



Instruction MANUAL

MRS 311 - RETRACTABLE STRETCHER -
SITMED ESSENTIAL II

www.sitmed.com.br

INSTRUCTION MANUAL 2024

MRS 311 - RETRACTABLE STRETCHER - SITMED ESSENTIAL II



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

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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 Retractable Stretcher - MRS 311. 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

		 SITMED EQUIPAMENTOS MÉDICOS LTDA Rua Felisberto Pereira da Silva, 550 - Bairro Nova Trento Flores da Cunha - RS - Brasil - CEP 95270-000 CNPJ: 02.473.977/0001-51 - IE: 048/0022410 Fone: +55 (54) 3196 8000 - E-mail: contato@sitmed.com.br EUDAMED ID/SRN: BR-MF-000008307	CAIXA NÚMERO BOX NUMBER XXX
 CLIENTE / COSTUMER IMPORTADOR/IMPORTER	XXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX XXXXX XXXX XXXXXXXXXXXXXXXX XXXXXXXX XXXXXXXXXXXXXXXX	QUANTIDADE / CAIXA QUANTITY / BOX DIMENSÕES BOX DIMENSIONS	XXXX XXX X XXX X XXXX
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	RÁPIDO E CONTÍNUO, UNIPESSOAL LDA. Rua Centro Empresarial, Beloura, Office Park - Ed. 4, Escritório 6 2710-693 – Sintra – Portugal - PJ – 517714558 EUDAMED PT-AR 000039288	DANFE BRAZILIAN DANFE FATURA/INVOICE	XXXXXX XX XXX XX
PRODUTO / PRODUCT	XXXXX XXXXXXXXXXXXXXXXXXXXXXXX		XXX XXX
DETALHES / FEATURES	XXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX		XXXXX
OBSERVAÇÕES/COMMENTS	XXXXXXXXXXXXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXX		DD/MM/YYYY
REG. PRODUTO ANVISA	80438490002 – 80438490003		DD/MM/YYYY
RESP. TÉCNICO TECHNICAL RESP.	MIGUEL MAZZOCCO - CRT RS 31192203020		BRASIL - BR 076 BRA
		 (01)1234567891011213 (10) 1234 (11)YYMMDD(17)YYMMDD	

The packaging label follows the guidelines determined by the MDR - Medical Devices Regulation 2017/745 (EU) European Community and Resolution - RDC N° 751, of September 15, 2022 - ANVISA.

1.6 - IDENTIFICATION AND TRACEABILITY LABEL

	NOME DO PRODUTO XXXXXXXX XXXXXXXX
SITMED EQUIPAMENTOS MÉDICOS LTDA Rua Felisberto Pereira da Silva, 550 - Bairro Nova Trento - Flores da Cunha - RS - Brasil CEP 95270-000 - CNPJ: 02.473.977/0001-51 - Fone: +55 (54) 3196 8000 E-mail: contato@sitmed.com.br - Site: www.sitmed.com.br INDÚSTRIA BRASILEIRA - MADE IN BRAZIL EUDAMED ID/SRN: BR-MF-000008307	XXXXXXXX
 RÁPIDO E CONTÍNUO, UNIPESSOAL LDA. Rua Centro Empresarial, Beloura, Office Park - Ed. 4 Escritório 6 - 2710-693 – Sintra – Portugal PJ – 517714558 - EUDAMED PT-AR 000039288	XXXXXXXX
	 (01)1234567891011213 (10) 1234 (11)YYMMDD(17)YYMMDD

All Sitmed equipment is identified with a serial label for traceability control. The identification label is located on the bottom of the stretcher bed and contains the manufacturer's identification, product name, model, serial number, Anvisa (Brazilian Health Regulatory Agency) registration number of the Brazilian Ministry of Health, CE marking, and the Unique Device Identification (UDI-DI) number.

When the stretcher is no longer in usable condition due to natural wear, damage from misuse, or accident damage to the ambulance, and has not been contaminated by any infectious agent or contaminant, it can be discarded for recycling, since all the materials used are recyclable.

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, contato@sitmed.com.br, or 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.

- Laboratory tests, field tests, risk analysis, and the instruction manual do not always manage to predict all possible scenarios for the use of this equipment. In this way, the performance of the equipment in some cases may be different from the results obtained. Promptly notify Sitmed of any inconsistency between the equipment and what is described in this Manual, in order to ensure the conformity of the product with the specifications of use and safety.
- 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 with the aim of always ensuring the physical integrity of patients and rescuers.
- Use the equipment with due care and diligence, contributing to ensuring compliance with the safety and usability requirements of the equipment, as set forth in this Manual.
- In case of any doubt regarding the correct interpretation of the instructions contained in this Manual, please contact Sitmed immediately by phone +55 54 3196 8000, by WhatsApp +55 54 99904 4900 or by email: sac@sitmed.com.br

2.2 - LIMITATION OF LIABILITY

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

- Non-compliance with the instructions, and use contrary to the instructions in this Manual;
- Natural wear and tear of parts and components without proper replacement;
- Use by inexperienced, untrained and/or uncertified personnel;
- Incorrect and improper use of the safety 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 periodic maintenance and testing 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 Services for the proper positioning and transport of the patient.
- Before each use, check the integrity of the safety belts. In case of malfunction or damage that may compromise the operation and safety of the patient or rescuer, the replacement of the belts is essential.
- The swivel wheels are not suitable for all types of terrain, so be careful when driving the stretcher on uneven ground. The stretcher must always be driven 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

- Using the stretcher as described in this Manual will result in efficient and effective rescue.

2.5 - PHYSICAL REQUIREMENTS OF THE OPERATORS

The STRETCHER is a device intended solely 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 dealing with obese patients, performing transfers, transporting in 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 assessment of the training and skills of the auxiliary rescuers is to prevent incidents during the procedure.

2.6 - ENVIRONMENTAL CONDITIONS

Operating temperature: -20 to +50 °C

Relative humidity: 20 to 100%

PRODUCT DESCRIPTION

The MRS 311 Essential II Retractable Stretcher was specially designed for heavy loads and to reduce the effort when placing it in or removing it from ambulances. Made of lightweight and durable duralumin, it has a retractable folding system and automatic assembly, adjustable backrests in rigid plastic material, a polyurethane foam mattress covered in waterproof material with electronic stitching, a set of safety belts, and a complete anchoring or locking system. It offers agility, safety, practicality, and robustness.

The Sitmed stretcher offers optional features to meet different needs:

127 mm (5-inch) wheel for regular terrain with low oscillation.

200 mm (8-inch) wheel for uneven terrain.

Retractable aerial axle for access to limited spaces, reducing the size of the bed.

Foot/Trendelenburg to elevate the legs of hypotensive patients and for pain relief.

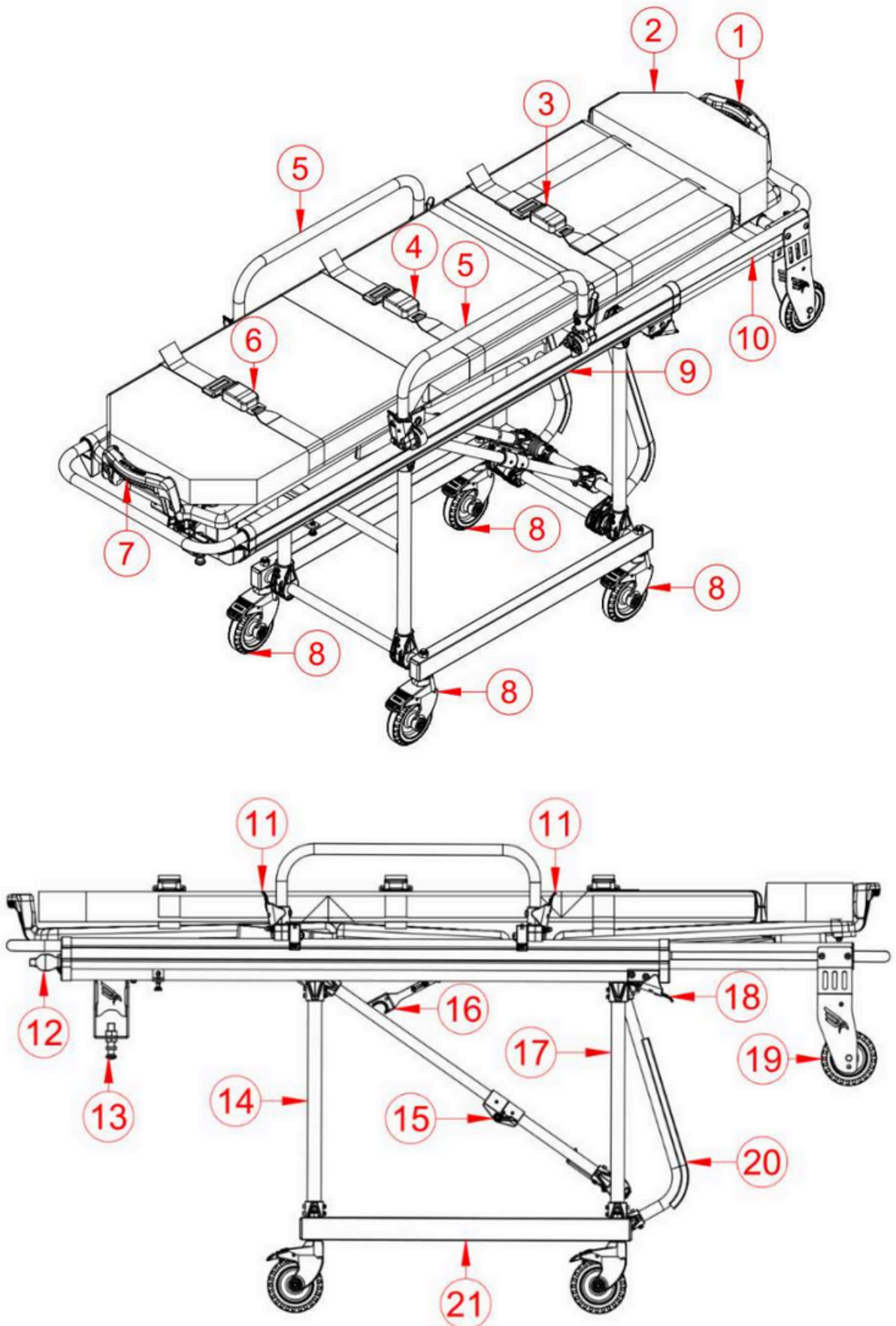
Standard color: Sitmed Orange.

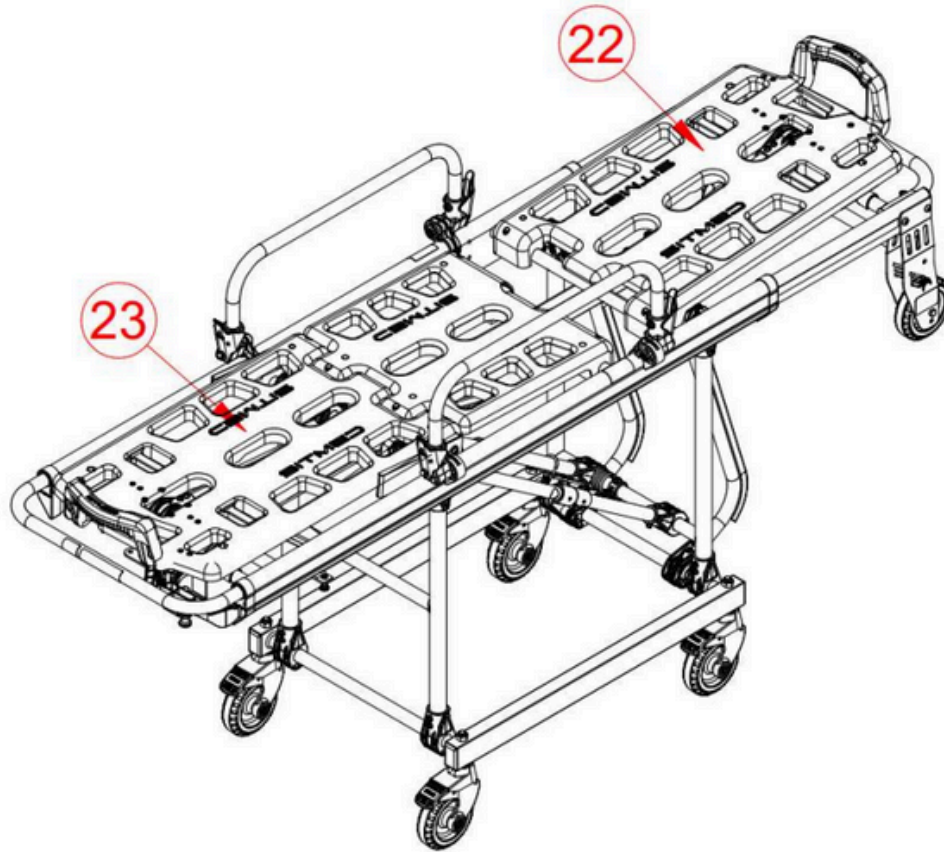
Custom color available upon request.

Fixed support for serums and blood, easy to activate and adjust.

Note: The height of the air wheels must be adjusted according to the height from the ground to the floor of the ambulance.

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

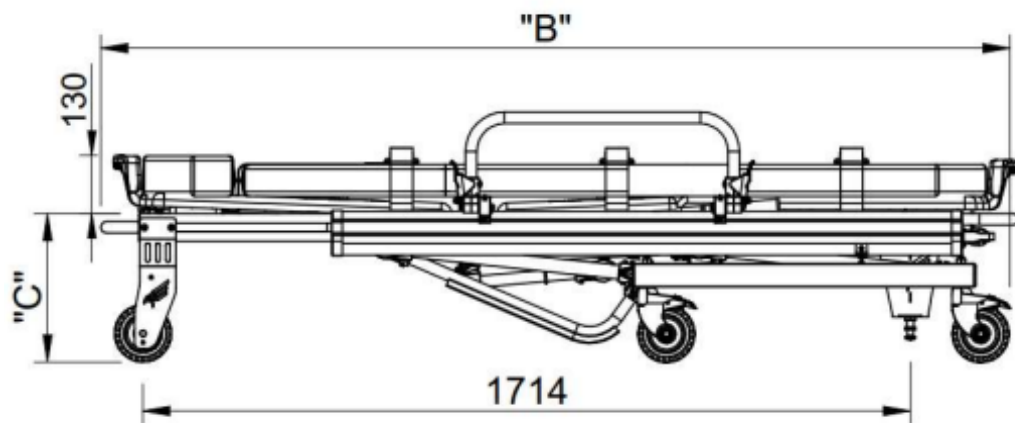
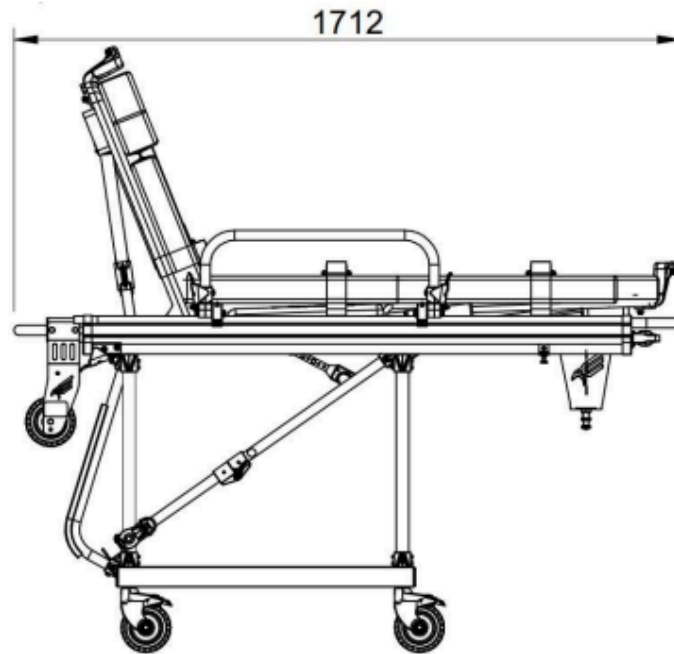
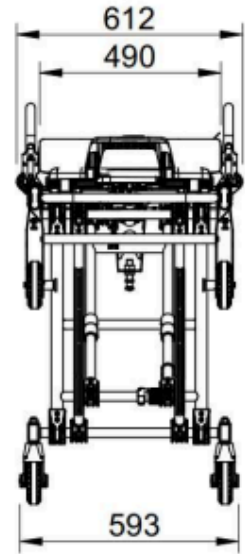
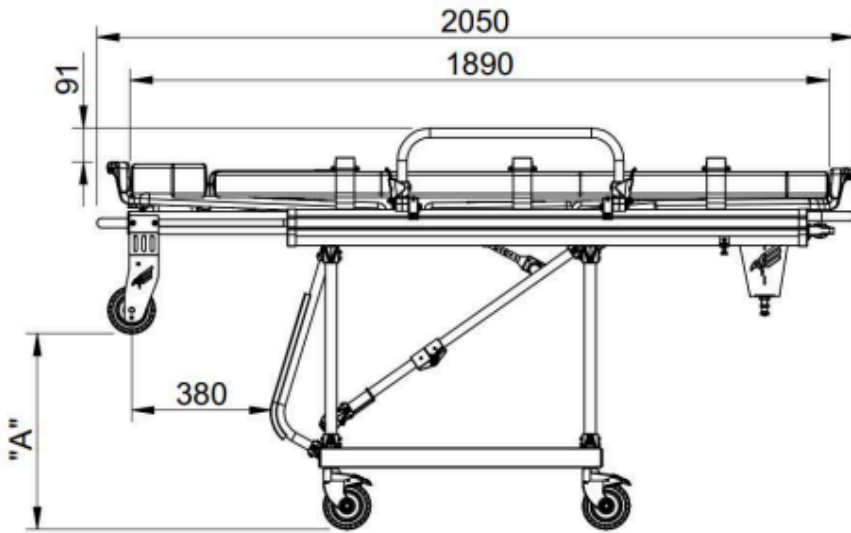
14	REAR SUPPORT PROFILE
15	"KNEE" JOINT
16	SAFETY LOCK
17	FRONT SUPPORT PROFILE
18	AIR SHAFT TRIGGER
19	AIR WHEEL
20	STOP
21	CART
22	HEADBOARD / FOWLER
23	FOOTBOARD / TRENDLENBURG

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

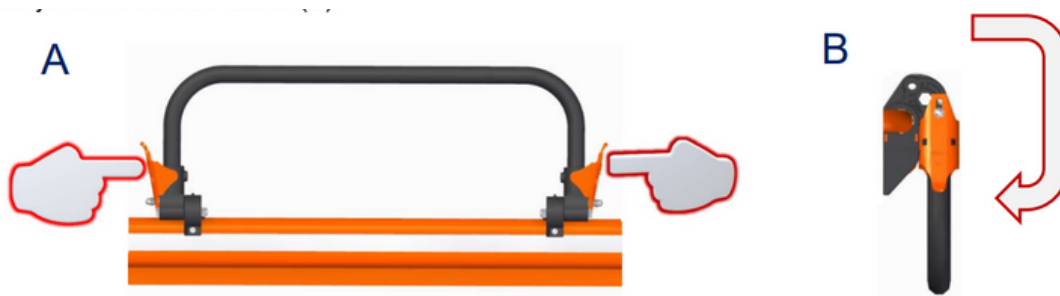
*Weight with Accessories - Stretcher + 2-Point Belt + 2-Point Belt + 4-Point Belt + Mattress

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

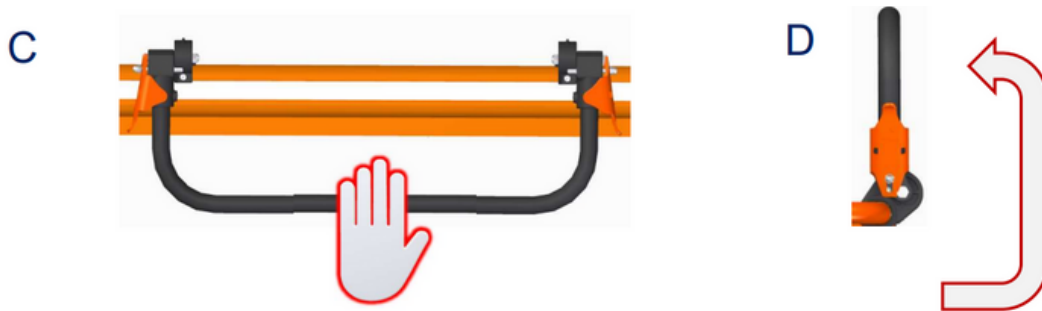
Note: All measurements are in millimeters.

3.3 - SIDE HANDLES

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

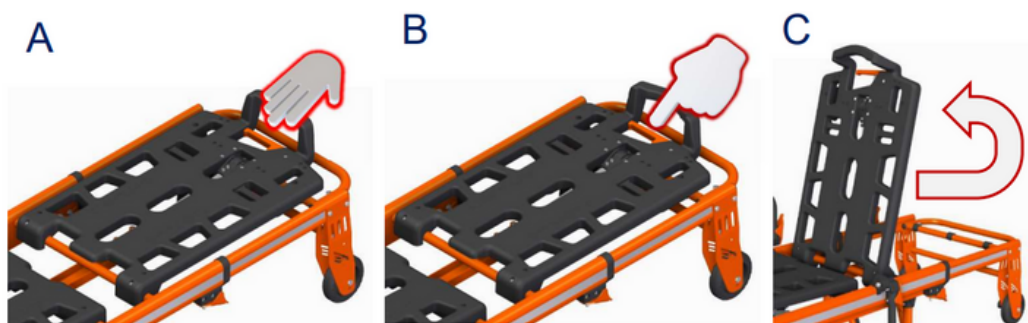


To raise the handle, hold the central part (C) and move it until it is perpendicular to the bed (D). The handle assembly automatically locks in place.



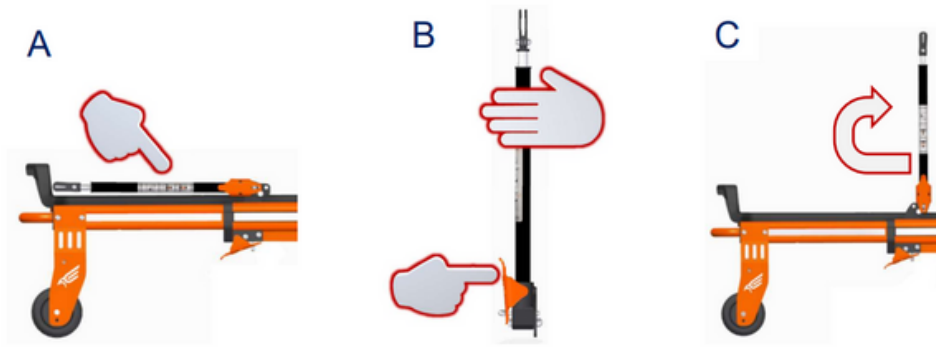
3.4 - HEADREST (FOWLER)

The stretcher's headrest is designed to raise the patient's torso and head region. It has 6 height levels with an elevation from 0° to 70°. For adjustment, place one hand on the handle (A), supporting the weight, and with the other hand, activate the trigger (B), releasing the movement of the assembly. Position the headrest at the desired height, release the trigger, and observe the "click" of the locking pin before releasing (C).

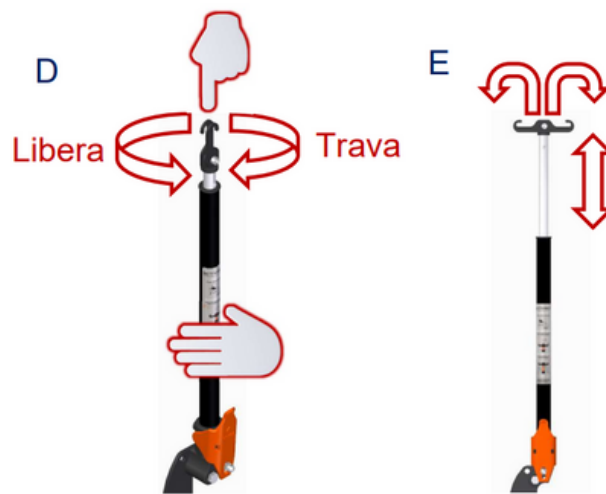


3.5 - IV AND BLOOD SUPPORT

The IV and blood support is an (optional) accessory that can be attached to the Sitmed stretcher. It is retractable and has a telescopic mechanism that allows height adjustment. Locate the support at the front of the equipment (A). To use it, it is necessary to hold the stem and activate the lower trigger (B), then move the assembly perpendicular to the bed until the "click" of the locking pin (C). For the closed position, perform the opposite movement.



For height adjustment, position one hand on the support stem and with the other, turn the upper stem counterclockwise (D). Adjust the height to the appropriate position and turn clockwise to lock, then open the suspension hooks of the saline or blood bags (E).

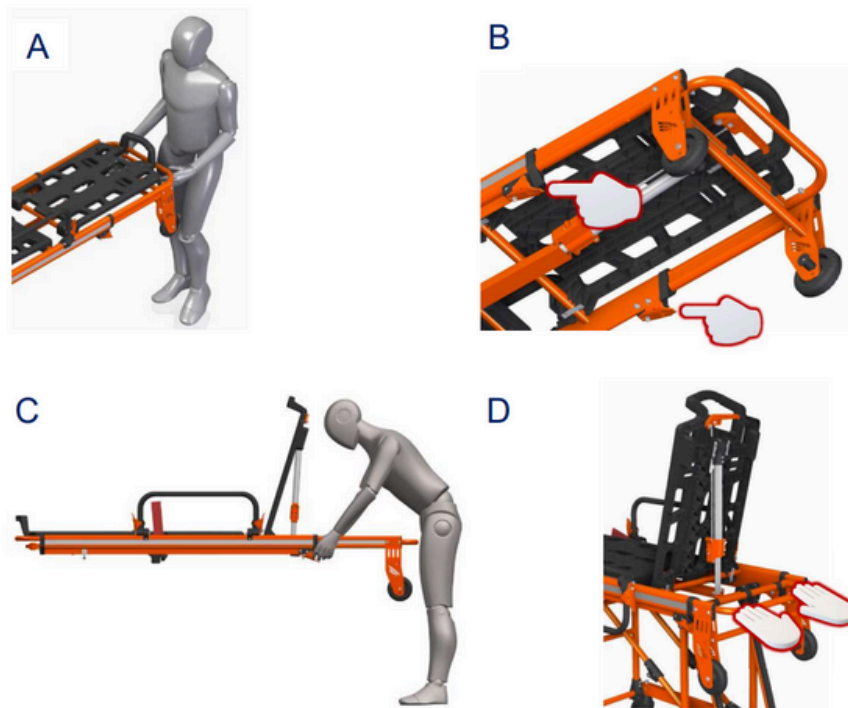


3.6 - MOBILE AIR AXIS

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

- 1 - Move the saline support to the perpendicular position to the bed, as per item 3.5 C.
- 2 - Raise the headrest (fowler) to the last level, with the patient sitting, as per item 3.4 C.
- 3 - To retract the air axis, position yourself at the front of the stretcher (A),
- 4 - Then locate the release triggers of the assembly at the bottom of the bed (B).
- 5 - Lean in, activate the triggers simultaneously and push the assembly with your body (C).
- 6 - Push the air axis assembly until it is fully retracted and locked at the end of the travel (D).

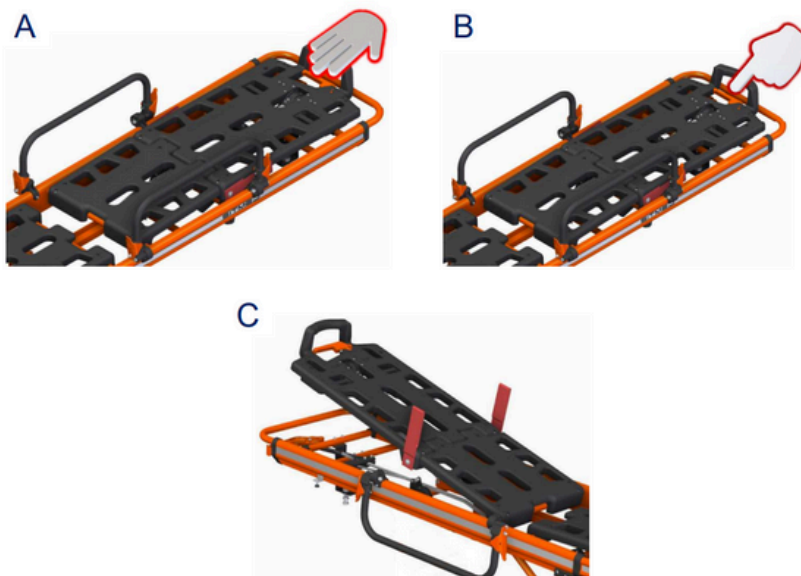
To extend the air axis again, perform the simultaneous trigger activation movement and observe that the extension movement starts automatically, then pull the assembly by the front arch until the pins are fixed. Test to ensure the locking has occurred to avoid accidents.



3.7 - MOBILE FOOTREST (TRENDLENBURG)

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

To raise the legs, place one hand on the handle (A) to support the weight, and with the other hand, activate the trigger (B), raise to the desired height, and release the trigger. Wait for the locking pin to click into place before releasing the handle (C).

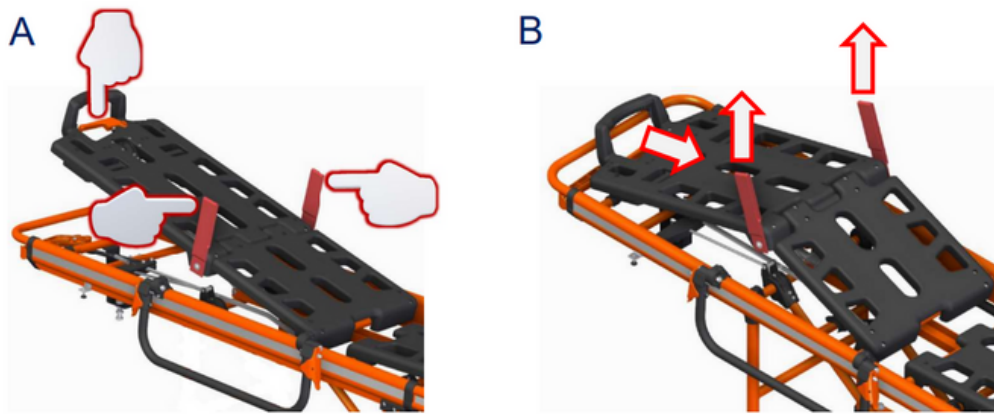


3.8 - LEG FLEXION

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

To execute this position, raise the footrest to the highest point, see item 3.7, hold the central handles of the footrest, suspend the weight, and then activate the trigger, flexing the footrest until the locking pin clicks into place (B).

To return the footrest to the flat position, hold the handle, suspend the weight, and activate the trigger, move it into alignment, select the position, and observe the click of the pin before releasing.



3.9 - BED POSITIONS

The Sitmed stretcher was developed to provide the best conditions for patient care and comfort. The following are the configuration possibilities for the patient's accommodation bed.

NOTE: It is only possible to perform all configurations for the model with a movable footrest option.

3.9.1 - OPEN POSITION

With the legs fully deployed. 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 is in when loaded into 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 recumbent position, is when the patient is lying on their back, with their face facing upwards, their legs extended, and their arms by their sides. This position is one of the most common positions used for patient transport and can be indicated for various clinical situations, including: monitoring, post-operative care, rest and comfort, medical examinations and procedures, pressure ulcer prevention, facilitating drainage, airway management, among others.



3.9.4 - FOWLER'S POSITION

This position, also known as the semi-Fowler's position, involves elevating the torso 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. Fowler's position is indicated for various clinical situations, including: improving respiration, reducing gastroesophageal reflux, improving blood circulation, facilitating feeding and swallowing, promoting comfort and post-operative recovery.



3.9.5 - SEMI-FOWLER OR HEAD-OF-BED POSITION

The Semi-Fowler's position is a variation of the Fowler's position, where the bed is inclined at a smaller angle, usually between 30 to 40 degrees, keeping the patient in a semi-seated position. This position can be indicated for various clinical situations, including: respiratory problems, aspiration prevention, reduction of gastroesophageal reflux, post-operative comfort, facilitating circulation, intracranial pressure control, and edema reduction.



3.9.6 - SITTING POSITION

This position, also known as the orthostatic position or the 70-degree or more position, is indicated for various clinical situations such as: Early mobilization, deep vein thrombosis, pneumonia, performing procedures, gastroesophageal reflux, and improved oxygenation.



3.9.7 - LEG FLEXION POSITION

The leg flexion position with the abdomen facing up is when the patient is lying on their back on the stretcher with their knees bent towards the abdomen. This position may be indicated for: Relief of low back pain, disc hernias, muscle relaxation, venous access, and comfort.



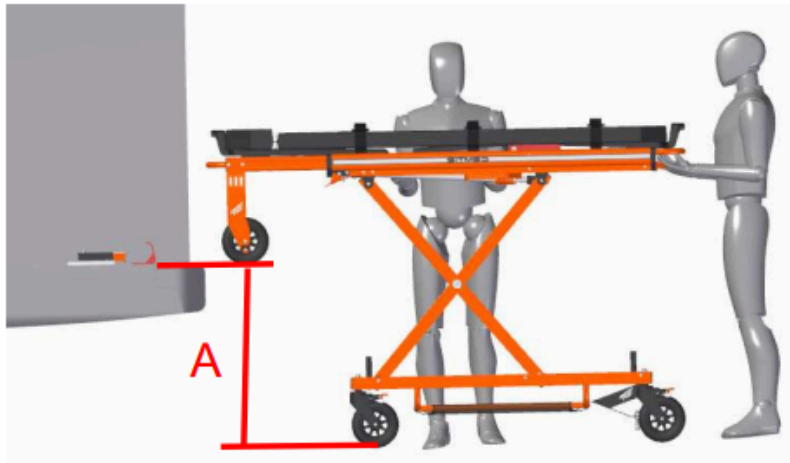
3.9.8 - TRENDELENBURG OR VASCULAR POSITION

A position in which the patient is in a supine (lying on the back) position, with the legs elevated at an angle of approximately 45 degrees. In the Trendelenburg position, the bed or stretcher is tilted with the head lowered and the feet elevated, placing the patient in a downward tilt. This position is used in various clinical situations, including: Improved blood circulation in the lower extremities, improved cerebral circulation in some medical emergencies, prevention or treatment of hypovolemic shock (sudden drop in circulating blood volume), and facilitation of venous return in some cases of heart failure.



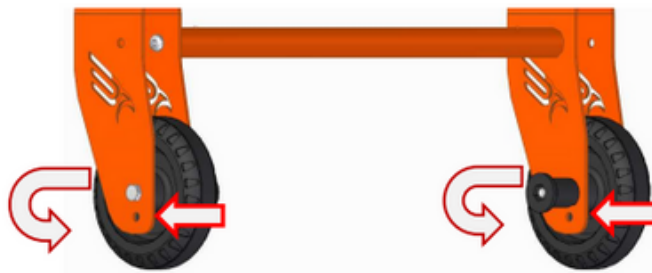
3.10 - STRETCHER HEIGHT / AMBULANCE HEIGHT

The Sitmed telescopic stretchers have predefined "A" air shaft height levels, see item 3.2 of this manual. Position the stretcher at the level compatible with the vehicle's height to proceed with the entry operation.



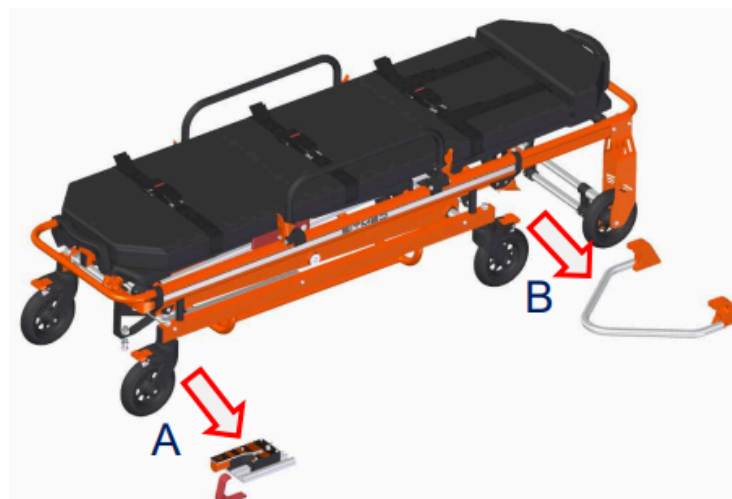
3.10.1 - AIR SHAFT ADJUSTMENT

The vehicle's cargo platform height changes after a period of use, the variation in height can be minimized by 20 mm by adjusting the air wheels. To make the adjustment, it is necessary to remove the air wheel fixing screws and secure them in the hole below the original model.



3.11 - ANCHORING SYSTEM

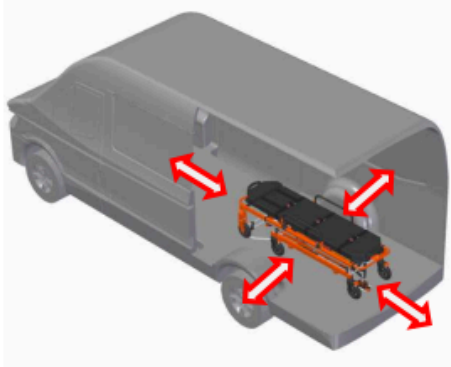
The Sitmed stretcher fixation system in the ambulance is composed of the rail, the lock, and the safety lock in the rear region (A), and the guide and stops in the front region (B).



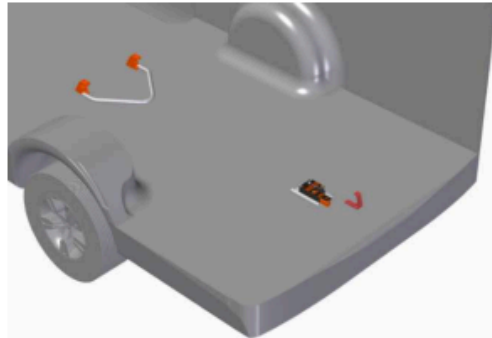
3.11.1 - INSTALLATION OF THE ANCHORING SYSTEM

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

A

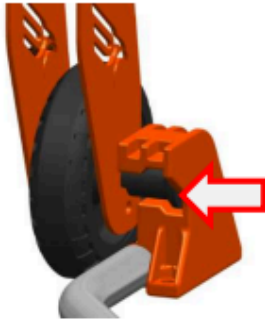


B

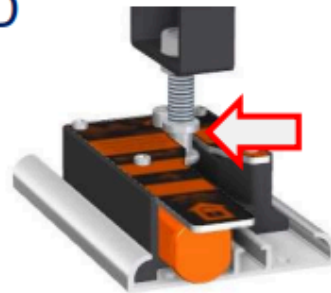


If necessary, adjust the height of the pin (E) with the help of 2 size 24 wrenches. The pin height must be compatible with the necessary height for coupling to the locking device (F).

C

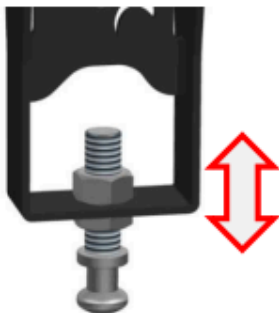


D

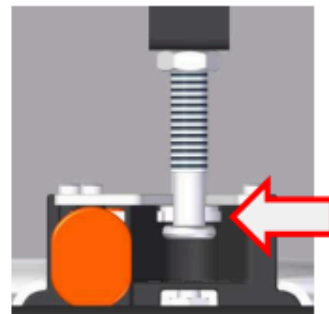


With the stretcher in the installation position, attach the front (C) and rear (D) anchoring system to the stretcher. The anchoring system must be adjusted with the minimum possible clearance to prevent oscillation during transport.

E

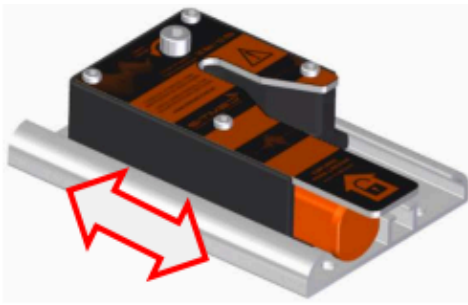


F



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

G



H

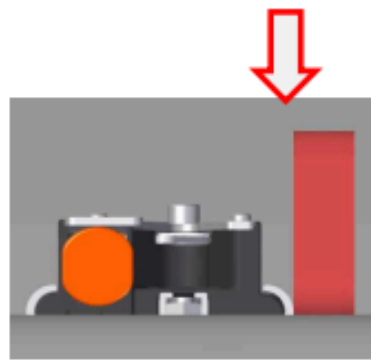


The safety latch of the stretcher must be installed in the position where the air wheel remains supported on the floor of the vehicle when the stretcher is removed from the ambulance (I) (J) (K).

I



J

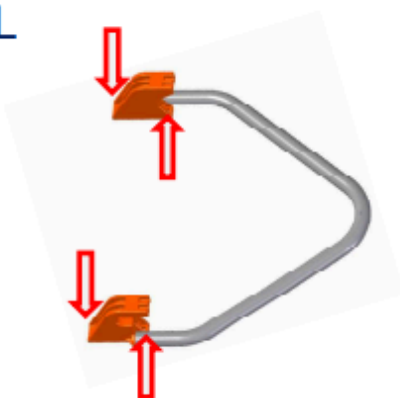


K

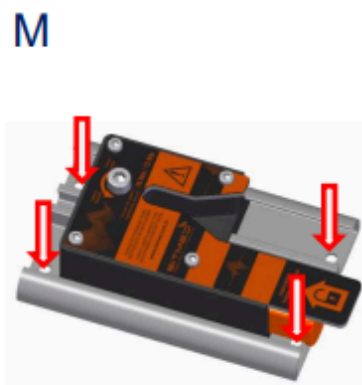


Make sure to position the stretcher correctly and attach the front (L) and rear (M) anchoring systems to the stretcher. Then, position the safety latch (N) and mark the points on the vehicle's floor where the drilling will be performed. Before proceeding, check that the drilling will not cause damage to the vehicle's components. Use an 8 mm diameter drill bit to make the hole.

L



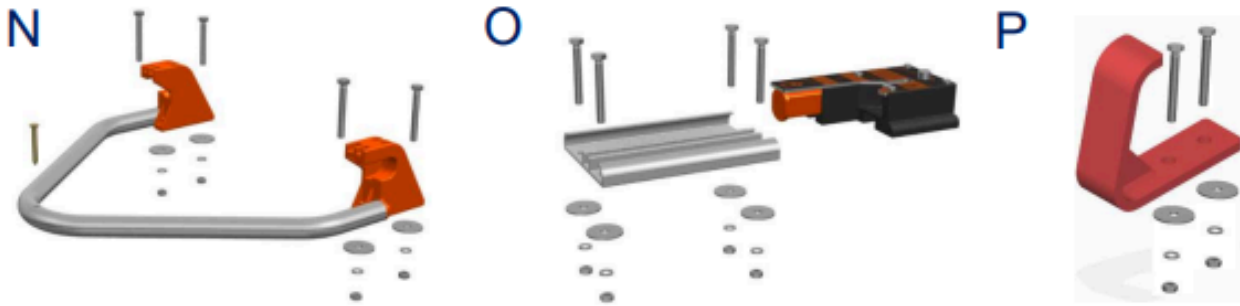
M



N



Secure the front (N), rear (O), and safety latch (P) anchoring systems using the hardware available in the kit that comes with the product. Use a 13 mm hex wrench and ensure that the fasteners of the anchoring system are well 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 rear rail from front to back.
- 3 - Finally, insert the other two screws.
- 4 - Make sure the screws are tightened securely.

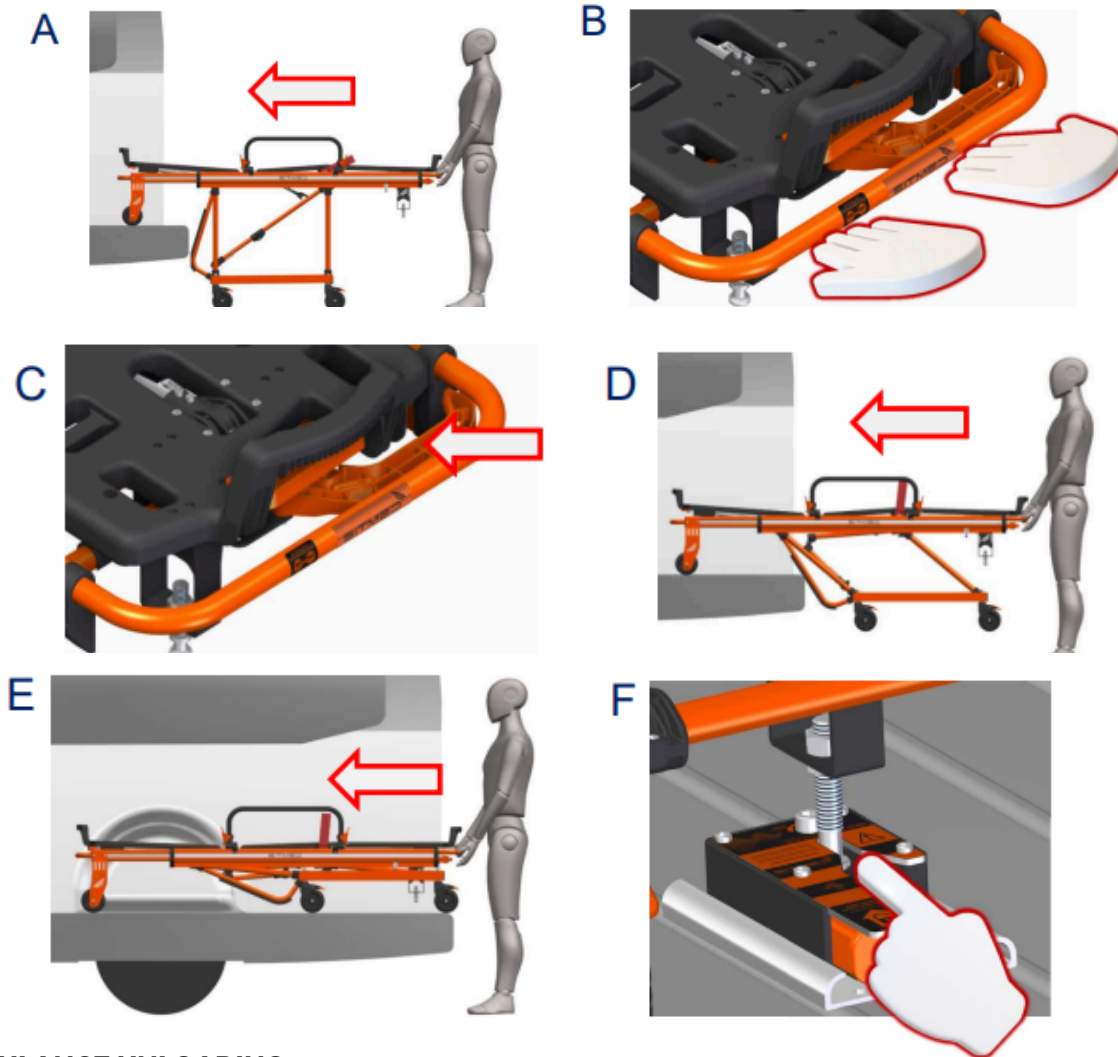
3.12 - INTRODUCING THE STRETCHER INTO THE AMBULANCE

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

1. Position the ambulance on a level surface.
2. Leave the ambulance doors in the open and locked position.
3. Ensure the side handles of the stretcher are raised and locked.
4. Check the patient's safety conditions.
5. Operate the equipment with a minimum of 2 operators. If there are unsafe conditions and for obese patients, request the assistance of more operators.
6. Approach the stretcher to the rear door of the ambulance, push until the air wheels rest on the floor, and maintain alignment with the fastening system (A).

Note: For the patient's comfort and to avoid damaging the vehicle and stretcher components, avoid colliding with the stretcher abruptly at the rear of the ambulance.

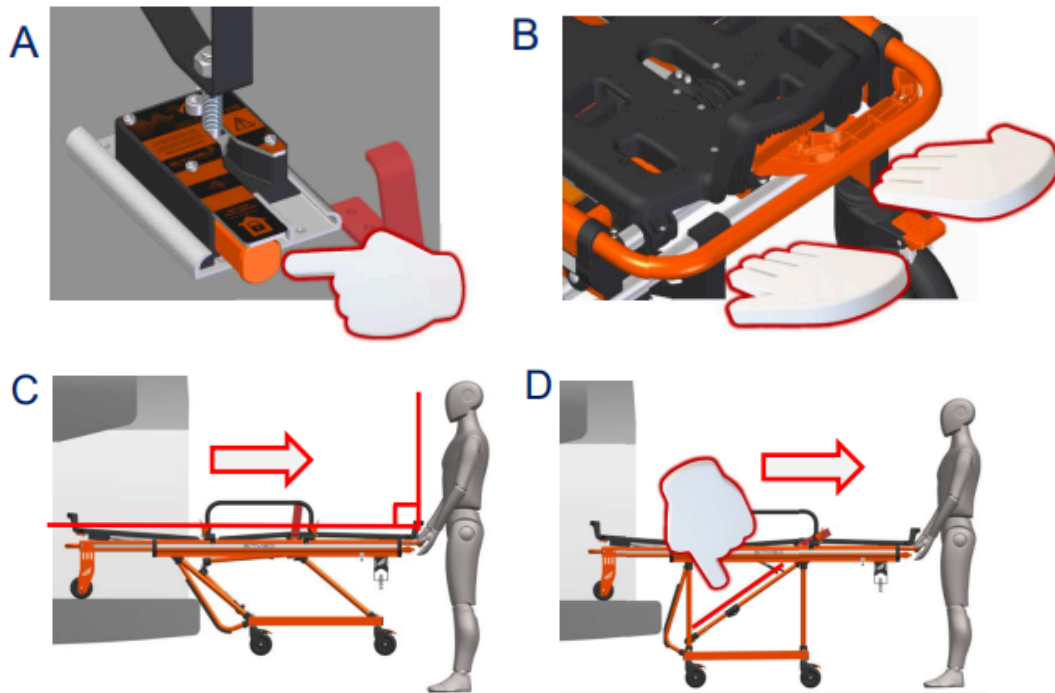
1. Observe that the lower structure of the stretcher does not exceed the bumper limit (A).
2. Ensure that the air wheels are completely inside the cargo compartment and in a safe condition (A).
3. OPERATOR 1: Hold the stretcher by the rear arch level with the vehicle floor (B), then lift and activate the retraction lever to release the lower support assembly / trolley (C).
4. OPERATOR 2: Move the lower support / trolley assembly to the upper structure / ballast (D), and help push the stretcher into the vehicle (E) (F).
5. Position it in the locking system (G) and perform the coupling (H).
6. Check if the pin is correctly engaged in the anchoring system and if the stretcher is secure for transport.
7. The stretcher has retraction levers on both sides to allow the additional operator to open and close them (I)



3.13 - AMBULANCE UNLOADING

For an easy and safe removal of the stretcher, the ambulance should preferably be located on a flat surface to allow for proper articulation of the stretcher legs.

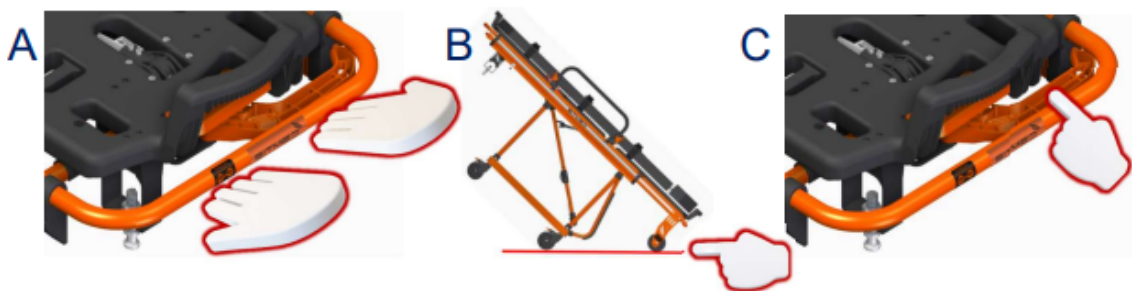
1. To remove the stretcher from the ambulance, activate the rear anchoring system button, releasing the locking pin (A).
2. OPERATOR 1: Hold the stretcher by the rear arch (B) and gently pull it out of the ambulance, leaving the front wheels of the trolley on the floor (C).
3. OPERATOR 2: Lift the lower support assembly/stretcher trolley (D).
4. OPERATOR 1 and 2: Remove the stretcher from the vehicle, keeping the aerial axis on the floor (E).
5. OPERATOR 1 and 2: Ensure that the lower support assembly/trolley limit has passed the bumper limit, to allow for opening (E).
6. OPERATOR 1: Hold the bed in a horizontal position, parallel to the vehicle floor, and activate the retraction lever (F).
7. OPERATOR 2: Move the lower support assembly/trolley to the ground (G).
8. OPERATOR 1 and 2: Release the retraction lever and ensure that the opening system is locked/secured.
9. OPERATOR 1 and 2: Check if the mobile tube of the aerial axis is resting on the safety lock, and if so, move the stretcher 30 cm into the vehicle.
10. OPERATOR 2: Release the safety lock by moving the mobile crossbar of the aerial axis until it passes the fixed lock on the vehicle floor (H).
11. OPERATOR 1 and 2: Remove the stretcher from the vehicle.
12. The stretcher has retraction levers on both sides to allow for opening and closing operation by an additional operator (I).



3.14 - LOWERING THE STRETCHER WITHOUT THE PATIENT

Before lowering the stretcher, find a flat and stable place where it is possible to perform the following operations.

1. Ensure that the side rails are raised, otherwise they may be damaged.
2. Position an operator at each end (A) or on the sides (B).
3. Hold the frame of the base and lift the weight of the stretcher, then activate one of the rear or side retraction levers.
4. Move the stretcher down smoothly until it is closed.
5. For the transport of obese patients, request additional assistance from operators.



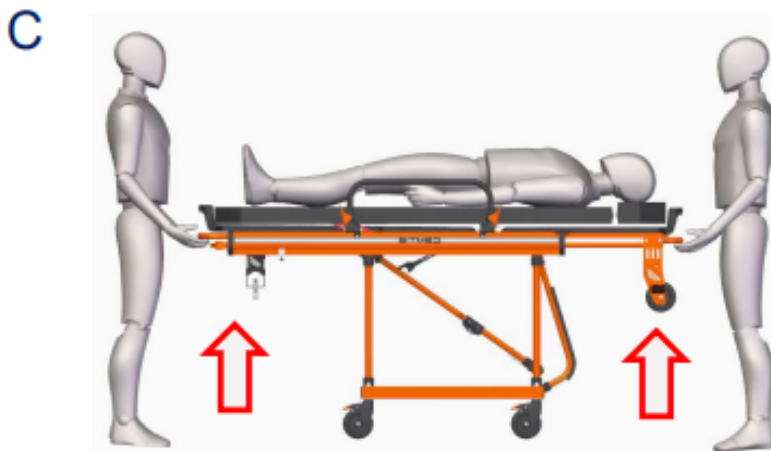
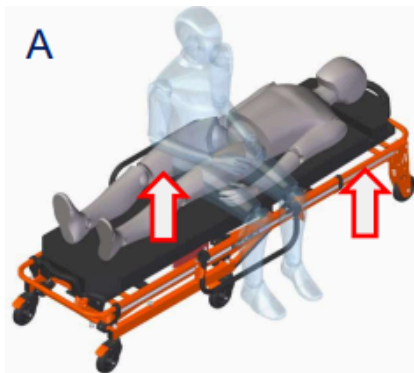
3.15 - PATIENT TRANSFER

Before moving the patient, check if the initial medical assessments have been made. To move the patient on the stretcher, evaluate the environment, equipment and patient, and request help if necessary. Ensure that the operators are qualified and trained before using the stretcher. Always use the safety belts when lifting, 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 collaborate during the transfer to the stretcher, ensuring they are aware of the risks.
 6. The patient can sit in the central region of the stretcher and then lie down (A).
 7. If the patient is immobilized or unable to collaborate, the operators must position themselves at the extremities, head and feet, and perform the transfer (B).
 8. To raise the stretcher, the operators must position themselves at the extremities (C) or on the sides of the stretcher (D).
 9. Activate one of the retraction levers (E) and perform the lifting movement.
 10. Before releasing the support of the stretcher, make sure the opening lock has occurred.
 11. Note: For obese patients, request additional assistance as indicated in section 3.16.
- Be sure to follow these guidelines to ensure a safe and appropriate transfer of the patient to the stretcher.

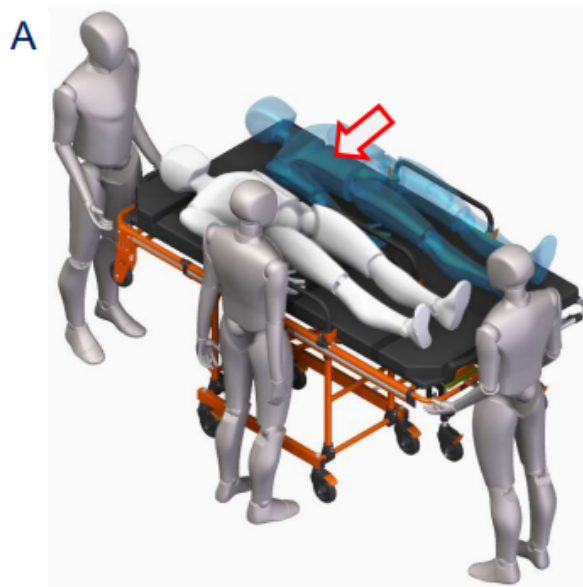


3.15.2 - TRANSFER OF THE HIGH-LEVEL PATIENT

To transfer the patient from a hospital stretcher to the Sitmed transport stretcher or from the transport stretcher to the hospital bed, additional assistance is required to perform the operation.

Follow these steps for the transfer:

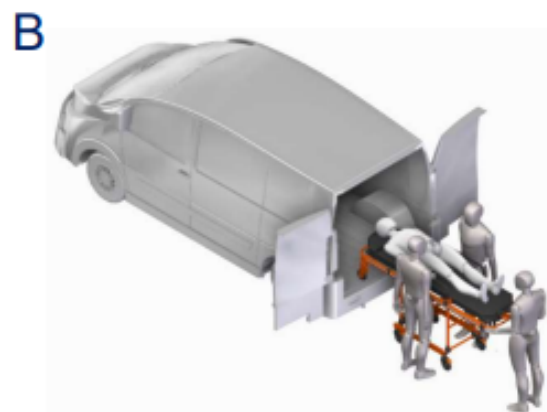
1. Engage the wheel brakes of the stretcher before moving the patient to the bed and remember to unlock them when necessary.
2. Position the stretcher next to the bed, with one professional at each end of the stretcher (head and feet) and one professional on the side to assist in the transfer of the patient and prevent the stretcher from moving during the operation (A).
3. Ensure that the hospital bed is locked before proceeding with the transfer of the patient. Note: For obese patients, it is recommended to request additional assistance as indicated in section 3.16.
4. By following these guidelines, you can safely and efficiently transfer the patient.



3.16 - TRANSPORT OF OBESE PATIENT

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 of the vehicle (B).

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



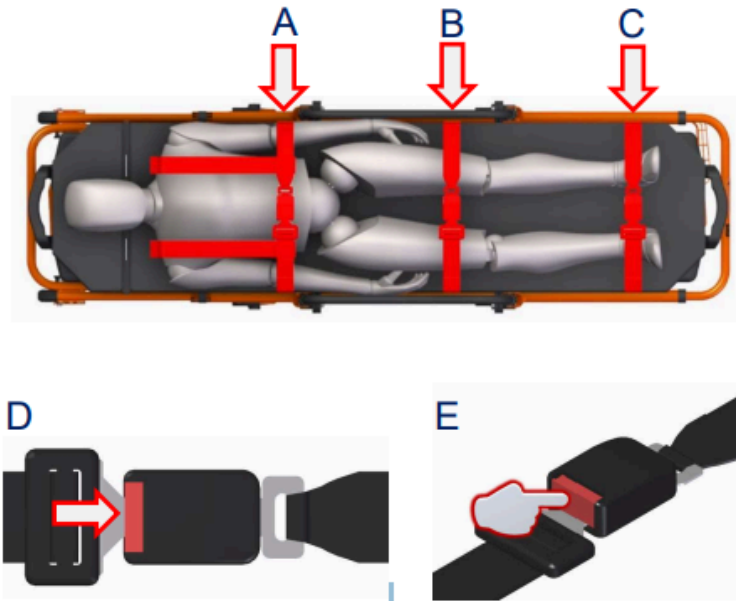
3.17 - PATIENT IMMOBILIZATION

The Sitmed stretchers were designed with the safety of both the patient and the operator in mind. They are equipped with quick-release immobilization belts along the bed, with the aim of reducing the patient's movements during transport, ensuring their safety.

It is essential not to perform any action of lowering, raising or transporting the patient without using all the safety belts.

The safety belts have different purposes: the 4-point belt is used to immobilize the chest (A), the 2-point belt for the pelvic region (B) and another 2-point belt for the ankles (C).

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



3.18 - WHEEL BRAKE

The stretcher's caster has a wheel locking system to prevent the stretcher from moving unintentionally and on inclined surfaces (A). To activate the wheel brake, press the area with the "ON" description until the lock clicks (B). To release the wheel lock, press the brake in the area with the "OFF" description (C). Note: Always use the wheel brakes when stopping the stretcher and release them before moving it.



4 - MAINTENANCE

The Pantographic Stretcher requires regular maintenance to ensure its proper functioning and extend its lifespan. Periodically check the components, such as wheels, brakes, seatbelts, and fastening systems, immediately replacing any damaged or worn-out parts. Additionally, it is essential for the owner or responsible party to perform periodic inspections and maintenance on the equipment due to its joints and moving mechanisms, to ensure perfect functionality, safety, and extended lifespan. Sitmed recommends bi-annual maintenance.

The inspections and maintenance should cover the following points:

- Verify if there is any damage to the structure, parts or joints.
- Evaluate any loose or worn-out components or parts due to use.
- Ensure that the screws and nuts are tightened and in their proper places.
- Confirm that the casters rotate without any 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 inclination levels.
- Ensure that the mattress is sanitized and free of perforations.
- Confirm that the seatbelts are sanitized, securely attached to the equipment, and functioning properly.
- Verify the operation of the retraction systems to fold the legs.
- Ensure that the stretcher's aerial wheels are at the same height as the ambulance floor.
- Verify the correct entry and exit of the stretcher into the ambulance.
- Confirm the firmness of the locking systems and that the stretcher connects perfectly.

During an inspection, if any damage or other strange behavior is detected, the equipment must be immediately taken out of service until maintenance is performed.

It is forbidden to tamper with the structure of the equipment or perform maintenance using components such as iron, wires, ropes, nails, tapes, bandages, and/or any other items that are not original to the stretcher.

For maintenance, Sitmed suggests contacting their 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's warranty.

5 - WARRANTY AND TECHNICAL ASSISTANCE

5.1 - WARRANTY:

SITMED ensures 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 *equipment invoice.

This warranty will be void if the equipment suffers any damage caused by accident, natural agents, use in disagreement with this instruction manual, shows signs of violation in its structure, lack of a serial number, adjustment or repair carried out by an unauthorized person, or by a fortuitous event or force majeure.

Other items acquired from third parties for inclusion and formatting of the product, such as: Mattress, seat belts, wheels and casters have a limited warranty period of 12 months, with the validity period also counted from the date of issuance of the equipment invoice.

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

5.2 - TECHNICAL ASSISTANCE

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

The owner residing in another location will be responsible for the expenses and risks of round-trip transportation of the equipment.

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

There is ownership of the equipment and the warranty period through the serial number and the *equipment purchase invoice.

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



NUMBER ONE
IN LIFE TRANSPORT

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