TECHNIMOUNT
EMS®

SAFETY ARM SYSTEM® 500

USER MANUAL

SAE J3043 TESTED 26G TECHNIMOUNT ENGINEERING

SAFETY AND FLEXIBILITY
WHERE IT MATTERS MOST

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For any issues with your Technimount product, its components, or for any technical questions during the installation, operation, or maintenance, please contact Technical Support at techsupport@technimount.com.

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1. General Mentions and Considerations

This user manual includes detailed product information, standards and guidelines to assist the administrator/ manager/supervisor and biomedical technician (or equivalent) with the unpacking, assembling (when indicated), maintenance, training and skills assessment of the EMS and clinical personnel, as well as specific user-related information to safely and effectively operate the Safety Arm System 500 (hereinafter called SAS 500).

Please read the user manual thoroughly to fully assess, comprehend, then relay its content to EMS and clinical personnel during training, to warn them of any potential danger of its abuse, how to safely use the product and provide a safe environment for patients as well as themselves. Your established internal protocols should be updated to include the Technimount product(s) standards, guidelines, requirements and safety recommendations included within this documentation. The user manual should remain available to users when needed and relayed if the product is subsequently sold.

NOTE : Technimount continually seeks advancements in product design and quality. While the user manual contains the most updated product information available at the time of printing, it may contain minor differences from the current version, including image references. For more information, please contact Technical Support at techsupport@technimount.com.

NOTE : Technimount reserves the right to change part numbers and products without notice. Please contact Customer Service at customerservice@technimount.com to ensure product options and availability.

1.1. Intended Use

The SAS 500 is a mounting system designed to aid trained EMS and clinical personnel secure and transport medical devices and accessories during ground emergency medical services and critical care transport.

1.2. User Competency

To safely operate the SAS 500, personnel must have the required skill level to comply with their function and level of interaction with the mounting system. Training should be given to EMS and clinical personnel prior to them using the SAS 500. Refer to the « Skills Assessment of the EMS and Clinical Personnel » section on page 27 to evaluate their competency.

Indicates who the content is intended for and the level of competency required. The definitions of the three (3) levels of competency are specified below.

- **Competent (trained EMS and clinical personnel):** Has received the required training, is sufficiently knowledgeable to safely operate the product and have passed the skills assessment (refer to the « Skills Assessment of the EMS and Clinical Personnel » section on page 27).

  NOTE : Any member of the EMS and clinical personnel who has not received the required training and lacks the knowledge needed to safely operate the mounting system must not use the product.

- **Proficient (administrator/manager/supervisor):** Has in-depth knowledge and product comprehension, and is familiar with standards and guidelines. Skilled to train the EMS and clinical personnel on how to safely use the product.
- **Advanced (biomedical technician or equivalent):** Has extensive mechanical experience. Skilled to perform the unpacking, assembly, safety checks and condition-based maintenance procedures as detailed herein, or the basic troubleshooting, upgrade and/or replacement procedures if applicable.

1.3. Warranties

1.3.1. Warranty Policy

This statement constitutes Technimount's entire warranty policy with regards to Technimount products. Technimount makes no other warranty or representation, neither expressed nor implied, except as stated herein. There is no warranty of merchantability or warranty of fitness for any particular purpose. Under no circumstances will Technimount be held liable hereunder for incidental or consequential damages, arising from or in any manner, related to sales or use of any such product.

Technimount E.M.S. Holding Inc. guarantees to the original "Purchaser" of the "Product" with which this "Limited warranty" is included, that the product will be free from "Defects" in workmanship and materials under normal use for a "Warranty period" of one (1) year from the product purchase date by the purchaser. During the warranty period, the product will be repaired or replaced according to the "Limited warranty" without charge to the purchaser for parts or labor. The parts and product may be repaired or replaced with new or refurbished parts or products. Herein this Limited Warranty, "Refurbished" means parts and products which have been returned to the factory, specifically. If the product is repaired or replaced within the warranty period, the greater of the remaining warranty period will apply, or three (3) months from the date of repair or replacement. If the product is repaired or replaced after the warranty period has expired, the warranty period for the repair or replacement will expire three (3) months after the repair or replacement date.

1.3.2. Limited Warranty

Technimount products are intended to secure in place medical devices only in the case of a single crash impact, and must thereafter be immediately replaced. If the end user uses a Technimount product following a crash impact, it is at the end user's own risk, and Technimount will not be held liable.

The limited warranty does not apply to normal wear that could result from normal use. It does not apply when the product or any of its components have been disassembled or repaired by someone not authorized by "Technimount". It does not cover repair or the replacement of any product or part thereof damaged by neglect, misuse, moisture, liquids, exposure to heat, accidents, abuse, and non-compliance with the instructions for installation and use provided with the product. It does not cover physical damage to the surface of the product. The decision to repair, replace or refuse the coverage is final and at the sole discretion of Technimount, without any compensation or obligation from Technimount. The product, defined as a "mounting system", is specifically designed to secure and transport medical devices and accessories during ground emergency medical services and critical care transport, and should only be used to fulfill this requirement. Any other use will void the warranty and Technimount shall not be held liable on any claim if the product has been modified or adapted for use.

1.3.3. International Warranty Clause

This warranty abides by the Canadian domestic policy. Warranty outside Canada may vary by country. Please contact Customer Service at customerservice@technimount.com for more information.

1.3.4. User Liability

The purchaser and administrator are responsible to validate regulations and standards for safety in their region, to comply with applicable safety regulations. Technimount is not responsible to inform the purchaser or the administrator of any applicable legislation for safety in their area.

The administrator is responsible for providing proper training to any personnel who will install, operate and perform maintenance on Technimount products.

1.4. Claims

1.4.1. Damaged or Defective Merchandise

ICC Regulations require that claims for damaged merchandise must be made with the carrier within fifteen (15) days of the reception date. **Do not accept** damaged merchandise unless such damage is noted on the delivery receipt at the time of reception. Upon prompt notification, Technimount will file a freight claim with the appropriate carrier for damages incurred. Claims are limited in amount to the actual replacement cost. If the claim has not been received by Technimount within the fifteen (15) day period following the date of delivery, or the damage was not noted on the delivery receipt at the time of receipt, the customer will be responsible for the full payment of the original invoice.

Claims for any short or broken merchandise must be made within thirty (30) days of invoicing. For details, refer to the claim process or contact Customer Service at customerservice@technimount.com.

1.4.2. Return Policy

Technimount products may be returned up to sixty (60) days from the reception date, if:

- The received product does not match what was originally ordered.
- The product does not meet the Technimount technical sheet specifications.
- The product is not compatible with the system on which it was intended to be installed on.

To return a Technimount product,

- A Return of Merchandise Authorized (RMA) must be requested and approved by Technimount prior to returning the product.
- Products must be returned undamaged and in its original packaging, appropriately identified with the approved RMA number. Returns will not be approved on a modified or damaged item.
- Charges may apply if the package received is damaged or items are missing.
- Purchaser is responsible for a restocking fee (refer to « Table 1: Restocking fees » table on page 8).

Table 1: Restocking fees

RESTOCKING FEES	
Prior to thirty (30) days	10%
Prior to forty-five (45) days	25%
Prior to sixty (60) days	30%

For any manufacturing defect, refer to the conditions within the warranty policy or contact Customer Service at customerservice@technimount.com for additional information.

1.4.3. Return of Material Authorization (RMA)

The Technimount Customer Service department is responsible for all merchandise returns and will provide a Return of Merchandise Authorization (RMA) number, upon approval. The RMA must be printed and placed on the returned merchandise. Technimount reserves the right to charge shipping and restocking fees (refer to « Table 1: Restocking fees ») for the returned items. Special, modified, or discontinued items are not subject to returns.

1.4.4. Claim Process

Upon reception of the returned merchandise, a thorough inspection will be performed. If the merchandise is compliant with the return policy or it is found that the product is defective, Technimount will take corrective actions and close the claim. If, however, it is found that the product is not defective, but rather misused or abused, the product will not be covered by the warranty. Details of our findings and conclusions will be provided shortly thereafter. To submit a claim, contact Customer Service at customerservice@technimount.com to obtain a Return of Material Authorization (RMA) form and return instructions.

2. General Safety Guidelines

The content in this section is intended for personnel who have a competent, proficient or advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

Pictograms, safety symbols and labels are used to alert the user to a potentially hazardous situation, which, if not avoided, may endanger the patients or the EMS and clinical personnel, and/or damage the product. This includes the special care necessary for the safe and effective use of the Technimount product to avoid damage that may occur from use or misuse.

The terms "Warning" and "Caution" herein carry special meaning and should be carefully reviewed before reading the « Safety Measures » section on page 11.

WARNING – Indicates a hazardous situation that, if not avoided, could result in death or serious injury, and/or damage the product.

CAUTION – Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury, and/or damage the product.

2.1. Symbols and Definitions

WARNING – Hand Crush/Pinch Point

Indicates an area where mechanical components could move toward each other and might result in a potential crush/pinch hazard.

WARNING – Risk of Injury

Indicates when a misuse of the Technimount product could result in injuries to the patients or EMS and clinical personnel, and/or damage to the product.

CAUTION – Safe Practice

Alerts the reader to pay special attention to the recommendations and methods outlining how to safely operate the product to minimize risks to the patients, EMS and clinical personnel, and/or to the product.

CAUTION – Safe Handling and Operation

Alerts the reader to pay special attention to the recommendations for safe use of the product, and of potentially hazardous situations that could result in minor injuries to the patients or EMS and clinical personnel. This includes the special care necessary for the safe and effective use of the product to avoid damage that may occur from use or misuse.

CAUTION – Safe Working Load (SWL)/Load Balance

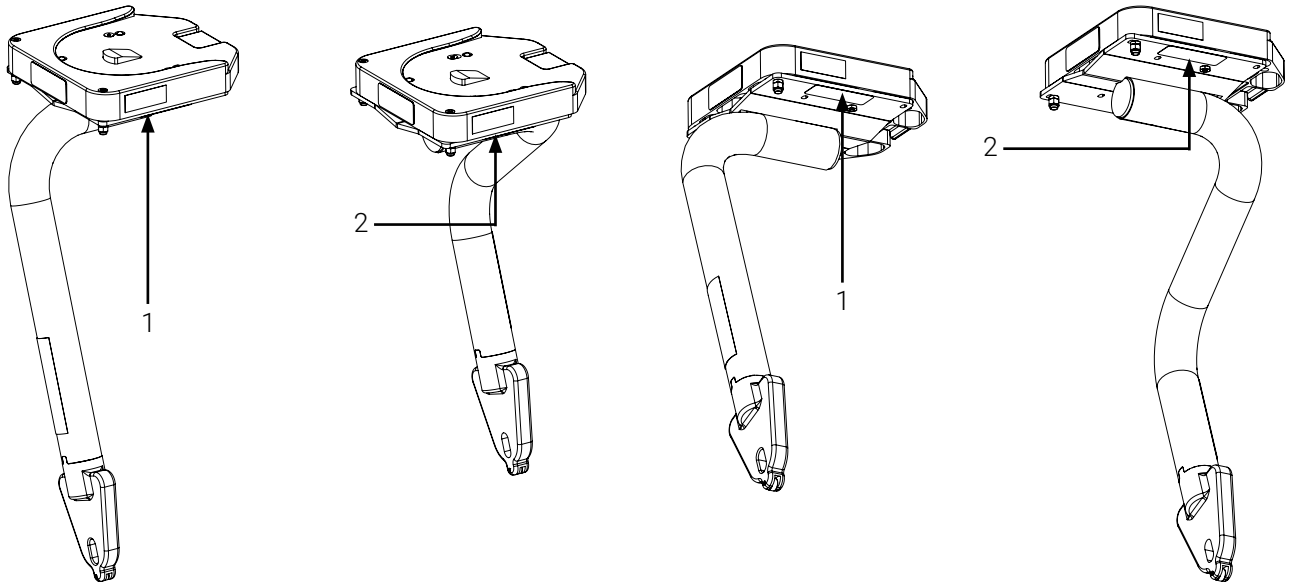
Indicates the maximum charge for a safe use of the product.

CAUTION – Follow Instructions for Use

Call for action. Reminds the reader to consult the user manual for information.

2.2. Labels

Labelling on the surface of the Technimount product, quickly identify potential risks and provides information to the user. A manufacturing label, including the serial numbers and the safe working load specifications (Figure 1), can be seen on the Technimount product.



1. Manufacturing label (Standard model)
2. Manufacturing label (Angular model)

Figure 1: Location of the manufacturing label

2.3. Safety Measures

Carefully read all the safety measures herein before operating the Technimount product, and always abide by all the safety guidelines identified within this document.

Specific safety measures relating to the safety checks and the conditioned-based maintenance, intended for personnel who have an advanced level of competency, can be found in the « The SAS 500 assembly is complete. » section on page 33.

WARNING – Unauthorized Systems

- **Under no circumstances** should the SAS 500 be installed on, connected to, or used in combination with any third party/competitor mounting system, base, bracket, or similar equipment, unless Technimount has provided a formal written confirmation of compatibility for the specific configuration.
- The SAS 500 was specifically engineered to be used with the compatible Technimount clamp blocks and base. Using any other mounting systems may cause the equipment to fall, operate unpredictably, or fail, resulting in serious injury to the patients or to the EMS and clinical personnel. Refer to the « Technical Specifications » section on page 14 if needed.
- The SAS 500 was engineered and tested exclusively for use with specific authorized and compatible Technimount components and systems. Using any unauthorized and/or incompatible system may cause the equipment to fall, operate unpredictably, or fail, resulting in serious injury to the patients or to the EMS and clinical personnel.
- Technimount assumes no responsibility for any damage, malfunction, or injury arising from use of unauthorized or incompatible systems. Using any unauthorized and/or incompatible system may result in non-compliance with the applicable safety standards and will immediately void all warranties and liability coverage.
- Technimount products are intended for use only within their defined applications, including but not limited to, emergency medical services, critical care transport, and approved healthcare environments. Refer to the « Technical Specifications » section on page 14.
- Regulations and standards for safety are the sole responsibility of the end user. Ensure that your established internal protocols are updated and meet the technical specifications requirements herein (refer to the « Technical Specifications » section on page 14), as well as the local and regional compliance requirements before use.

WARNING – Proper Installation

- Improper installations and/or installations that haven't been inspected and approved by qualified personnel may cause the equipment to fall, operate unpredictably, or fail, resulting in serious injury to the patients or to the EMS and clinical personnel.
- Technimount assumes no responsibility for any damage, malfunction, or injury arising from improper installations and/or installations that haven't been inspected and approved according to these requirements.
- Follow the installation instructions as detailed in the « Assemble the SAS 500 » section on page 30 for a safe and reliable installation of your SAS 500, to avoid risks that may cause the equipment to fall, operate unpredictably, or fail, resulting in serious injury to the patients or to the EMS and clinical personnel.

WARNING – Hand Crush/Pinch Point

Do not put your hands/fingers near the triangular head when the SAS 500 is being installed/removed in/from the clamp block, to avoid risks of pinching, resulting in serious injury to the patients or to the EMS and clinical personnel. Refer to the clamp block User Manual if needed.

WARNING – Risk of Injury

- **Do not use** the SAS 500 for air emergency medical services and critical care transport. The mounting support should be used only for ground emergency medical services and critical care transport.
- **Do not use** the SAS 500 if there are any loose or missing screws, to avoid risks that may cause damage or the equipment to fall or operate unpredictably, resulting in serious injury to the patients or to the EMS and clinical personnel.
- Immediately stop using the SAS 500 if any serious incident occurs and inform authorized personnel, to contact the Technical Support at technicalsupport@technimount.com for a remedial action plan and to report the incident to the applicable regulatory agency.

CAUTION – Safe Handling and Operation

- Always ensure that the SAS 500 is correctly installed and secured in the clamp block before the stretcher moved and/or before installing the medical device, to avoid risks that may cause damage or the equipment to fall or operate unpredictably, resulting in serious injury to the patients or to the EMS and clinical personnel.
- Always ensure that the medical device's mounting bracket is correctly installed and secured in the SAS 500 before the stretcher moved, to avoid risks that may cause damage or the equipment to fall or operate unpredictably, resulting in serious injury to the patients or to the EMS and clinical personnel.
- Always remove the medical device before lowering or raising the SAS 500, to avoid risks that may cause damage or the equipment to fall or operate unpredictably, resulting in serious injury to the patients or to the EMS and clinical personnel.
- Always remove the medical device before removing the SAS 500 from the clamp block, to avoid risks that may cause damage or the equipment to fall or operate unpredictably, resulting in serious injury to the patients or to the EMS and clinical personnel.
- Always pay close attention **not to wedge** the power cords or tubing during the installation/removal of the mounting system, the mounting bracket and the medical device.

CAUTION – Safe Practice

- Always pay close attention to the safety mechanism of the SAS 500, to avoid risks that may cause damage or the equipment to fall or operate unpredictably, resulting in serious injury to the patients or to the EMS and clinical personnel. Follow the recommended maintenance plan and its guidelines, as described in this user manual.
- Always practice safely operating the SAS 500 until the manipulations have been perfected, before use with patients. Improper use of the mounting system may cause damage or the equipment to fall or operate unpredictably, resulting in serious injury to the patients or to the EMS and clinical personnel.

CAUTION – Safe Working Load (SWL)/Load Balance

- **Do not overload or exceed** the total Safe Working Load (SWL) of the SAS 500, to avoid tipping incidents or risks of collapsing. Refer to the « Technical Specifications » section on page 14 for the SWL specifications.
- The Safe Working Load (SWL) of the SAS 500 **does not override** the maximum load capacity of another Technimount product or system, neither those of the medical devices, accessories and/or medical equipment accessories that could be placed in bags and drawers for example. To comply with the SWL specification, the entire configuration should be taken into account. Refer to the user documentation of each product applicable to your specific configuration for specifications.

CAUTION – Follow the Instruction for Use

Always refer to your established internal protocols, as well as read and abide by the safety guidelines and instructions provided in the user documentation of the SAS 500, the clamp block, the Standard Surface Base, the mounting bracket, the medical device and the stretcher.

3. Technical Specifications

The content in this section is intended for personnel who have a competent, proficient or advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

Product Name	Safety Arm System 500
Description	Mounting system designed to secure and transport medical devices and accessories during ground emergency medical services and critical care transport
Product Codes	- Safety Arm System 500 (Patient right, standard) – 400-20-UN and Standard Surface Base – 100-20-UN - Safety Arm System 500 (Patient left, standard) – 400-20-UN-LFS and Safety Arm System 500 – 100-20-UN - Safety Arm System 500 (Patient right, angular) – 400-20-UN-ANG and Standard Surface Base – 100-20-UN - Safety Arm System 500 (Patient left, angular) – 400-20-UN-LFS-ANG and Standard Surface Base – 100-20-UN
Operating Environment	EMS/CCT (ground)
Compliance	- Tested in compliance with SAE J3043: 2025 - Tested in compliance with AMD-028: 2024
Expected Service Life	5 years
Compatible Mounting Base	Standard Surface Base
Compatible Stretchers	- Stryker Power-Pro XT, model 6500-6506 - Stryker MX-PRO R3 - Stryker Power-PRO 2 stretcher - Stryker Performance-PRO XT, model 6085-6068
Compatible Mounting Systems	- PP2 Clamp Block - PPXT FQS Clamp block - MXP Clamp Block - IV Pro Adapter 2-SMDT
Compatible Mounting Brackets	Technimount Bracket Pro Series mounting brackets with standard bottom discs
Dimensions (W X D X H) *The dimension specifications include the Standard Surface Base – 100-20-UN*	-
Weight *The weight specifications include the Standard Surface Base – 100-20-UN*	- Safety Arm System 500 – 400-20-UN and Safety Arm System 500 – 400-20-UN-LFS: 2.54 kg (5.6 lb) - Safety Arm System 500 – 400-20-UN-ANG and Safety Arm System 500 – 400-20-UN-LFS-ANG: 2.62 kg (5.78 lb)
Composition	Aluminum and stainless steel

Total Safe Working Load (SWL)	30 lb (13.61 kg)
Operating Temperature	- 35° C to 45° C (- 31° F to 113° F)
Tested and Approved Cleaning Solutions	- Oxivir, 5% Hydrogen Peroxide with Peracetic Acid (AHP) - Lavo 12, 10 000 ppm Sodium Hypochlorite - TNT-100, 5% Quaternary Ammonium Compound - Spectro-Sept, 5% Ethyl Alcohol - Spectrol, 5% EDTA salt
Options	- PP2 Clamp Block (Patient right) – 570-10-PRO2 - PP2 Clamp Block (Patient left) – 570-10-PRO2-LFS - PPXT FQS Clamp block (Patient right) – 500-10-PFXT - PPXT FQS Clamp block (Patient left) – 500-10-PFXT-LFS - MXP Clamp Block (Patient right) – 530-10-MXPR - MXP Clamp Block (Patient left) – 530-10-MXPR-LFS

4. Orientation Illustrations

The content in this section is intended for personnel who have a competent, proficient or advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

NOTE : The orientations referenced herein are from the EMS and clinical personnel or clinical personnel standpoint, when facing the Stretcher Name.

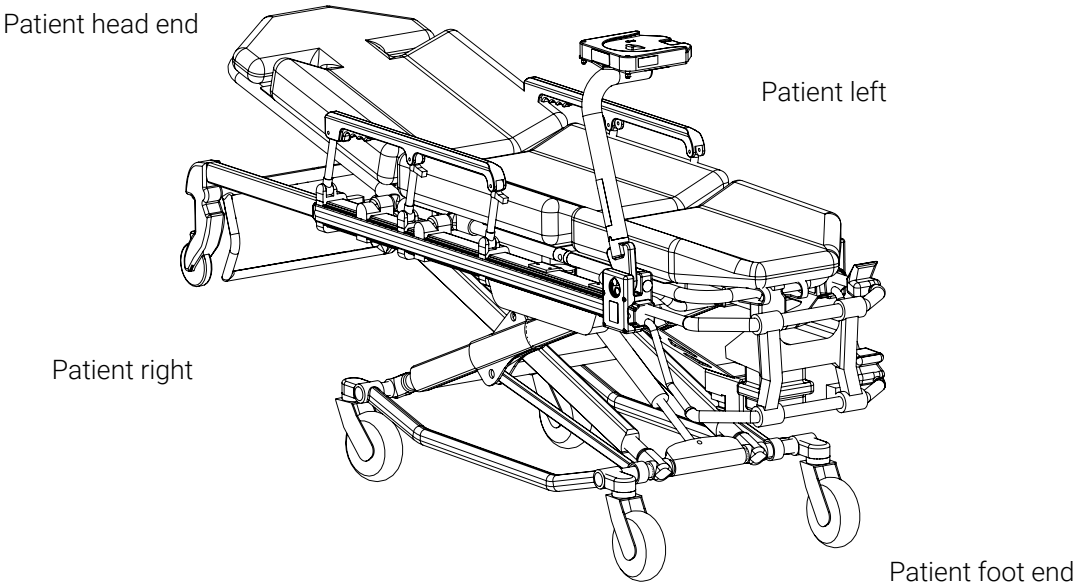


Figure 2: SAS 500 orientation illustration (Standard model)

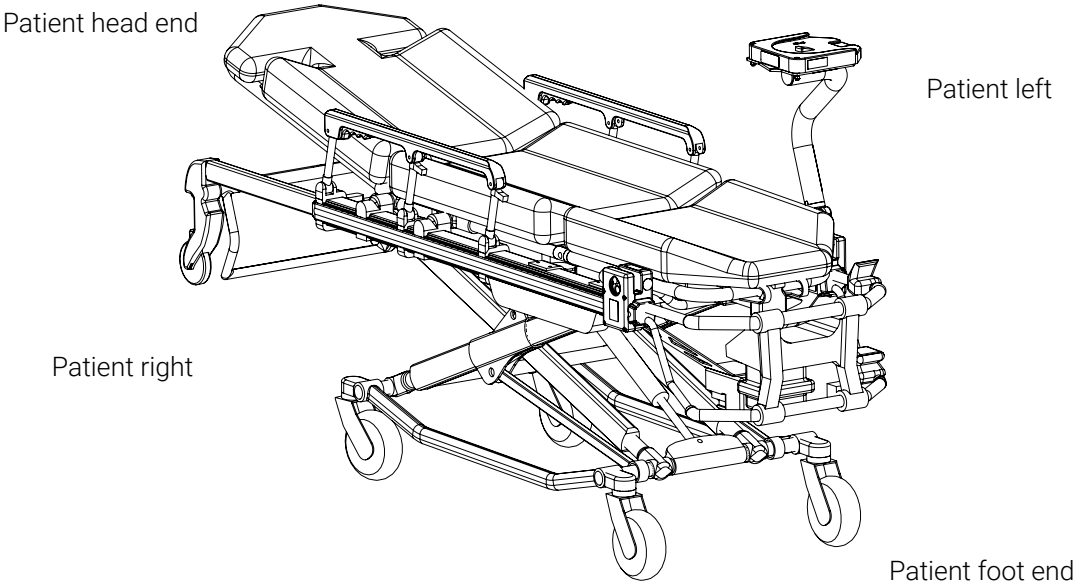
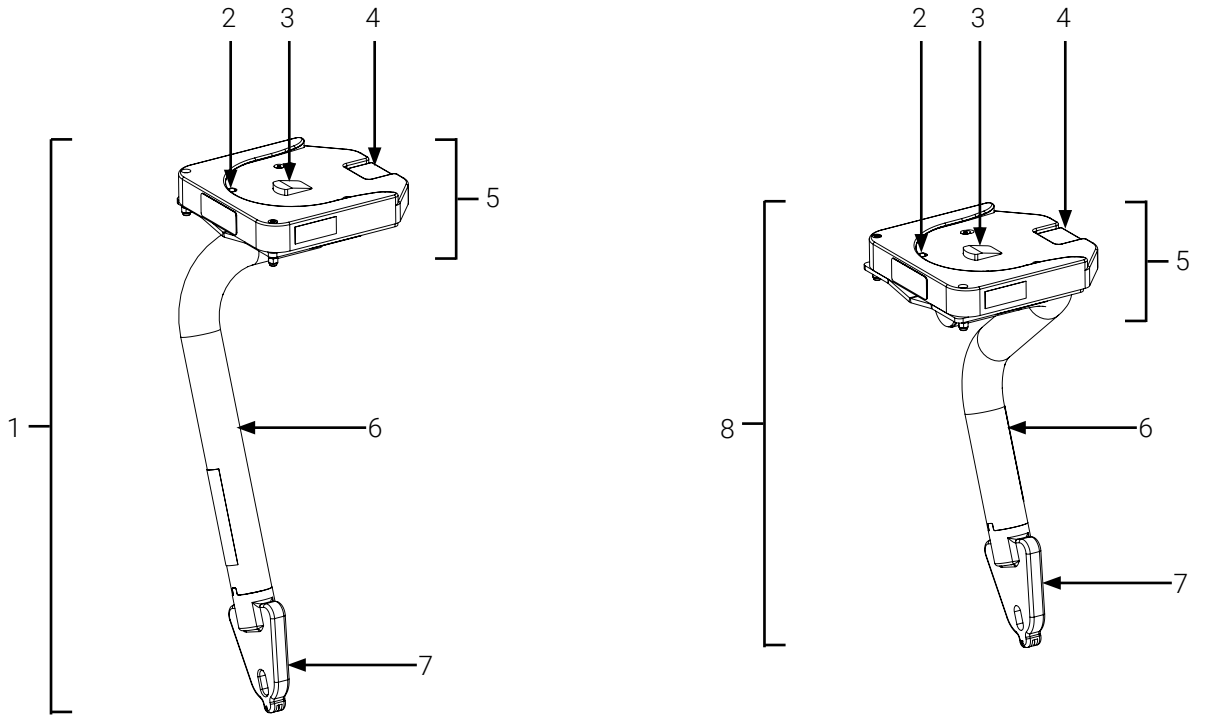


Figure 3: SAS 500 orientation illustration (Angular model)

5. Illustrated Parts

The content in this section is intended for personnel who have a competent, proficient or advanced level of competency. Refer to the « User Competency » section on page 5 if needed.



1. SAS 500 (Standard model)	5. Standard Surface Base
2. Plungers (4X)	6. Tubular arm
3. Locking mechanism	7. Triangular head
4. Quick release button	8. SAS 500 (Angular model)

Figure 4: SAS 500 components

6. Illustrated Dimensions

The content in this section is intended for personnel who have a competent, proficient or advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

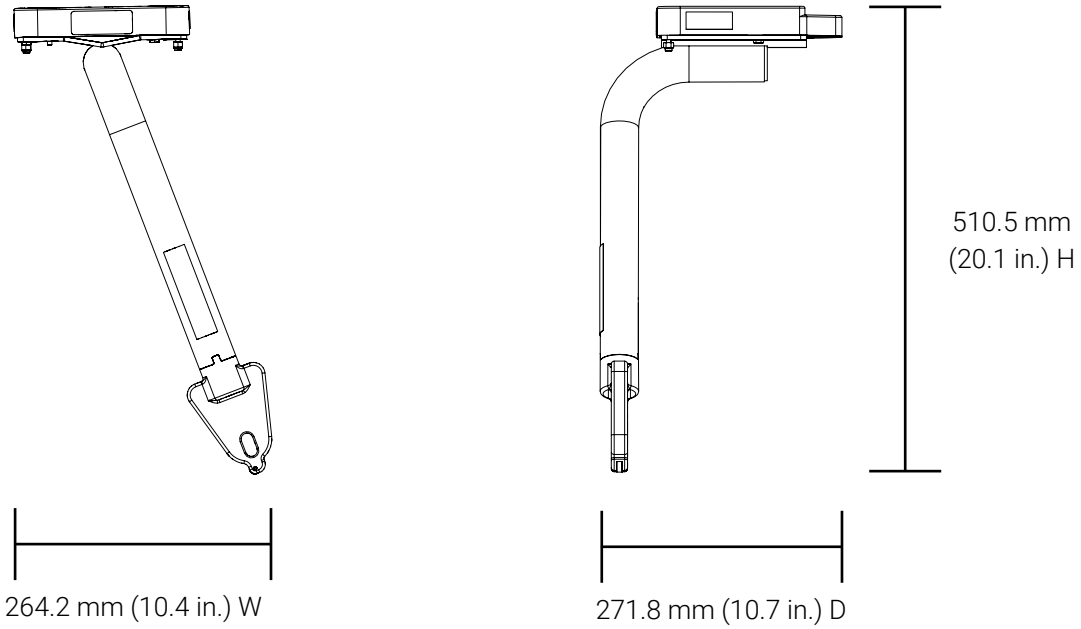


Figure 5: SAS 500 dimensions (Standard model)

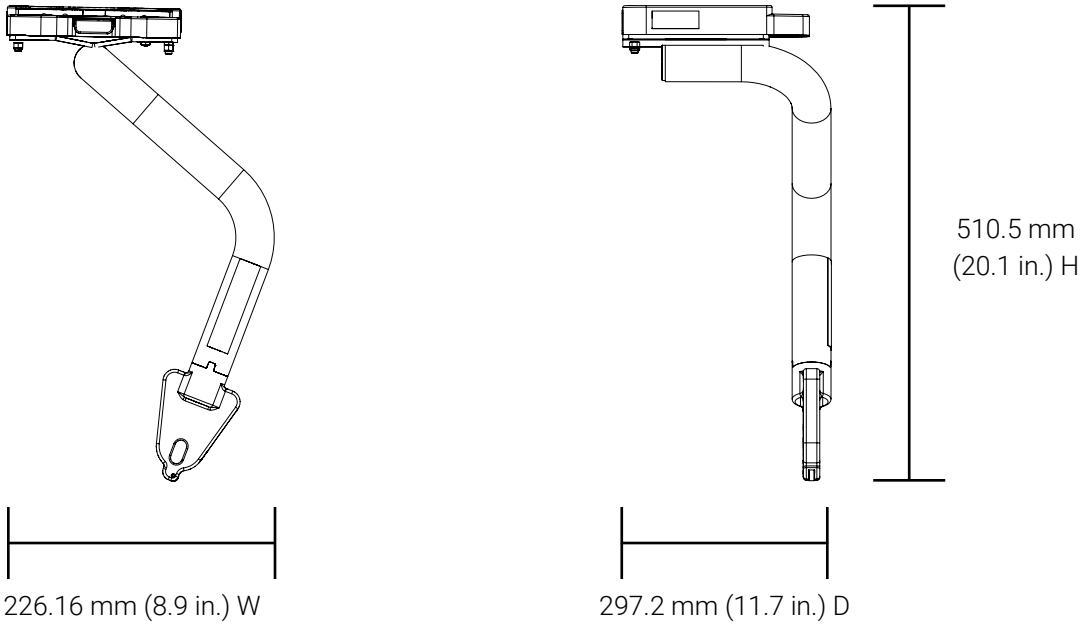


Figure 6: SAS 500 dimensions (Angular model)

7. Safety Mechanism

The content in this section is intended for personnel who have a competent, proficient or advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

The safety mechanism is composed of a locking mechanism and a quick release button. The safety mechanism activates when the standard bottom disc of the mounting bracket is inserted in the Standard Surface Base of the SAS 500. When the disc is pushed towards the back of the base, it slides on the integrated plungers until the locking mechanism inserts the cavity of the disc. When the click sound is heard, the base is locked and the mounting bracket is secured. The locking mechanism deactivated when the quick release button is pressed. Refer to the « Illustrated Parts » section on page 17 and the « Technical Specifications » section on page 14 for the compatibilities if needed.

- **To lock** the mounting bracket, align and insert the standard bottom disc of the bracket in the Standard Surface Base horizontally until your hear the click sound (Figure 7 A).
- **To unlock** the mounting bracket, press and hold the quick release button located at the front of the base, then pull on the bracket horizontally until the standard bottom disc is out of the base (Figure 7 B). Release the quick release button.

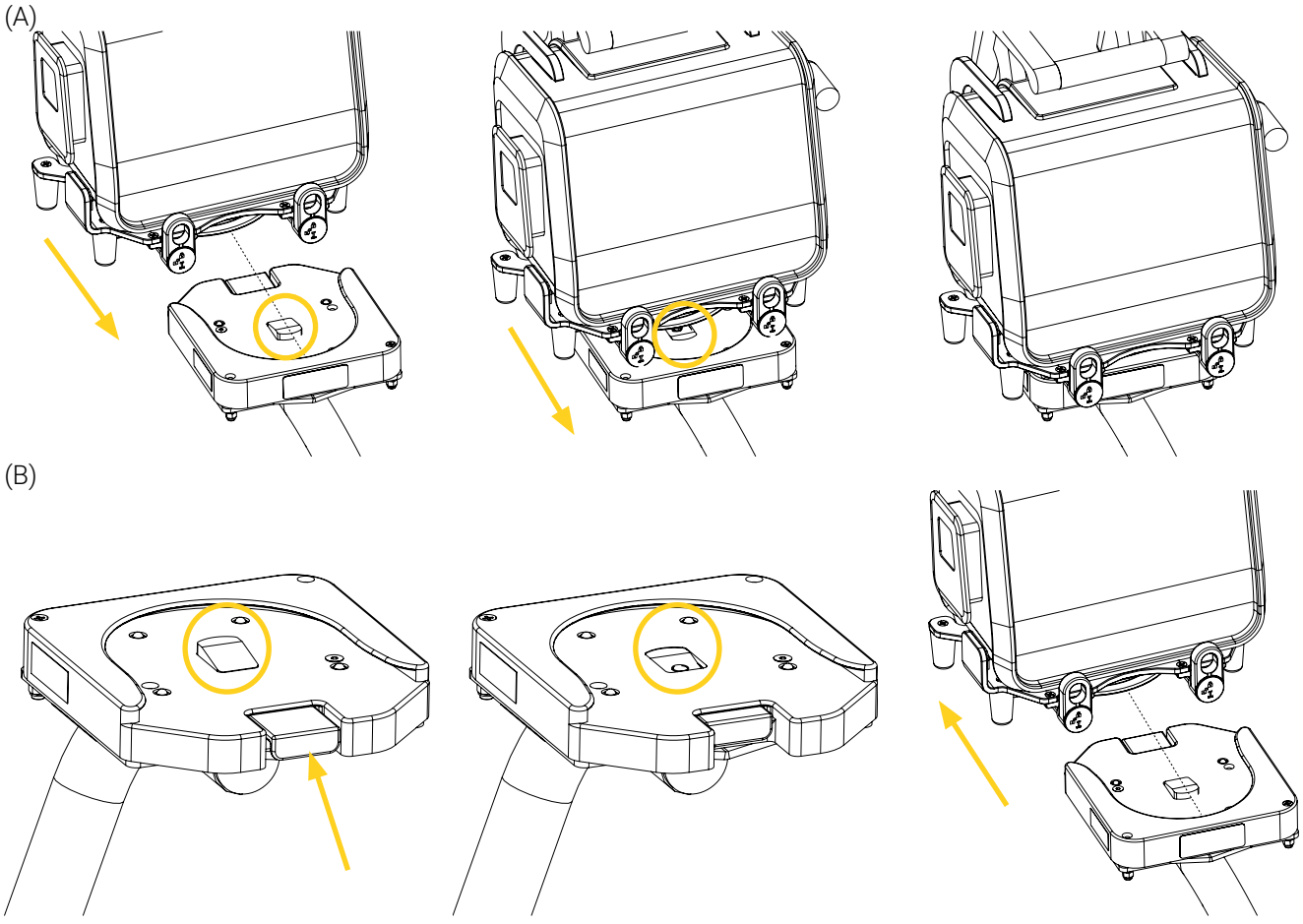


Figure 7: Locking/unlocking the mounting bracket on the SAS 500

8. Operate the SAS 500

The content in this section is intended for personnel who have a competent, proficient or advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

NOTE : The illustration herein are for user-comprehension purposes and may differ from your actual configuration. The instructions apply to any compatible mounting system, mounting bracket and clamp block. Refer to their user documentation for the safety guidelines and safe use, if needed.

8.1. Install the SAS 500 in the Clamp Block

1. Pull the knob of the clamp block (Figure 8 A) and remove the lock pin using the finger ring (Figure 8 B).

(A) (B)

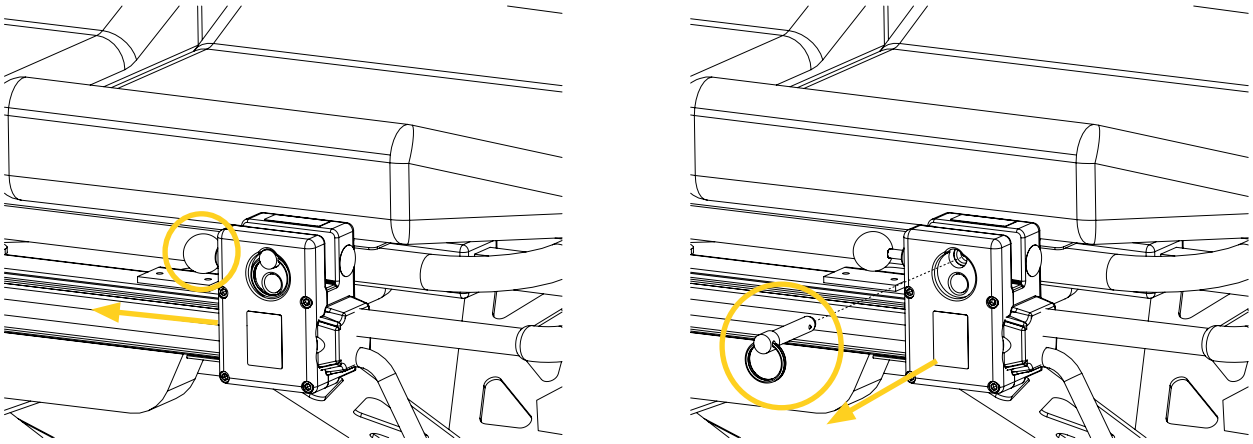


Figure 8: Removing the lock pin

2. Pull and hold the knob of the quick release mechanism of the clamp block (Figure 9 A), align and insert the triangular head of the SAS 500 in the clamp block (Figure 9 B), then release the knob (Figure 9 C).

(A) (B) (C)

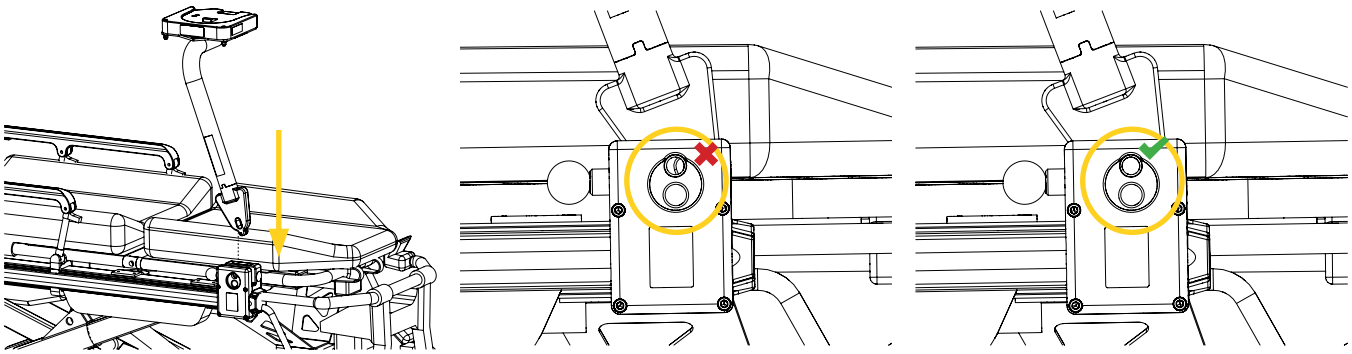


Figure 9: Installing the SAS 500 in the clamp block

3. Reinsert the lock pin in the clamp block (Figure 10 A) and push it until the finger ring is flat against the surface (Figure 10 B).

(A) (B)

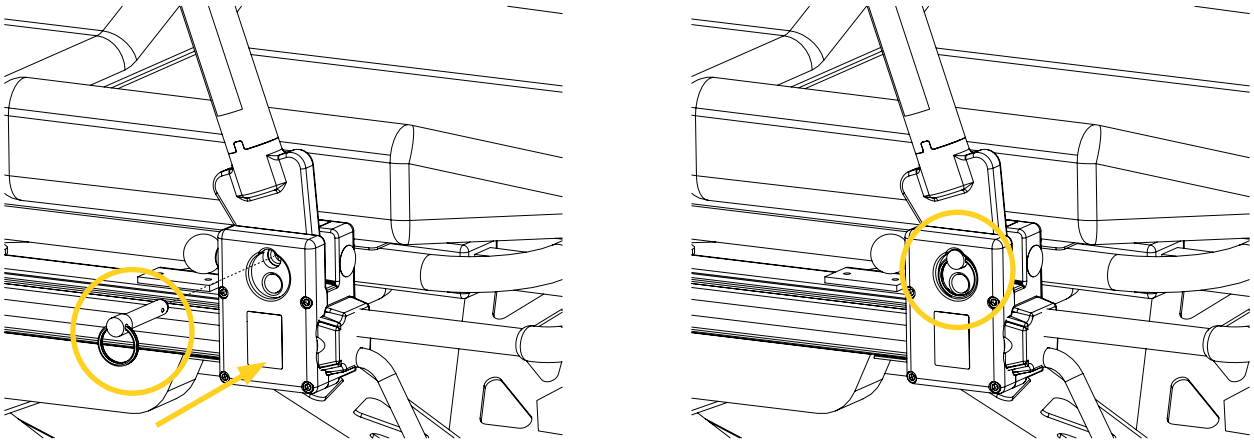


Figure 10: Reinserting the lock pin

4. Move the SAS 500 up and down and back and forth a few times to ensure it is locked and secured in the clamp block. If the SAS 500 stays in the clamp block after the verification, it is locked and secured.

The installation of the SAS 500 in the clamp block is complete.

8.2. Remove the SAS 500 from the Clamp Block

1. Ensure that the medical device has been removed from the SAS 500. Refer to the « Remove the Medical Device from the SAS 500 » section on page 26 if needed.
2. Remove the lock pin of the clamp block using the finger ring (Figure 11), then set it aside momentarily.

(A) (B)

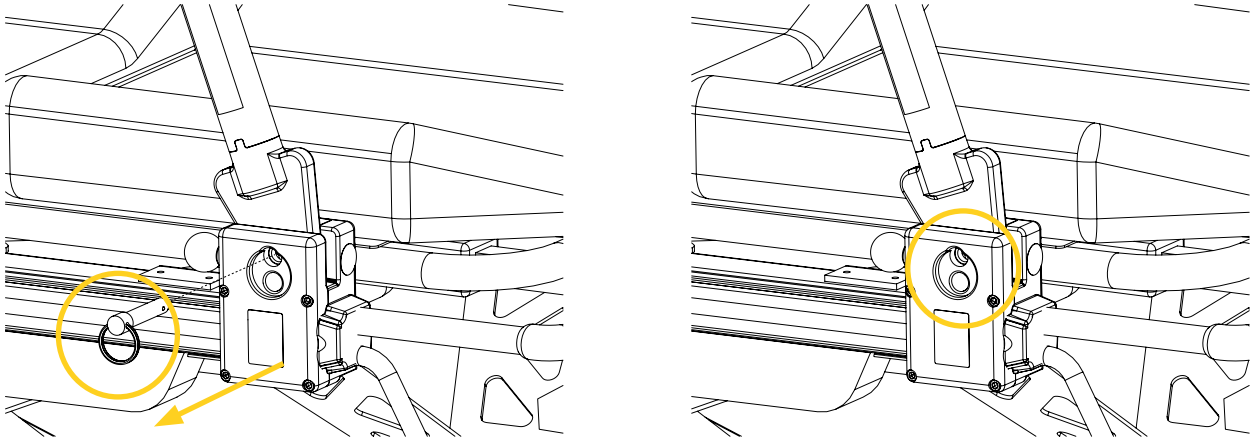


Figure 11: Removing the lock pin

3. Pull and hold the knob of the quick release mechanism of the clamp block (Figure 12 A), lift and remove the SAS 500 from the clamp block, then release the knob (Figure 12 B).

(A) (B)

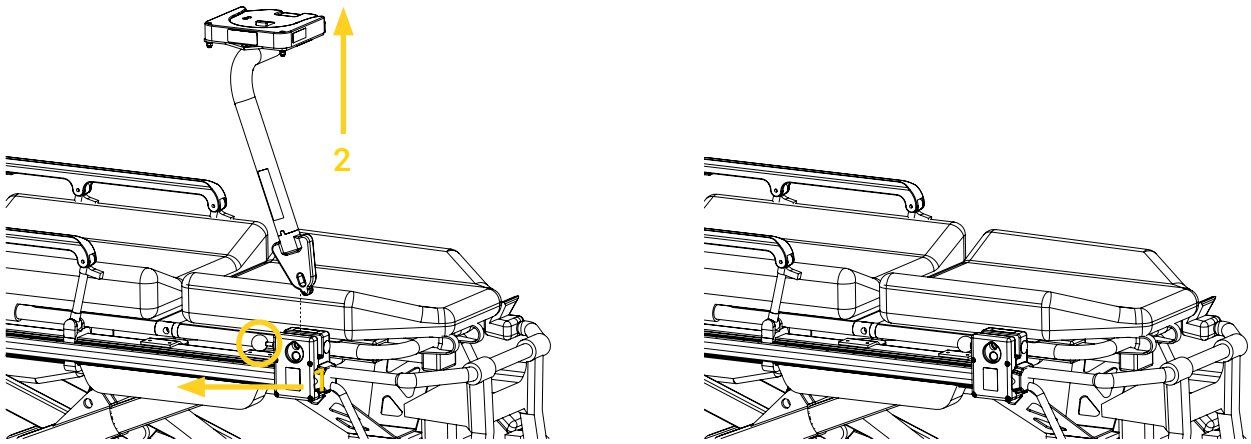


Figure 12: Removing the SAS 500 from the clamp block

4. Set the SAS 500 aside on a clean surface, or place it in its dedicated storage space. Refer to your established internal protocols if needed.
5. Reinsert the lock pin in the clamp block (Figure 13).

(A) (B)

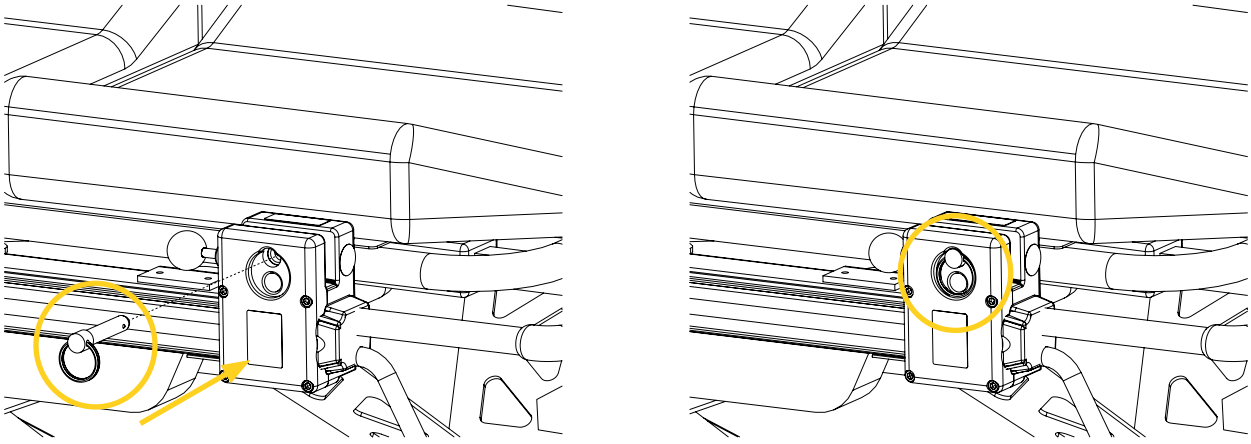


Figure 13: Reinserting the lock pin in the clamp block

The removal of the SAS 500 from the clamp block is complete.

8.3. Lift/Lower the SAS 500

When the SAS 500 is being used to install, remove and/or operate the medical device, the mounting system should be in the upright in the vertical position (Figure 14 A). When the SAS 500 is **not** being used and/or when the medical device has been removed, it can be lowered in the horizontal position (Figure 14 B) to allow more space for your normal operations.

(A) (B)

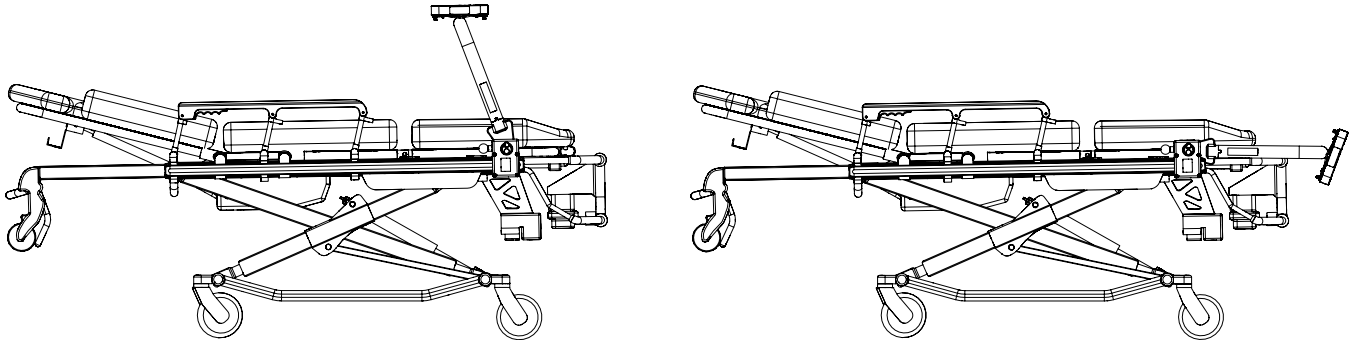


Figure 14: SAS 500 vertical and horizontal positions

8.3.1. Lower the SAS 500

1. Ensure that the medical device has been removed from the SAS 500. Refer to the « Remove the Medical Device from the SAS 500 » section on page 26 if needed.
2. Pull and hold the quick release knob of the clamp block (Figure 15 A) to disengage the safety mechanism.
3. Lift the tubular arm upwards, rotate the SAS 500 downwards to the horizontal position (Figure 15 B), then release the quick release knob of the clamp block (Figure 15 C).

(A) (B) (C)

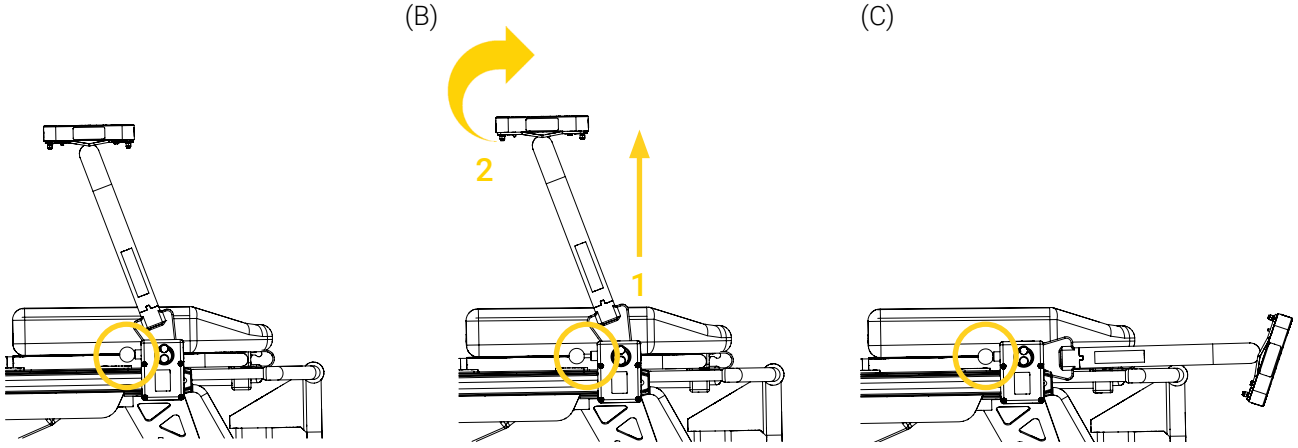


Figure 15: Lowering the SAS 500

The SAS 500 is lowered.

8.3.2. Lift the SAS 500

1. Ensure that the medical device has been removed from the SAS 500. Refer to the « Remove the Medical Device from the SAS 500 » section on page 26 if needed.
2. Pull and hold the quick release knob of the clamp block to disengage the safety mechanism, then rotate the SAS 500 upwards to the vertical position (Figure 16 A).
3. Push the tubular arm downwards to insert the triangular head in the clamp block (Figure 16 B), then release the knob (Figure 16 C).

(A) (B) (C)

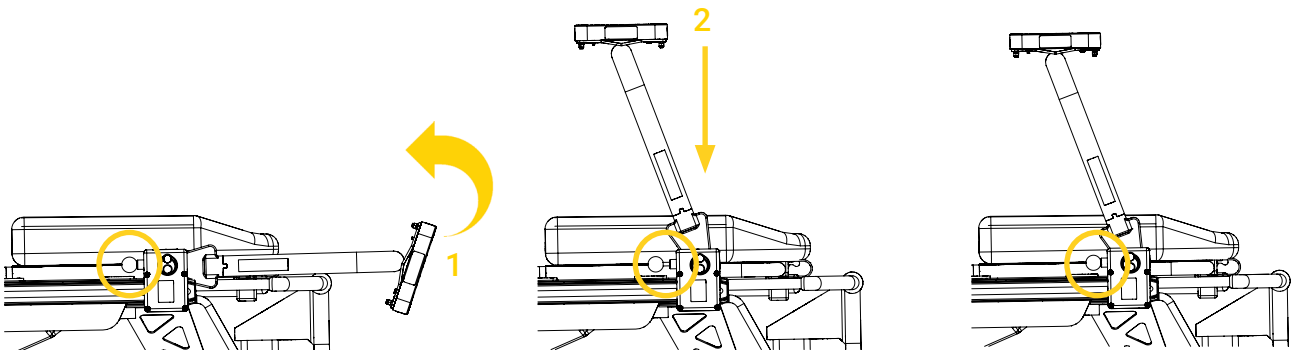


Figure 16: Lifting the SAS 500

4. Move the SAS 500 back and forth a few times to ensure it is locked and secured in the clamp block. If the SAS 500 does not move after the verification, it is locked and secured.

The SAS 500 is lifted.

8.4. Install the Medical Device in the SAS 500

1. Ensure that the SAS 500 is correctly installed and secured in the clamp block. Refer to the « Install the SAS 500 in the Clamp Block » section on page 20 if needed.
2. Align and insert the standard bottom disc located under the medical device's mounting bracket in the SAS 500 horizontally until it locks (Figure 17).

(A) (B)

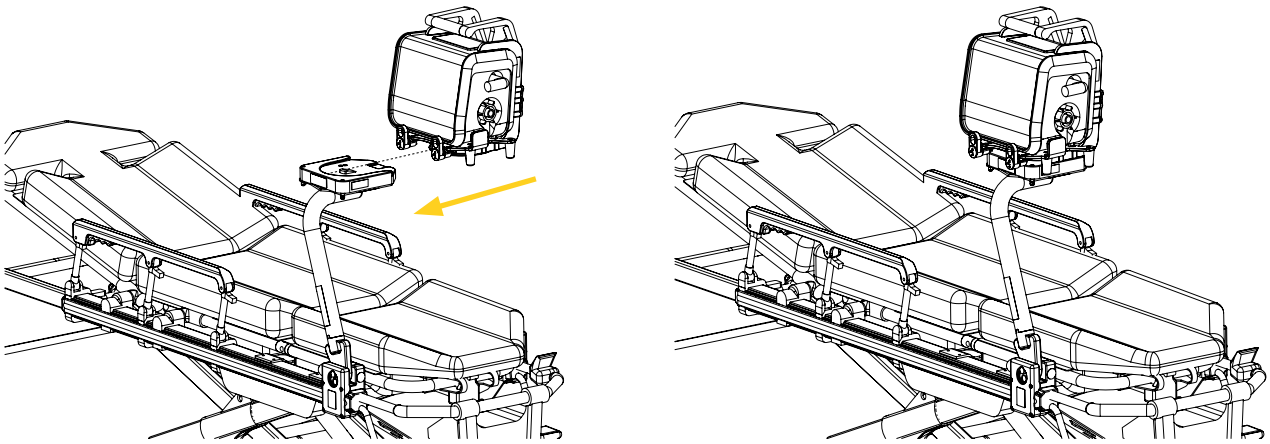


Figure 17: Installing the medical device in the SAS 500

3. Move the medical device back and forth a few times to ensure it is locked and secured in the SAS 500. If the medical device stays in the mounting system after the verification, it is locked and secured.
4. Turn the medical device up to 360° clockwise or counterclockwise to the desired position (Figure 18).

(A) (B) (C)

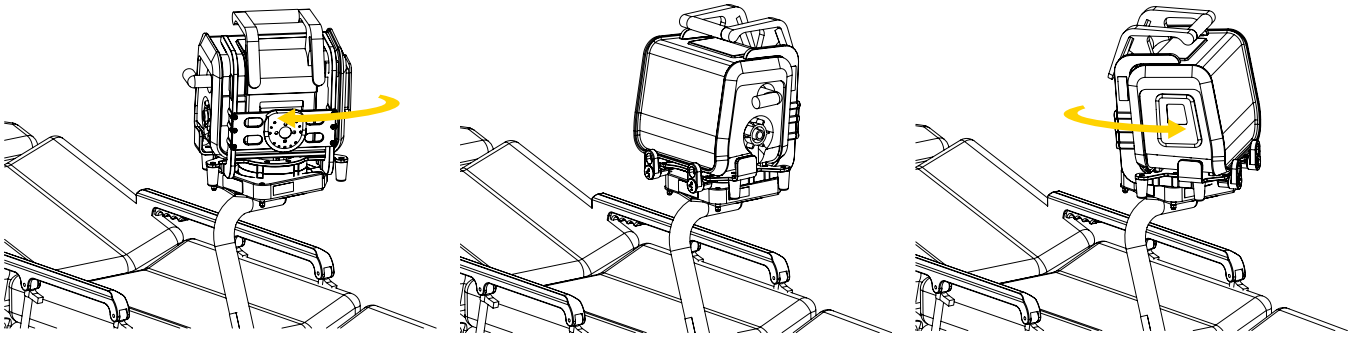


Figure 18: Rotating the medical device

5. Move the medical device up and down a few times to ensure it is locked and secured in the SAS 500. If the medical device does not move after the verification, it is locked and secured.

The installation of the medical device in the SAS 500 is complete.

8.5. Remove the Medical Device from the SAS 500

1. Press and hold the quick release button located of the SAS 500 (Figure 19 A), then slide the standard bottom disc located under the medical device's mounting bracket out of the mounting system horizontally (Figure 19 B).

(A) (B)

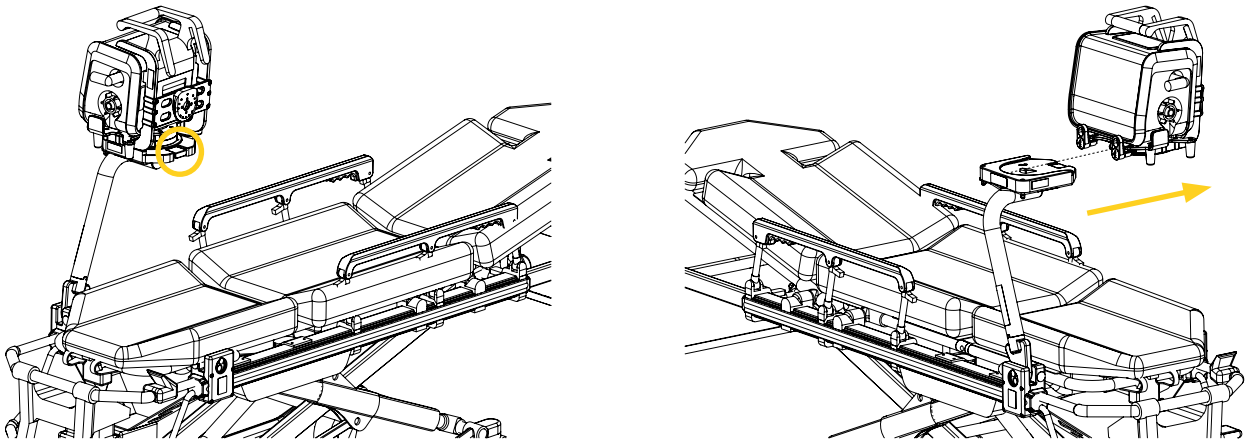


Figure 19: Removing the medical device from the SAS 500

2. Set the medical device aside on a clean surface, or place it in its dedicated storage space. Refer to your established internal protocols if needed.

The removal of the medical device from the SAS 500 is complete.

Annex I Skills Assessment of the EMS and Clinical Personnel

The content in this section is intended for personnel who have a proficient level of competency. Refer to the « User Competency » section on page 5 if needed.

Following training, a skills assessment should be given to each member of the EMS and clinical personnel to ensure they have fully comprehended the labelling, warnings and cautions, potential risks, safe practices and proper operating procedures needed to safely and effectively use the SAS 500. Consider adding the following to your internal training protocols.

Trainee name: _____ Unit: _____

Assessor name: _____ Date: _____

SKILLS ASSESSMENT		
SKILL CRITERIA	PASSED	FAILED
Labelling		
- Able to identify meaning and potential risks associated with the different safety labels:		
- Manufacturing label	☐	☐
- Safe Working Load (SWL)	☐	☐
Safety Measures		
- Knows that **under no circumstances** should the SAS 500 be installed on, connected to, or used in combination with any third party/competitor mounting system, base, bracket, or similar equipment.	☐	☐
- Knows that the SAS 500 was specifically engineered to be used with the compatible Technimount clamp blocks and base, and that using any other mounting systems may cause the equipment to fall, operate unpredictably, or fail.	☐	☐
- Knows that the SAS 500 was engineered and tested exclusively for use with specific authorized and compatible Technimount components and systems and that using any unauthorized and/or incompatible system may cause the equipment to fall, operate unpredictably, or fail.	☐	☐
- Knows **not to put their hands/fingers** near the triangular head when the SAS 500 is being installed/removed in/from the clamp block.	☐	☐
- Knows that the SAS 500 should be used only for ground emergency medical services and critical care transport.	☐	☐
- Knows **not to use** the SAS 500 if there are any loose or missing screws.	☐	☐

SKILLS ASSESSMENT		
SKILL CRITERIA	PASSED	FAILED
- Knows to immediately stop using the SAS 500 if any serious incident occurs and to inform authorized personnel.	☐	☐
- Knows to always ensure that the SAS 500 is correctly installed and secured in the clamp block before the stretcher is moved.	☐	☐
- Knows to always ensure that the medical device's mounting bracket is correctly installed and secured in the SAS 500 before the stretcher is moved.	☐	☐
- Knows to always remove the medical device before lowering or raising the SAS 500.	☐	☐
- Knows to always remove the medical device before removing the SAS 500 from the clamp block.	☐	☐
- Knows to always pay close attention **not to wedge** the power cords or tubing during the installation/removal of the mounting system, the mounting bracket and the medical device.	☐	☐
- Knows to always pay close attention to the safety mechanism of the SAS 500.	☐	☐
- Knows to always practice safely operating the SAS 500 until the manipulations have been perfected, before use with patients and that improper use of the mounting system may cause damage or the equipment to fall or operate unpredictably.	☐	☐
- Knows **not to overload or exceed** the total Safe Working Load (SWL) of the SAS 500.	☐	☐
- Knows that the Safe Working Load (SWL) of the SAS 500 **does not override** the maximum load capacity of another Technimount product or system, neither those of the medical devices, accessories and/or medical equipment accessories that could be placed in bags and drawers for example.	☐	☐
- Knows to always refer to their established internal protocols, as well as read and abide by the safety guidelines and instructions provided in the user documentation of the SAS 500, the clamp block, the Standard Surface Base, the mounting bracket, the medical device and the stretcher.	☐	☐
Operation		
- Able to install/remove the SAS 500 in/from the clamp block.	☐	☐
- Able to install/remove the medical device in/from the SAS 500.	☐	☐
- Able to lift/lower the medical device.	☐	☐
- Able to rotate the medical device.	☐	☐

Annex II Unpack the SAS 500

The content in this section is intended for personnel who have an advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

1. Inspect the shipping box(es) for signs of damage before accepting shipment. Take pictures and report them promptly if applicable.
2. Move the shipping box(es) to the location of the installation.
3. Open the shipping box(es).
4. Unpack the box(es) and ensure that all shipping and packaging materials have been properly removed, prior to installation.

   NOTE : Keep all packaging material for future use.
5. Identify the items included in the shipping box(es), then set them aside. Refer to the « Assemble the SAS 500 » section on page 30 for the required parts.
6. Inspect the items for signs of damage. Take pictures and report them promptly if applicable.

Annex III Assemble the SAS 500

The content in this section is intended for personnel who have an advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

WARNING – Risk of Injury

Always wear/use the appropriate Personal Protection Equipment (PPE) based on your established internal protocols (e.g., gloves, eyewear, etc.) during the installation.

WARNING – Incompatible Installations

Refer to the Proper Installation warning in the for the precisions before performing the installation.

NOTE : The illustration herein are for user-comprehension purposes and may differ from your actual configuration. The procedure applies to all the compatible mounting systems, mounting brackets and medical devices. Refer to the « Technical Specifications » section on page 14 for the compatibilities.

Estimated Installation Time

10 minutes

Included Parts

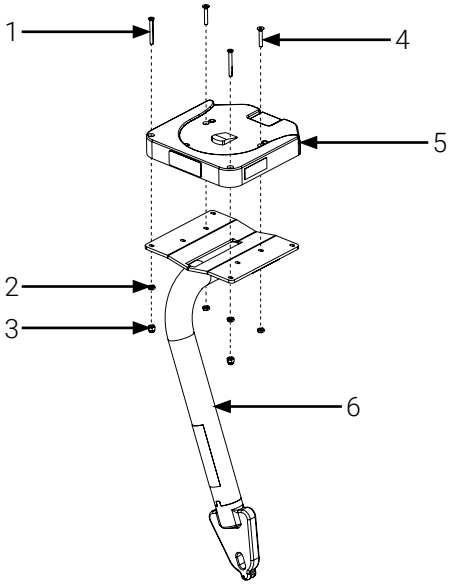
- Safety Arm System 500 – 400-20-UN, 400-20-UN-LFS, 400-20-UN-ANG or 400-20-UN-LFS-ANG
- Standard Surface Base – 100-20-UN
- 10-32 in. X 1 ¾ in. stainless steel screws (2X)
- 10-32 in. X 1 ¼ in. stainless steel screws (2X)
- 10-32 in. D hex nuts (4X)
- 10-32 in. D cap nuts (2X)

Customer-provided Tools/Hardware

- Phillips-head screwdriver
- Wrench
- High strength thread lock adhesive ( )

Assembly Procedure

1. Identify the SAS 500 assembly parts (Figure 20).



1. 10-32 in. X 1 ¾ in. stainless steel screw (2X)	4. 10-32 in. X 1 ¼ in. stainless steel screw (2X)
2. 10-32 in. D hex nut (4X)	5. Standard Surface Base
3. 10-32 in. D cap nut (2X)	6. Tubular arm

Figure 20: SAS 500 assembly parts

2. Ensure that the clamp block has been properly installed on the stretcher frame. Refer to the clamp block user manual if needed.
3. Install and secure the tubular tube in the clamp block (Figure 21). Refer to the « Install the SAS 500 in the Clamp Block » section on page 20 if needed.

(A) (B)

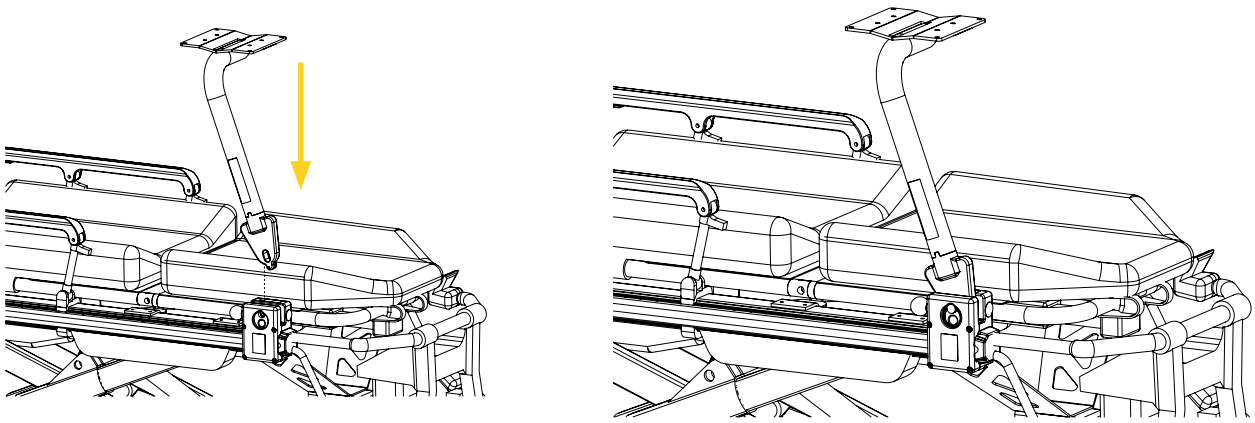
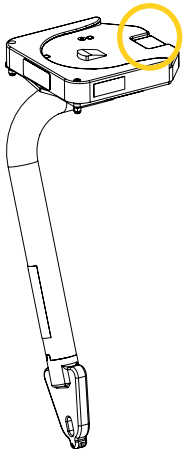


Figure 21: Installing the tubular arm in the clamp block

4. Move the tubular arm up and down and back and forth a few times to ensure it is locked and secured in the clamp block. If the arm stays in the clamp block after the verification, it is locked and secured.
5. Ensure that the tubular arm is in the upright position. Refer to the « Lift/Lower the SAS 500 » section on page 23 if needed.
6. Choose the orientation of the Standard Surface Base that best suits your needs. The Standard Surface Base can be installed with the quick installation button oriented towards patient left (Figure 22 A) or towards patient right (Figure 22 B). Refer to your established internal procedures if needed.

NOTE : Always consider the orientation of the quick release button once the Standard Surface Base installed to ensure that the safety mechanism will **not** be accidentally activated.

(A)



(B)

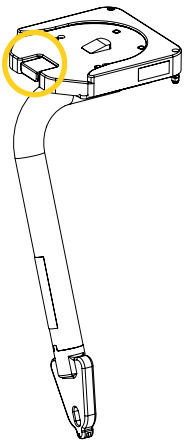
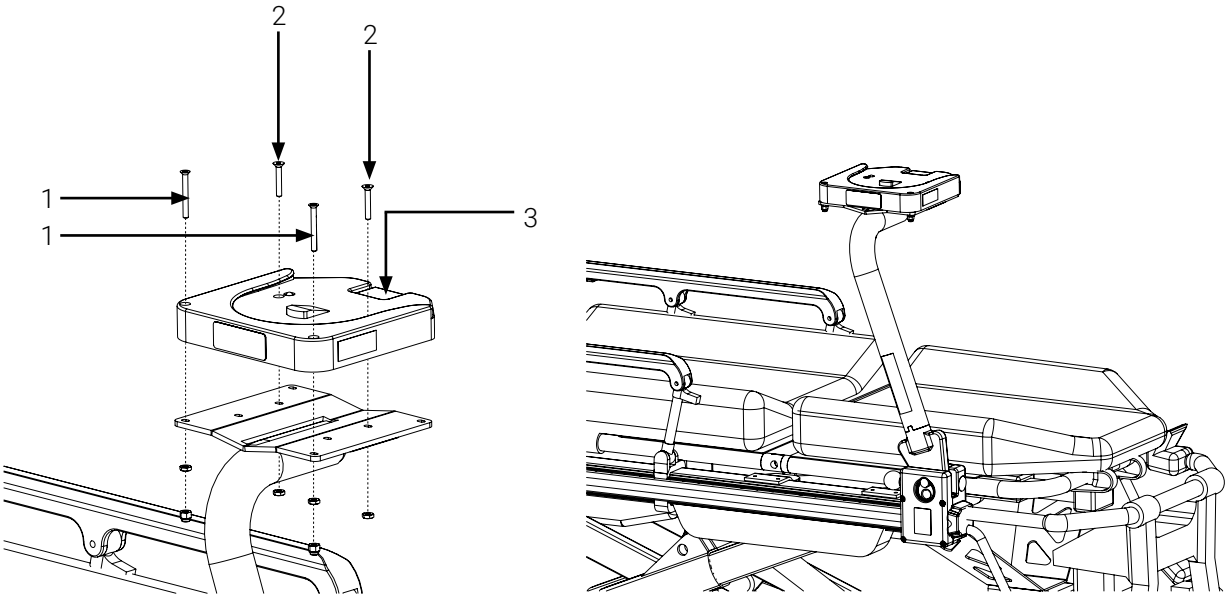


Figure 22: Orientation of the quick release buttion

7. Align the screw holes of the base and the screw holes top plate that are furthest way from the quick release button, then partially tighten using two (2) 10-32 in. X 1 ¾ in. stainless steel screws coated with high strength thread lock adhesive (), two (2) hex nuts, two (2) cap nuts and a wrench (Figure 23).
8. Align the screw holes of the base and the screw holes top plate that are closest to the quick release button, then partially tighten using two (2) 10-32 in. X 1 ¼ in. stainless steel screws coated with high strength thread lock adhesive (), two (2) hex nuts and a Phillips-head screwdriver (Figure 23).

(A) (B)



1. 10-32 in. X 1 ¾ in. stainless steel screw
2. 10-32 in. X 1 ¼ in. stainless steel screw
3. Quick release button

Figure 23: Installing the Standard Surface Base on the tubular arm

9. Tighten the nuts of the screws in a cross-pattern using a Phillips-head screwdriver and wrench.
10. Move the Standard Surface Base back and forth and from side to side a few times to ensure it is correctly tightened and secured on the tubular arm. If the base does not move after the verification, it is correctly tightened and secured.

The SAS 500 assembly is complete.

Annex V Maintenance

The content in this section is intended for personnel who have an advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

Factors such as weather, environment, geographical location and individual usage will necessitate different needs. For the maintenance of the SAS 500, follow the guidelines listed herein and in accordance with your service's current maintenance practices and established internal protocols. Please contact Technical Support at techsupport@technimount.com for replacement parts or repair related issues, if needed.

WARNING – General Warning

- **Do not perform** the safety checks or the condition-based maintenance before having read the entire « Safety Measures » section on page 11 and the maintenance specific safety measures in this section, having read the entire content of this user manual, having gained in-depth knowledge and product comprehension, as well as having familiarized yourself with the standards and guidelines.
- Safety checks and a condition-based maintenance plan are required and should be established for all Technimount products.
- Perform the safety checks and maintenance operations as described herein. Failing to follow the recommended maintenance plan or its guidelines could cause premature damage to the product.
- Use only Technimount parts, maintenance procedures, cleaning solutions and lubricants (if applicable), as described herein. Using unapproved modified parts or procedures for the maintenance of the Technimount product may cause the system to be unstable and could cause injury to the patients or EMS and clinical personnel and void the product warranty.
- Replace damaged or worn-out parts if past their expected service life or when damaged (refer to the « Replacement Parts/Kits » section on page 40 for the parts/kits numbers and to the « Replacement Procedures » section on page 41 for the procedures if needed). Recycle damaged parts or dispose according to the environmental laws that apply to your jurisdiction and consult the Safety Data Sheets (SDS).

CAUTION – Safe Handling and Operation

- **Do not use** unauthorized, untested or unapproved cleaning products and disinfectants to perform condition-based maintenance, to avoid damaging the surface of your Technimount product and void the warranty. Technimount will not be held liable for damages resulting from the use of an unauthorized, untested or unapproved cleaning product.
- **Do not use** powered tools to screw the hardware during installation, as there is a risk of damage to the threads.
- **Do not steam clean or use ultrasonic cleaners** on the system or any of its components.
- **Do not immerse** the metal parts/components in water.
- To spot clean, the maximum water temperature should not exceed 82° C (180° F). The maximum water pressure should not exceed 1500 psi/103.5 BAR. If using a high pressure washer, the pressure nozzle must be kept a minimum of 609.6 mm (24 in.) from the product.
- When cleaning, always use the appropriate Personal Protection Equipment (PPE) based on your established internal protocols (e.g., gloves, eyewear, etc.).

CAUTION – Corrosion

- Always rinse and dry the SAS 500 components properly after using cleaning products. Certain types of cleaners may leave a corrosive residue on the surface of the product and could cause the premature corrosion of critical components. Refer to the product Safety Data Sheets (SDS) for chemical information or handling, storage and emergency measures in case of accident.
- Dispose of corrosive wastes according to the environmental laws that apply to your jurisdiction and consult the Safety Data Sheets (SDS).

CAUTION – Follow Instructions for Use

Always read and abide by all the safety guidelines identified, as well as follow all of the instructions provided by the manufacturer of the cleaning product.

Maintenance Frequency

- Safety checks and the condition-based maintenance should be performed minimally every month or as frequently needed, to prolong the longevity of the SAS 500 in optimal conditions.
- Decontaminate the SAS 500 as recommended in your established internal protocols, as well as the regulations and standards in virtue of the infection prevention and control procedures.

Customer-Provided Tools

- Clean and dry cloth
- Soft brush
- Pressure washer
- Cleaning solutions
- Phillips-head screwdriver
- Wrench
- High strength thread lock adhesive ( )

Tested and Approved Cleaning Solutions

- Oxivir, 5% Hydrogen Peroxide with Peracetic Acid (AHP)
- Lavo 12, 10 000 ppm Sodium Hypochlorite
- TNT-100, 5% Quaternary Ammonium Compound
- Spectro-Sept, 5% Ethyl Alcohol
- Spectrol, 5% EDTA salt

Maintenance Plan

1. Check the boxes upon completion of the « Safety Checks » section on page 36 and the « Condition-Based Maintenance » section on page 37, then add your comments and/or observations in the « Maintenance Log » section on page 38 if needed. In case of a non-conformity, immediately stop using the SAS 500 and contact Technical Support at techsupport@technimount.com for a remedial action plan.
2. Keep records of your maintenance activities.

SAFETY CHECKS	CHECKED

SAS 500 (Figure 24)

- Visually inspect all the components of the SAS 500 to ensure that the hardware is in good condition and there are no loose screws. ☐
  - *If the hardware is not in good condition, replace it. Contact Technical Support if needed.*
  - *If the screws are loose, tighten them. Refer to the Standard Surface Base user Manual.*
- Visually inspect all the components of the SAS 500 to ensure there is no chemical attack. ☐
  - *If there are traces of chemical attack, clean the mounting system. Refer to the « Condition-Based Maintenance » section on page 37 if needed.*
- Press and release the locking mechanism a few times to ensure proper functioning of the safety mechanism of the SAS 500. ☐
  - *If the locking mechanism does not easily insert or a resistance in felt when it is pressed, there is a non-conformity.*
  - *If the locking mechanism does not retract easily or to a minimum of 3/16 in. (H) when it is release, there is a non-conformity.*
- Press and release the quick installation button a few times to ensure proper functioning of the safety mechanism of the SAS 500. ☐
  - *If the button does not easily insert or a resistance in felt when it is pressed, there is a non-conformity.*
  - *If the button does not retract easily when it is release, there is a non-conformity.*
- Press and release each plunger a few times to ensure their proper functioning. ☐
  - *If the plungers do not easily insert or remain stuck in the base when they are pressed, clean the mounting system and lubricate the plungers. Refer to the « Condition-Based Maintenance » section on page 37 if needed.*
- Install and remove the mounting bracket in the SAS 500 a few times to ensure proper functioning of the safety mechanism of the mounting system. ☐
  - *If the standard bottom disc of the mounting bracket does not easily insert in the SAS 500 and does not lock, and/or cannot be easily removed when using the quick release button of the mounting system, there is a non-conformity.*
- Install the mounting bracket in the SAS 500 and turn it clockwise and counterclockwise a few times to ensure proper functioning of the mounting system's mechanism. ☐
  - *If the mounting bracket does not easily rotate from left to right and you feel resistance when doing so, there is a non-conformity.*

SAFETY CHECKS	CHECKED

- Install and remove the SAS 500 in the clamp block a few times to ensure proper functioning of the safety mechanism of the mounting system. ☐
  - *If the triangular head of the SAS 500 does not easily insert in the clamp block and does not lock, and/or cannot be easily removed when using the quick release knob and lock pin of the mounting system, there is a non-conformity.*
- Install the SAS 500 in the clamp block and lift and lower the tubular arm a few times to ensure proper functioning of the mechanism of the mounting system. ☐
  - *If the tubular arm of the SAS 500 does not easily lift or lower in the clamp block and/or does not lock when using the quick release knob of the mounting system, there is a non-conformity.*
- Look at the manufacturing label to ensure that specifications are still visible and that the bracket has not passed its expected service life. Refer to the « Labels » section on page 10 and the « Technical Specifications » section on page 14 if needed. ☐
  - *If the estimated period of safe and reliable use has passed, there is a non-conformity.*
- Look at the safety labels to ensure that they are still visible and that they are all accounted for. Refer to the « Labels » section on page 10 and the « Technical Specifications » section on page 14 if needed. ☐
  - *If the labels are no longer visible and/or missing, there is a non-conformity.*

CONDITION-BASED MAINTENANCE	CHECKED

Clean the **SAS 500**, after you have completed the safety checks: ☐

1. Remove the excess dirt using a clean cloth, if needed.
2. Remove the contaminants using a pressure washer or as recommended in your established internal protocols and control procedures.
3. Clean using a cloth and cleaning solution.
4. Spot clean stains by applying the solution directly on the stain and let sit on the surface, if needed.

   NOTE : Avoid over saturation and ensure that the product **does not sit** on the surface of the SAS 500 components longer than recommended by the cleaner's manufacturer.

5. Thoroughly rinse the solution with a clean cloth dampened with lukewarm water, then dry all the components using a clean cloth before returning to service.

Clean the Standard Surface Base and clamp block, after you have completed the SAS 500 conditioned-based maintenance. ☐

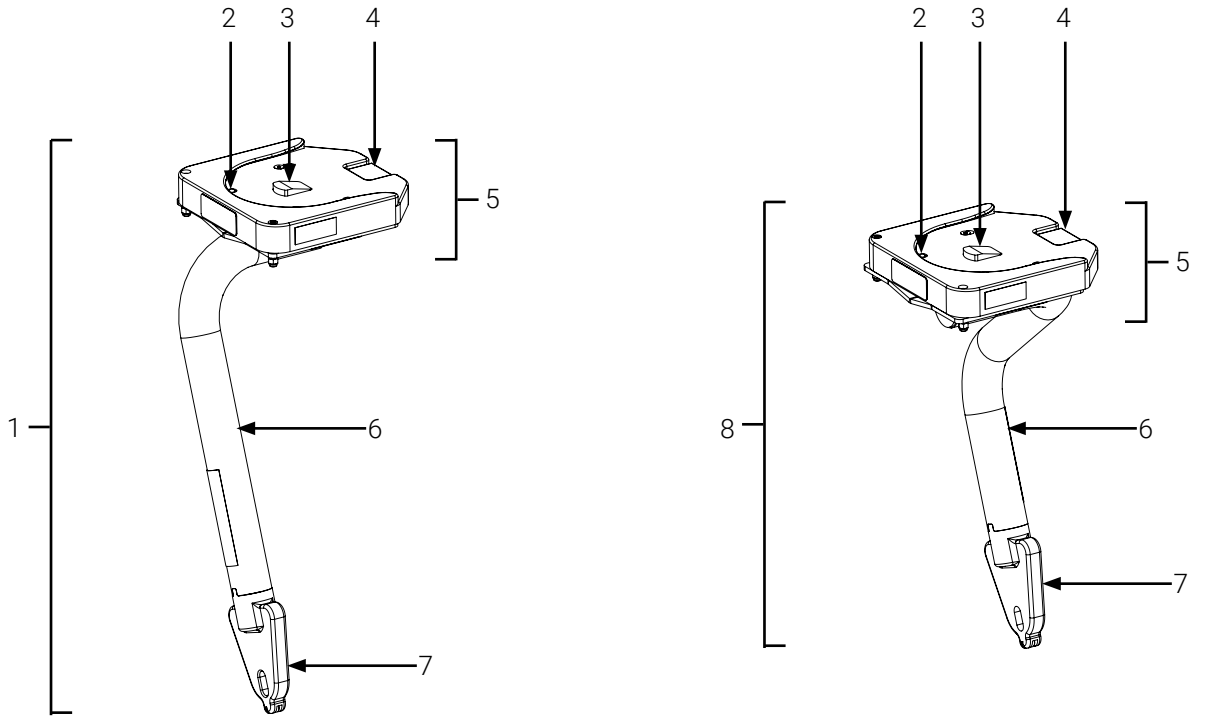
MAINTENANCE LOG

Add your comments and/or observations, after you have completed the safety checks and condition-based maintenance, if needed:

Maintenance plan completed on (dd/mm/yyyy): _____

Maintenance plan completed by: _____

Illustrated Inspection Points



1. SAS 500 (Standard model)	5. Standard Surface Base
2. Plungers (4X)	6. Tubular arm
3. Locking mechanism	7. Triangular head
4. Quick release button	8. SAS 500 (Angular model)

Figure 24: Illustrated inspection points

Annex VI Replacement Parts/Kits

The content in this section is intended for personnel who have a, proficient or advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

Technimount reserves the right to change part numbers and products without notice. Please contact Customer Service at customerservice@technimount.com to ensure product options and availability, or Technical Support at techsupport@technimount.com for replacement parts/kits or repair related issues.

REFERENCE #	PART/KIT #	PART/KIT DESCRIPTION	REPLACEMENT PROCEDURE
Figure 24, 5	100-20-UN	Standard Surface Base	Refer to « Replace the Standard Surface Base » section on page 41
N/A	910-00-UN	Lock pin with finger ring	Refer the the Lock Pin with finger ring replacement procedure IN-RPROC-LP-202607EN-01
N/A	920-00-UN	Safety Pin with quick release knob	Refer the the Safety Pin with knob replacement procedure IN-RPROC-SP-202607EN-01

Annex VII Replacement Procedures

The content in this section is intended for personnel who have a proficient or advanced level of competency. Refer to the « User Competency » section on page 5 if needed.

WARNING – Risk of Injury

Always wear/use the appropriate Personal Protection Equipment (PPE) based on your established internal protocols (e.g., gloves, eyewear, etc.) during the installation.

WARNING – Incompatible Installations

Refer to the Proper Installation warning in the for the precisions before performing the installation.

NOTE : The illustration herein are for user-comprehension purposes and may differ from your actual configuration. The procedure applies to all the compatible mounting systems, mounting brackets and medical devices. Refer to the « Technical Specifications » section on page 14 for the compatibilities.

Replace the Standard Surface Base

Estimated Replacement Time

10 minutes

Required Parts

- Standard Surface Base – 100-20-UN
- 10-32 in. X 1 ¾ in. stainless steel screws (2X)
- 10-32 in. X 1 ¼ in. stainless steel screws (2X)
- 10-32 in. D hex nuts (4X)
- 10-32 in. D cap nuts (2X)

Customer-provided Tools

- Phillips-head screwdriver
- Wrench
- High strength thread lock adhesive ( )

Replacement Procedure

1. Install the SAS 500 in the clamp block (Figure 25). Refer to the « Install the SAS 500 in the Clamp Block » section on page 20 if needed.

(A) (B)

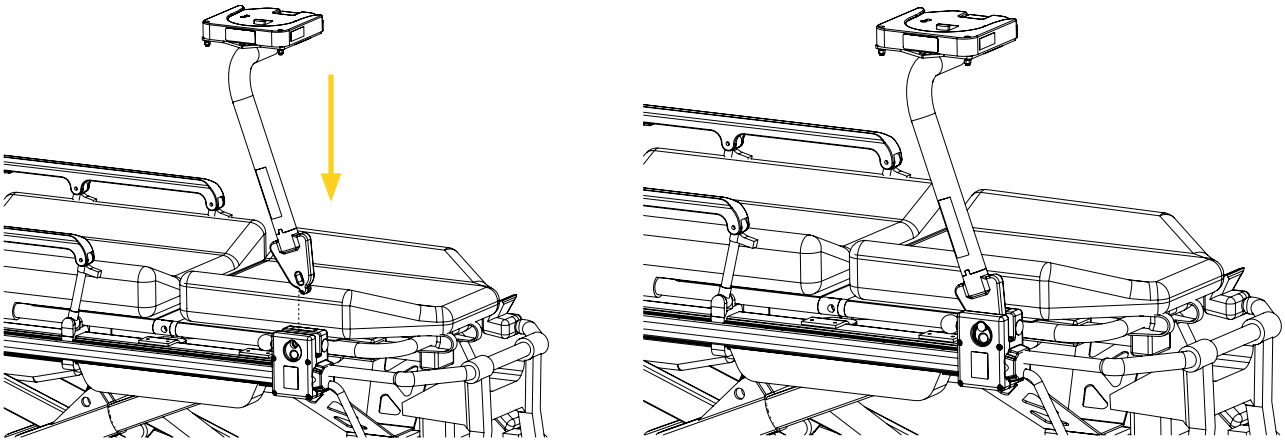


Figure 25: Installing the SAS 500 in the clamp block

2. Remove the four (4) screws, four (4) hex nuts, two (2) cap nuts and the Standard Surface Base from the tubular arm (Figure 26) using a Phillips-head screwdriver and a wrench. The hardware and Standard Surface Base will **not** be reused. Refer to your established internal protocols and the environmental laws that apply to your jurisdiction for the proper disposal of the parts.

(A) (B)

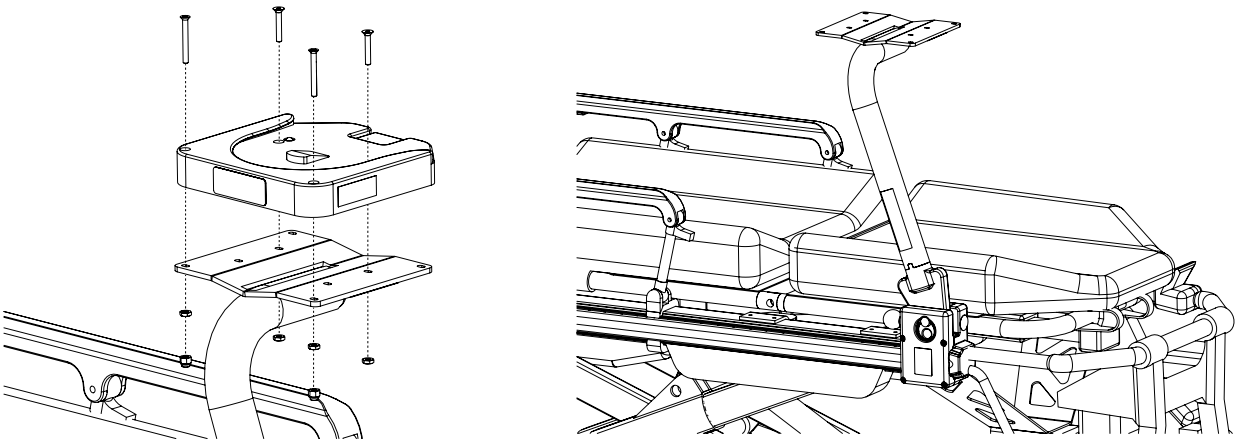
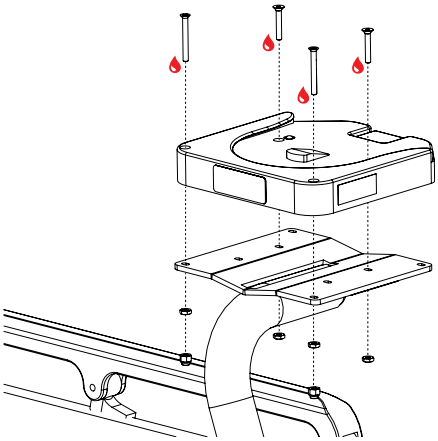


Figure 26: Removing the hardware and Standard Surface Base

3. Install the replacement Standard Surface Base and hardware coated with high strength thread lock adhesive ( )using a Phillips-head screwdriver and a wrench (Figure 27). Refer to steps 4 to 10 of the « Assemble the SAS 500 » section on page 30 if needed.

(A)



(B)

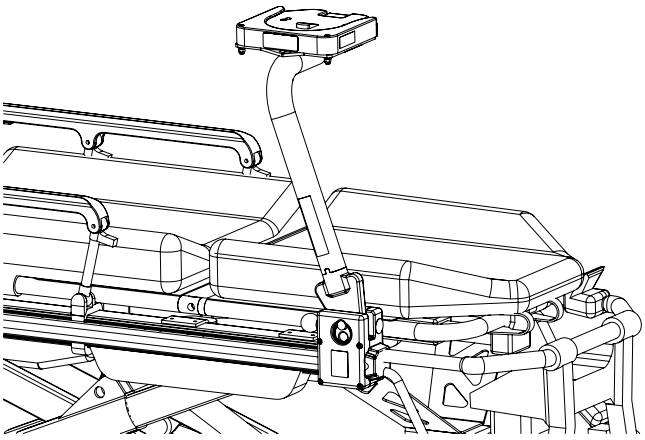


Figure 27: Installing the replacement Standard Surface Base on the tubular arm

The Standard Surface Base has been replaced.

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