



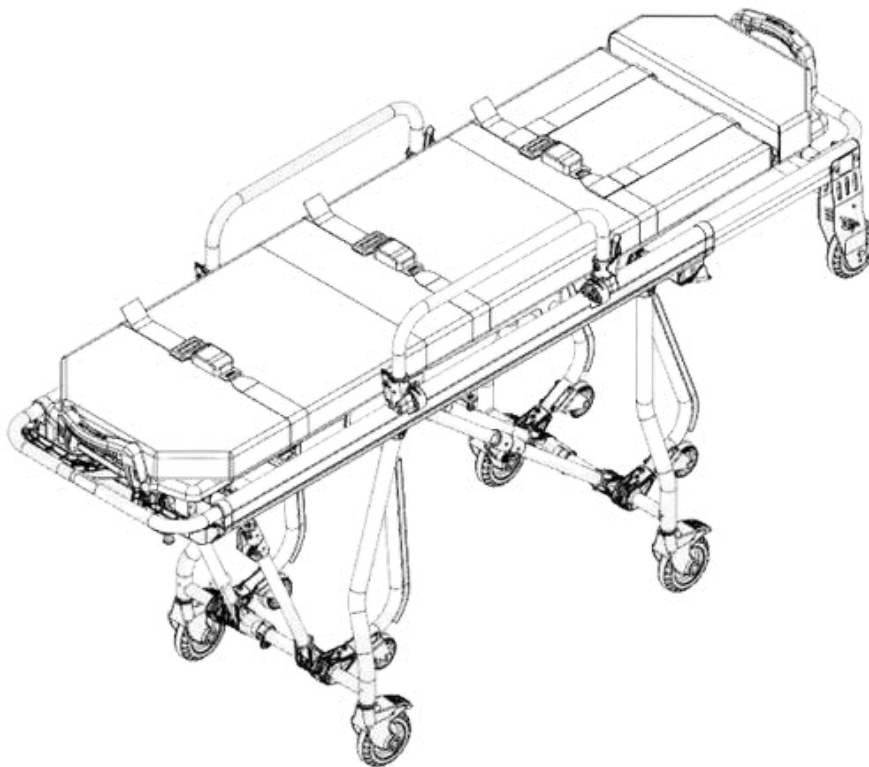
# Intruction MANUAL

MWS 321 - ARTICULATED STRETCHER -  
SITMED LEVEL UP II

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# INSTRUCTION MANUAL 2024

## MWS 321 - ARTICULATED STRETCHER - SITMED LEVEL UP II



Device in compliance with MDR Medical Devices Regulation 2017/745 (EU)

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## LEGAL NOTICE

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### 1 - GENERAL INFORMATION

#### 1.1 - PURPOSE











This Instruction Manual aims to provide important information about the use of the Sitmed Essential II MRS 321 - ARTICULATED STRETCHER. Read carefully and pay attention to all operating and safety instructions, so that you can use the equipment properly and safely. The Retractable Stretcher was developed for the transport of disabled persons and accident victims. It is practical, versatile, robust and was designed for use in ambulances or rescue and emergency vehicles.

#### 1.2 - WARNING

Before using the Pantographic Stretcher, make sure that all its components are properly adjusted and functioning correctly. Follow the instructions in this manual and always use appropriate personal protective equipment. When using the stretcher in ambulances or rescue vehicles, follow the applicable emergency response safety standards and regulations.

#### 1.3 - ACCESS TO THE MANUAL

The Instruction Manual will be available on the Sitmed website and can also be accessed through the QR Codes provided on stickers affixed to the stretcher

	Device in compliance with MDR Medical Devices Regulation 2017/745 (EU)
	Medical Device Manufactured in Brazil
	Authorized Representative in the European Community
	Consult the Instructions for Use
	Medical Devices
	Non-Sterile Medical Device
	Unique Device Identification
	Date of Manufacture
	Manufacturer
	Serial Number

	Catalog Number
	Caution / Warning
	Logistics
	Expiry Date
	Country of Origin
	Importer
	Keep Dry
	Fragile



# INSTRUCTION MANUAL

This label should never be removed, as the serial number will allow full traceability of components, processes, documents, date of manufacture, warranty, and will identify the equipment throughout its entire life cycle.

## 1.7 - GUIDELINES FOR TRANSPORTING PACKAGED PRODUCTS

All medical devices produced by Sitmed are delivered properly packaged from the factory to ensure their integrity and preservation during transport. If you receive the product with damaged packaging, immediately check in the presence of the carrier whether it has suffered any damage. If so, the damage must be reported on the back of the freight bill and the merchandise returned to Sitmed.

Packaged products must be handled and transported with care, avoiding exposure to rain and hot and/or humid locations. They must also be transported observing the maximum stacking and the respective direction in which the packaged product must be transported and stored, as indicated by the directional arrows.

## 1.8 - REQUEST FOR MAINTENANCE AND TECHNICAL ASSISTANCE SERVICES

For maintenance, technical assistance, or acquisition of spare parts, you must contact Sitmed's technical assistance department by phone (+55 54) 3196 8000 and 3196 8001, WhatsApp (+55 54) 99904 4900 or by email: [sac@sitmed.com.br](mailto:sac@sitmed.com.br), [contato@sitmed.com.br](mailto:contato@sitmed.com.br), or [vendas@sitmed.com.br](mailto:vendas@sitmed.com.br).

To facilitate the technical assistance service, please always inform the serial number (SN) located on the adhesive fixed on the lower structure of the stretcher bed or on the packaging label.

## 1.9 - DECOMMISSIONING AND DISPOSAL OF THE EQUIPMENT

As soon as the poor condition of use of the stretcher is evidenced, whether due to its natural wear, damage, misuse, or accident damage to the ambulance, and it is not contaminated by any infectious agent or contaminant, it can be discarded for recycling, since all the materials used are recyclable.

## 2 - IMPORTANT WARNINGS

### 2.1 - GENERAL WARNINGS FOR USE AND SAFETY

- The Retractable Stretcher must be operated only by trained and qualified professionals. Improper or incorrect use can damage the equipment and cause injury to the patient and rescuers.
- Do not allow untrained people to help maneuver, use or move the stretcher, as they may cause injury to the patient, rescuers and themselves.
- An accident victim can only be transported after being properly evaluated, stabilized and immobilized.
- Always immobilize the patient using the belts that accompany the stretcher, which are designed for this purpose. Lack of immobilization can pose serious risks to the patient's physical integrity.

- To safely and efficiently transport the patient, always use all safety belts, including the shoulder belts, and keep the side handles armed at all times.
- Never leave the patient alone on the stretcher, as the lack of assistance contributes to the risk of falling.
- To avoid any risk to the safety of the patient and the rescuer during transport, it is recommended that at least two rescuers be present, one positioned at each end of the stretcher.
- Pay close attention to possible obstacles in the path of the stretcher's movement, preventing debris from locking the wheels, destabilizing the rescuers, and consequently causing the stretcher and patient to fall.
- When handling the stretcher without patients, always keep the safety belts buckled and the side handles armed to prevent damage to the equipment.
- Perform periodic maintenance as described in this Manual, as proper and continuous maintenance ensures longer equipment lifespan and maintains safety during use.
- Use only original parts supplied by Sitmed and, before performing any maintenance, carefully read this Manual and/or contact Sitmed's technical assistance to receive guidance and clarification. Using unsuitable or incompatible replacement parts, as well as modifying the equipment by altering the original design, in addition to generating accident risks and loss of warranty, also results in the owner of the equipment being held responsible for any damages caused.
- Before using the equipment, make sure it is in perfect working condition. Regularly check its integrity, carefully examining the stretcher to confirm the absence of damage to its structure or loose components.
- Always store the equipment in a clean and perfect condition for the next use.
- Do not store the equipment under heavy objects that may cause damage to its structure.
- The equipment must not be exposed to or come into contact with any source of combustion or flammable agents.
- Once inside the ambulance, the equipment must be securely anchored to the anchoring system, keeping it firmly in place to prevent accidents with the loose stretcher.
- Do not use the equipment if any damage, failure, or malfunction is identified. In these cases, the equipment must be segregated, and technical assistance, maintenance, or disposal measures must be taken to prevent accidents or inadequate care.
- Under no circumstances should the equipment be tampered with, modified, or adapted. In these cases, the warranty is void, and the responsibility for damages to the equipment, the rescuer, or the patient rests with the owner of the equipment, with Sitmed being exempt from any liability.
- The distributor or owner of the equipment must be aware of the legal requirements and valid in the country of final destination applicable to this medical device, including Laws, Regulations and Standards on technical specifications, safety requirements and disposal.

- The health authorities, as well as the manufacturer, must be immediately informed of any accident caused by this equipment, as well as the measures taken. All in order to always ensure the physical integrity of patients and rescuers.
- Use the equipment with due care and diligence, contributing to ensure the conformity of the equipment's safety and usability requirements, as stated in this Manual.
- In case of any doubt regarding the correct interpretation of the instructions contained in this Manual, immediately contact Sitmed by phone +55 54 3196 8000, by WhatsApp +55 54 99904 4900 or by email: [sac@sitmed.com.br](mailto:sac@sitmed.com.br)

## 2.2 - LIMITATION OF LIABILITY

Sitmed disclaims any liability for damages or accidents caused under the following conditions:

- Non-observance of the instructions, and use in disagreement with the instructions in this Manual;
- Natural wear and tear of parts and components without proper replacement;
- Use by inexperienced, untrained and/or unqualified personnel;
- Incorrect and improper use of seat belts;
- Inadequate installation of the anchoring system in the ambulance;
- Non-observance of the integrity of the equipment;
- Lack of periodic maintenance.

## 2.3 - SPECIFIC WARNINGS

- Establish a schedule of maintenance and periodic testing, in order to identify failures, loose parts, natural wear and tear from use, and thus ensure the essential requirements for using the equipment, as provided for in this Manual. Sitmed recommends semi-annual maintenance and testing.
- Use only original Sitmed components, replacement parts and accessories.





- Always respect the maximum load capacity of 300 kg, considering in the calculation the weight of the patient, life support equipment and accessories. Equipment and accessories must always be distributed in a way that maintains the stability of the equipment.
- After cleaning and disinfection, before being stored, it is recommended that the equipment be completely dry.
- Follow the procedures approved by the Emergency Medical Care Services for the correct positioning and transport of the patient.
- Before each use, check the integrity of the seat belts. In case of malfunction or damage that can compromise the operation and safety of the patient or rescuer, it is essential to replace the seat belts.
- The swivel wheels are not suitable for all types of terrain, so be careful when maneuvering the stretcher on uneven terrain. The stretcher must always be operated by TWO rescuers, one at each end, and always with care to prevent the equipment from colliding with any obstacle, and causing imbalance and even the consequent fall of the patient.

## 2.4 - CONTRAINDICATIONS AND SIDE EFFECTS

- The use of the stretcher as described in this Manual will result in efficient and effective assistance.

## 2.5 - PHYSICAL REQUIREMENTS OF OPERATORS

The STRETCHER is a device intended exclusively for professional use, and the rescue operators must have the following minimum requirements:

- Have good muscle structure and motor coordination;
- Have been properly instructed and trained to use the medical device;
- Have knowledge to assess conditions and risks;
- This stretcher requires at least TWO operators, with strength, balance, coordination and common sense. In certain situations, such as when dealing with obese patients, performing transfers, transporting on uneven terrain or facing special and adverse circumstances, the participation of more than two rescuers in the operation of the stretcher may be required. The evaluation of the training and skills of the auxiliary rescuers is essential to prevent incidents during the procedure.

## 2.6 - ENVIRONMENTAL CONDITIONS

Operating temperature: from -20 to +50 °C

Relative humidity: from 20 to 100%.

## 3- PRODUCT DESCRIPTION

Sitmed Level Up II - MRS 321 Bi-Articulated Stretcher was specially designed for heavy loads and to reduce the effort when placing it in or removing it from ambulances. Built in lightweight and durable duraluminum, it has a retractable and automatic assembly retrieval system, adjustable backrests in rigid plastic material, a polyurethane foam mattress, covered in waterproof material with electronic stitching, a set of seat belts and a complete anchoring or locking system. It offers agility, safety, practicality and robustness.

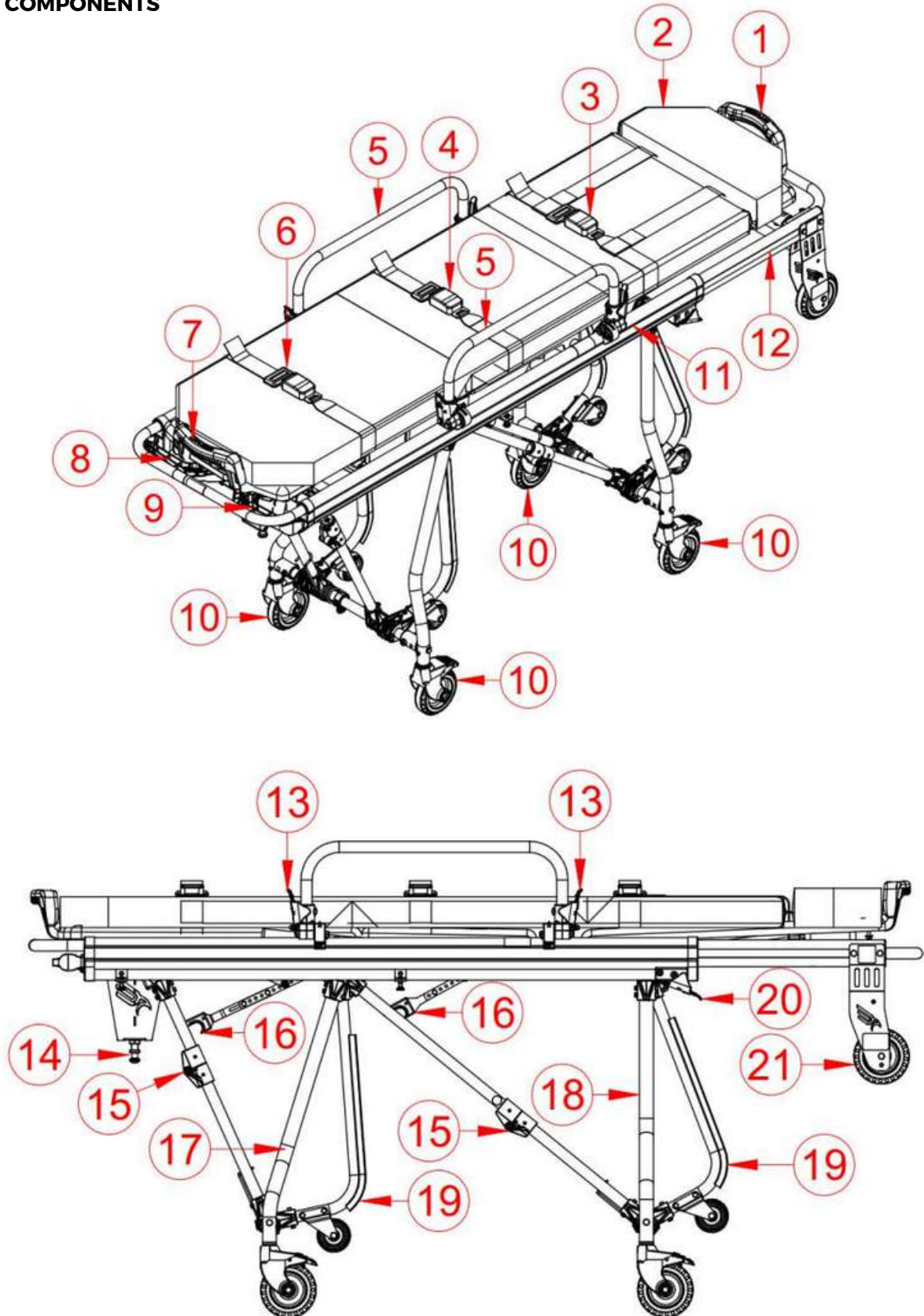
The Sitmed stretcher offers optional features to cater to different needs:

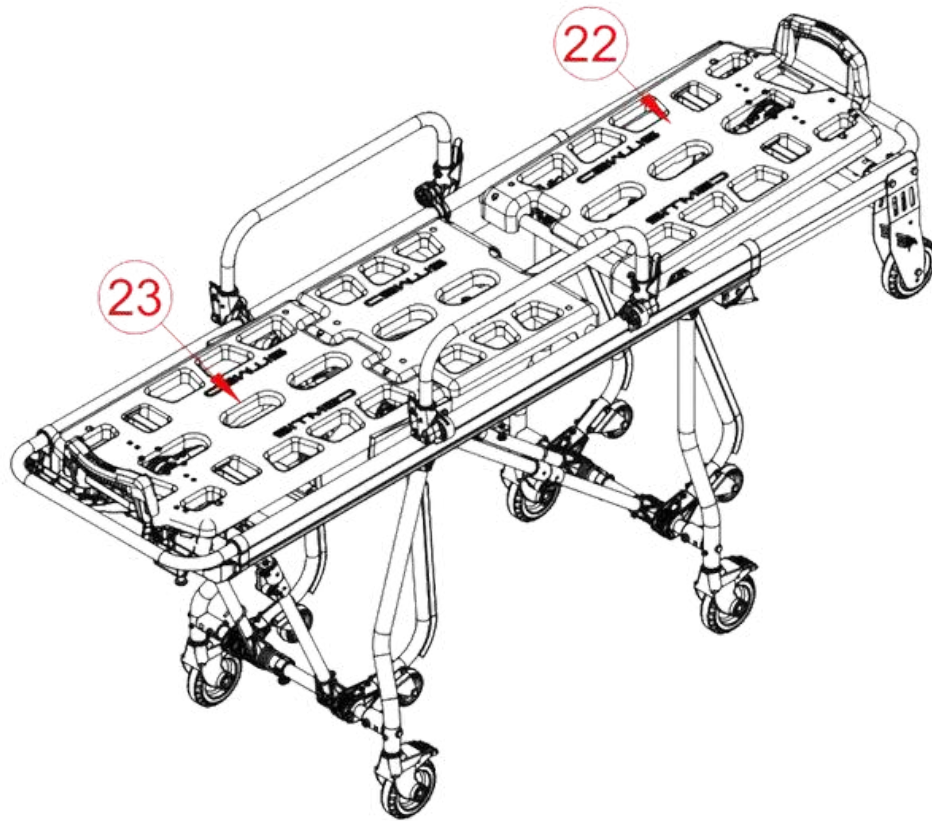
- 127 mm (5-inch) wheels for regular terrain with low oscillation.
- 200 mm (8-inch) wheels for irregular terrain.
- Retractable overhead frame for access to limited spaces, reducing the bed size.
- Foot section/Trendelenburg to elevate the legs of hypotensive patients and for pain relief.
- Standard color: Sitmed Orange.

Custom color available upon request.  
 Fixed support for IV and blood bags, easily activated and adjustable.

Note: The height of the aerial wheels should be adjusted according to the ground-to-ambulance floor distance.

**3.1 - MAIN COMPONENTS**





No.	COMPONENT DESCRIPTION
1	FRONT HANDLE
2	MATTRESS
3	4-POINT BELT - CHEST AND SHOULDER
4	2-POINT BELT - PELVIS
5	SIDE HANDLE
6	2-POINT BELT - FEET
7	REAR HANDLE
8	CASTER
9	BALLAST
10	AIR SHAFT
11	SIDE HANDLE TRIGGER
12	RETRACTION LEVER
13	FIXING PIN

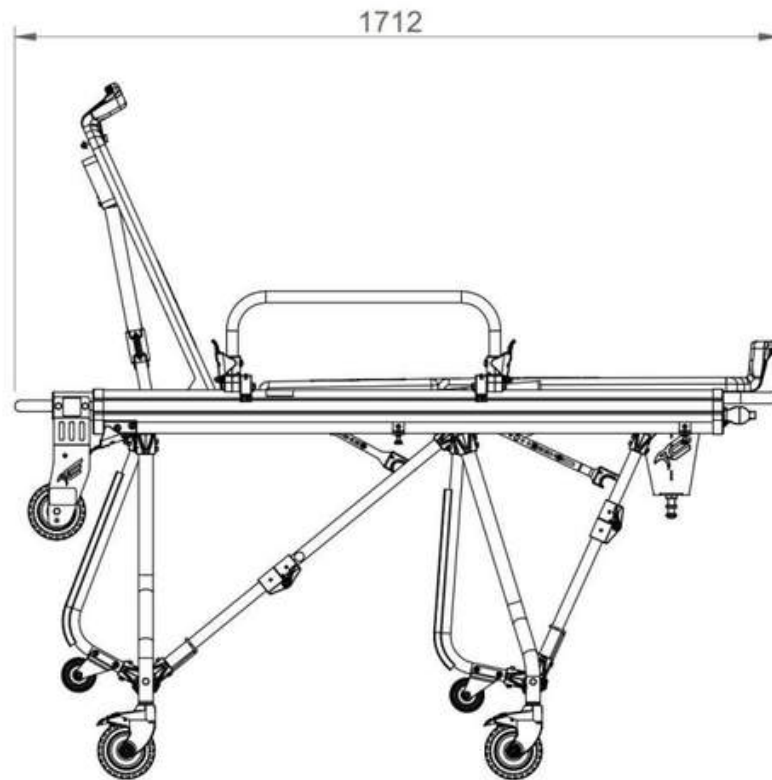
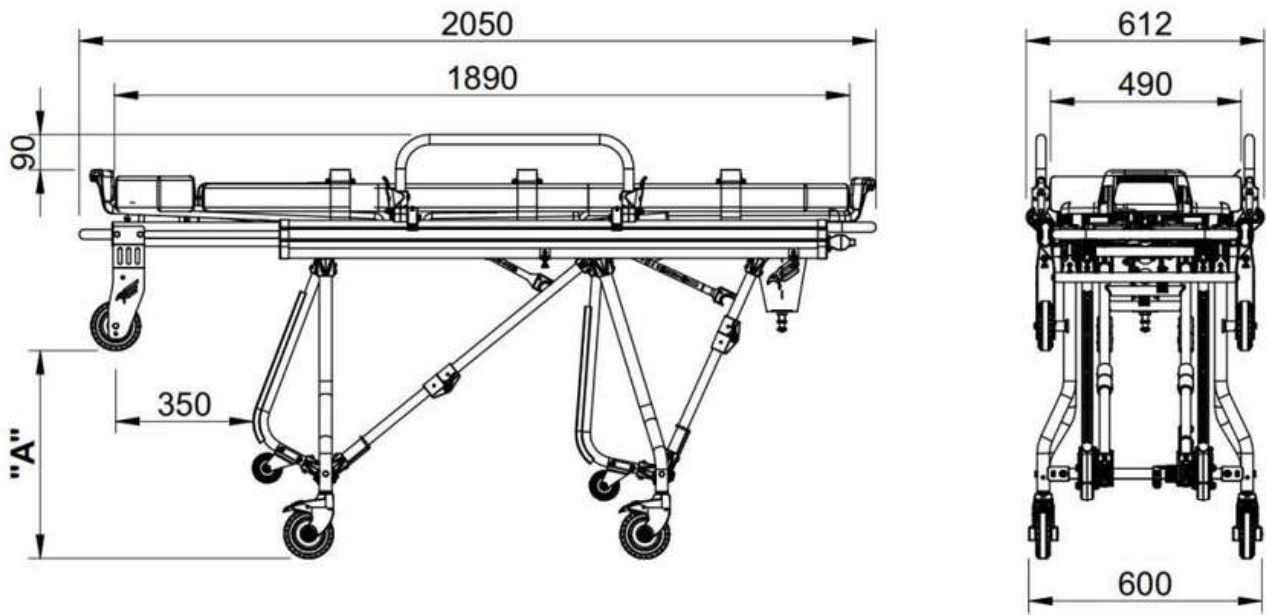
14	REAR SUPPORT PROFILE
15	"KNEE" JOINT
16	SAFETY LOCK
17	FRONT SUPPORT PROFILE
18	AIR SHAFT TRIGGER
19	AIR WHEEL
20	STOP
21	CART
22	HEADBOARD / FOWLER
23	FOOTBOARD / TRENDLENBURG

**3.2 - TECHNICAL DATA**
**CHARACTERISTICS**

CHARACTERISTICS	MEASUREMENTS WITH 127mm CASTERS	MEDIDA COM RODÍZIO DE 200mm
WIDTH	612mm	612mm
OPEN LENGTH	2050mm	2050mm
OPEN LENGTH RETRACTED AIR AXLE (OPTIONAL)	1712mm	1712mm
AIR AXLE HEIGHT "A"	VARIABLES ACCORDING TO THE VEHICLE*	VARIABLES ACCORDING TO THE VEHICLE*
CLOSED LENGTH "B"	VARIABLES ACCORDING TO THE AIR AXLE HEIGHT*	VARIABLES ACCORDING TO THE AIR AXLE HEIGHT*
DISTANCE BETWEEN FIXING POINTS	1714mm	1714mm
BED LENGTH	1890mm	1890mm
BED WIDTH	490mm	490mm
NET WEIGHT	VARIABLES ACCORDING TO THE STRETCHER HEIGHT*	VARIABLES ACCORDING TO THE STRETCHER HEIGHT*
LOADING CAPACITY	300KG	300KG

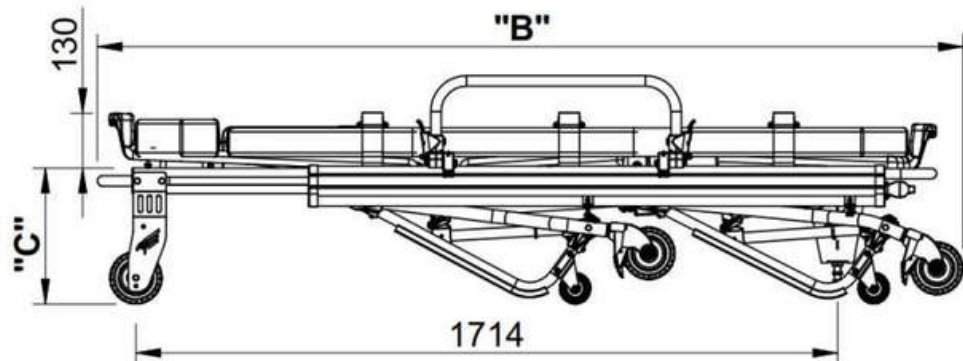
QUANTITY	ACCESSORY	WEIGHT (KG)
1	2-POINT SAFETY BELT (PELVIC REGION)	0,3
1	2-POINT SAFETY BELT (FEET)	0,3
1	2-POINT SAFETY BELT (CHEST)	0,4
1	MATTRESS PAD	3,0
1	LOCKING / ANCHORING SYSTEM	1,5
1	LOCKING / ANCHORING SYSTEM (GUIDE)	0,7

OPTIONALS	WEIGHT (KG)
IV POLE	0,8
OXYGEN SUPPORT	2,0
MONITOR STAND	6,0



**MEASUREMENT "C"**

"5" WHEEL"	335
"8" WHEEL"	420





## DIMENSIONS AND WEIGHT TABLE

"5" WHEEL - 127mm					"8" WHEEL - 200mm			
HEIGHT "A"	CLOSED LENGTH "B"	NET WEIGHT*	WEIGHT WITH ACCESSORIES*	WEIGHT WITH PACKAGING*	CLOSED LENGTH "B"	NET WEIGHT*	WEIGHT WITH ACCESSORIES*	WEIGHT WITH PACKAGING*
530	2050	38,5	42,5	49,7	2090	40	44	55,2
540	2050	38,5	42,5	49,7	2100	40	44	55,2
550	2050	38,5	42,5	49,7	2010	40	44	55,2
560	2060	38,5	42,5	49,7	2120	40	44	55,2
570	2070	38,5	42,5	49,7	2130	40	44	55,2
580	2080	38,5	42,5	49,7	2140	40	44	55,2
590	2090	38,5	42,5	49,7	2150	40	44	55,2
600	2100	38,5	42,5	49,7	2160	40	44	55,2
610	2110	39	43	50,2	2170	40,5	44,5	52,7
620	2120	39	43	50,2	2180	40,5	44,5	52,7
630	2013	39	43	50,2	2190	40,5	44,5	52,7
640	2014	39	43	50,2	2200	40,5	44,5	52,7
650	2015	39	43	50,2	2210	40,5	44,5	52,7
660	2016	39	43	50,2	2220	40,5	44,5	52,7
670	2017	39	43	50,2	2230	40,5	44,5	52,7
680	2018	39	43	50,2	2240	40,5	44,5	52,7
690	2019	39	43	50,2	2250	40,5	44,5	52,7
700	2020	39,5	43,5	50,7	2260	41	45	53,2
710	2021	39,5	43,5	50,7	2270	41	45	53,2
720	2022	39,5	43,5	50,7	2280	41	45	53,2
730	2023	39,5	43,5	50,7	2290	41	45	53,2
740	2024	39,5	43,5	50,7	2300	41	45	53,2
750	2025	39,5	43,5	50,7	2310	41	45	53,2

\*Net Weight - Stretcher

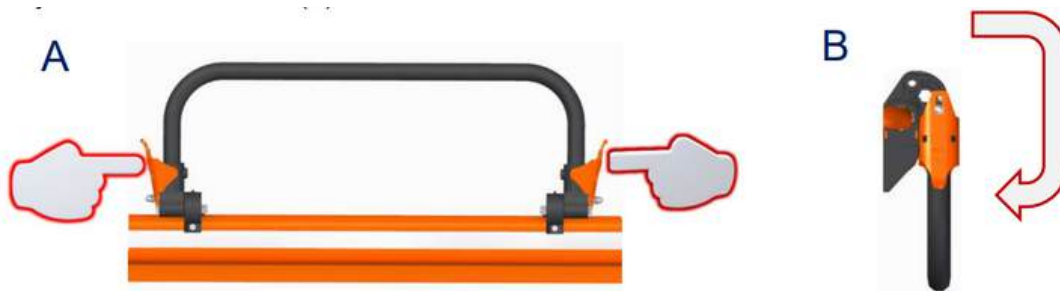
\*Weight with Accessories - Stretcher + 2-Point Belt + 2-Point Belt + 4-Point Belt + Mattress

\*Weight with Packaging - Stretcher + Accessories + Mounting System + Packaging

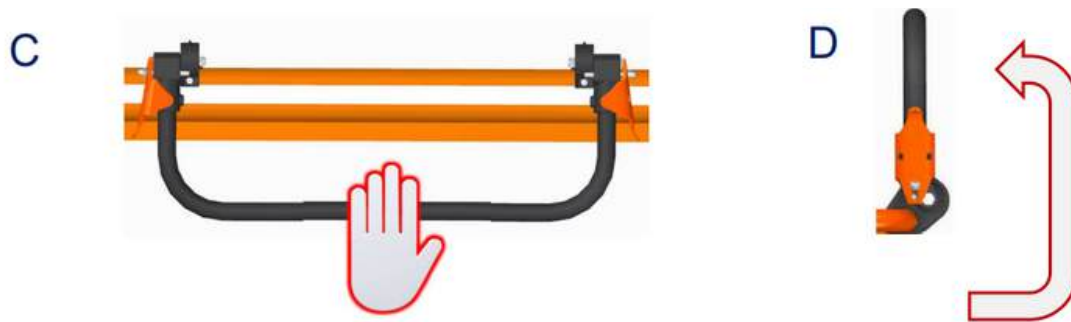
Note: All measurements are in millimeters.

### 3.3 - SIDE HANDLES

The side handles of the stretcher are designed to protect the patient during transport. To activate them, locate the side triggers and press them simultaneously (A), then lower the assembly laterally (B).

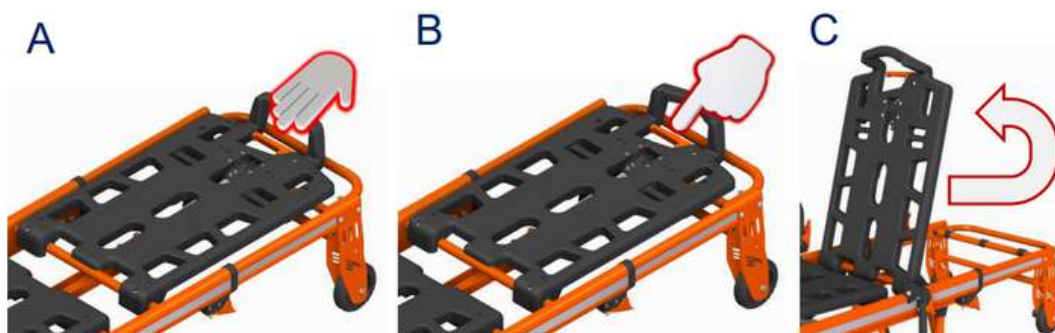


To raise the handle, grip it by the central part (C) and move it until it is perpendicular to the bed (D). The handle assembly locks automatically.



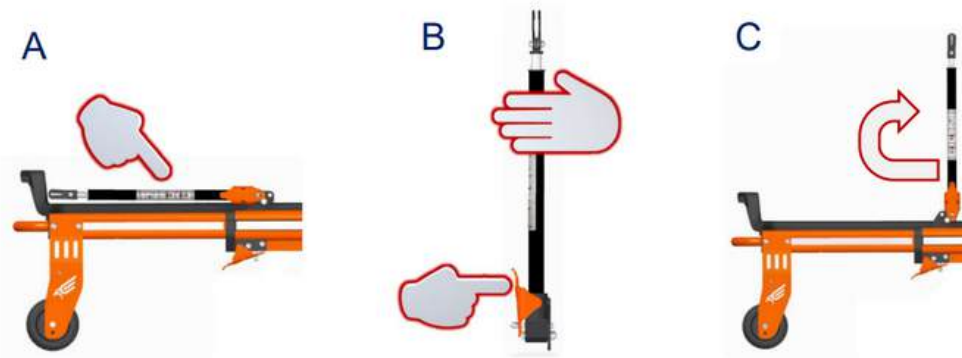
### 3.4 - HEADBOARD (FOWLER)

The headboard of the stretcher is designed for elevating the trunk and head area of the patient. It has 6 height levels with an elevation range from 0° to 70°. To adjust it, place one hand on the handle (A) to lift the weight, and with the other hand, activate the trigger (B) to release the movement of the assembly. Position the headboard at the desired height, release the trigger, and listen for the “click” of the locking pin before letting go (C).

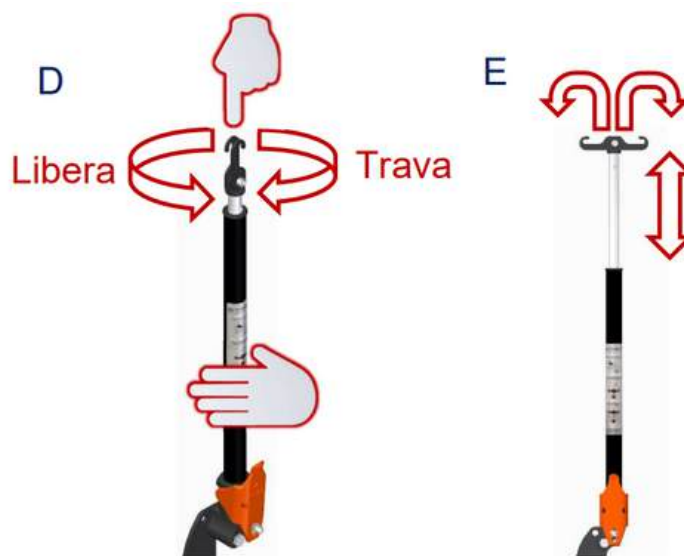


### 3.5 - IV AND BLOOD SUPPORT

The IV and blood support is an accessory (optional) that can be attached to the Sitmed stretcher. It is retractable and features a telescopic mechanism that allows for height adjustment. Locate the support at the front of the equipment (A). To use it, grasp the pole and activate the lower trigger (B), then move the assembly perpendicularly to the bed until you hear the “click” of the pin locking (C). To close it, perform the opposite movement.



To adjust the height, place one hand on the support pole and with the other, turn the upper pole counterclockwise (D). Adjust the height to the appropriate position and then turn it clockwise to lock. Afterward, open the hooks for suspending the IV or blood bags (E).



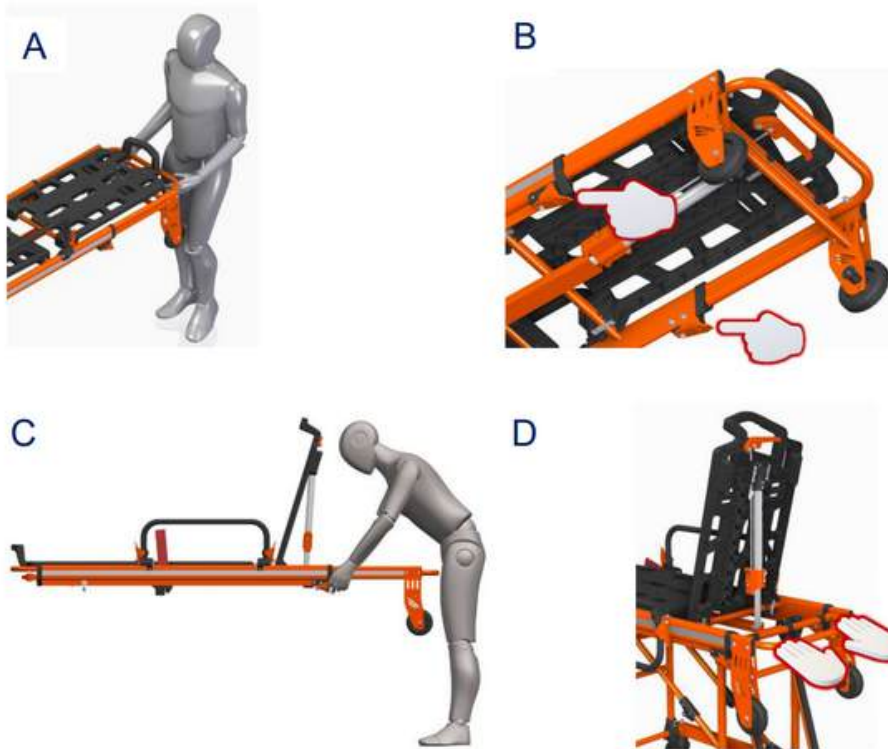
### 3.6 - MOBILE AERIAL AXIS

The mobile aerial axis is an optional feature of the Sitmed stretcher, designed to reduce the length of the stretcher for movement in areas with limited access and elevators. To retract the aerial axis, first verify if your equipment has this option and also an IV support. If so, follow these steps

1. Move the IV support to a position perpendicular to the bed, as described in item 3.5 C.
2. Raise the headboard (Fowler) to the highest level with the patient seated, as described in item 3.4 C.
3. To retract the aerial axis, position yourself at the front of the stretcher (A).
4. Next, locate the release triggers for the assembly at the bottom of the bed (B).
5. Lean forward, activate the triggers simultaneously, and push the assembly with your body (C).
6. Push the aerial axis assembly until it is fully retracted and locks at the end of the course (D).

To extend the aerial axis again, simultaneously activate the triggers and note that the extension movement begins automatically. Then, pull the assembly by the front arch until the pins are secured. Test to ensure that the locking occurred to avoid accidents.

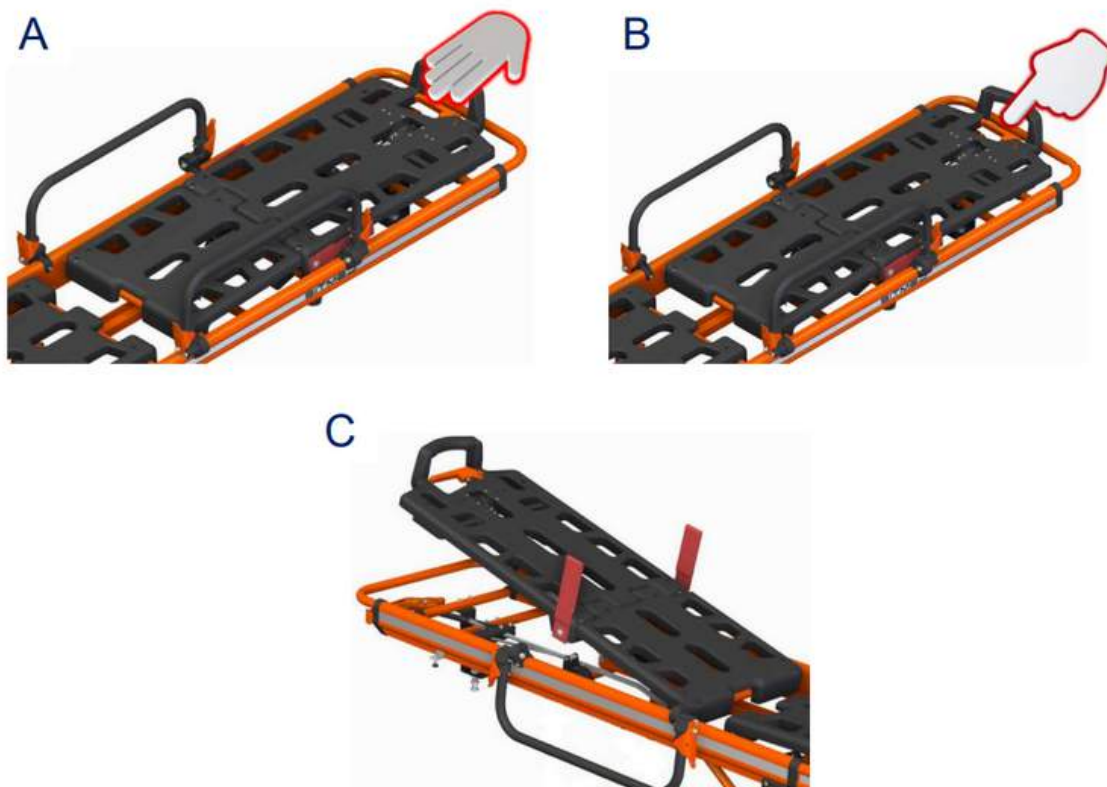




### 3.7 - MOBILE FOOTBOARD (TRENDELENBURG)

The mobile footboard (Trendelenburg) is an optional feature of the Sitmed stretcher, designed to elevate the patient's legs during care. It has 3 adjustment levels: flat, level 1, and level 2.

To elevate the legs, place one hand on the handle (A) to lift the weight, and with the other hand, activate the trigger (B). Raise it to the desired height and release the trigger, waiting for the "click" of the locking pin before letting go of the handle (C).

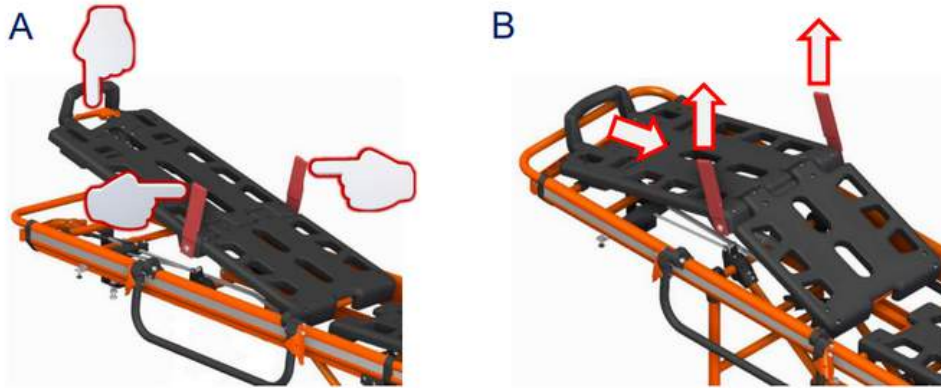


### 3.8 - LEG FLEXION

The leg flexion position is an optional feature of the Sitmed stretcher and is a variation of the mobile footboard position for cases where the patient's condition allows, providing greater comfort during transport.

To execute this position, raise the footboard to the highest point, as described in item 3.7. Grasp the central handles of the footboard, lift the weight, and then activate the trigger to flex the footboard until you hear the “click” of the locking pin (B).

To return to the flat position of the footboard, hold the handle while lifting the weight and activate the trigger. Move it until aligned, select the position, and listen for the “click” of the pin before releasing.



### 3.9 - BED POSITIONS

The Sitmed stretcher has been designed to provide the best conditions for patient care and comfort. Below are the configuration options for the patient accommodation bed.

**NOTE:** All configurations are only possible for the model with the optional mobile footboard.

#### 3.9.1 - OPEN POSITION

With the legs fully extended. This is the position for moving the stretcher and transporting the patient.



#### 3.9.2 - CLOSED POSITION

With the legs retracted. This is the position the stretcher assumes when placed inside the ambulance, but it can also be used to facilitate patient accommodation.



### 3.9.3 - SUPINE POSITION

The supine position, also known as the dorsal decubitus position, is when the patient is lying on their back, facing upward, with their legs extended and arms at their sides. This position is one of the most common for patient transport and may be indicated for various clinical situations, including: monitoring, post-operative care, rest and comfort, medical examinations and procedures, prevention of pressure ulcers, facilitation of drainage, airway management, among others.



### 3.9.4 - FOWLER POSITION

This position, also known as the semi-sitting position, involves elevating the trunk at an angle between 40 and 50 degrees relative to the bed. This position can be adjusted to different degrees of inclination, depending on the patient's needs. The Fowler position is indicated for various clinical situations, including: improving respiration, reducing gastroesophageal reflux, enhancing blood circulation, facilitating feeding and swallowing, and promoting comfort and post-operative recovery.



### 3.9.5 - SEMI-FOWLER POSITION

The Semi-Fowler position is a variation of the Fowler position, where the bed is inclined at a smaller angle, typically between 30 and 40 degrees, keeping the patient in a semi-sitting position. This position may be indicated for various clinical situations, including: respiratory issues, prevention of aspiration, reduction of gastroesophageal reflux, post-operative comfort, facilitation of circulation, control of intracranial pressure, and reduction of swelling.



### 3.9.6 - SITTING POSITION

This position, also known as the orthostatic position or at an angle of 70 degrees or more, is indicated for various clinical situations such as: early mobilization, deep vein thrombosis, pneumonia, performing procedures, gastroesophageal reflux, and improving oxygenation.



### 3.9.7 - LEG FLEXION POSITION

The leg flexion position, with the patient lying on their back, is when the knees are bent toward the abdomen. This position may be indicated for: relief of lower back pain, herniated discs, muscle relaxation, venous access, and comfort.



### 3.9.8 - TRENDLENBURG OR VASCULAR POSITION

In this position, the patient is lying on their back with the head and torso in the supine position, while the legs are elevated at an angle of approximately 45 degrees. In the Trendelenburg position, the bed or stretcher is inclined with the head lowered and the feet elevated, placing the patient in a downward slope. This position is used in various clinical situations, including: improving blood circulation in the lower extremities, enhancing cerebral circulation in certain medical emergencies, prevention or treatment of hypovolemic shock (sudden drop in circulating blood volume), and facilitating venous return in some cases of heart failure.



### 3.10 - STRETCHER HEIGHT / AMBULANCE HEIGHT

Sitmed stretchers are designed according to the vehicle in which they will be used, meaning the stretcher is manufactured based on the height from the ground to the floor of the ambulance, depending on the vehicle model. This measurement should be specified at the time of purchase to ensure that the height of the aerial wheel "A" is compatible with the loading height, guaranteeing safe conditions for use. The height measurement "A" determines the space needed to allow for the articulation, closing, and opening of the stretcher's support base.



#### 3.10.1 - AERIAL AXIS ADJUSTMENT

The height of the vehicle's loading platform may change after a period of use. The height variation can be minimized by 20 mm by adjusting the aerial wheels.

To make the adjustment, it is necessary to remove the fixing screws of the aerial wheels and secure them in the hole below the original model.



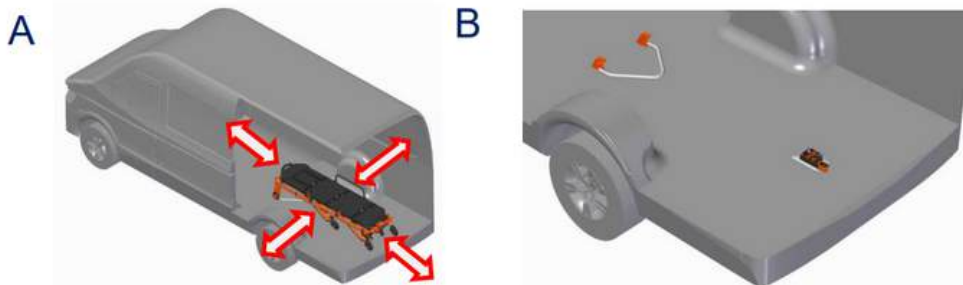
### 3.11 - ANCHORING SYSTEM

The anchoring system for Sitmed stretchers in the ambulance consists of a rail, latch, and safety latch at the rear (A), and a guide and stops at the front (B).



#### 33.11.1 - INSTALLATION OF THE ANCHORING SYSTEM

Position the stretcher inside the ambulance and check the appropriate distance in the following directions: front, right side, left side, and rear, to allow for entry, exit, and coupling without any obstacles (A). Mark the positions for drilling and securing the anchoring system (B). The anchoring system of the stretcher is essential to ensure the safety of both the patient and the operator; therefore, follow the instructions below for proper installation and operation.



With the stretcher in the installation position, attach the front (C) and rear (D) anchoring systems to the stretcher. The anchoring system should be adjusted with minimal slack to prevent oscillations during transport.



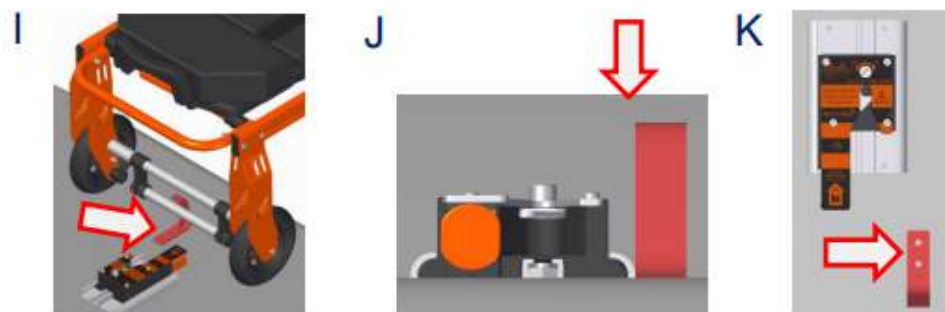
If necessary, adjust the height of the pin (E) using two 24 mm wrenches. The height of the pin should be compatible with the height required for coupling to the locking latch (F).



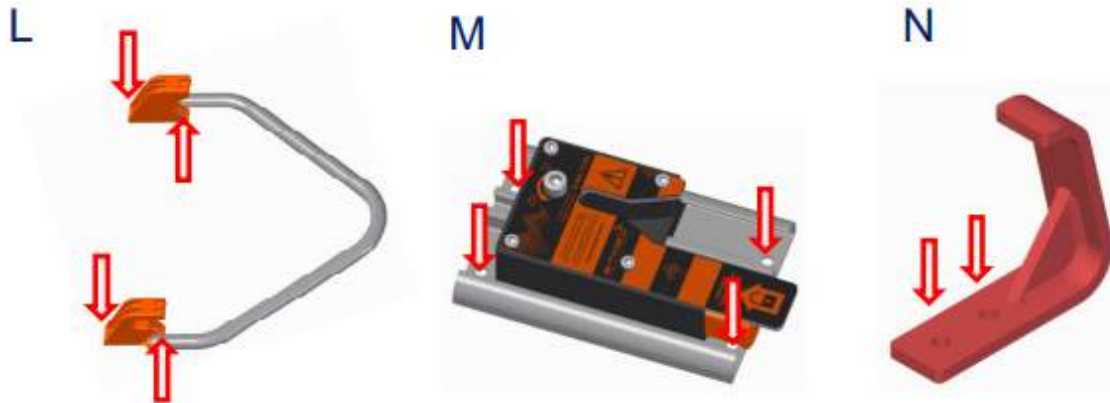
The locking latch can be adjusted along the rail, allowing for fine adjustments to reduce any slack in the anchoring system (G). To release the movement of the latch along the rail, locate the screw on the surface of the locking latch (H) and, using an 8 mm Allen wrench, turn it counterclockwise to release and clockwise to lock.



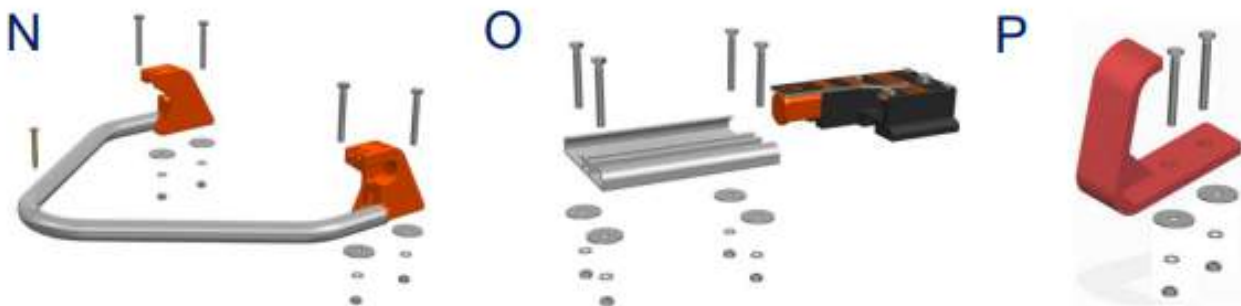
The safety latch of the stretcher should be installed in a position where the aerial wheel remains supported on the vehicle floor when removing the stretcher from the ambulance (I) (J) (K).



Ensure that the stretcher is positioned correctly and attach the front (L) and rear (M) anchoring systems to the stretcher. Next, position the safety latch (N) and mark the points on the vehicle floor where drilling will take place. Before proceeding, check that the drilling will not damage any vehicle components. Use an 8 mm diameter drill bit to make the hole.



Secure the front (N) and rear (O) anchoring systems and the safety latch (P) using the hardware available in the kit that comes with the product. Use a 13 mm hex key and ensure that the fastening screws are tightly secured and tightened.



To install the rear anchoring system (O), follow the steps below:

1. First, insert the screws closest to the rear door of the ambulance.
2. Next, fit the latch assembly into the rail from back to front.
3. Finally, insert the other two screws.
4. Ensure that all screws are tightly secured and tightened.

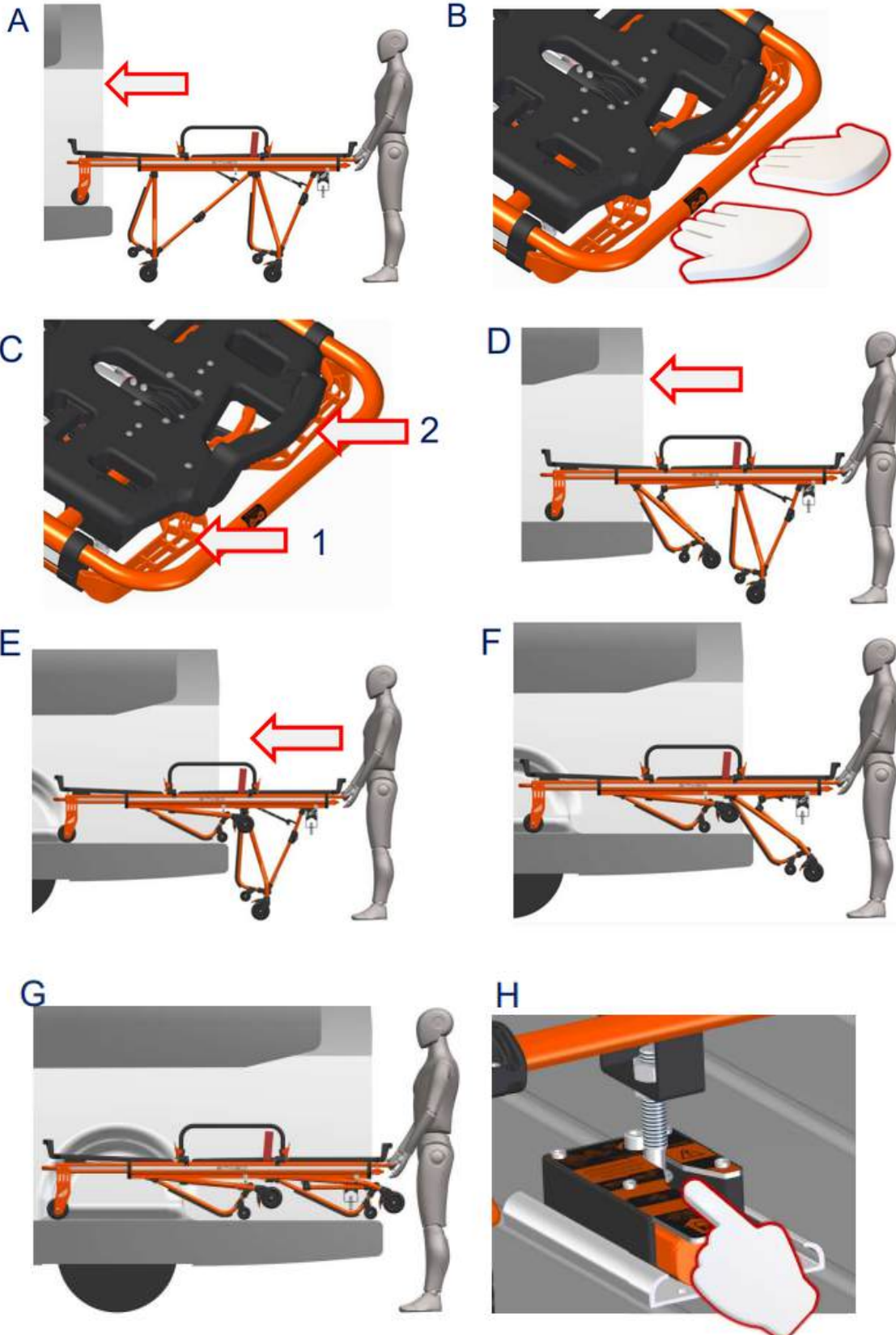
### 3.12 - INTRODUCING THE STRETCHER INTO THE AMBULANCE

To introduce the stretcher into the ambulance, follow these steps:

1. Position the ambulance on a level surface.
2. Leave the ambulance doors open and locked.
3. Ensure that the side handles of the stretcher are raised and locked.
4. Check the patient's safety conditions.
5. If there are unsafe conditions or if the patient is obese, request assistance from additional operators.
6. Bring the stretcher close to the rear door of the ambulance, support the aerial wheels on the floor, push the stretcher until the leg stops touch the bumper, and maintain alignment with the anchoring system. Note: For the comfort of the patient and to avoid damaging the vehicle and stretcher components, avoid colliding the stretcher forcefully with the rear of the ambulance.
7. Bring the stretcher close to the rear door of the ambulance, support the aerial wheels on the floor, push the stretcher until the leg stops touch the bumper, and maintain alignment with the anchoring system.
8. Ensure that the aerial wheels are fully inside the cargo compartment and in a safe condition (A).
9. Hold the stretcher by the rear arch (B), then lift the stretcher and activate the left retraction lever "1" to release the articulation of the front support assembly (C).



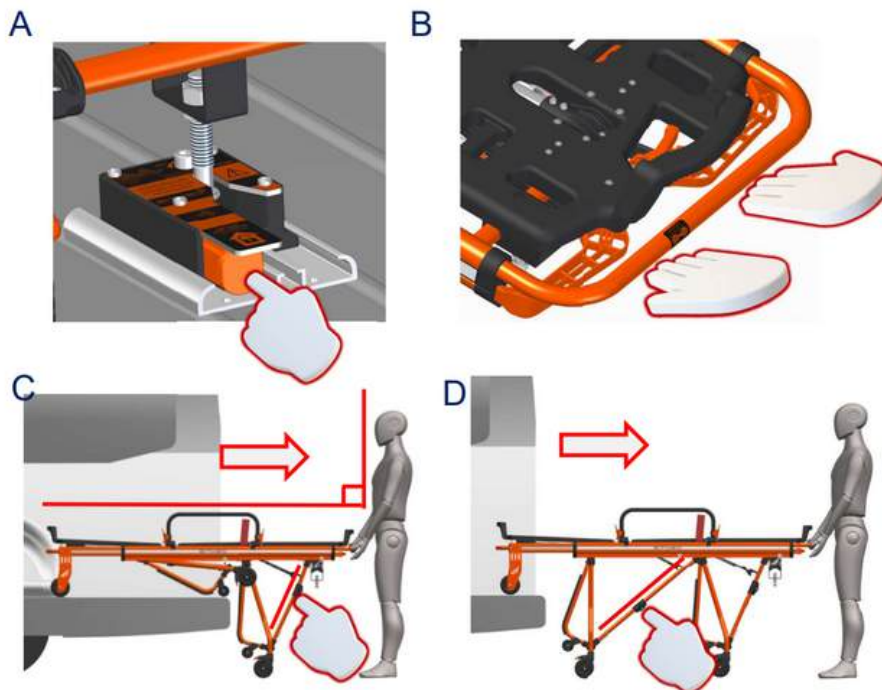
1. Gently push the stretcher into the vehicle (D) (E).
2. To articulate the rear support assembly, activate the right retraction lever "2" (C).
3. Gently push the stretcher further into the vehicle (F) (G).
4. Position it in the locking system and perform the coupling (H).
5. Verify that the pin is properly engaged in the anchoring system and that the stretcher is secure for transport.



### 3.13 - REMOVING THE STRETCHER FROM THE AMBULANCE

For an easy and safe removal of the stretcher, the ambulance should preferably be on level ground to allow for the correct articulation of the stretcher legs.

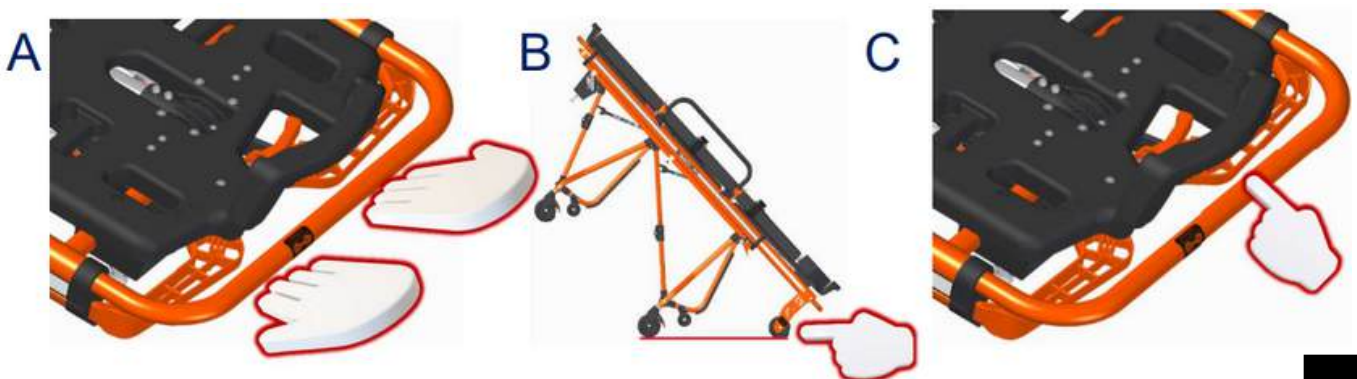
1. To remove the stretcher from the ambulance, activate the button for the rear anchoring system, releasing the locking pin (A).
2. Hold the stretcher by the rear arch (B) and gently pull it out of the ambulance.
3. There is no need to activate the retraction lever. The stretcher automatically deploys without the need for any mechanism activation.
4. When removing the stretcher, hold it in such a way that the bed remains level and parallel to the vehicle floor until the rear support assembly is fully opened (C).
5. Slide the stretcher out of the vehicle to open the front support assembly (D).
6. Before fully removing the stretcher from the ambulance, ensure that the support/leg assemblies are fully deployed and that the "knee" articulation (C)(D) is not flexed or bent.



### 3.14 - LOWERING THE STRETCHER WITHOUT THE PATIENT

Before lowering the stretcher, find a flat and stable place where the following operations can be performed.

1. Ensure that the side guards are raised; otherwise, they may be damaged.
2. Hold the rear arch with both hands (A) and tilt the stretcher until the aerial wheels touch the floor (B).
3. Lift the weight of the stretcher by the arch and activate the retraction lever, moving the stretcher until it closes (C).
4. For transporting obese patients, request additional operator assistance (G).



### 3.15 - PATIENT TRANSFER

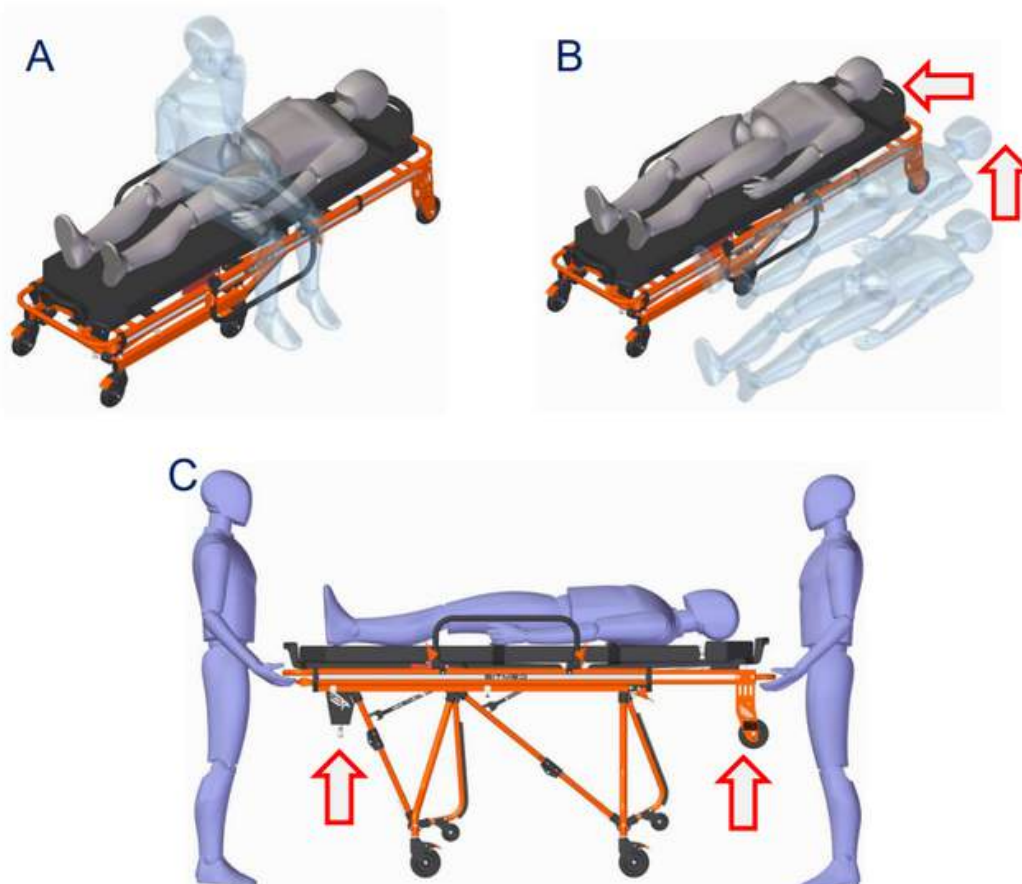
Before moving the patient, ensure that initial medical assessments have been completed. To move the patient on the stretcher, evaluate the environment, the equipment, and the patient, and request assistance if necessary. Ensure that operators are qualified and trained before using the stretcher. Always use safety belts when raising, lowering, or transporting the patient on the stretcher.

#### 3.15.1 - LOW-LEVEL PATIENT TRANSFER

To place the patient on the stretcher from ground level, follow these steps:

1. Close the stretcher as indicated in section 3.14 of the manual.
2. Position the stretcher close to the patient to minimize the distance of movement.
3. Engage the wheel brakes and remember to unlock them before moving the stretcher.
4. Lower the side handle where the patient will be accommodated.
5. If possible, ask the patient to actively cooperate during the transfer to the stretcher, ensuring they are aware of the risks.
6. The patient can sit in the center of the stretcher and then lie down (A).
7. If the patient is immobilized or unable to cooperate, the operators should position themselves at the ends, head, and feet, and perform the transfer (B).
8. To lift the stretcher, the operators should position themselves at the ends and along the front and rear arches, elevating the stretcher until the lower leg articulation is fully bent (C).

Note: For obese patients, request additional assistance as indicated in section 3.16. Ensure you follow these guidelines to guarantee a safe and proper transfer of the patient to the stretcher.

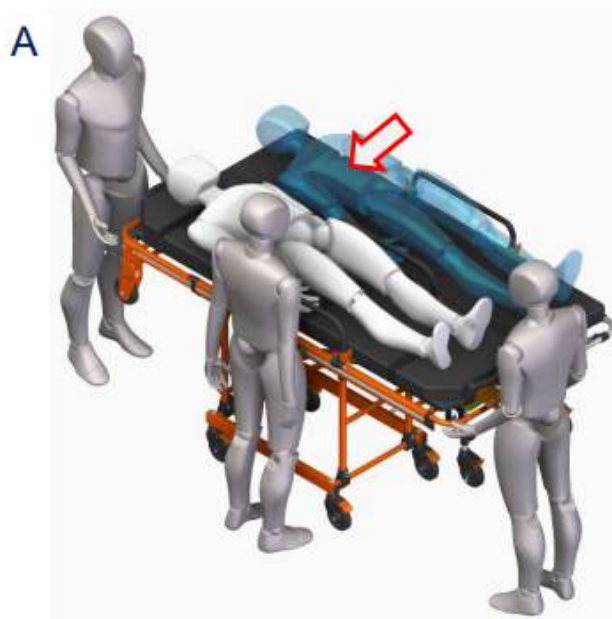


### 3.15.2 - HIGH-LEVEL PATIENT TRANSFER

To transfer the patient from a hospital stretcher to the Sitmed transport stretcher or vice versa to the hospital bed, it is necessary to perform the operation with additional assistance. Follow these steps for the transfer:

1. Engage the wheel brakes of the stretcher before moving the patient to the bed and remember to unlock them when necessary.
2. Position the stretcher next to the bed, with one professional at each end of the stretcher (head and feet) and one professional on the side to assist in the transfer and prevent the stretcher from moving during the operation (A).
3. Ensure that the hospital bed is locked before proceeding with the patient transfer.

Note: For obese patients, it is recommended to request additional assistance as indicated in section 3.16.



### 3.16 - TRANSPORTING OBESE PATIENTS

When transporting a stretcher with an obese patient, it is advisable to have additional operators to assist both during handling and transport (A) and during entry and exit from the vehicle (B).

Ensure that you assess the conditions of the environment, the patient, and the operators. Analyze potential risk situations and decide on the most appropriate approach for transport, aiming to ensure the safety of everyone involved.

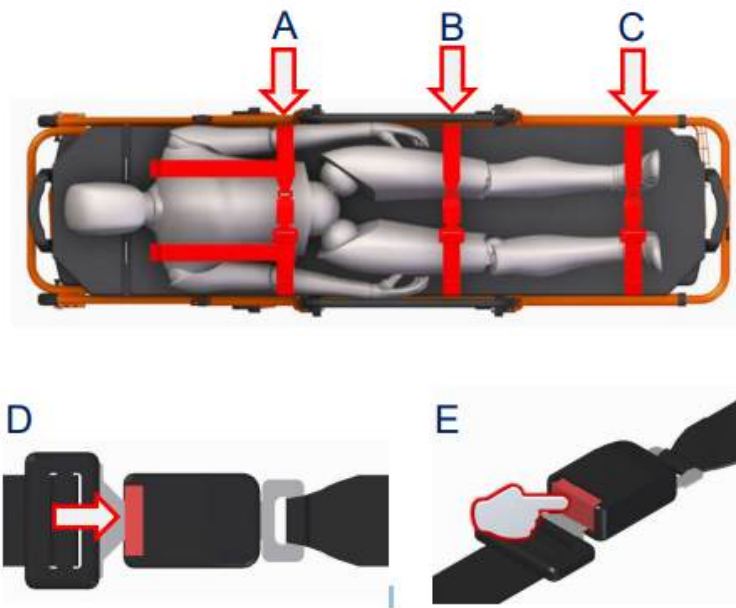


### 3.17 - PATIENT IMMOBILIZATION

Sitmed stretchers are designed to ensure the safety of both the patient and the operator. They are equipped with quick-release immobilization belts along the bed to reduce patient movement during transport, ensuring safety.

It is essential not to perform any actions to lower, raise, or transport the patient without using all safety belts. The safety belts serve different purposes: the 4-point belt is used to immobilize the thorax (A), a 2-point belt for the pelvic region (B), and another 2-point belt for the ankles (C).

To secure the belt, insert the clasp into the latch box (D). To release the belt, press the button on the latch box and remove the clasp (E).



### 3.18 - WHEEL BRAKE

The stretcher's swivel has a wheel locking system to prevent involuntary movement and to keep it stable on inclined surfaces (A). To engage the wheel brake, press the area marked "ON" until you hear the "click" of the latch (B). To release the wheel lock, press the brake in the area marked "OFF" (C).

Note: Always use the wheel brakes whenever you stop the stretcher, and release them before moving.



## 4 - MAINTENANCE

The Pantographic Stretcher requires regular maintenance to ensure its proper functioning and extend its lifespan. Periodically check components such as wheels, brakes, safety belts, and anchoring systems, replacing any damaged or worn parts immediately. Additionally, it is essential that the owner or responsible party conducts regular inspections and maintenance on the equipment due to its joints and moving mechanisms, aiming to ensure perfect functionality, safety, and an increase in lifespan. Sitmed recommends semi-annual maintenance.

Inspections and maintenance should cover the following points:

- Check for damage to the structure, parts, or joints.
- Evaluate components or parts that are loose or worn from use.
- Ensure that bolts and nuts are tightened and in their proper places.
- Confirm that the swivels rotate without play and brake properly when the brake is engaged.
- Ensure that all moving parts are functioning correctly.
- Check the operation of the movable headrest at all incline levels.
- Ensure that the mattress is clean and free from punctures.
- Confirm that the safety belts are clean, securely attached to the equipment, and functioning properly.
- Verify the operation of the retraction systems for collecting the legs.
- Ensure that the aerial wheels of the stretchers are at the same height as the ambulance floor.
- Check the proper entry and exit of the stretcher into the ambulance.
- Confirm the firmness of the locking systems and whether the stretcher couples perfectly.
- 

If any damage or unusual behavior is detected during an inspection, the equipment must be immediately taken out of use until maintenance is performed.

It is prohibited to alter the structure of the equipment or perform maintenance using components such as iron, wires, ropes, nails, tapes, bandages, or any other items not original to the stretcher.

For maintenance, Sitmed suggests contacting your technical department.

Use only original Sitmed components and parts. The use of any third-party parts, accessories, or materials is the sole responsibility of the owner and will result in the loss of the equipment warranty.



## 5 - WARRANTY AND TECHNICAL ASSISTANCE

### 5.1 - WARRANTY:

SITMED guarantees the buyer of its equipment a warranty period of 2 years for structural components such as aluminum profiles and exclusive SITMED parts, effective from the date of issuance of the \*invoice for the equipment.

This warranty will be void if the equipment suffers any damage caused by accidents, natural agents, use contrary to this instruction manual, signs of tampering in its structure, absence of the serial number, adjustments or repairs made by unauthorized personnel, or due to defects from fortuitous events or force majeure.

Other items acquired from third parties for inclusion and formatting of the product, such as mattresses, safety belts, wheels, and swivels, have a limited warranty period of 12 months, also effective from the date of issuance of the equipment invoice.

The device, if used as indicated in the following instruction manual, has an average lifespan of 5 years. The lifespan can only be extended after a general review of the product, which must be performed by the manufacturer or an authorized company.

### 5.2 - TECHNICAL ASSISTANCE

SITMED will provide warranty-related services exclusively at its respective factory, located in Flores da Cunha - RS - Brazil.

The owner residing in another location will be responsible for the expenses and risks of transporting the equipment to and from the factory.

The warranty will only be valid if a manufacturing defect is duly proven, as previously stipulated.

Ownership of the equipment and warranty period is confirmed through the serial number and the \*invoice of purchase of the equipment.

Note: In the case of a joint purchase of the equipment with the ambulance, request a copy of the invoice for your equipment from the company responsible for the vehicle transformation.



**NUMBER ONE**  
IN LIFE TRANSPORT

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