155030, 155030G and 155030C

➡ Symbols — labels — protective elements should never be removed from the shower trolley.

➡ No part of this manual may be altered or copied without permission of TIMO d.o.o. Ajdovščina.



Before first use, fully charge the battery!

SYMBOLS

Symbols used in this manual.


	IMPORTANT		Fuse
	FOLLOW THE INSTRUCTION WRITTEN IN THIS PARAGRAPH		Type B
	USER TYPE A Equipment user		IN ACCORDANCE WITH REGULATION 2017/745
	USER TYPE B Tehnickal maintenance of equipment		Date – year of production
	Double electrical insulation		Manufacturer
	Medical device		Carefully read the manual before you start using this product
	Safe working load		Maximum patient weight
	Electrical and electronic components must be separated for recycling in accordance with Directive 2012/19/EU on waste electrical and electronic equipment		

1. PRESENTATION

1.1. Congratulations

Dear customer, we are very pleased that you have decided to purchase one of our products.

Each product of **TIMO d.o.o. Ajdovščina** is produced in accordance with the applicable safety manual for the protection of the medical staff and the patient. This manual describes and illustrates different uses, and the proper and safe handling of the product.

 **Please carefully read all the information in this manual**

1.2. Assistance — help

TIMO d.o.o. Ajdovščina will always be available for shower trolley service and maintenance.

The request should be issued to **TIMO d.o.o. Ajdovščina** by phone or fax (phone +3865 36 89 330, fax +3865 36 63 805).

In case you have purchased the product via our authorized dealer, you must submit your service request to them or to an **authorized service provider**.

Unauthorized changes of shower trolley - art. 155030, 155030G and 155030C, produced by Timo d.o.o. Ajdovščina may affect on its safety. Timo d.o.o. Ajdovščina is not responsible for the accident, incident or injury which might arise as a result of any unauthorized modification shower trolley - art. 155030, 155030G and 155030C.

Periodically – every 6 months – the authorized service centre should perform a regular shower trolley service check. The regular service checks are recorded in a service data booklet for each shower trolley. This warranty is valid upon the fulfilment of the conditions stated above. The customer is obliged to ensure that regular service checks are carried out and that it also keeps a record on the form for the management of maintenance and service checks (page 46).

In case you require further information, please contact Timo d.o.o. Ajdovščina, we will be happy to assist you. In case you need spare parts contact your service representative.

Dealer

Authorized service provider

1.3. Warranty

Products of **TIMO d.o.o. Ajdovščina** have a 2-year warranty beginning on the day of product delivery.

This warranty does not cover the components that have a separate original manufacturer warranty.

 **This warranty starts on the day of product delivery.**





The warranty is valid only in the event that the product has been used properly and according to the instructions described in this safety manual and with and the completed form to conduct maintenance and service checks (page 42).

Damaged parts or defective parts will be repaired or replaced with new ones at no cost to the user. This will be done by the manufacturer **TIMO d.o.o. Ajdovščina**.

When a defective part is replaced with a new part, it is necessary to return the defective part to the manufacturer **TIMO d.o.o. Ajdovščina**. Transportation costs of returning the defective part to the manufacturer are borne by the customer.




In the event that it is necessary to replace the defective part with a new one or the assistance of the manufacturer **TIMO d.o.o. Ajdovščina** is required at the customer's location, all costs of replacement parts are borne by the manufacturer, and travel expenses are charged to the customer.

Decisions about the assistance of **TIMO d.o.o. Ajdovščina** at the customer's location must be taken with respect to the content of the problem on a case-by-case basis and depending on the failure type.

-  **This warranty does not cover the cost of periodic product reviews and the required parts that should be replaced during periodic reviews.**
-  **The warranty also does not cover product failures caused by not following this manual.**
-  **Repair and replacement of defective parts do not extend the overall warranty; instead, only the warranty of the particular new part is extended.**
-  **The warranty excludes any agreement about replacing a defective part with a new similar product, except if the parties agree otherwise.**

2. INFORMATION

2.1. Purpose of use

-  **Before you start using the product, make sure that the shower trolley art. 155030, 155030G and 155030C and all of its components operate smoothly and are not damaged.**
-  **Shower trolley art. 155030, 155030G and 155030C, must be used in accordance with the intended use and in accordance with these instructions.**
-  **Anyone who uses shower trolley art. 155030, 155030G and 155030C must read and understand the instructions for use, in case of doubt, please contact Timo d.o.o. Ajdovščina, or to our representative.**

Purpose of use

The two-column adjustable shower trolley – electrical art. **155030, 155030G and art. 155030C** is intended for the care and bathing of immobile persons - patients, which are almost completely immobile and totally dependent on others for assistance. The weight of the patient must not exceed 100 kg (art. 155030C), 150 kg (art. 155030) and 250 kg (art. 155030G) the height of the patient must be between 120 and 190 cm. Shower trolley is intended for indoor use in homes of the elderly, hospitals, home use.

If the product is used for purposes other than those described in this manual provided by **TIMO d.o.o. Ajdovščina**, TIMO cannot be held liable for compensation or criminally responsible for injuries and damage claims which may arise as a result of use that differs from what is described in this manual.

2.2. Presentation – Product description

Two-column electrically adjustable shower trolley art. **155030, 155030G and 155030C** by the manufacturer **TIMO d.o.o. Ajdovščina** has been manufactured in accordance with the applicable standards and shower trolley user recommendations to allow simple and safe use by the nursing staff as well as appropriate and comfortable patient treatment.

Classification
Class I according to Regulation 2017/745
Insulation class II, type B according to EN 60601-1

Design, structural parts, safety distances and joints between components of the shower trolley art. 155030, 155030G and 155030C, are manufactured to comply with all applicable standards to ensure safe operation.

All joints described below were designed to enable the patients a more friendly and safe use with the assistance of the nursing staff (professional or at home care).

Presentation of the shower trolley:

With its modern form and function, the two-column adjustable shower trolley – electrical art. **155030, 155030G and art. 155030C** is intended for the care and bathing of immobile persons - patients, which are almost completely immobile and totally dependent on others for assistance. The weight of the patient must not exceed 100 kg (art. 155030C), 150 kg (art. 155030) and 250 kg (art. 155030G) the height of the patient must be between 120 and 190 cm. The trolley mattress and the headboard cushion are made of special PVC canvas. The trolley mattress platform is height-adjustable using two electric motors in the columns, the option of placing it in a Trendelenburg and reverse Trendelenburg position (**only 155030**), and the head rest adjustment (0-30°). The structure is made of steel pipes and is powder-coated for protection against corrosion.

The electric trolley art. 155030, 155030G and 155030C is equipped with the following basic equipment:

- A side rail with a special lowering/raising mechanism
- A flexible drain hose
- A headboard cushion
- Wheels \varnothing 125 and a central braking system, twin wheels \varnothing 150 and a central braking system (**only 155030G**)

Actions before first use:

- Perform a visual check to make sure that the shower trolley 155030, 155030G and 155030C is in perfect condition and no damage has occurred during transport, as well as, with all its parts (bag, drain hose,)
- Packaging have to be recycled in accordance with local regulations
- Read this the instructions for use
- Disinfect shower trolley 155030, 155030G and 155030C (see Chapter 9)
- Unpack the charger and the battery, you have to mount the charger on the wall outside the bathroom
- Before first use, fully charge the battery.
- Perform a test operation of the shower trolley 155030, 155030G and 155030C
- For storage shower trolley 155030, 155030G and 155030C choose a dry and well-ventilated area where the shower trolley 155030, 155030G and 155030C will not be exposed to direct sunlight.
- Choose a location where you stored this User and maintenance manual

Actions before each use:

- Perform a visual check to make sure that the shower trolley 155030, 155030G and 155030C is in perfect condition and the shower trolley 155030, 155030G and 155030C is not damaged
- In the case that any of parts is damaged, do not use the shower trolley 155030, 155030G and 155030C
- Check that the shower trolley 155030, 155030G and 155030C is clean and disinfected
- Make sure the battery is charged

Adjustment options art. 155030:

Figure 1 - MAXIMUM HEIGHT OF MATTRESS PLATFORM

Figure 2 - MINIMUM HEIGHT OF MATTRESS PLATFORM

Figure 3 - RAISED HEAD REST

Figure 4 - TRENDELENBURG

Figure 5 - REVERSE TRENDELENBURG

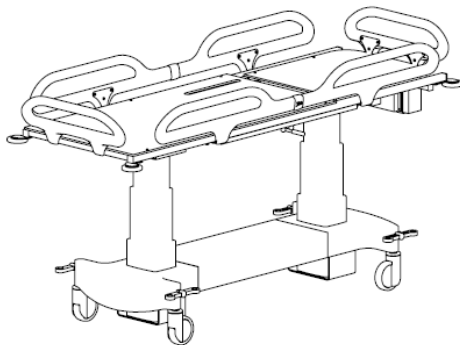


figure.1

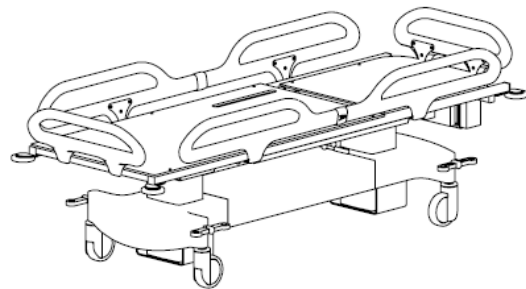


figure.2

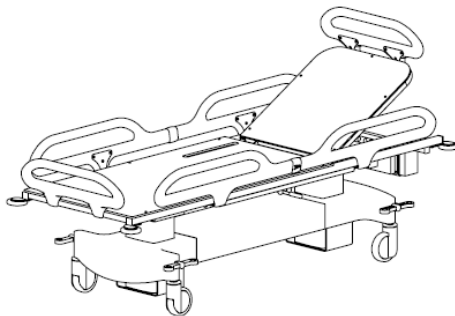


figure.3

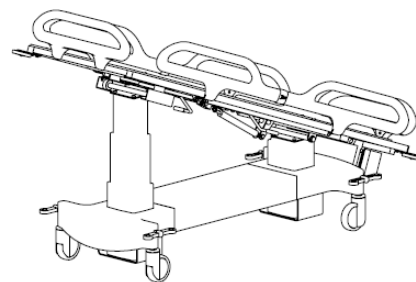


figure.4

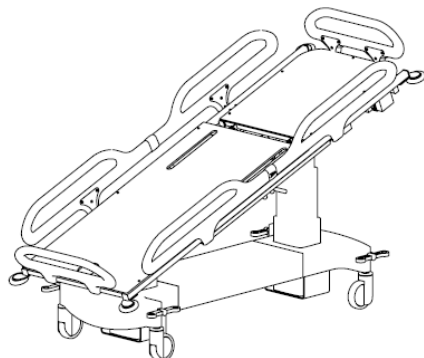


figure.5

Adjustment options art. 155030G and art. 155030C:

Figure 6 - MAXIMUM HEIGHT OF MATTRESS PLATFORM

Figure 7 - MINIMUM HEIGHT OF MATTRESS PLATFORM

Figure 8 - RAISED HEAD REST

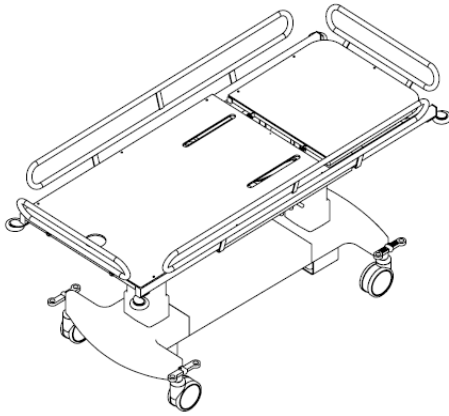


figure.6

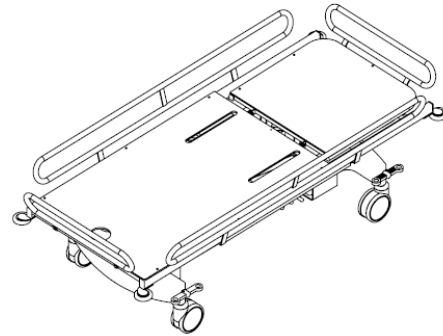


figure.7

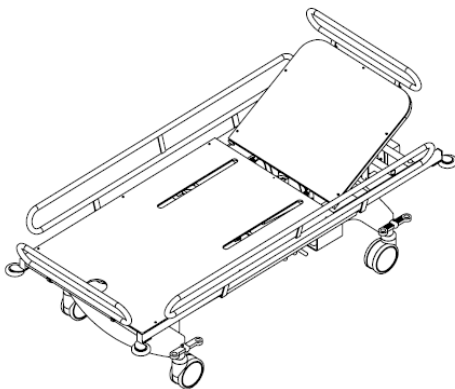


figure.8

3. SAFETY

3.1. General instructions for safety compliance

Fulfilment of and compliance with all safe work regulations allows nursing staff to use the shower trolley art. 155030, 155030G and 155030C in a way that avoids any injuries that might be caused to themselves or others.





Any use of the shower trolley art. 155030, 155030G and 155030C that is different from what is described in section 2.1. is prohibited. The product may be operated only by staff trained in its use.

Before they start using the shower trolley art. 155030, 155030G and art. 155030C, operators must be carefully instructed on how the shower trolley works and where are all the controls for all adjustments, as well as be familiar with all the technical features of the shower trolley art. 155030, 155030G and art. 155030C. It is therefore necessary to carefully read the attached user and maintenance manual.



Before you start using the product, make sure that the shower trolley art. 155030, 155030G and 155030C and all of its components operate smoothly and are not damaged.

 **Shower trolley art. 155030, 155030G and 155030C, must be used in accordance with the intended use and in accordance with these instructions.**


 **Anyone who uses shower trolley art. 155030, 155030G and 155030C must read and understand the instructions for use, in case of doubt, please contact Timo d.o.o. Ajdovščina, or to our representative.**

All operators and users of shower trolley 155030, 155030G and 155030C are committed to the proper use of the product in compliance with all applicable safety recommendations and legislation to avoid the possibility of causing injuries to both themselves and third parties.

3.2. Special instructions for safety compliance

Any type of re-designing or part replacement without an authorized permission from the manufacturer **TIMO d.o.o. Ajdovščina** on the shower trolley art. 155030, 155030G and art. 155030C is prohibited.

Any use of additions, accessories and other recommendations that differs from what is shown and described in this user and maintenance manual, is understood as a possibility of causing damage or injury to both the operator and the product itself.

 **Any changes made to the shower trolley art. 155030, 155030G and 155030C which are not explicitly authorized by the manufacturer TIMO d.o.o. Ajdovščina, cannot be the cause of the manufacturer's liability in the event of civil and damage claims**



Removing safety mechanisms and warnings is strictly prohibited. They must be inspected periodically every week and any damage rectified immediately.



Before starting any repairs on the shower trolley art. 155030, 155030G and 155030C or its equipment, be sure that you are familiar with the technical information contained in this user and maintenance manual.



All maintenance and repair work can be carried out only by trained personnel, see section 3.5.



Shower trolley repairs and maintenance can represent a hazard risk for the user.

IMPORTANT!

The shower trolley art. 155030, 155030G and 155030C cannot be used in the following cases:

- # When the product toppling over, or back, and there is visible damage,
- # When the safety sides locking mechanism does not work smoothly, choppy or is worn out,
- # When folding parts (crank mechanisms, etc ...) causing noise and does not carry out the desired operations,
- # When the space in which is the product does not allow the product could operate freely.



Never place the shower trolley - art. 155030, 155030G and 155030C, near heat sources, where is a lot of oxygen, a source of heat or flammable gas anesthetics.



Place shower trolley - art. 155030, 155030G and 155030C on a horizontal surface in a stable position. To prevent the movement of the shower trolley - art. 155030, 155030G and 155030C, and

the fall of the patient, do not use this shower trolley - art. 155030, 155030G and 155030C on surfaces with depressed drains, holes or inclined surfaces that exceed a ratio of 1: 50 (1,15°).

- ➡ Ensure that the space around shower trolley - art. 155030, 155030G and 155030C and below is free, so that the adjustments can be carried out smoothly. Do not lift or lower the other equipment near to the shower trolley - art. 155030, 155030G and 155030C and take also attention to a stationary object in the case of regulation of height of shower trolley - art. 155030, 155030G and 155030C
 - ➡ Shower trolley art. 155030,155030G and 155030C, must be used in accordance with the intended use and in accordance with these instructions.
 - ➡ Never leave the patient alone on the shower trolley without the supervision of nursing staff!
 - ➡ To avoid electric shock, do not use other electrical equipment. near the shower trolley - art. 155030, 155030G and 155030C
 - ➡ Make sure that patient has hair and limbs close to the body, to avoid pinch or grip. Make sure also that in case of moving patient the side rails are raised up.
- In case of moving a patient from the bed to a shower trolley - art. 155030, 155030G and 155030C and vice versa ago, and during showering, always make sure that the wheels are locked and the brake pedal position is blocked as shown in figure 11 in Section 3.4., in order to avoid a fall of the patient.

3.3. Outstanding risk areas

Some parts of the the shower trolley art. 155030, 155030G and art. 155030C expose users to risk, since they cannot be avoided.

Each user of the shower trolley art. 155030, 155030G and art. 155030C must be familiar with the existing risks, so that they can avoid them and prevent damage.

Parts that expose users to risk are listed below:



CRUSH

Moving the the shower trolley art. 155030, 155030G and art. 155030C, lowering the head rest with the rapid descent levers, or lowering/raising the side rails represents a risk of a hand getting crushed between the folding parts/bed and the structure (outstanding risk - Crush risk).

When moving (transportation) the shower trolley art. 155030, 155030G and art. 155030C, one of the wheels can drive over a foot of a person if we do not pay attention during the transport (outstanding risk Crush risk).

When the shower trolley art. 155030, 155030G and art. 155030C is installed in place, be careful not to crush people or things between the headboard extension of the shower trolley and the wall (outstanding risk Crush risk).



FALL

When the patient rises from the shower trolley art. 155030, 155030G and art. 155030C, make sure to adjust the mattress platform to a height suitable for getting up depending on the patient and his/her abilities (outstanding risk risk of falling).

Operator can slip on wet floor due to improper footwear.

3.4. Safety mechanisms of the shower trolley

Two-column adjustable shower trolley – electrical art. 155030, 155030G and 155030C is designed to ensure safe use for both the nursing staff and the patient. For this reason it is equipped with the following safety mechanisms.

MECHANICAL – MANUAL:

Side rails

- 1) They prevent the patient from falling off the shower trolley when lying in the raised position as shown in Figure 9 and 10. Shower trolley art.155030 of standard length 190 has side rails as shown in Figure 9. Shower trolley art.155030 shorter than 170 and longer than 210, art. 155030G and art.155030C have side rails as shown in Figure 10.



Figure 9



Figure 10

- 2) They allow easy access to and out of the bed in a lowered position as shown in Figure 11 and 12.



Figure 11



Figure 12

Brake

- 1) Prevents movement of the shower trolley during installation or when the patient is getting off. See Figure 13 brake pedal in the blocked position.

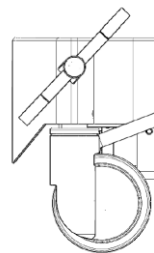



Figure 13

- ➡ **Never leave the patient alone on the shower trolley without the supervision of nursing staff!**
- ➡ **Make sure that patient has hair and limbs close to the body, to avoid pinch or grip. Make sure also that in case of moving patient the side rails are raised up.**
- ➡ **In case of moving a patient from the bed to a shower trolley - art. 155030, 155030G and 155030C and vice versa ago, and during showering, always make sure that the wheels are locked and the brake pedal position is blocked as shown in figure 11 in Section 3.4., in order to avoid a fall of the patient.**

 Place shower trolley - art. 155030, 155030G and 155030C on a horizontal surface in a stable position. To prevent the movement of the shower trolley - art. 155030, 155030G and 155030C, and the fall of the patient, do not use this shower trolley - art. 155030, 155030G and 155030C on surfaces with depressed drains, holes or inclined surfaces that exceed a ratio of 1: 50 (1,15°).

3.5. Staff training

Two-column adjustable shower trolley – electrical art. 155030, 155030G and 155030C should be used in health and social care institutions only by trained personnel listed below.



"OPERATOR" is the person who operating the shower trolley art. 155030, 155030G and art. 155030C (nursing staff).

Product operation of the shower trolley art. 155030, 155030G and art. 155030C must follow the user and maintenance manual in Chapters 8 and 9.

The nursing staff must have a thorough understanding of the user manual and all product adjustments described in the he user and maintenance manual of the shower trolley art. 155030, 155030G and art. 155030C.



The nursing staff is prohibited from using the shower trolley - art. 155030, 155030G and 155030C in a way that differs from what is described in Chapters 8 and 9 of the user and maintenance manual.



"MAINTENANCE TECHNICIAN" is the person responsible for transportation, installation, entry into service, repairs – maintenance, cleaning, repairs and modifications and maintenance of the shower trolley art. 155030, 155030G and art. 155030C. This person must be thoroughly instructed, should take part in the shower trolley art. 155030, 155030G and art. 155030C, maintenance course and have experience in the field of transport, installation, operation and servicing of medical devices.

4. POSITION OF SYMBOLS AND LABELS ON THE SHOWER TROLLEY



The shower trolley – electrical art. 155030, 155030G and 155030C is equipped with symbols and labels so that attention is drawn to the risks. Each operator must recognize the importance of such a symbol.

The CE mark with the date and serial number should always be stated on the repair and spare part request.



Symbols and labels must always be installed on the shower trolley – electrical art. 155030, 155030G and 155030C – they cannot be removed or destroyed.



A person who is responsible for employees' safety at work in the facility, must immediately request labels or symbols, if they find out that they are no longer on the shower trolley – electrical art. 155030, 155030G and 155030C or are destroyed




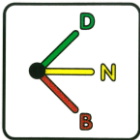




TIMO d.o.o. Ajdovščina can always send new labels and symbols.



Figure 14. Shower Trolley 155030



Figure 15: Shower Trolley 155030

1		Shows the lever for raising and lowering the head area
2		Shows the different positions of the brake pedal
3		A) Item Number B) Serial Number C) Date of production (week/year) D) safe working load E) Description - Type F) CE mark G) Medical device H) Manufacturer
4		Manufacturer name
5		Carefully read the user and maintenance manual before begin using this product
6		Symbol for maximum patient weight and maximum load capacity

5. TECHNICAL DATA

Products of **TIMO d.o.o. Ajdovščina** are continuously improved, which means that the technical properties of the product can change without notice.

5.1. Shower trolley specifications

art. 155030	Length A [mm]	Width B [mm]	Height H [mm]	Angle [°]
Mattress platform	1710, 1910, 2110	650		
Head rest	625	540		0-30
Trolley dimensions – lowered side rail	1850, 2050, 2250	765		
Trolley dimension with side rail	1850, 2050, 2250	800		
Minimum mattress platform height			510	
Maximum mattress platform height			910	
Trendelenburg				20
Reverse Trendelenburg				20
Maximum weight of the patient	150 kg			
The maximum permissible load	200 kg			
Weight of shower trolley	108/111/115 kg			
Wheels / brake system	Ø125 / central brake system			

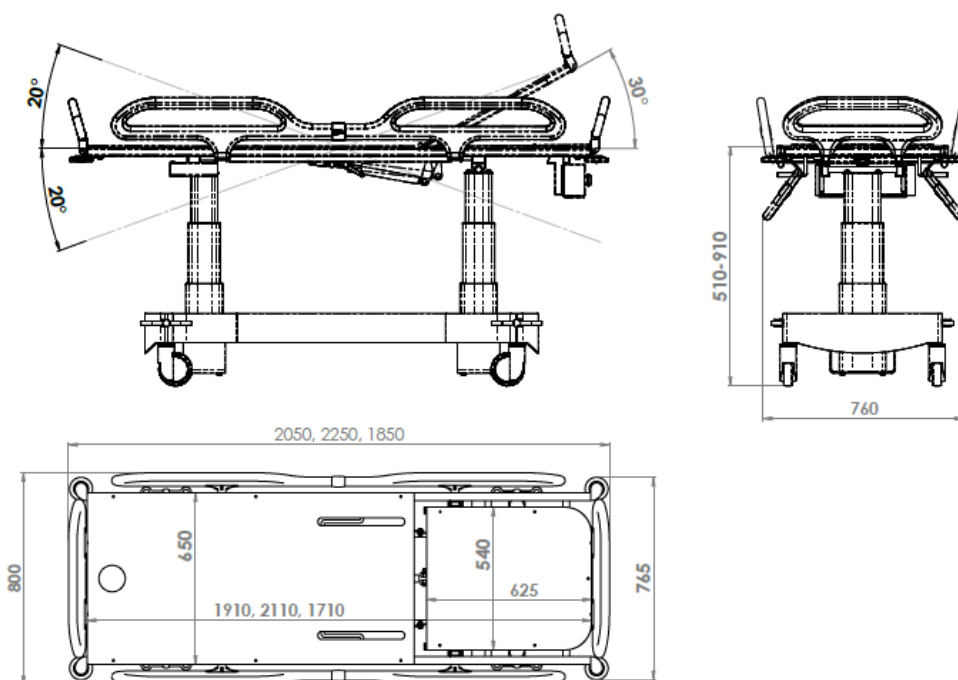


Figure 16: Sketch of shower trolley Art. 155030

art. 155030G	Length A [mm]	Width B [mm]	Height H [mm]	Angle [°]
Mattress platform	1910	800		
Head rest	625	695		0-30
Trolley dimensions – lowered side rail	2050	920		
Trolley dimension with side rail	2050	940		
Minimum mattress platform height			510	
Maximum mattress platform height			910	
Maximum weight of the patient	250 kg			
The maximum permissible load	300 kg			
Weight of shower trolley	120 kg			
Wheels / brake system	Ø150 / central brake system			

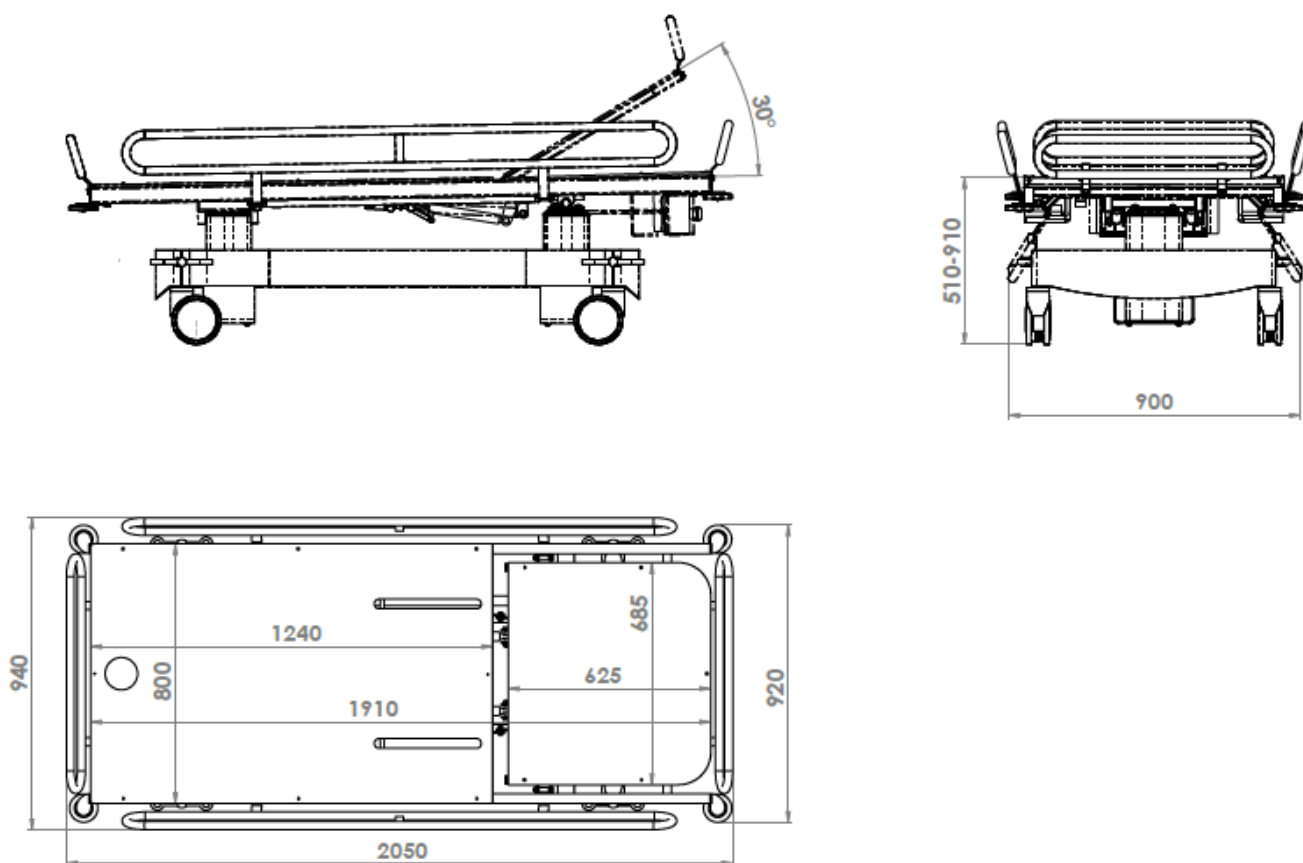


Figure 17: Sketch of shower trolley art. 155030G

art. 155030C	Length A [mm]	Width B [mm]	Height H [mm]	Angle [°]
Mattress platform	1510	650		
Head rest	555	540		0-30
Trolley dimensions – lowered side rail	1650	765		
Trolley dimension with side rail	1650	800		
Minimum mattress platform height			501	
Maximum mattress platform height			900	
Maximum weight of the patient	100kg			
The maximum permissible load	150kg			
Weight of shower trolley	105kg			
Wheels / brake system	Ø125 / central brake system			

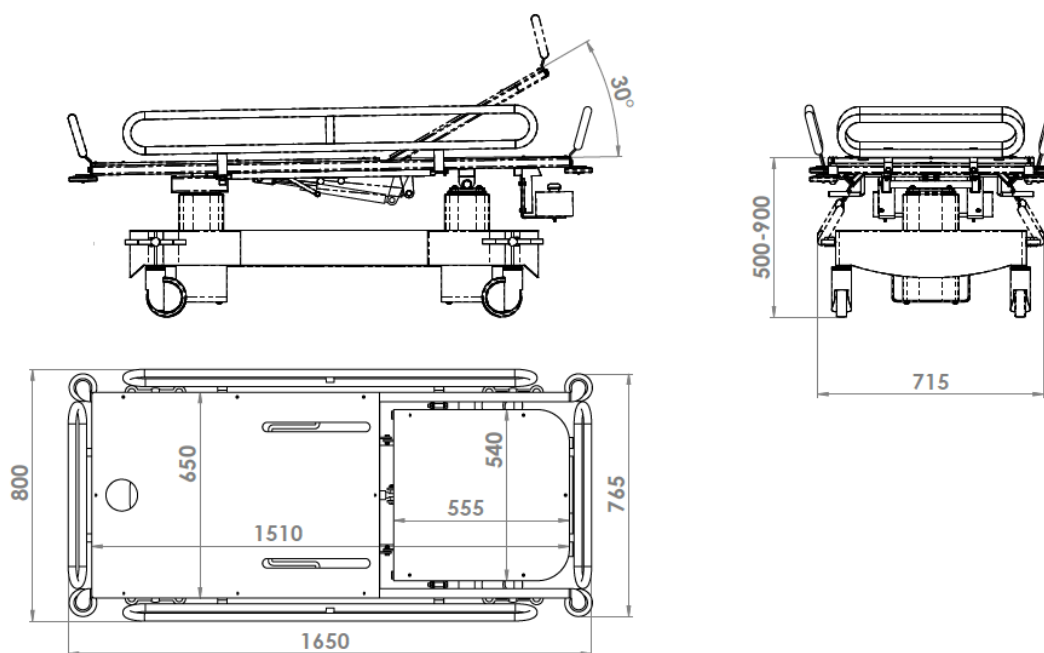


Figure 18: Sketch of shower trolley art. 155030C

Tehnickal data of battery	
Battery voltage	24 V DC / 1 x 2,9 Ah
Max input	4 A
Level of protection	IPX6
Work cycle	10%, max 2min/18min
Battery charger voltage	100 - 240 V / 50 - 60 Hz / 650mA

6. HANDLING - MOVING

USE – HANDLING



6.1. Lifting the shower trolley trolley art. 155030, 155030G and 155030C from the packaging



The shower trolley trolley art. 155030, 155030G and 155030C may be handled only by a trained and qualified person.



Before removing the shower trolley trolley art. 155030, 155030G and 155030C from the packaging, make sure there are no people nearby.



Straps to lift the shower trolley trolley art. 155030, 155030G and 155030C must be provided by the customer.

The weight that needs to be lifted is given as the weight of the product (see technical data) plus the weight of the packaging and accessories.

The load capacity of the straps must exceed 300 kg.



When lifting the shower trolley trolley art. 155030, 155030G and 155030C, avoid unnecessary movement which could cause instability of the product.

6.2. Handling

To install the shower trolley, the operator should check the following:

- 1) Make sure that the shower trolley brake pedal is in the central position (see figure 19)

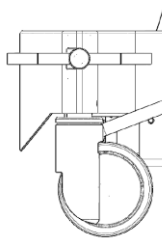


Figure 19

- 2) Raising and lowering the shower trolley (see Chapter 7-8 Installation and control).

Keep the hand used to move the shower trolley on the shower trolley at an angle of 90°.

MOVING ALONG CORRIDORS AND ACROSS LONG DISTANCES

Lift the brake lever so as to lock the **DIRECTIONAL** wheel (head side - right) in “straight” position (fig. 20). This way, the operator will find it easier to push the shower trolley because the front wheel will be in directional position and rest wheels will be free to turn the shower trolley.

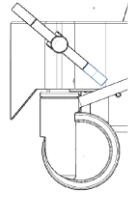
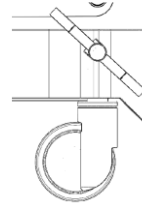


Figure 20



The correct position of a directional wheel



The wheels of the central braking system can be locked to allow movement in one direction only. If you try moving the shower trolley in the opposite direction of the locked wheel, damage and malfunction of the system may occur.

SUITABLE FOR LEFT/RIGHT MOVEMENT SHOULD THE ROOM ALLOW IT

1. Press the wheel-block pedal down to unblock the locked wheel (see Figure 21); the locked wheel is now unblocked and the shower trolley can be moved in all directions.

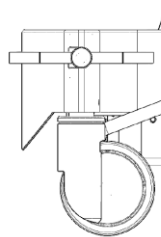


Figure 21

2. When you reach the desired position, make sure to block all the wheels (see Figure 22). This means all four wheels are blocked and cannot move.

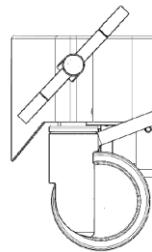


Figure 22



6.3. Shower trolley storage

In case you store the equipment for a period longer than 6 to 12 months, follow the instructions below:

- Reset all the shower trolley settings, including its height
- Make sure the wheels of the shower trolley stand on a flat surface/ground
- Make sure the wheels are not blocked - brake in idle position
- The room where the shower trolley is stored should be dry and in accordance with the following conditions:
 - **Temperature from 10 to +40 °C**
 - **Air pressure 700 to 1060 mbar**
 - **Humidity max 70%**



Do not stack multiple shower trolleys on top of each other.

6.4. Transportation



The two-column adjustable shower trolley – electrical art. 155030, 155030G and 155030C is delivered to the customer fully assembled. Upon delivery, it must simply be taken off the truck and taken to the facility. Transportation is usually done by truck. The following recommendations are to be followed:

- Temperature from 0 to +40 °C
- Air pressure 700 to 1060 mbar
- Humidity max 80%



6.5. Re-use

When the shower trolley is put back into use, please check:

- Wheel braking system
- All safety mechanisms
- All adjustments and operation of the shower trolley



7. INSTALLATION

7.1. Installation

Before installation make sure that:

- The space around the shower trolley is free. When making adjustments, the shower trolley may not touch the wall or other items or people nearby.

8. CONTROL



Before you start using the shower trolley, make sure to read the adjustment instructions carefully. Make sure that you thoroughly understand the safe operation of the shower trolley, because the safe operation depends on your correct use of the shower trolley.



Shower trolley art. 155030, 155030G and 155030C, must be used in accordance with the intended use and in accordance with this user and maintenance manual, different use cannot be the cause of the manufacturer's liability in the event of civil and damage claims.



Before you start moving and adjusting the shower trolley, make sure that the patient's limbs are close to the body and do not touch the moving parts of the shower trolley (e.g. side rail).



Before you start adjusting (e.g. bed height adjustment), make sure that the area under and around the shower trolley is free and without any obstructions. (e.g. children)



Before you start raising and lowering (e.g. side rails), make sure that the shower trolley bed is set to its lowest possible height.



Never leave the patient alone on the shower trolley without the supervision of nursing staff!



8.1. Use

To use the shower trolley, the operators should follow the instructions below:

The shower trolley can be used by qualified personnel to carry out nursing and medical care or nursing personnel in home environment.

Bathing and care of patient should be carried out according to nursing standards which provide safe and quality work in the field of health care (see Hygienic of patient) and correct transfer programs (see the helping the patient move).

For safe and successful work is necessary to consider the manufacturer's instructions on the proper use of the trolley shower and nursing standards (Source: Zeleznik, D., A. Ivanuša 2002. Standards of nursing care. Maribor: University of Maribor. Faculty of Education).

- 1) The shower trolley should be placed in a stable position for safe operation by blocking the wheels using the brake pedal (see Figure 23). Place shower trolley - art. 155030, 155030G and 155030C on a horizontal surface in a stable position. To prevent the movement of the shower trolley - art. 155030, 155030G and 155030C, and the fall of the patient, do not use this shower trolley - art. 155030, 155030G and 155030C on surfaces with depressed drains, holes or inclined surfaces that exceed a ratio of 1: 50 (1,15°).

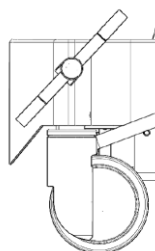


Figure 23

- 2) Proper moving of patient on his side during the bathing and care



Figure. 24



Figure. 25



Figure. 26

Proper preparation to moving of patient on his side is shown on picture 24 and 25

On picture 26 is shown the correct position-rotation of the patient on his side!

3) Improper moving of patient during the care and bath



Figure 27



Figure 28

On picture 27 and 28 is shown the improper position-rotation of patient by pulling him!



ATTENTION!

Place shower trolley - art. 155030, 155030G and 155030C on a horizontal surface in a stable position. To prevent the movement of the shower trolley - art. 155030, 155030G and 155030C, and the fall of the patient, do not use this shower trolley - art. 155030, 155030G and 155030C on surfaces with depressed drains, holes or inclined surfaces that exceed a ratio of 1: 50 (1,15°).

Never leave the patient alone on the shower trolley without the supervision of nursing staff!

Movement on the shower trolley from the bed

- Side rails is in the raised position, in order to prevent a fall of a patient from the shower trolley
- Make sure that patient has hair and limbs close to the body, to avoid pinch or grip.
- To prevent a fall of a patient from the mattress platform of shower trolley, there have to be two operators, to make movement from bed to shower trolley

Please follow the below steps:

- Activate the brake pedal of wheels (Figure 23)
- You have to lift the bed and shower trolley on an appropriate height, which will ensure a safe transfer.
- On the side of transfer lower the side rails of the shower trolley and bed
- On both sides of the bed and shower trolley have to be one operator
- Place the patient near to the place for transfer
- Turn the patient sideways on his, so that he is facing away from the site for transfer.
- The patient is holding by an operator against which he is facing
- Other operator have to set a shower trolley across the bed so that it is as close as possible to the patient, and touching the mattress of bed
- Reactivate the brake pedal of wheels (Figure 23)
- Turn the patient on his back and place it on a shower trolley
- Both operators have to help the patient to be positioned at the center of the shower trolley mattress platform
- Lift the safety side rails
- Place the pillow under the head of patient for comfort
- Lift the shower trolley so that it does not touch the mattress of bed
- Unlock the brake pedal of wheels (Figure 21)
- Move the shower trolley away from the bed
- If the patient is not wearing a clothes, you have to cover it
- Adjust the shower trolley height on an ergonomic height for the operators

Movement from the shower trolley on the bed

- Side rails is in the raised position, in order to prevent a fall of a patient from the shower trolley
- Make sure that patient has hair and limbs close to the body, to avoid pinch or grip.
- To prevent a fall of a patient from the mattress platform of shower trolley, there have to be two operators, to make movement from bed to shower trolley

Please follow the below steps:

- Activate the brake pedal of wheels (Figure 23)
- You have to lift the bed and shower trolley on an appropriate height, which will ensure a safe transfer.
- On the side of transfer lower the side rails of the shower trolley and bed
- On both sides of the bed and shower trolley have to be one operator
- Other operator have to set a shower trolley across the bed so that it is as close as possible to the patient, and touching the mattress of bed
- Reactivate the brake pedal of wheels (Figure 23)
- Place the patient near to the place for transfer
- Turn the patient sideways on his, so that he is facing away from the site for transfer.
- The patient is holding by an operator against which he is facing
- Turn the patient on his back and place it on a bed
- Both operators have to help the patient to be positioned at the center of the bed mattress platform
- Lift the shower trolley so that it does not touch the mattress of bed
- Unlock the brake pedal of wheels (Figure 21)
- Move the shower trolley away from the bed
- You have to make the disinfection of shower trolley after every use of shower trolley (see Chapter 9)

Movement on the shower trolley from the bed with a sliding aid

- Side rails is in the raised position, in order to prevent a fall of a patient from the shower trolley
- Make sure that patient has hair and limbs close to the body, to avoid pinch or grip.
- To prevent a fall of a patient from the mattress platform of shower trolley, there have to be two operators, to make movement from bed to shower trolley
- For big gaps to slide across, between shower trolley and bed use a slide board in between shower trolley and bed to bridge the gap.

Please follow the below steps:

- Lower the safety side rails
- Activate the brake pedal of wheels (Figure 23)
- You have to lift the bed and shower trolley on an appropriate height, which will ensure a safe transfer.
- On the side of transfer lower the side rails of the shower trolley and bed
- On both sides of the bed and shower trolley have to be one operator
- Place a sliding aid below the patient
- One of operator have to set a shower trolley mattress in the way that the mattress of shower trolley is a little lower than a mattress of bed
- Reactivate the brake pedal of wheels (Figure 23)
- Both operators with a sliding aid move the patient from the bed on shower trolley
- Both operators have to help the patient to be positioned at the center of the shower trolley mattress platform
- Place the pillow under the head of patient for comfort
- Unlock the brake pedal of wheels (Figure 21)
- Move the shower trolley away from the bed and raise up the side rails
- Remove a sliding aid from below of patient
- If the patient is not wearing clothes, you have to cover it
- Adjust the shower trolley height on an ergonomic height for the operators

Movement from the shower trolley to the bed with a sliding aid

- Side rails is in the raised position, in order to prevent a fall of a patient from the shower trolley
- Make sure that patient has hair and limbs close to the body, to avoid pinch or grip.
- To prevent a fall of a patient from the mattress platform of shower trolley, there have to be two operators, to make movement from bed to shower trolley
- For big gaps to slide across, between shower trolley and bed use a slide board in between shower trolley and bed to bridge the gap.

Please follow the below steps:

- Activate the brake pedal of wheels (Figure 23)
- You have to lift the bed and shower trolley on a appropriate height, which will ensure a safe transfer.
- On the side of transfer lower the side rails of the shower trolley and bed
- On both sides of the bed and shower trolley have to be one operator
- Place a sliding aid below the patient
- One of operator have to set a shower trolley mattress in the way that the mattress of shower trolley is a little lower than a mattress of bed
- Reactivate the brake pedal of wheels (Figure 23)
- Both operators with a sliding aid move the patient from the shower trolley to the bed
- Both operators have to help the patient to be positioned at the center of the bed mattress platform
- Unlock the brake pedal of wheels (Figure 21)
- Move the shower trolley away from the bed
- Remove a sliding aid from below of patient
- You have to make the disinfection of shower trolley after every use of shower trolley (see Chapter 9)

Movement on the shower trolley from a sling lift (only for floor or ceiling lifts)

Please follow the below steps:

- Lower the height of shower trolley at the lower height
- Activate the brake pedal of wheels (Figure 23)
- Make sure that both safety side is raised up.
- Lower lift with patient on shower trolley
- Remove the sling from lift
- Move away the lift from shower trolley
- Adjust the shower trolley height on a ergonomic height for the operators
- Remove the sling from patient
- Place the pillow under the head of patient for comfort
- Unlock the brake pedal of wheels (Figure 21)
- If the patient is not wearing a clothes, you have to cover it

Movement from the shower trolley to a sling lift (only for floor or ceiling lifts)

Please follow the below steps:

- Activate the brake pedal of wheels (Figure 23)
- Adjust the shower trolley height on an ergonomic height for the operators
- Put the sling below the patient
- Lower the height of shower trolley at the lower height
- Put the lift under the patient
- Attach the sling to the lift
- Lift the patient from the shower trolley
- You have to make the disinfection of shower trolley after every use of shower trolley (see Chapter 9)

Shower patient in a shower trolley

Please follow the below steps:

- Please shower trolley as close as possible to the mixer or apparatus for water treatment

- Make sure the drain hose is placed in a drain
- Activate the brakes and raise or lower the shower trolley mattress platform at a comfortable working height
- Lift the shower head under the shower trolley
- Adjust the thermostatic mixing valve to the desired or appropriate temperature.
- Before you take a shower to the patient, you have always to check the water temperature with naked hand first, only after that you can direct the water on patient. It is important that you do not use gloves at the time of check of temperature of water.
- Adjust the temperature of the water, so that it is pleasant for the patient
- Shower the patient
- After showering close the water and wipe the patient
- Release the brakes
- Lift the shower trolley at a comfortable height and take back the patient
- You have to make the disinfection of shower trolley after every use of shower trolley (see Chapter 9)

8.2. Home care use of shower trolley

Distributors and borrowers please follow the below steps:

- Read these instructions together with the recipient (parents, husband, wife, ...)
- Point out the intended use and all regulation of shower trolley
- Check whether the user has understood the instructions
- You have to read all warnings to the recipient
- Check if place meets all the requirements listed in these user and maintenance manual
- Ensure that before handing over the shower trolley to the new user always carries out a process of cleaning and disinfection

When using the shower trolley as home care use please follow the below steps:

ATTENTION!

▶▶▶ Place shower trolley - art. 155030, 155030G and 155030C on a horizontal surface in a stable position. To prevent the movement of the shower trolley - art. 155030, 155030G and 155030C, and the fall of the patient, do not use this shower trolley - art. 155030, 155030G and 155030C on surfaces with depressed drains, holes or inclined surfaces that exceed a ratio of 1: 50 (1,15°).

▶▶▶ Never leave the patient alone on the shower trolley without the supervision of nursing staff!

- Make sure that all (parents, husband, wife, ...) read and understand the instructions contained in these user and maintenance manual
- That all carpets and fitted carpets in the room is removed out
- That all thresholds in the area is removed removed out
- That all stairs and edges are protected by a security fence that will prevent the shower trolley drove down
- That there is of adequate space for use of the shower trolley
- That they are familiar with the proper care and treatment procedures for the patient (point 8.1.)

In the following cases, please refer to healthcare personnel:

- For the re-demonstration of proper care of the patient during the use of the shower trolley

▶▶▶ To prevent accidents with children, never leave children unattended near the shower trolley

▶▶▶ Children should not have access to the shower trolley

▶▶▶ Domestic animals must not come into contact with the shower trolley

▶▶▶ Make sure that the storage space meets the required conditions

 Please follow the instructions for regular maintenance from point 10.2.

8.3. Manual controls - adjustments

8.3.1. Setting the head area (art.155030, 155030G, 155030C)



In the event of an emergency, the head rest can be lowered using the rapid descent levers on both sides of the bed.

8.3.1.1. Raising the head rest

- 1) Grip the backrest part.
- 2) Pull the handle at the side of the mattress platform upwards, without forcing (fig. 29).

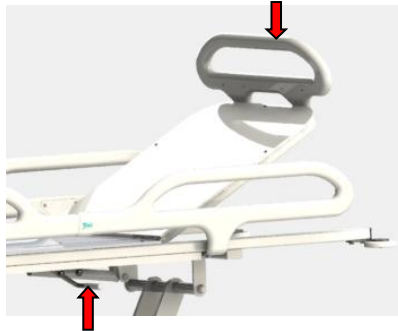


Figure 29

- 3) Now adjust the head rest to the desired position.
- 4) First release the lever and then the head area.

8.3.1.2. Lowering the head area

- 1) Grip the backrest part.
- 2) Pull the handle at the side of the mattress platform upwards, without forcing (fig. 29).
- 3) Rise down the platform as far as desired position.
- 4) First release the handle and then the backrest.



Before you start adjusting the head rest, make sure that nothing prevents the head area from being it into a horizontal position


8.3.2. Adjusting side rails



Before lowering and raising the said rails, make sure that the patient's limbs are close to the body and do not touch the side rails

Raising the side rails

Firmly grasp the upper edge of a side rail and pull it up until it locks in place. Make sure it is secured in a raised position. See Figure 30.

 **ATTENTION!** When raising the rails always check that the two locking mechanisms properly set into place (Figure 31), otherwise the rail may open under load.


 **ATTENTION!** If the locking mechanism is not working properly (it jams), remove the shower trolley immediately from use and call maintenance department to fix the problem!



Figure 30

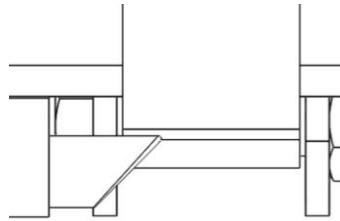


Figure 31

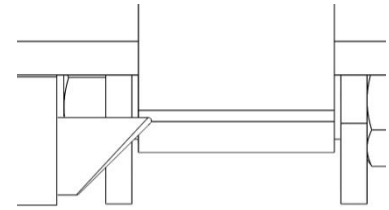


Figure 32

Lowering the side rails

Firmly grasp the upper edge of a side rail and push the buttons on the rail triggers marked with a red arrow, as shown in Figure 33, to lower the rail. While lowering, hold the rail by the top tube to avoid pinching fingers.

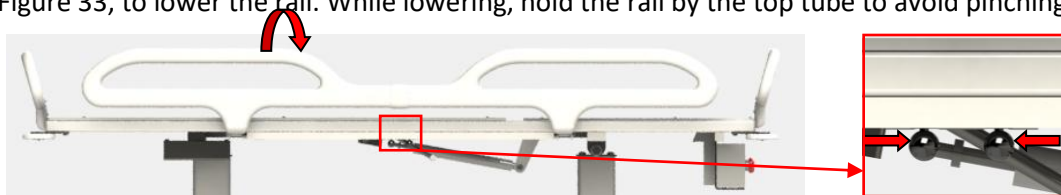


Figure 33



8.4. Shower trolley electrical adjustment

Electrical adjustments of the shower trolley:

- raising – lowering of mattress platform
- Trendelenburg - reverse Trendelenburg (only 155030)
- Raising and lowering movements can last 2 minutes without interruptions; after that, the system must not move for 18 minutes. After 18 minutes, you can return to normal use. Work cycle 2min/18min.

8.4.1. Raising/lowering the mattress platform

The mattress platform is raised/lowered using the manual controller. The mattress platform is raised/ lowered by pressing the button and holding it until you reach the desired height.



Make sure the space around the shower trolley is free and that nothing obstructs the bed height adjustment.

Regulation of height is allowed only with raised safety sides

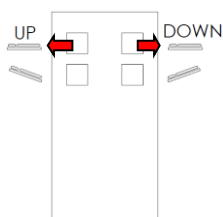


Figure 34: Manual controller of art.155030

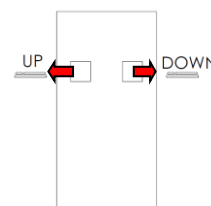


Figure 35: Manual controller of art.155030G in155030C

8.4.2. Trendelenburg - reverse Trendelenburg bed tilt only art. 155030

The shower trolley is tilted using the manual controller. The shower trolley is placed in the Trendelenburg - reverse Trendelenburg tilt by pressing the button and holding it until you achieve the desired tilt.

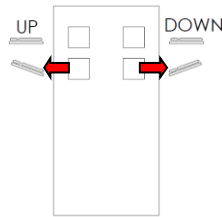


Figure 36: Manual controller of art.155030



First make sure that the area under and around the shower trolley is free of objects or people (e.g. children); there should be no obstacles under the bed.



While using the Trendelenburg - reverse Trendelenburg tilt, the shower trolley must be blocked and the side rails lifted to ensure patient safety.



If the patient is not lying on the shower trolley bed, the Trendelenburg - reverse Trendelenburg adjustment cannot be used. Always make sure that the patient is lying on the shower trolley bed, before you begin using this adjustment.



8.5. Moving the shower trolley



Before starting to move the shower trolley, make sure to raise the safety rails is raised up to prevent the patient from falling off the shower trolley. Make sure there is enough space to safely move the shower trolley and all the accessories through corridors and doors.

To move the shower trolley, push the wheel-block pedal into the open position (see Figure 37). Push the shower trolley to the desired location and block the wheels (See Figure 39).

To move the shower trolley across longer distances, lock the direction of one of the wheels with the pedal (see Figure 38); when the desired location is reached, block the pedal again to block the wheels (See Figure 39).

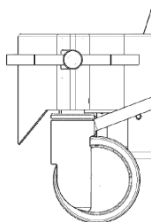


Figure 37

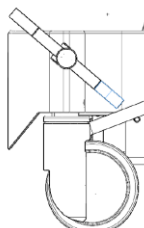


Figure 38

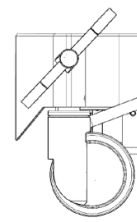


Figure 39

9. CLEANING AND DISINFECTION

9.1. Cleaning and disinfection

Shower trolley needs to be cleaned and disinfected after each use to prevent accumulation of bacteria on a shower trolley mattress and pillow. Cleaning and disinfection of shower trolley is particularly important where there are daily showers of more patients, to prevent transmission of infection between patients.

Shower trolley is cleaned with water using normal detergents and disinfectants, which can be applied with a damp cloth or washed with a jet of water.

We recommend using disinfectant Apesin SDR SAN.

Make sure that you have the safety data sheets for the disinfectant you are using.

▶▶ Never use high-pressure cleaners, acids, solvents, corrosive products and etching substances. Detergents must not contain phosphates, phosphorus or formaldehyde.

▶▶ Always use protective gloves and goggles to prevent eye damage and skin.

In case of contact rinse with plenty of water. If there is inflammation of the eyes or skin, see your doctor.

Always read the instructions for disinfecting and safety data sheets for disinfectant.

▶▶ Disinfection must never be performed in the presence of the patient, as it may cause inflammation of the eyes and skin.

▶▶ To prevent damage to the equipment using a recommended disinfectant Apesin SDR SAN.

Clean the pillow immediately after each use!

Shower trolley pillows should NOT be cleaned with substances containing:

- solvents,
- bleachers (e.g. hydrogen peroxide),
- (cleaning) gasoline,
- contain abrasive materials or
- have a corrosive effect.

Shower trolley should not be cleaned with hot water (maximum lukewarm!) or using high-pressure cleaners.

Only cleaners that are intended by the manufacturer of the cleaning agents to be used for PVC coated textiles should be used for cleaning. The concentration, use and rinse instructions of each detergent manufacturer must be carefully followed.

Cleaning agents, neutral pH, or light soaps may be used.

Important: After cleaning, the cleaning agent should be completely rinsed with clean water.

Do not clean under direct sunlight. If the detergent dries, stains can remain.

A soft sponge or soft brush should be used to clean the shower trolley. Never use abrasive, powder-based cleaners and take care not to scratch or damage the surface.

Before cleaning over a large area, it is recommended that you perform a test in an invisible area, for example, on the underside of a pillow.

10. MAINTENANCE

10.1. Lubrication



Maintenance can only be performed by properly qualified staff or TIMO d.o.o. Ajdovščina, Pod letališčem 5, 5270 Ajdovščina, phone +3865/3689 330, fax +3865/3663 805, e-mail: info@timo.si!

Periodically – at least every 6 months or even better after each cleaning – we recommend lubrication of all moving parts with Vaseline-like grease or dried grease spray.

Particular attention should be paid to the correct (smooth) operation of the side rails locking mechanism so that it locks without jamming. If the side rail locking mechanism jams, you must immediately remove the shower trolley from use and inform the maintenance department to repair the defect (to clean and lubricate the mechanism)!



10.2. Checking parts of the shower trolley



Maintenance can only be performed by properly qualified staff or TIMO d.o.o. Ajdovščina, Pod letališčem 5, 5270 Ajdovščina, phone +3865/3689 330, fax +3865/3663 805, e-mail: info@timo.si!

Periodically – at least every 6 months – we recommend that you check whether the screws, pins etc. are tight.

Periodically - at least every 6 months - it is recommended to check the screws, pins, etc. are tight.

Check also the possible wear of the side rail locking mechanism! As soon as you notice excessive wear of the locking mechanism you should immediately remove the shower trolley from use and inform the maintenance department to repair the defect - replace the worn part with a new one.

Figure 40: Unworn part

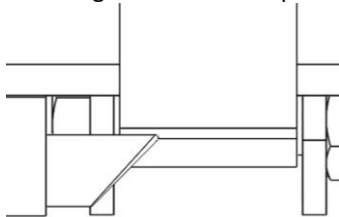
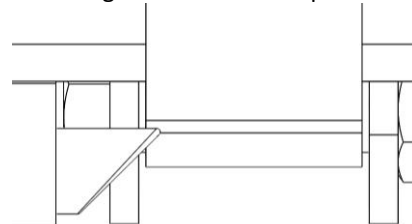


Figure.41: Worn-out part



Worn-out part



Periodically – every 6 months – the authorized service centre should perform a regular shower trolley service check. The regular service checks are recorded in a service data booklet for each shower trolley. This warranty is valid upon the fulfilment of the conditions stated above. The customer is obliged to ensure that regular service checks are carried out and recorded in the service booklets.

Checking the braking system

It is recommended to check the brake system. Push the brake pedal into locked position (Figure 43). Then check if all the wheels are blocked. If any wheel rotates, adjust the wheel according to the procedure. The brake pedal is in the locked position (Figure 43), unscrew the M8x12 screw (Figure 44) and rotate the wheel clockwise [1] (for example 2 turns) and thus adjust the brake. When the brake is adjusted, tighten the M8x12 screw.

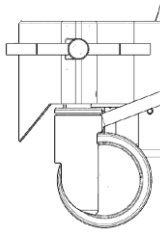


Figure 42

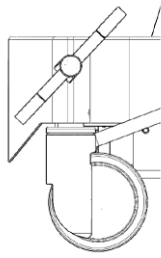


Figure 43

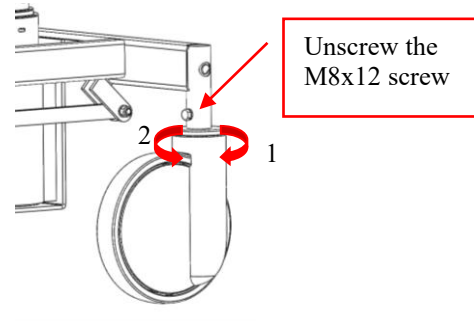


Figure 44

However, if the wheel brakes when the brake pedal is in the position free (Figure 42), follow the following procedure: - the brake pedal is in the locked position (figure 43) - unscrew the M8x12 screw and turn the wheel counter clockwise [2]. When the brake is adjusted, tighten the M8x12 screw.

Liabilities operators:

- **Daily disinfection**
You have to make the disinfection of shower trolley after every use of shower trolley.
- **Weekly visual inspection of the exposed parts**
In particular, check the parts that come into direct contact with patients or operators. Make sure that there are no cracks or sharp edges that could hurt the patient or patient, and that shower trolley did not become unsanitary.
Check drain hose and parts thereof. Replace any damaged parts.
- **Check the mechanical connections**
Tilt the shower trolley mattress platform, visually inspect the screw.
When the shower trolley is tilted, check whether the are any cracks.
- **Perform functionality test**
 - safety side rails
 - regulation of shower trolley
 - Brake pedal of wheels and cleaning
 - Checking the manual controller in the event of damage to the cable is necessary to remove the shower trolley from the use until a new manual controller is installed.
 - Checking the battery and charger, in case of damage is necessary to remove the shower trolley from the use until a new battery or charger is not received
 - Overview mattress and the pillow, in the case that of damage, cracks or tears is necessary to remove the shower trolley from the use until a new mattress or pillow is not received.

10.3. Electrical diagram

Electrical diagram:

A - central box COL50

B - battery BAL50

2÷C – manual controller HB72 (art.155030)

2÷D – manual controller HB72 (art. 155030G and 155030C)

3÷E - el. actuator BL1

4÷E - el. actuator BL1

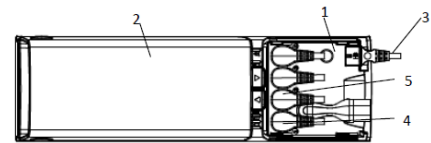


Figure 45: Electrical diagram

A	central box COL50 -Linak	COL50
B	battery BAJ1 -Linak	BAL50
C	manual controller HB33 –Linak (art.155030)	HB33
D	manual controller HB31 -Linak	HB31
E	el. actuator BL1 -Linak	BL141HA114
F	actuator connecting cable 850 -Linak	CAB0965807-850
G	actuator connecting cable 2500 -Linak	0965207-2500
H	Battery charger CHJ2 -Linak	CHL50

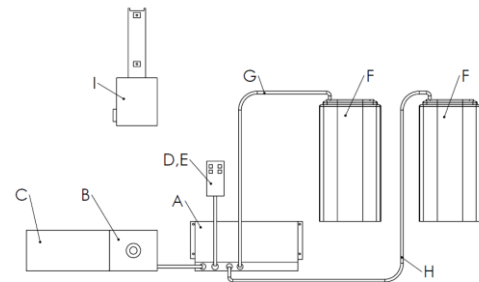


Figure 46: Electrical components

10.4. Emergency stop

The emergency stop button is mounted on the end of the battery.

Emergency stop activation:

1. Press the red button on the battery (Figure 47) and two yellow lights flash

To release off the emergency stop, remove the battery:

2. Press the round buttons on the side of the battery with your fingers (Figure 47)
3. And remove the battery (Figure 48).

Reinsert the battery (Figure 49)

4. Place on guide
5. Push until it locks in place

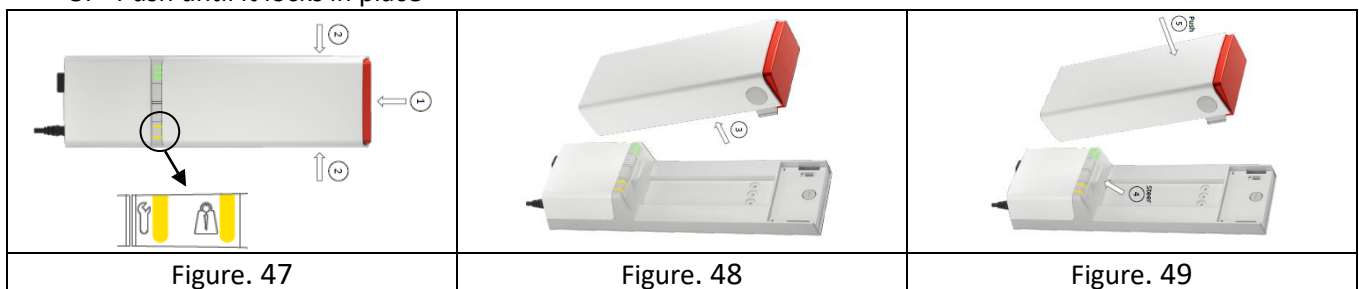


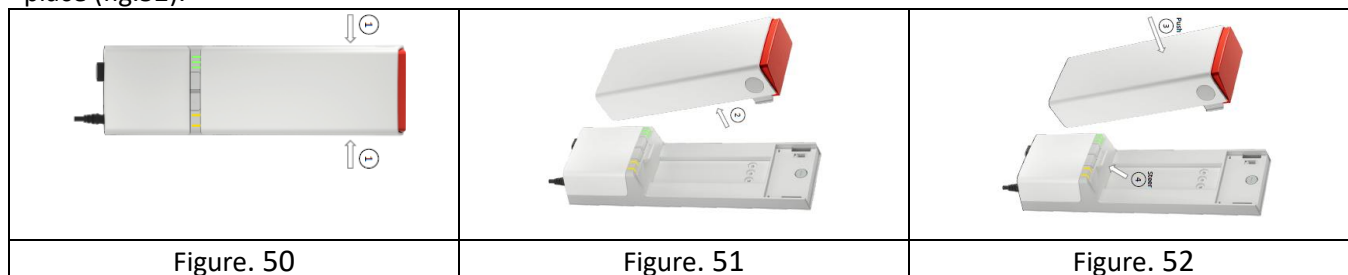
Figure. 47

Figure. 48

Figure. 49

10.5. Removal and installation of battery on a wall charger (CHL50) or box (COL50)

Remove the battery with CHL50 or COL50 by holding the battery with one hand and pressing the round buttons (1) on the side of the battery (fig.50) with the other hand and removing the battery (fig.51). The battery is inserted into the CHL50 or COL50 by placing it on the bus(4) and pushing it in until it locks in place (fig.52).






10.6. Battery charging

How do we know when we need to connect the battery to the charger? There are three signal lights on the box indicating the battery charge. When the voltage drops below a certain point, the first light flashes, alerting us to the need to connect the battery to the charger.

	<p>All three lights are green The battery is charged between 75-100%</p>
	<p>Two lights are green The battery is charged between 50-75%</p>
	<p>One light is green The battery is charged under 50%</p>
	<p>The first light flashes from green to orange The battery needs to be connected to the charger.</p>
<p>Figure. 53</p>	

There are three signal lights on the wall charger indicating the battery charge. The battery will charge in approximately 4 hours.

	<p>Three lights are on. 90-100%</p>	
	<p>The first two lights are continuously on and the third light flashes. 65-90%</p>	
	<p>The first light is continuously on and the second light flashes. 40-65%</p>	
	<p>The first light flashes 0-40%</p>	
	<p>All three lights flash. Battery failure or overheating</p>	
	<p>No lights is on. No communication with the battery</p>	
<p>Figure. 54</p>		

	<p>Recommendations</p> <ul style="list-style-type: none"> • Before first use, fully charge the battery. • Consider the storage temperature (+10 ° to +40 ° C) battery, otherwise the life expectancy and product capacity will decrease. • It is recommended to allow the battery to reach room temperature before use or charging. The battery operating range is (+10° to +40 °C). • Only use the original Linak® CHL50 charger. • Do not exceed the work cycle as this will shorten the product life and reduce efficiency. • Before storage, recharge the battery if it has been completely discharged. • For long-term storage, remove the battery from the appliance and store separately. • Charge the batteries at least every 12 months. • In combination with COL50, IPX6 can only be provided if the minimum interval is 24 hours. <p>between every wash.</p>
	<p>ALL USERS OF LI-ION BATTERIES MUST READ THESE IMPORTANT SAFETY INSTRUCTIONS FOR THE BATTERY AND THE WARNINGS BEFORE USE.</p> <p>Failure to read and follow these safety instructions and warnings may result in a fire, injury to the user and damage to equipment if batteries are charged and/or used incorrectly.</p> <ul style="list-style-type: none"> • Do not open, disassemble or change the battery housing, as a cell or circuit and excessive fever may occur. • Immediately stop using the battery if the battery emits an unusual odour, is hot or changes colour or shape, shows signs of injury or corrosion, or look abnormally in any other way. • If the battery heats up, disconnect it and remove it from the room. <p>If the battery is not possible to remove, leave the room.</p> <ul style="list-style-type: none"> • Defective or damaged lithium-ion batteries or batteries that cause excessive heat or fire may not be transported. • For safety reasons, observe the specified charging temperatures, storage and operation extreme temperatures (low or high) may ignite the battery and cause a fire. • Follow the installation instructions to avoid exposure of the batteries to water. • The customer is responsible for the proper operation of the charger and the host device.
	<p>DO NOT:</p> <ul style="list-style-type: none"> - heat up, burn and short-circuit the battery - subject the batteries to severe impact - squeeze or puncture the batteries - charge or store batteries near flammable materials - charge batteries without supervision - expose the batteries to water or other liquids - use batteries in swimming pools <p>Any of the above can cause a fire or injury!</p>

11. PROBLEMS – FAILURES



Foreword



**Maintenance can only be performed by properly qualified staff
or TIMO d.o.o. Ajdovščina, Pod letališčem 5, 5270 Ajdovščina, phone +3865/3689 330, fax
+3865/3663 805, e-mail: info@timo.si!**

This section describes possible faults and how to fix them. In the event that the fault cannot be fixed, please contact the authorized service provider.

FAULT	CAUSE	FIX
The Trendelenburg - reverse Trendelenburg adjustment does not work	<ol style="list-style-type: none"> 1. The battery may be empty or not properly connected 2. The manual controller may be malfunctioning 3. Engine failure 4. Damaged power cord 5. Faulty control box 	<ol style="list-style-type: none"> 1. Connect the battery to the charger or call a technician to replace the battery 2. Call a technician to replace the manual controller 3. Call a technician to replace the engine 4. Check if all power cables are properly connected or call a technician to replace cables 5. Call a technician to replace the control box
The head rest would not raise, when you press the lever	<ol style="list-style-type: none"> 1. Excessive load on the head area 2. Damage to gas spring 3. Damage to trigger 	<ol style="list-style-type: none"> 6. Reduce the load and attempt to raise again 7. Call a technician to replace the gas spring 8. Call a technician to replace the trigger
The shower trolley cannot be blocked	<ol style="list-style-type: none"> 1. Damage to wheels 2. Damage to brake pedal 	<ol style="list-style-type: none"> 1. Call a technician to replace the wheel. 2. Call a technician to replace the pedal
It is not possible to raise the mattress platform	<ol style="list-style-type: none"> 1. The battery may be empty or not properly connected 2. The manual controller may be malfunctioning 3. Engine failure 4. Damaged power cord 5. Faulty control box 	<ol style="list-style-type: none"> 1. Connect the battery to the charger or call a technician to replace the battery 2. Call a technician to replace the manual controller 3. Call a technician to replace the engine 4. Check if all power cables are properly connected or call a technician to replace cables 5. Call a technician to replace the control box

12. DECOMMISSIONING

The shower trolley art. 155030,155030G and 155030C is made from metallic, non-metallic, thermoplastic and electrical material.

In the event of disposal and recycling, please comply with the local legislation.

For decommissioning please follow these instructions:

- unplug the shower trolley from electricity grid
- dismantle the shower trolley and recycle the components
- Disposal of different materials and disposal of various special and hazardous waste should be carried out in accordance with the legal requirements in the country in which the shower trolley is used.

In the event of disposal and recycling, the applicable legislation should be followed. Electrical and electronic components must be separated for recycling in accordance with Directive 2012/19/EU on waste electrical and electronic equipment (WEEE).

13. ELECTROMAGNETIC COMPATIBILITY

a) Warning: Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.

b) Warning: Use of accessories, transducers and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.

c) Warning: Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Shower trolley (art. 155030, art. 155030G and art. 155030C), including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.

d)

Emission

Test	Limit	Electromagnetic environment - guidance
Conducted emission	CISPR 11, Group 1, Class B	Device uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
Radiated emission	CISPR 11, Group 1, Class B	

Immunity test levels

Test	Compliance level	Electromagnetic environment - guidance
Electrostatic Discharge (IEC 61000-4-2)	Contact Discharge: ±8 kV Air Discharge: ±2 kV, ±4 kV, ±8 kV, ±15 kV	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Radiated RF EM field (IEC 61000-4-3)	80-2700 MHz; 1kHz AM 80 %; 10 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = 1.2\sqrt{P}$ for 80 MHz to 800 MHz $d = 2.3\sqrt{P}$ for 800 MHz to 2,7 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).
Proximity fields form RF wireless communications equipment (IEC 61000-4-3)	385 MHz; Pulse Modulation: 18 Hz; 27 V/m 450 MHz, FM ± 5 Hz deviation: 1 kHz sine; 28 V/m 710, 745, 780 MHz; Pulse Modulation: 217 Hz; 9 V/m 810, 870, 930 MHz; Pulse Modulation: 18 Hz; 28 V/m 1720, 1845, 1970 MHz; Pulse Modulation: 217 Hz; 28 V/m 2450 MHz; Pulse Modulation: 217 Hz; 28 V/m; 5240, 5500, 5785 MHz; Pulse Modulation: 217 Hz; 9 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance 30 cm.
Electrical fast transients / bursts (IEC 61000-4-4)	Signal lines: 1 kV; 100 kHz repetition frequency	Mains power quality should be that of a typical environment.
Conducted disturbances induced by RF fields (IEC 61000-4-6)	0.15-80 MHz; 1kHz AM 80 %; 3 Vrms, 6 Vrms in ISM and amateur radio band	Portable and mobile RF communications equipment should be used no closer to any part of the device, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter. Recommended separation distance $d = 1.2\sqrt{P}$ for 150 kHz to 80MHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m).
Rated power frequency magnetic fields (IEC 61000-4-8)	30 A/m, 50 Hz	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Proximity magnetic fields (IEC 61000-4-39)	30 kHz; 8 A/m; CW 134 kHz; 65 A/m; PM:2,1 kHz 13,56 MHz; 7,5 A/m; PM: 50 kHz	RFID, WPT and similar equipment should be used no closer to any part of the device, including cables, than the recommended separation distance 15 cm.

14. PART LIST

14.1. Part list of base (art. 155030)

no.	description	no.	description
1	Chassis frame 2 x BL1	14	Cover BL1-M
2	2046UAP125R26-28S45	15	Cover BL1-SL
3	2044UAP125R26-28S45	16	Cover central BL1
4	Brake rod 660	17	plate fastening BL1-M12
5	brake lever	18	washer pvc n30-18x2
6	Spring washer DIN 128 - A8	19	screw M12
7	screw - M8 x 12	20	plate fastening BL1
8	Brake connection 1350	21	wheel fi46x22
9	washer DIN 125 - A 8.4	22	Cable 750
10	screw - M8 x 30	23	Cable 2500
11	self-locking nut - M8	24	Brake pedal L
12	actuator BL1	25	Brake pedal R
13	screw BL1 - M8 x 60	26	

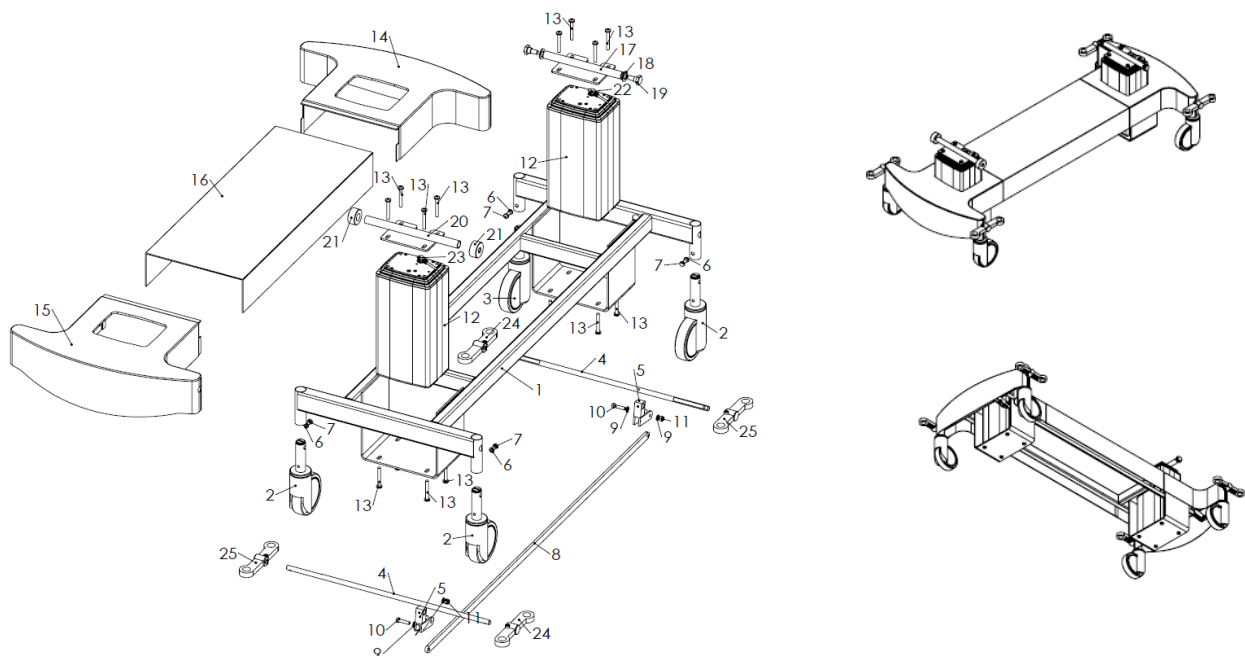


Figure 53: Base of shower trolley art. 155030

14.2. Part list of mattress platform (art. 155030)

no.	description	no.	description
1	Support frame two-pillar el.sp7	18	Plug 30x30
2	Laminat of mattress long one 1250x650	19	U support of cylinder 140
3	Backrest of shower trolley	20	Nut M10 x 1.0
4	laminat of mattress short one 650x630	21	Spring Ø10x30
5	Trigger of side rail	22	Support of trigger
6	Buffer wheel Ø25	23	Twin trigger
7	Gas cylinder 120	24	Left support of buffer wheel
8	Support of buffer wheel	25	Right support of buffer wheel
9	Blind river Ø4.8x10	26	Screw M8 x 20
10	Rubber handle n12x100	27	Plug 50x25
11	screw M6x15 pvc with black head	28	Plug 25x25
12	screw M8 x 35	29	Side rail long
13	Screw M8 x 25	30	Side rail short
14	washer DIN 125 - A 8.4	31	Box COL 50
15	self-locking nut -M10	32	Battery BAL50
16	self-locking nut -M8	33	Blind river Ø 4x16
17	screw M10 x 55	34	

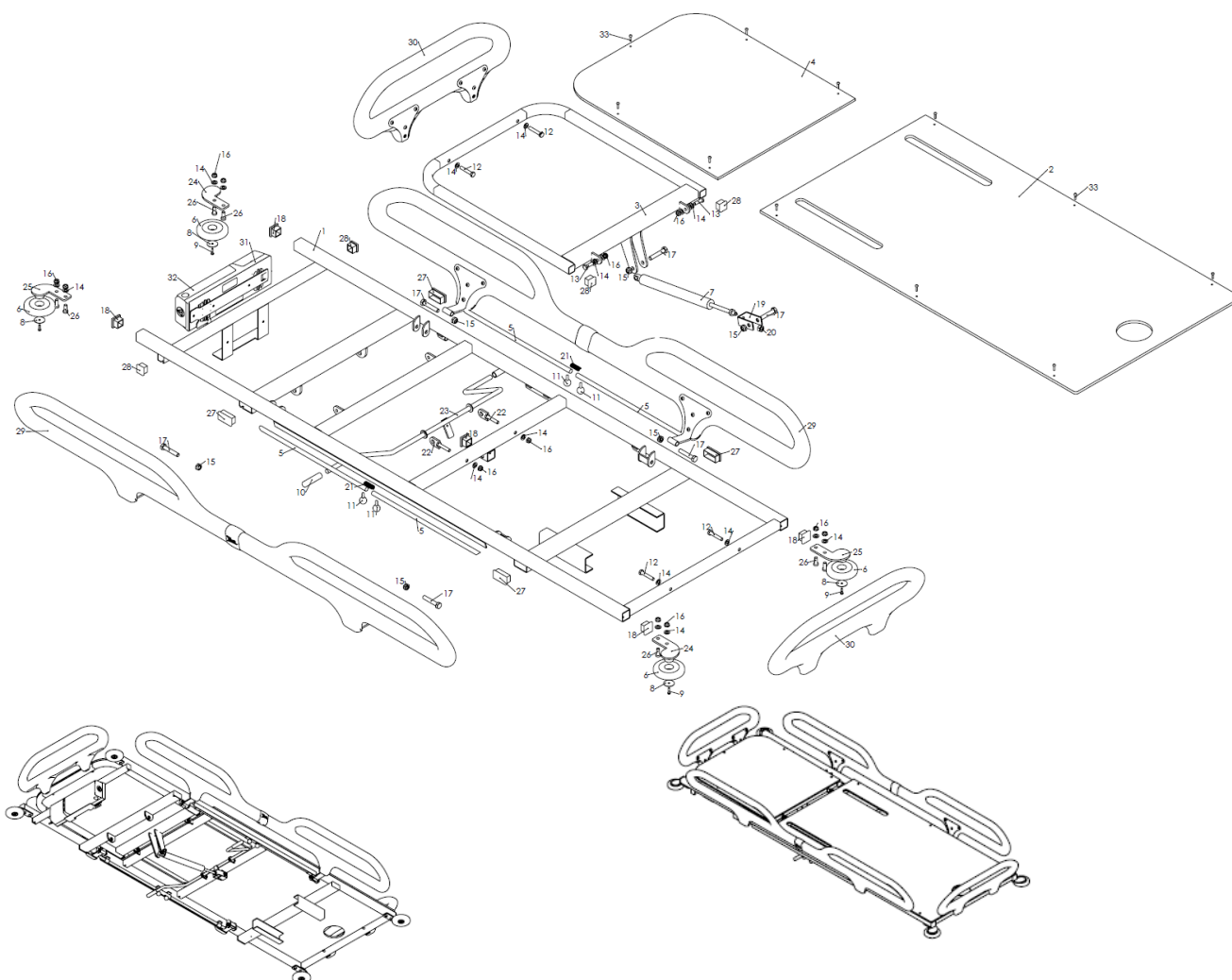


Figure 54: Mattress platform of shower trolley art. 155030

14.3. Part list of base –gigant (art. 155030G)

no.	description	no.	description
1	Support frame gigant	14	cover BL1-800-SL
2	wheel 2944UAP150R26-28S45	15	cover BL1-800
3	whell2946UAP150R26-28S45	16	Cover central BL1
4	Brake rod 810	17	Plate fastening BL1-M12
5	brake lever	18	washer pvc ø30-18x2
6	Spring washer DIN 128 - A8	19	screw M12
7	Screw - M8 x 12	20	Plate fastening BL1
8	Brake connection 1350	21	wheel Ø46x22
9	washer DIN 125 - A 8.4	22	Cable 750
10	screw - M8 x 30	23	Cable 2500
11	Self – locking nut - M8	24	Brake pedal L
12	actuator BL1	25	Brake pedal R
13	screw BL1 - M8 x 60	26	

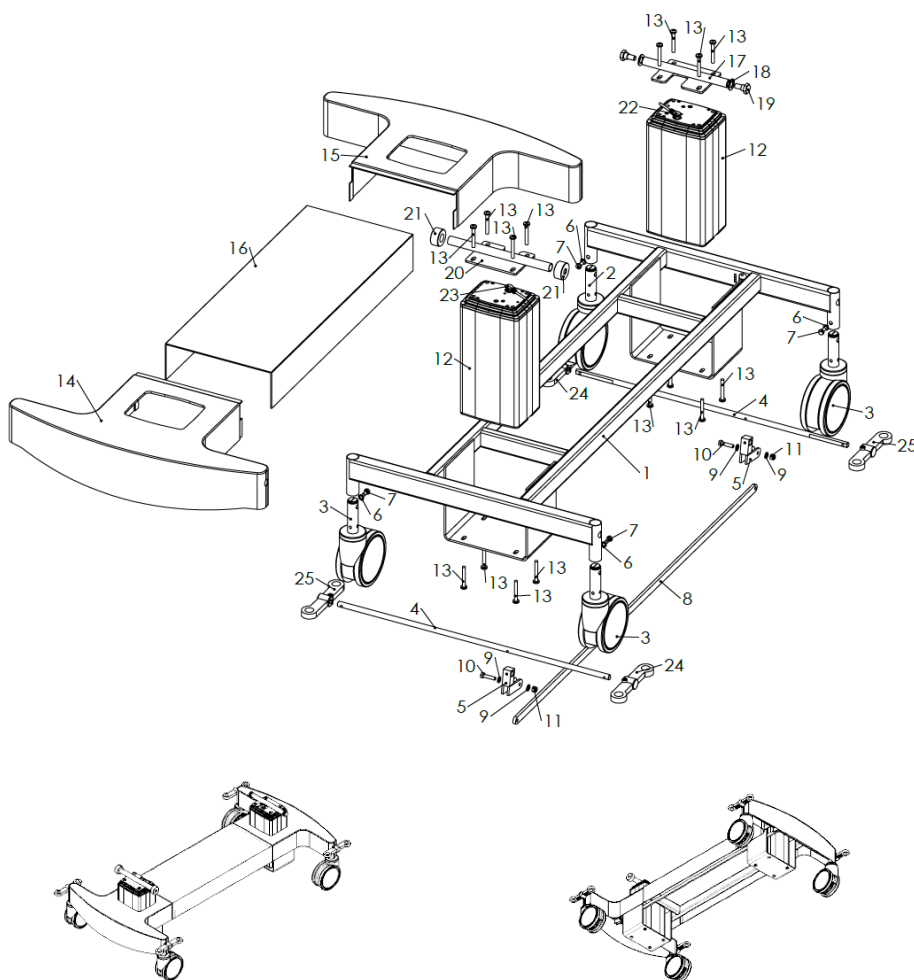


Figure 55: Base of shower trolley art. 155030G

14.4. Part list of gigant mattress platform (art. 155030G)

no.	description	no.	description
1	Support mattress frame gigant	19	screw - M8 x 40
2	Support of backrest	20	Side rail long new one
3	screw - M8 x 25	21	Trigger of side rail
4	Plug 25x25	22	Spring $\varnothing 10 \times 30$
5	Gas cylinder 120	23	Screw M6x15 pvc with black gead
6	U support of cylinder 140	24	Left support of buffer wheel
7	Nut - M10 x 1.0	25	Right support of buffer wheel
8	Plug 30x30	26	screw - M8 x 20
9	Twin trigger - 800	27	Buffer wheel $\varnothing 25$
10	Support of trigger	28	Support plate of buffer wheel
11	Rubber handle $\varnothing 12 \times 100$	29	Blind rivet $\varnothing 4 \times 16$
12	Washer DIN 125 - 8.4	30	plug 50x30
13	Self-locking nut -M8	31	laminat of mattress support long gigant
14	Self-locking nut -M10	32	laminat of mattress support short gigant
15	screw - M10 x 55	33	Blind rivet $\varnothing 4 \times 16$
16	screw - M5 x 10	34	Box COL 50
17	Self-locking nut - M5	35	Battery BAL50
18	Side rail short new one	36	

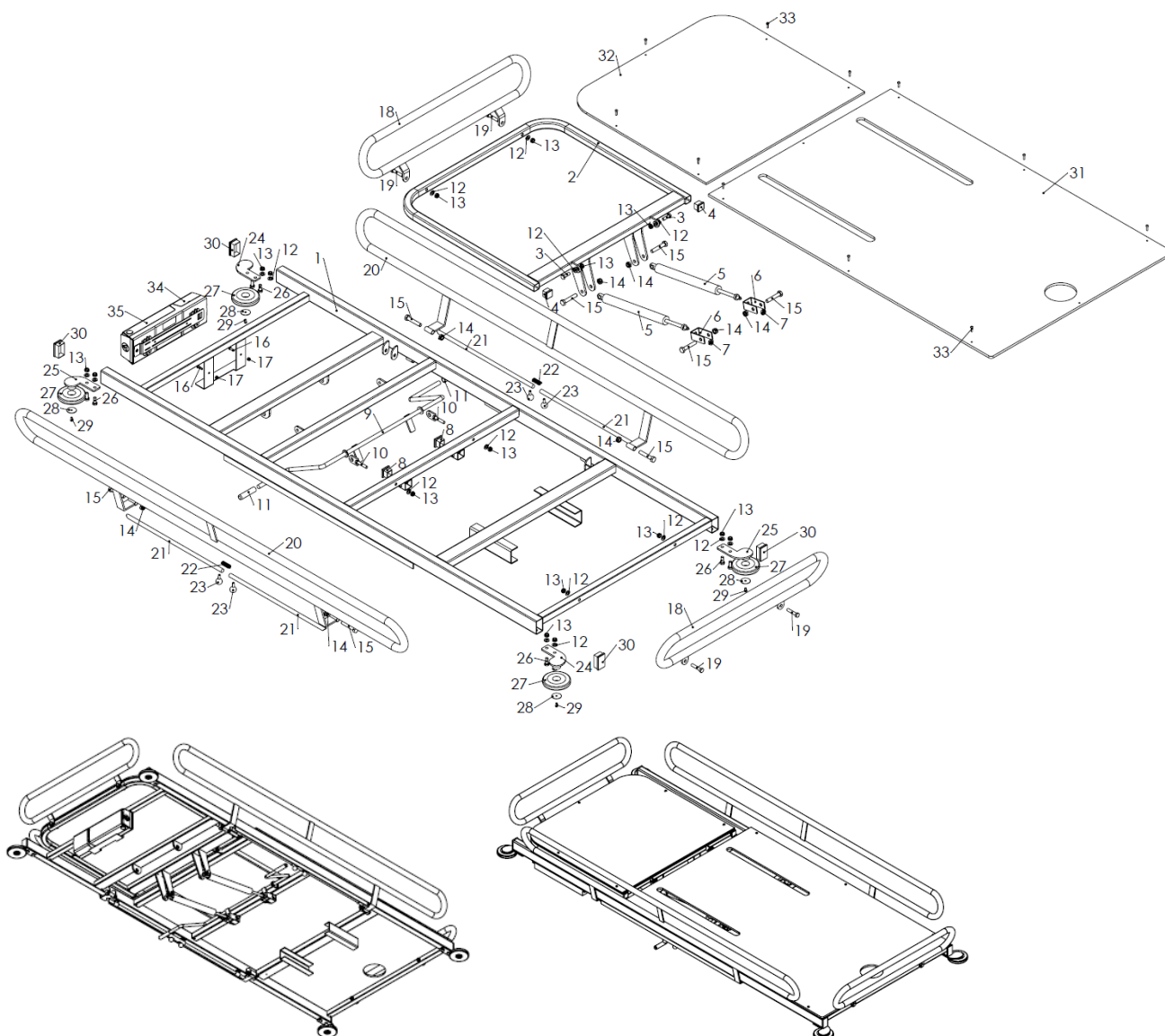


Figure 56: Mattress platform of shower trolley art. 155030G

14.5. Part list of base children (art. 155030C)

no.	description	no.	description
1	Chassis frame 2 x BL1	14	Cover BL1-M
2	2046UAP125R26-28S45	15	Cover BL1-SL
3	2044UAP125R26-28S45	16	Cover central BL1
4	Brake rod 660	17	plate fastening BL1-M12
5	brake lever	18	washer pvc n30-18x2
6	Spring washer DIN 128 - A8	19	screw M12
7	screw - M8 x 12	20	plate fastening BL1
8	Brake connection 1350	21	wheel fi46x22
9	washer DIN 125 - A 8.4	22	Cable 750
10	screw - M8 x 30	23	Cable 2500
11	self-locking nut - M8	24	Brake pedal L
12	actuator BL1	25	Brake pedal R
13	screw BL1 - M8 x 60	26	

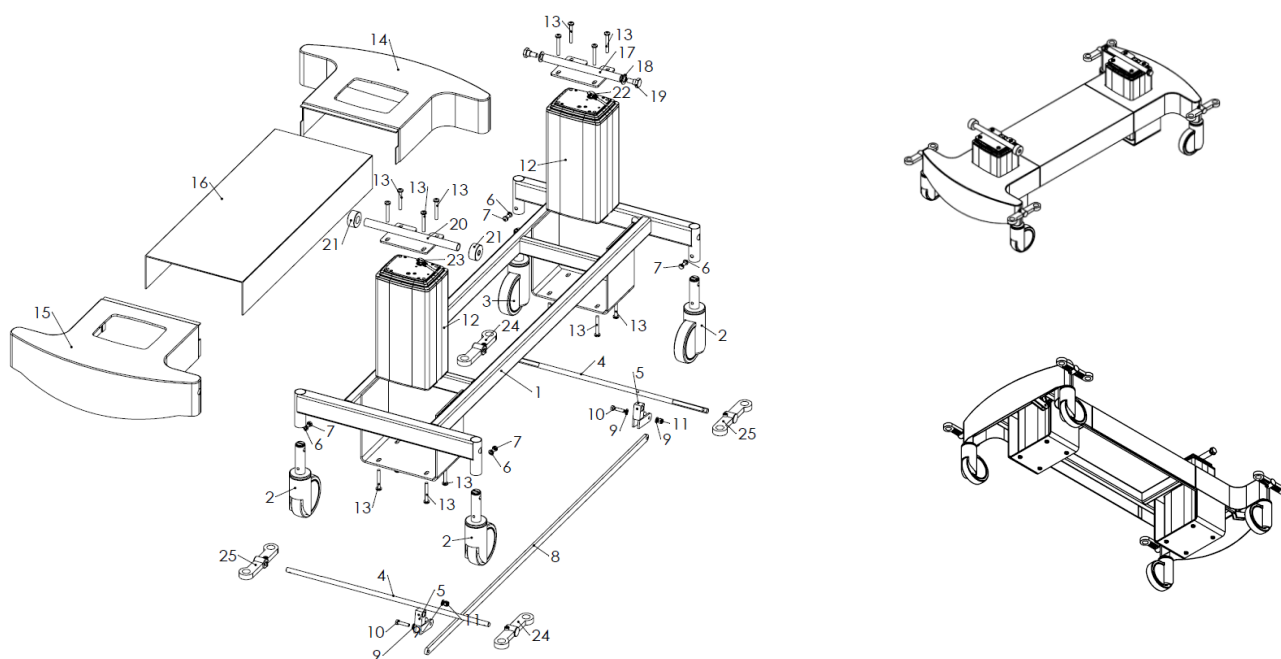


Figure 57: Base of shower trolley art. 155030C

14.6. Part list of mattress platform children (art. 155030C)

no.	Description	no.	Description
1	Support frame el.150-C	19	Buffer wheel Ø25
2	Support frame of backrest -C	20	Support plate of buffer wheel
3	Screw - M8 X 25	21	Blind rivet ø 4.8x10
4	washer DIN 125 - A 8.4	22	Screw - M8 X 20
5	Self-locking nut - M8	23	Side rail short
6	Plug 30x30	24	Screw - M8 X 40
7	Gas cylinder 120	25	Side rail 150 cm new one
8	nut - M10 x 1.0	26	Self-locking nut - M10
9	U support of cylinder 140	27	Screw - M10 x 55
10	Twin trigger	28	Trigger of side rail 320
11	Handle rubber Ø12x100	29	Spring Ø10x30
12	Support of trigger	30	Screw M6x15 pvc with black head
13	Screw - M8 X 25	31	laminat of mattress frame long C
14	Self-locking nut – M5	32	laminat of mattress frame short C
15	Plug 50x25	33	Blind rivet ø 4x16
16	Plug 25x25	34	Boy COL 50
17	Left support of buffer wheel	35	Battery BAL50
18	Right support of buffer wheel		

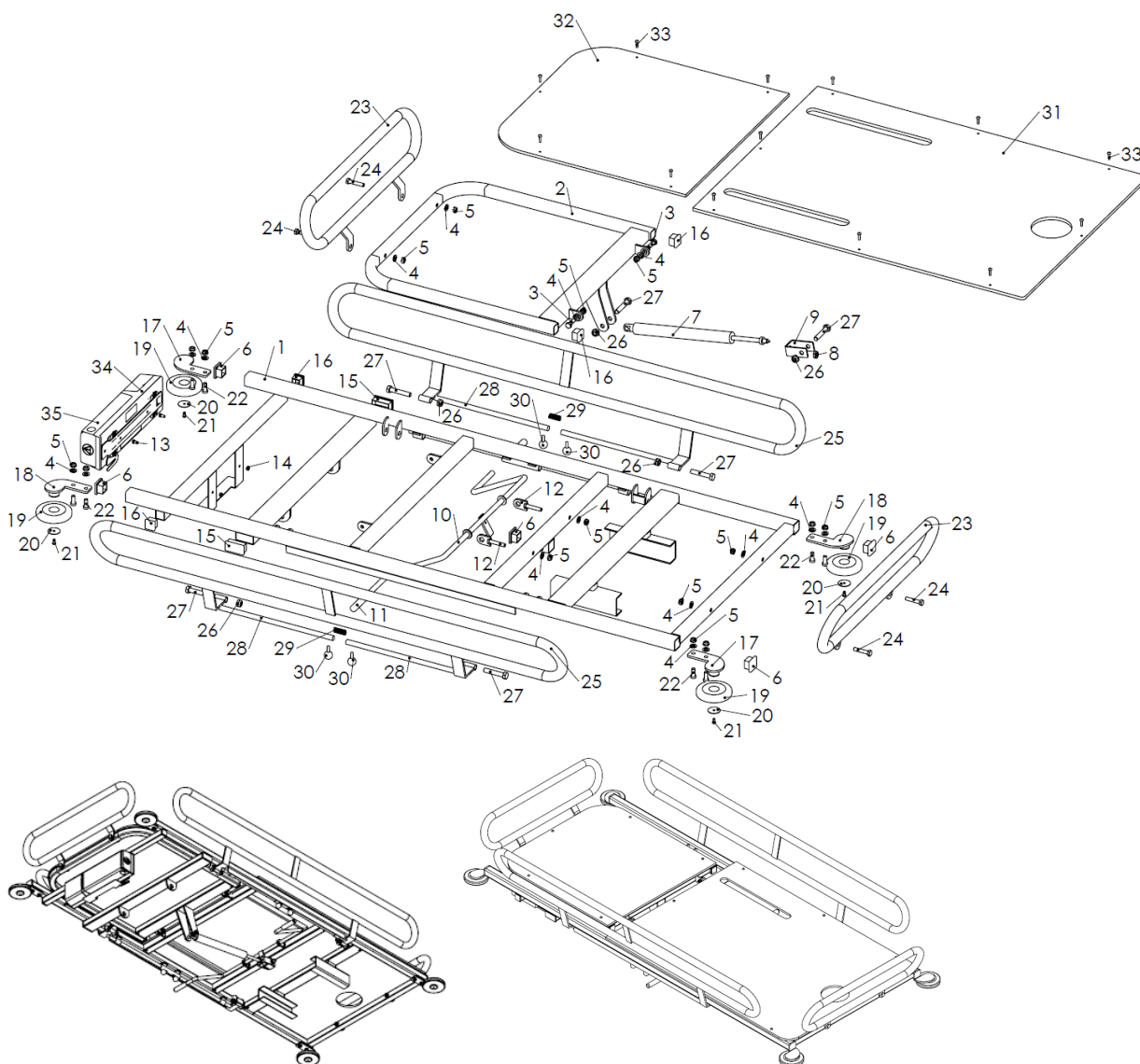


Figure 58: Mattress platform of shower trolley art. 155030C

14.7. Part list of mattress

- Mattress of shower trolley art. 155030, 155030G, 155030C

no.	description
1-S	Mattress of shower trolley 155030
1-G	Mattress of shower trolley 155030G
1-C	Mattress of shower trolley 155030C
2	Drain tube 5/4
3	Pillow
4	Plug of drain tube

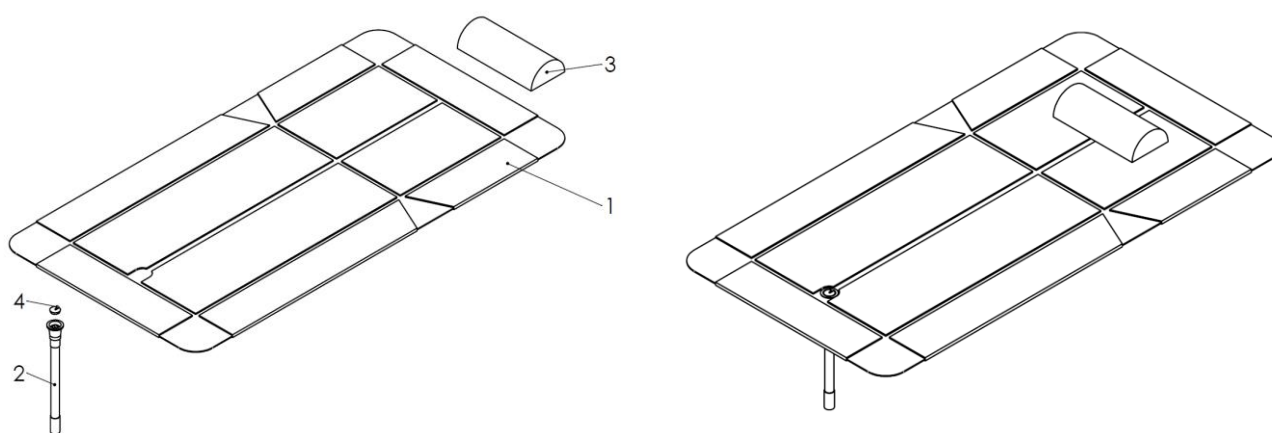


Figure 59: Mattress of shower trolley

15. Notification in a case of incidents

In the case of any serious incident related with Shower Trolley, manufacturer and competent authority in the concerned Member State should be notified:

manufacturer:

TIMO d.o.o. Ajdovščina
Pod letališčem 5, 5270 Ajdovščina, Slovenia
Tel.: +386 5 36 89 330
Fax: +386 5 36 63 805
e-mail: info@timo.si

Competent Authority

MAINTENANCE AND SERVICES FORM

SERVICE RECORD				
Name of equipment operator				
Phone				
Operator contact				
Product name		Serial number		
Product location		Date of purchase		
Maintenance and services activities				
Date	Technician	Spare parts	Maintenance or servicing	Notes

Periodically - every 6 months - the authorized service centre performs regular service check of the shower trolley. The regular service checks are recorded in a service data booklet for each shower trolley. This warranty is valid upon the fulfilment of the conditions stated herein. The customer is obliged to ensure that regular service checks are carried out and recorded in the service booklets.

**It is prohibited to modify and distribute this manual without the permission of
the manufacturer TIMO d.o.o. Ajdovščina.**

Equipment for Hospitals - Clinics - Nursing Homes

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