



SAFETY ARM SYSTEM™
Model 500 - Stryker
For cot/stretchers installation



USER'S MANUAL

SAFETY ARM SYSTEM™

FOR TECHNICAL ASSISTANCE CALL: +1.581.998.9820 or contact us at: techsupport@technimount.com



English version

TABLE OF CONTENTS

SYMBOLS AND DEFINITIONS..... 3

COMPONENTS IDENTIFICATION..... 3

COMPONENTS IDENTIFICATION (CONTINUED) 3

WARNING / CAUTION / SAFETY NOTE..... 6

INTRODUCTION 7

PRODUCT DESCRIPTION 7

INTENDED USE OF PRODUCT..... 7

SPECIFICATIONS..... 8

CONTACT INFORMATION..... 10

PRODUCT ILLUSTRATION..... 11

SUMMARY OF SAFETY PRECAUTIONS..... 13

PINCH POINTS..... 16

SET UP PROCEDURES..... 17

TOOLS REQUIRED 18

SETTING THE COT /STRETCHER FOR THE INSTALLATION..... 19

REMOVE THE IV POLE: 20

SAFETY ARM SYSTEM INSTALLATION 21

INSTALLING “SURFACE BASE” ONTO STRETCHER SAFETY ARM RECEIVING UPPER PLATE 26

OPERATING GUIDELINES..... 29

PROPER LIFTING TECHNIQUES..... 30

PROPER HANDLING POSITIONS..... 31

OPERATING THE SAFETY ARM SYSTEM..... 33

CLEANING..... 36

CLEANING SOLUTIONS 37

PREVENTIVE MAINTENANCE 38

QUICK REFERENCE REPLACEMENT PARTS..... 42

CERTIFICATION - TESTING..... 43

WARRANTY 44





RETURN POLICY..... 46

TECHNIMOUNT RETURN POLICY 46

RETURN AUTHORIZATION 46

DAMAGED MERCHANDISE..... 46

SYMBOLS AND DEFINITIONS

	Attention, consult accompanying documents, or special attention required
	Safe working load symbol
	Pinch point
	Load balance symbol

COMPONENTS IDENTIFICATION

Locking pin: The side safety lock pin is stainless steel with a finger ring (as shown in picture 1 & 1A), is used to lock or secure the « Safety Arm System » into the clamp block. It passes through the clamp block & bottom of the arm, locking the arm in place to the clamp block; (as shown in picture 2)



Picture 1: lock pin with optional red coloured lock pin head & ring – **OPTION** -



Picture 1A: lock pin with no color

Safety pin: The fixed safety pin is identified by the red rounded handle mechanism uses for locking the arm in the upper position; as shown in picture 3.



Picture 2: Side LOCKING pin insert location



Picture 3: SAFETY pin with red handle

COMPONENTS IDENTIFICATION (Continued)

Clamp block: The clamp block is the two (2) part metal system attached on one side of the cot or stretcher frame, in order to support and insert the arm. The two sections are attached with four (4) hexagon socket pan head screws; as shown in picture 3.



Picture 3: Clamp block before being installed



Picture 4: Clamp block assembly

Arm support: The arm support is the arm that supports the base mount. It is welded on the arm pole that goes into the clamp block; shown in picture 5.



Picture 5: Arm support - upper plate



Picture 6: Safety Arm yellow colored

Hardware: The hardware (screws, nuts and caps) are provided for the installation of the surface base standard on the upper plate. It normally comes with the arm.



- Hardware kit:
- 2 X Screw 10-32 x 1-3/4" Philips (star)(kit figure 2)
 - 2 X Screw 10-32 x 1-1/4" Philips (star)
 - 4 X Hexagonal nuts 10-32 x 3/8"
 - 2 X Hexagonal SS Caps 10-32

Picture 6: Hardware for installation of the surface base

NOTES RELATED TO OPTIONS WITH THE PRODUCT:

Options available with the product:

1. The locking pin is available in red color as an optional charged upgrade; chemical process is applied for coloring the stainless pin; for long duration.
2. Safety Arm can is also available in different colors as an optional charged upgrade; blue, yellow and red can be offered; the yellow color is the base color; stain and scratch resistance based on anodization process, for the black triangular feet.
3. Installing the IV Pole on the same side of the Safety Arm Stretcher, you may need a plate to support it, the IV Pro Adapter – see page 42 for part number.

NOTE FOR INSTALLATION RELATED TO POWERLOAD

1. The spacer block is the shim installed under the “V” bracket on the cot frame when a power load system is with the cot. This NOT a piece from Technimount.
-

WARNING / CAUTION / SAFETY NOTE

The word warning, caution, note carry special meaning and should be carefully reviewed.



WARNING

Alerts the reader about a situation which, if not avoided, could result in death or serious injury. It may also describe potential serious adverse reactions and safety hazards.



CAUTION

Alerts the reader of a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury to the user or patient or damage to the equipment or other property. This includes special care necessary for the safe and effective use of the device and the care necessary to avoid damage to a device that may occur as a result of use or misuse.

NOTE

Provides special information to make maintenance easier or important instructions clearer.

INTRODUCTION

This manual is designed to assist you with the operation and maintenance of the **Technimount Safety Arm System™**, Model 500. Please read this manual thoroughly before placing the equipment into operations or commencing preventative maintenance. To ensure safe operation of this equipment, it is recommended that methods and procedures be established for educating and training staff on the safe operation of this product.

PRODUCT DESCRIPTION

The Technimount Model 500, **Safety Arm System™** is a manual mounting cot/stretcher system that consists of a platform, mounted on a pivoting arm, installed with a clamp block on the side frame of the cot/stretcher, designed to support and transport portable medical equipment with a maximum weight of 45 lb. in pre-hospital and hospital environments. The device can be removed and stored safely when not in use and when in use in emergency vehicles with a cot/stretcher and the arm has two (2) adjustable positions for transport & loading/unloading of the of the patient on the cot/stretcher.

The **Safety Arm System™** is equipped with a **fixed safety locking** mechanism to secure the position of the arm when in the transportation mode, or the arm lowered for loading and unloading a patient. Additionally, it uses a side **locking pin** with a finger ring handle, in order to secure the arm to the clamp block attached to the cot/stretcher. In case of emergencies, the side locking pin can be removed in less than 5 seconds followed by releasing or pulling back the fixed safety locking mechanism.,

Once combined with the surface base mounting system (Bracket Pro™ Serie - *device depending*) it allows the medical crew to see and use the unit during transportation and patient loading and unloading.

INTENDED USE OF PRODUCT


The **Safety Arm System™** is a secure mounting system for medical devices, designed to be installed on a cot/stretcher (specific models). The design is intended to support and transport medical equipment during a medical intervention of a traumatized, ambulatory or non-ambulatory patient (including infants, children and adults).

The upper position (or locked position) is designed to incorporate the use of the medical device while transporting the patient and performing normal tasks by medical personal. The lower position (or *unlocked position*) is designed to assist with loading or unloading the patient onto the cot/stretcher; and not design to be used during the movement or transport of the cot/stretcher.

Once the arm is on the upper position (or locked position) it facilitates the safe and secure transportation of associated medical equipment (i.e. defibrillator and/or pumps) in emergency vehicles. The use of the Safety Arm System is completed in concert with the use of an ambulance cot/stretcher and intended for front-line responders who have received the orientation and training necessary to operate the system in the field. The expected service life of the product is 5 years, or greater, depending upon use.

The **Safety Arm Systems** are intended for transportation purposes only. They are not intended for more than one unit nor additional equipment attached to the arm.

SPECIFICATIONS

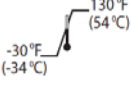
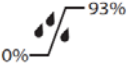

Brand cot/stretcher models available	STRYKER MODEL
 <p>Safe Working Load Note: Safe Working Load indicates the sum of the medical device and accessory weight.</p>	45 lbs.
CHARACTERISTICS of the product	MODEL 500
Cot/Stretcher compatibility	ProXT, PowerPro, model 6085-6086, 6500 and 6506
Part number (cot model depending)	500-00-XXXX
Positions available	Upper and lower
Material manufacturing	Aluminum high grade
Cot installation	Clamp box on side frame
Positioning installation	Right side (<i>patient leg</i>) Left side – <i>Option</i>
Dimensions (inch)	
Total Height - upper position -	18-7/8 "
Overall length - w/ clamp box	21-5/8"
Cot (frame) to under base plate on upper position	17-1/4" – cot mattress up 10" – cot mattress down
Cot (frame) front to base plate on lower position	9-3/8" – with tubing 12" – after the base plate
Weight (lb - oz)	
Arm only	3.8 lbs
Clamp block	2.15 lbs
Total system (hardware incl.)	6.8 lbs
Color available	Black - Yellow
Angle of the base plate with the arm	70°
Maximum load capacity	45 lbs
Installation hole on upper base plate	4 holes
Recommending loading position	Lower
Recommending number operator	1
Surface base mounting compatibility	Bracket Pro Standard and extended base
Impact resistance testing	30G – 577 lbs
Typical mounting	
Clamp block	Clamp box mounting with 4 screws on side square frame
Safety Arm	Locking & Safety pin
Installation time (approx..)	± 5 minutes
Removing time for the Arm	Less than 5 sec.
Standards	SAE J3043, KKK-A-1822

Technimount system reserves the right to change specifications without notice.

The **Safety Arm System™** is designed to conform to the Federal Specification for the Star-of-Life Ambulance (KKK-A-1822) and SAE J3043. Patents pending.

Technimount hereby declares that this Safety Arm System™ (model 400-500) is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC and SAE J3043. A copy of the original declaration of conformity can be obtained by contacting Technimount System at 444 Papin St. Office 103. Quebec City, (QC) Canada G1YP 3T8 Attn. Regulatory Affairs.

SPECIFICATIONS (CONTINUED)

Environmental conditions	Operation
Temperature	
Relative Humidity	
Atmospheric Pressure	



CAUTION

Changes or modifications to the product not expressly approved by Technimount could void the product warranty.

CONTACT INFORMATION

Contact Technimount System Customer Service or Technical Support at:

Phone: +1.581.998.9820
Fax: 1.855.339.6351
Email: techsupport@technimount.com

TECHNIMOUNT SYSTEM

Administrative Office
445 Papin St. Office 103
Quebec City, (Quebec)
Canada
G1P 3T8

NOTE:

Please have the serial number of your Technimount product available (*as shown in Figure 1*) when calling Technimount Customer Service or Technical Support. Include the serial number in all written communication.

SERIAL NUMBER LOCATION

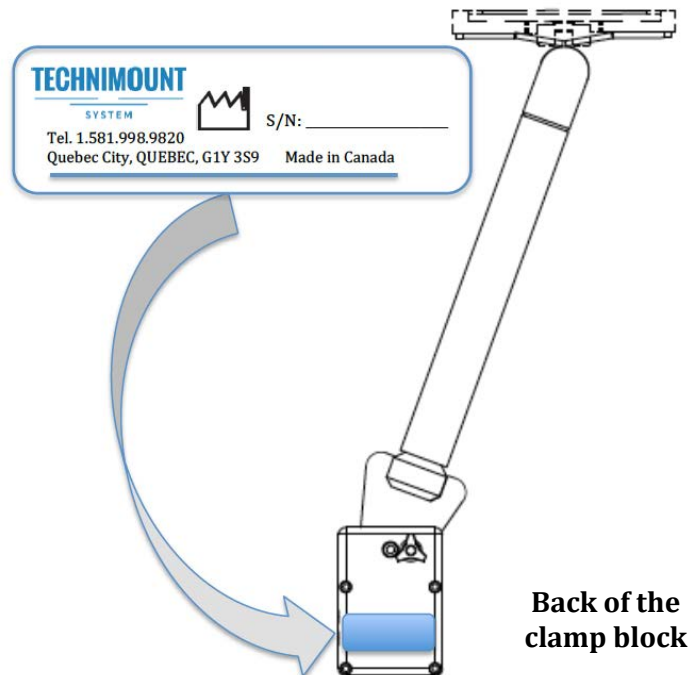


Figure 1: Arm serial # & location

PRODUCT ILLUSTRATION

Perspective View

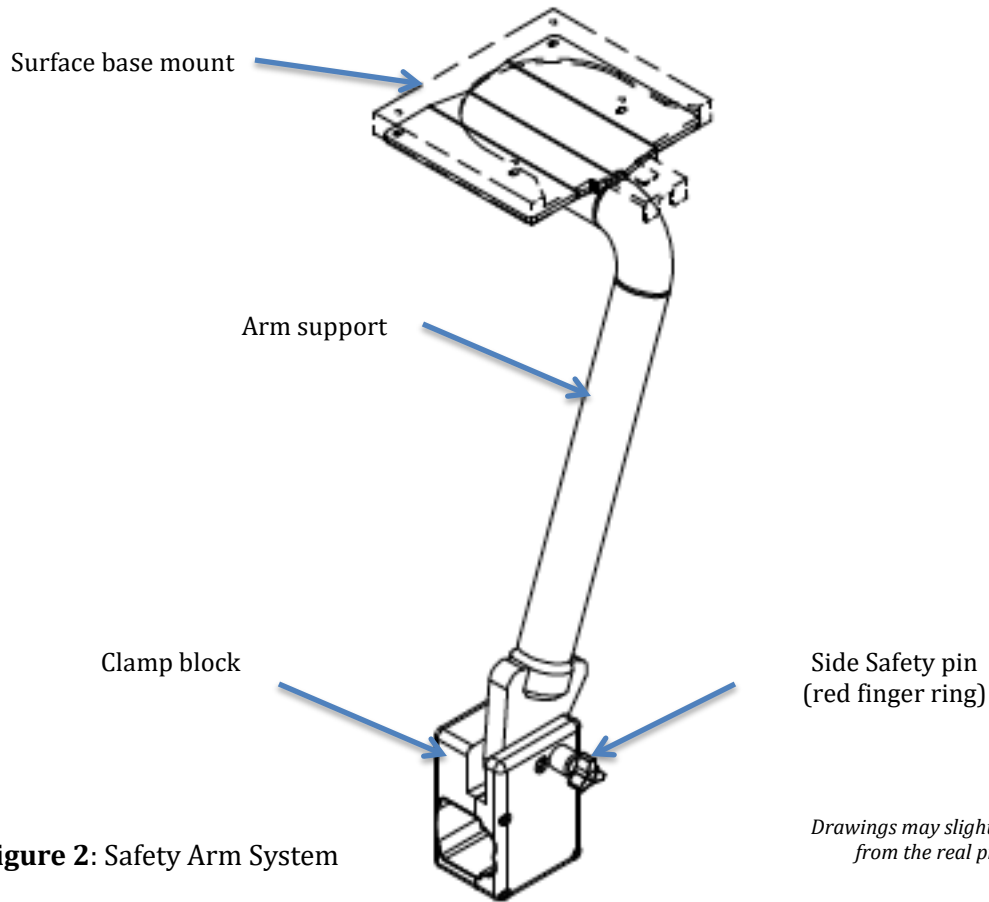


Figure 2: Safety Arm System

Drawings may slightly differ from the real product

Side View

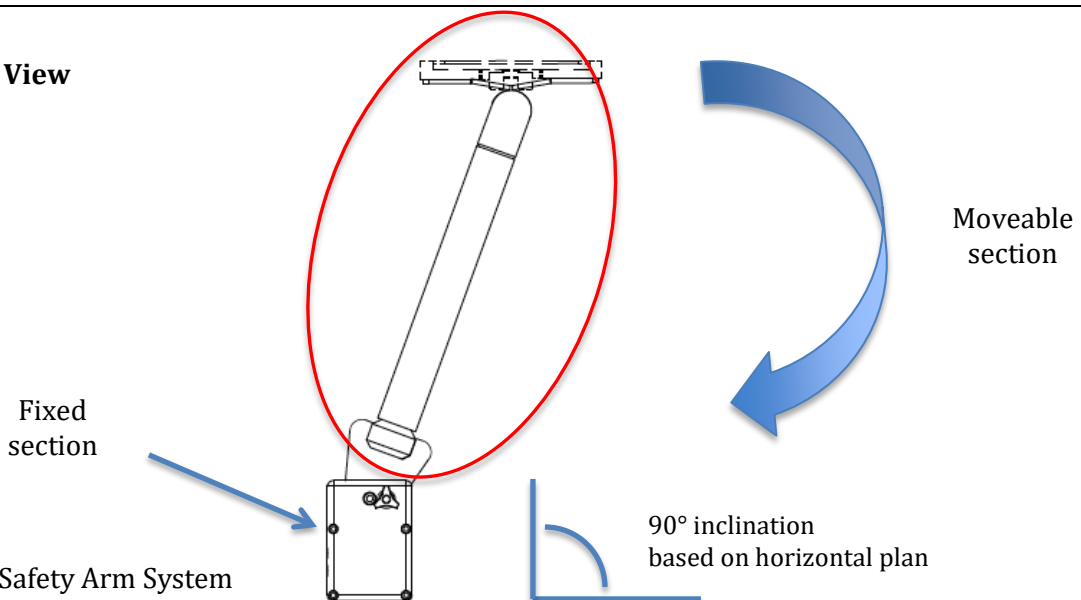


Figure 3: Safety Arm System Flexion

PRODUCT ILLUSTRATION (Installation overview)

Upper position

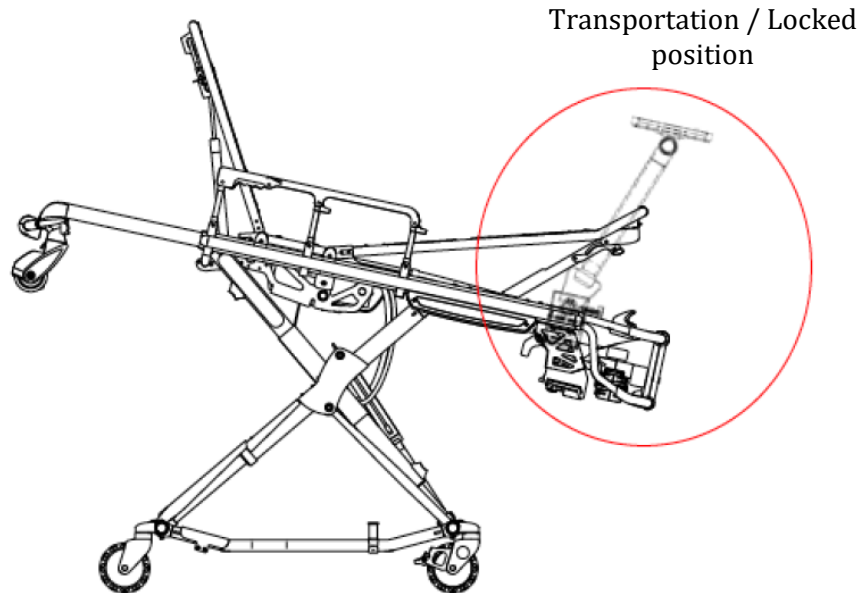
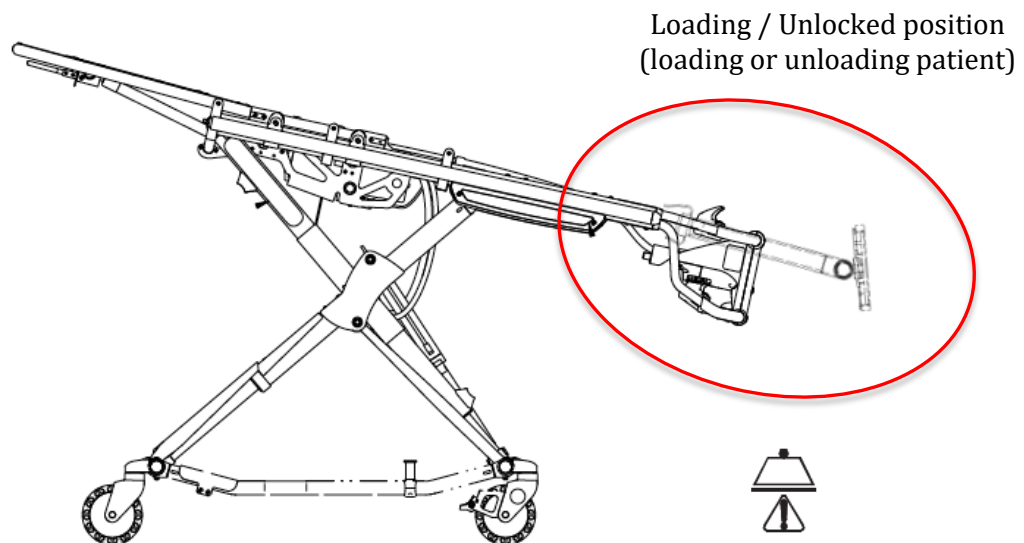


Figure 4: Safety Arm System installed on cot

Lower position



Always check arm positioning to avoid an unbalanced cot situation

Figure 5: Safety Arm System deployed on cot

SUMMARY OF SAFETY PRECAUTIONS

Carefully read and strictly follow the warnings and cautions listed on these pages. Service only by qualified personnel.



WARNING

- ✓ **ALWAYS HOLD THE ARM WHEN YOU MANIPULATE IT. AS WELL, ALWAYS PULL AND HOLD THE LOCKING SAFETY PIN (RED HANDLE) UNTIL IT REACHES THE FINAL POSITION (UP (Locked) OR DOWN (Un-Locked))**
-



WARNING

- ✓ Ensure proper hand placement on arm support or surface plate. Hands should be clear of the black clamp block and arm pivot while loading and unloading the medical equipment or whenever changing height position of the arm with two or more operators.
- ✓ Improper usage of the *Safety Arm System* can cause injury to the patient or operator. Operate the arm only as described in this manual.
- ✓ Do not modify the arm or any components of the system. Modifying the product can cause unpredictable operation resulting in injury to the patient or operator. Modifying the product also voids its warranty (see page 44).
- ✓ It is the responsibility of the cot/stretchers operator to ensure that the *Safety Arm System* being used with Technimount products meet the installation specifications listed on page 6. Injury may result if a non-compatible product are used in the Technimount system.
- ✓ Do not attempt to operate the arm when it is loaded into a vehicle or in a very tight or narrow area.
- ✓ Failure to install the side safety pin (finger ring) can cause injury to operator and damaged the product. Always secured the arm with it. Install and use the safety pin as described on page 25.
- ✓ To avoid injury, verify that the side safety pin has been pulled all the way through the clamp block before removing the arm from the cot or lowering the arm to the unlocked position.
- ✓ Verify that the side safety pin (red finger ring) is always pushed into the holes of the clamp block and arm base in the locking position, regardless of how the arm is load or unloaded with a medical device; injury to the patient or operator and/or damage to the arm may occur.
- ✓ Practice changing arm positions (Transportation (Locked)/Loading & Unloading (Un-Locked) until operation of the product is fully understood. Improper use can cause injury.
- ✓ Always securely hold the arm near the bend (top of arm) when changing positions from locked to unlocked; failure to do it can cause damage to the product and/or the cot/stretchers.

- ✓ Do not allow untrained staff to assist in the operation of the arm system. Untrained technicians/staff can cause injury to the patient or themselves.
- ✓ Do not sit or ride on the tubular pole (arm). Damage to the product could occur, resulting in injury to the patient or operator.
- ✓ Grasping the arm improperly can cause injury. Keep hands, fingers and feet away from moving parts. To avoid injury, use extreme caution when placing your hands and near the tubular base (arm & clamp block) while raising or lowering the arm.
- ✓ Operators must be able to safely lift the total weight of the system (arm and medical device), and any items related on the arm.
- ✓ Never use the arm when installed on the cot/stretcher in the lower or un-locked position, to open the rear vehicle door nor pull the cot with the arm.
- ✓ Do not attempt to load the arm with the medical device in the lower or un-locked position. Loading a medical device onto the arm must be in the upper or locked position, if not installed properly the medical device on the surface base may cause injury to the patient or operator and/or damage to the product.
- ✓ Do not attach restraints to the base tubular frame, the surface base, or any other place of the arm system. It may result in damage to the arm and/or result in injury to the patient or operator.
- ✓ Do not place any additional equipment or objects on the arm, other than the approved Technimount System device bracket for medical devices.
- ✓ Always reposition the arm with due care, avoid any improper pushing or violent manipulation, as it may result in an unbalanced cot/stretcher and may cause injury to the patient or operator and/or damage to the product.
- ✓ To avoid the risk of patient injury or equipment damage, ensure that you properly mount and secure the defibrillator platform (bracket) to the arm's receiving surface base.
- ✓ To avoid the risk of patient injury or equipment damage, you must make sure that the disc attached to the bracket under the medical device is properly locked into the surface base prior to repositioning the arm.
- ✓ If you want to remove the arm from the system, make sure you remove the medical device from the surface base prior the operation, failure of removing it may result in damage to the product, or cause injury to the operator.
- ✓ **SOME CLEANING PRODUCTS ARE CORROSIVE IN NATURE AND MAY CAUSE DAMAGE TO THE PRODUCT IF USED IMPROPERLY.** If such products are used to clean Technimount equipment, measures must be taken to ensure the Safety Arm System are wiped with clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the arm

will leave a corrosive residue on the surface of the cots, possibly causing premature corrosion of critical components.

- ✓ Failure to properly clean or dispose of corrosive product will increase the risk of premature damage and may cause injury to the patient or operator.
- ✓ Changing of parts either through replacement or modifications of a unit without the consent or approval by Technimount System could void the user's authority to operate the system and its warranty.
- ✓ Installation of the *Safety Arm System* was designed to be placed on the left side of the cot/stretchers (looking from foot end of the cot/stretchers). When ordering, it's important to identify which side the Safety Arm is to be located; the *Safety Arm System* cannot be reversed as the clamp block has been designed for specific side.
- ✓ A certified technical or mechanic familiar with the cot/stretchers' specifications should complete the installation of the clamp block. Consult the cot/stretchers manufacturer's manual before installing the safety arm and be sure that the installation of the safety arm system does not damage or interfere with the cot/stretchers.
- ✓ A preventative maintenance program should be established for all Technimount equipment. Preventative maintenance may need to be performed more frequently, based on the usage level of the product. Close attention should be given to safety features (ie safety pins, attachment points).
- ✓ Improper maintenance can cause injury or damage to the product. Maintain the *Safety Arm System* as described in this manual. Use only Technimount approved parts and maintenance procedures. Using unapproved parts and procedures could cause unpredictable operation and/or injury and will void the product warranty (see page 44).
- ✓ Failure to use authorized parts, lubricants, etc. could cause damage to the arm and will void the warranty of the product.
- ✓ This manual should be considered a permanent part of the arm system and should remain with the product even if the arm is subsequently sold.
- ✓ Technimount continually seeks advancements in product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your arm system and this manual. If you have any questions, please contact Technimount Customer Service or Technical Support at +1.581.998.9820.
- ✓ Inspect regularly the clamp block and surface base for any issue and loose screws, bolts and nuts.
- ✓ Do not adjust or change arm position while you roll or work simultaneously with the cot, and/or into a vehicle without advising the patient. Stay with the patient and control the arm at all times.

- ✓ Always manipulate the arm at the lower position of the cot, as much possible; high lever may unbalance the cot with violent movement or unpredictable motion.

PINCH POINTS

WARNING: Pinch Points

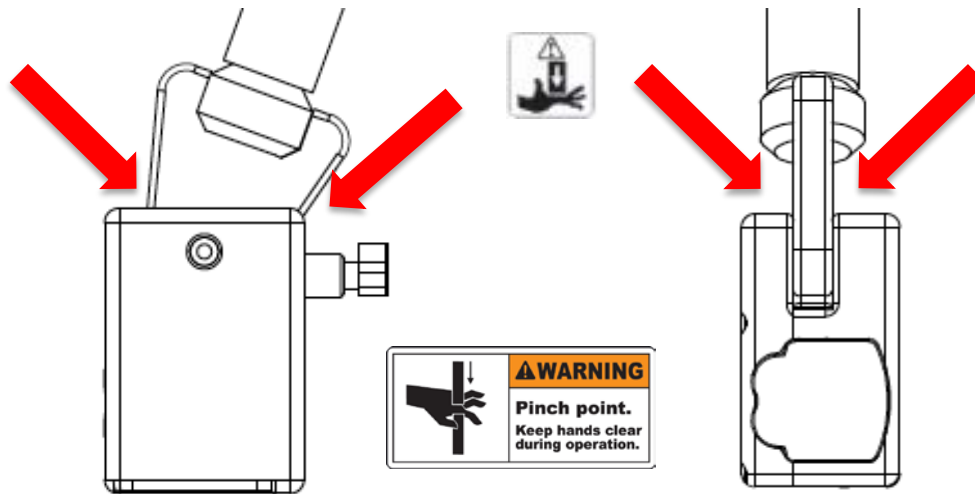


Figure 6: Side view clamp block and arm pivot

Figure 7: Lateral view clamp block and arm pivot



WARNING

Ensure proper hand placement on a high position on the tubular frame (pole). Hands should be clear of clamp block while loading and unloading the arm or whenever changing height position of the arm system with two or more operators.

SET UP PROCEDURES

Ensure that all shipping and packaging materials have been removed from the product(s) prior to use.

Unpack the cartons and check all items for proper operation. It is important that the *Safety Arm System* is working properly before it is put into service. See on page 3 to identify all of the product components.

Validate that you have all the components and hardware prior to starting the installation. Some hardware or parts provided might not be applicable to the model of your cot/stretcher; please refer to the page 3 for identification product components.

Note: Loose items or debris on the cot can interfere with the operation of the safety arm system and cot/stretcher. Keep cot/stretcher & the floor clear.



WARNING

- ✓ Improper usage of the Safety Arm System can cause injury to the patient or operator. Operate the system only as described in this manual.
- ✓ Do not modify the product or any components of the cot/stretcher. Modifying the product can cause unpredictable operation resulting in injury to the patient or operator. Modifying the product also voids its warranty (see page 44).

Note:

- ✓ This manual should be considered a permanent part of the product and should remain with the product even if the system is subsequently sold.
- ✓ Technimount continually seeks advancements in product design and quality. Therefore, while this manual contains the most current product information available at the time of printing, there may be minor discrepancies between your arm system and this manual. If you have any questions, please contact Technimount Customer Service or Technical Support at +1.581.998.9820 or via email: techsupport@technimount.com

TOOLS REQUIRED

Tools needed for this installation are simple. We're provided some basic information for selecting your tools. If you're not too sure about the exact tool or you may need assistance, please contact Technimount Technical Service.

Item 1:
Allen key dimension
3/16" ANSI - SME



Item 2:
Screw driver –
Star bite S2-T27



Item 3:
Small plastic/rubber hammer



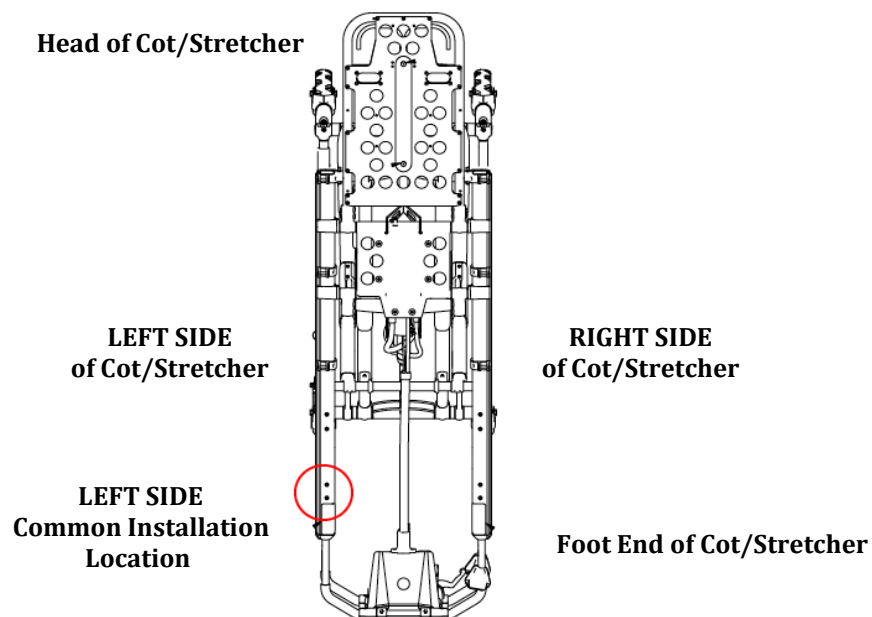
Picture 1: Tools required for the installation



WARNING

Other type of tool may also be appropriate for the work; however, electric tools are not recommended for unscrewing the bolt into the cot frame the first time, risk of damaged the threads.

Cot/Stretcher Orientation Diagram



SETTING THE COT/STRETCHER FOR THE INSTALLATION

SETTING FOR MODEL 500

Some cots/stretchers will have the IV pole located on the left side of the frame (looking from *foot end of cot/stretcher*). If this is the case, you'll need to change the IV pole location to the other side of the cot/stretcher unless you have a Technimount **IV Pro Adapter** (Part no: 511-00-UN-BLK), in order to have the *Safety Arm System* on the side closest to the side wall of the ambulance (left common use or right side with patient's leg). Locating the IV pole on the same side as the Safety Arm System does not interfere with the installation or the operation of the arm. NOTE: You will need to validate location of the installation before commencing removal of IV pole hardware.

Technimount can provide with two (2) different models. The standard model 400 (Ferno) or Model 500 (Stryker) which is designated as a "right" side installation (patient's leg) but left side is available upon request, and the installation is exactly the same procedure. For this manual, we'll use a left side model.

Here is the procedure to remove or change the IV pole prior to installing the Safety Arm System on the cot/stretcher.

Procedure to remove or change position of the IV pole from the left side to the right side.

Note:

- ✓ You might **not** have this step to perform, depending if you have or not the IV pole installed.
- ✓ Please refer to the manual of the manufacturer of the cot/stretcher for more details about the installation/reinstallation.



Picture 2: right side cot with IV pole to be remove



Picture 3: Do not install IV pole same side of the arm unless you have the IV Pro Adapter



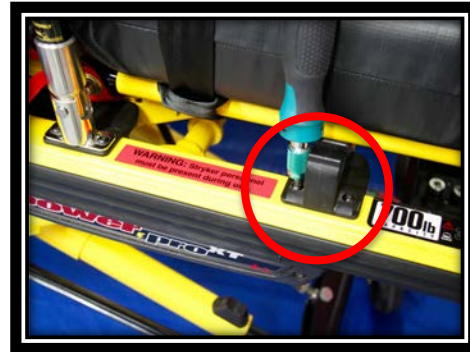
CAUTION

- ✓ Be careful to not damage the screw holes, and the bolt. Technimount does not provide replacement parts for this. Please contact the manufacturer of the cot/stretcher for replacement parts.

REMOVE THE IV POLE:

STEP 1

- Get access to the screws that hold the IV pole and the holder, by placing the IV pole in the upper position.



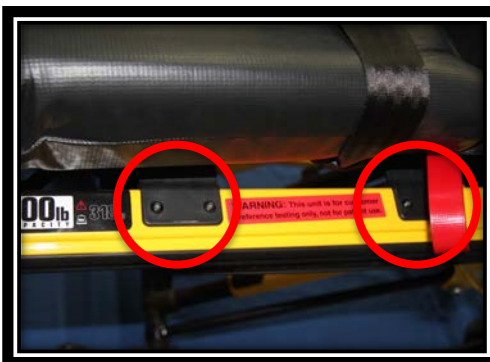
STEP 2

- Remove all 4 screws holding IV pole bracket & holder; and replace the screws.



STEP 3

- The IV pole can be installed on the other side of the cot/stretcher, utilizing the same bracket/holder, or put aside for later use.



SAFETY ARM SYSTEM INSTALLATION

Note: The Safety Arm System Installation instructions on page 21 through page 25 are intended for cots/stretchers that you will use **with or without** Power-LOAD.

 **WARNING**

It is the responsibility of the arm operator to ensure that the system being used on the cot/stretcher meets the installation specifications listed on page 23. Injury may result if a non-compatible cot is used.

Note: Adjustment of the clamp block assembly may be required in order to compensate for any variation in the cot frame dimension depending on the cot manufacturer and model number.

POSITION ON THE COT (left side of model shown)

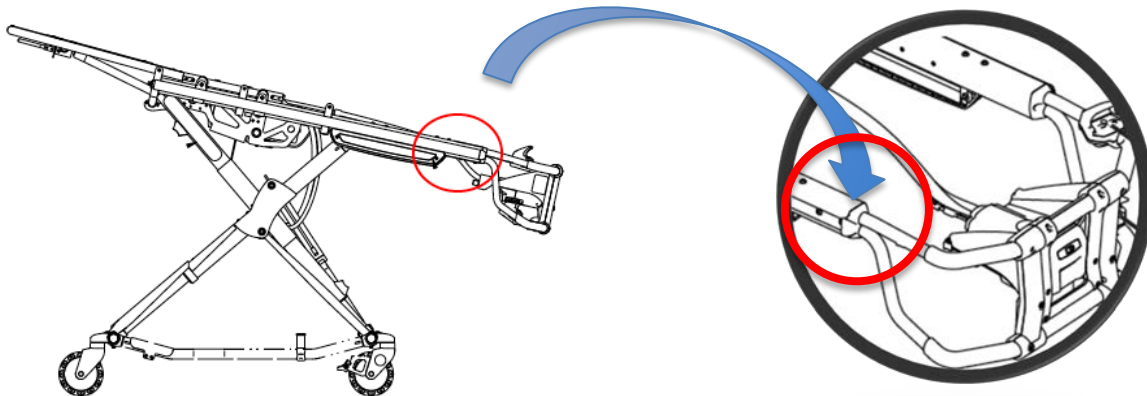


Figure 8: Position of the clamp block on the tip side rail frame

Note:

- ✓ In order to install the *Safety Arm System* on the left side (foot end of cot/stretcher), you need to specify which side the arm will be installed; the *Safety Arm System* can not be reversed or installed on the other side; clamp block has been designed for specific side.
- ✓ The Arm itself cannot be switched from one side to another, you need to order a system according to the side desired.

SAFETY ARM SYSTEM INSTALLATION (continued)

POSITION ON THE COT (left side of model shown)

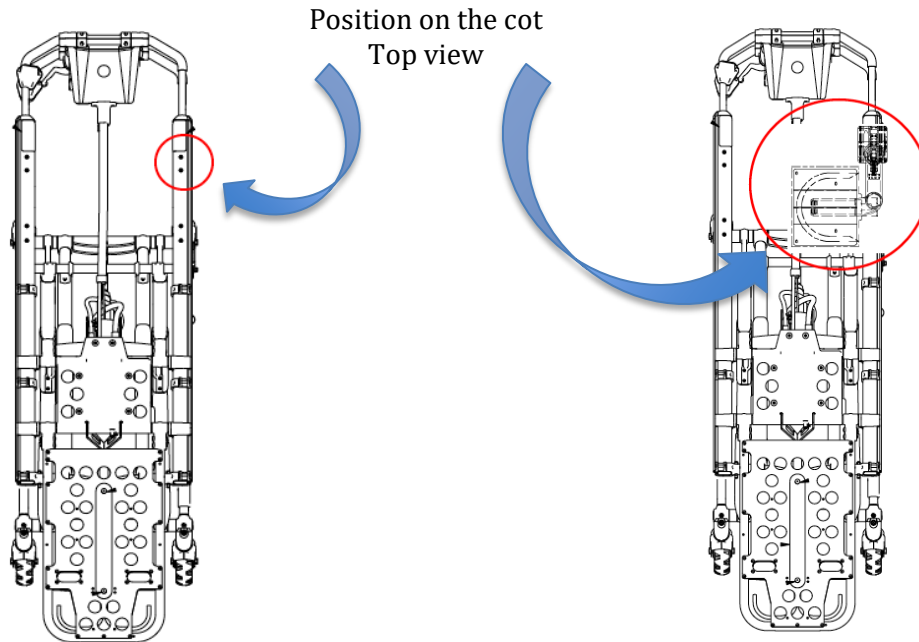


Figure 9: Position to be installed

Figure 10: Once installed upper position

POSITION ON THE COT (Left & Right sides of model shown)

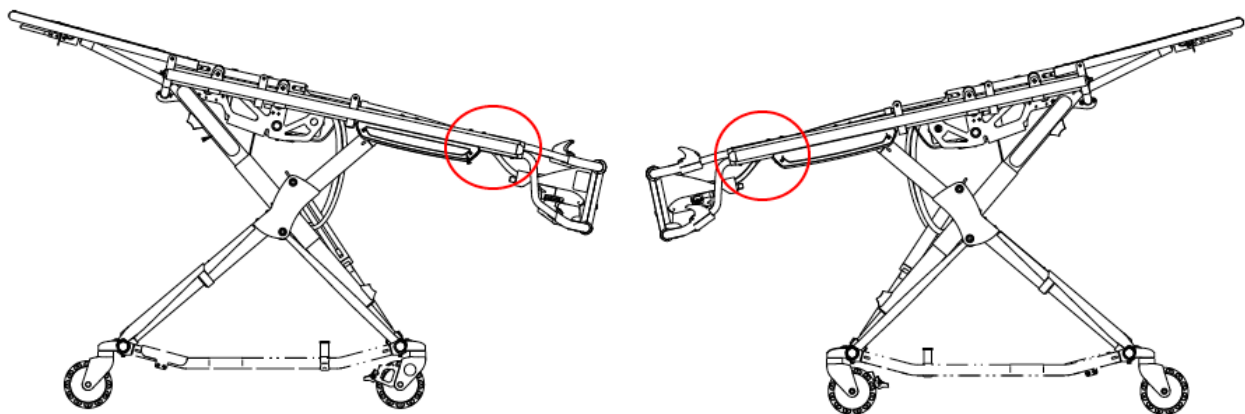


Figure 11: Both side of the cot for installation;
Model 500 shown

Note:

- ✓ Installation on a “left or right” model is the same location for the clamp block; the clamp block is designed for specific side.

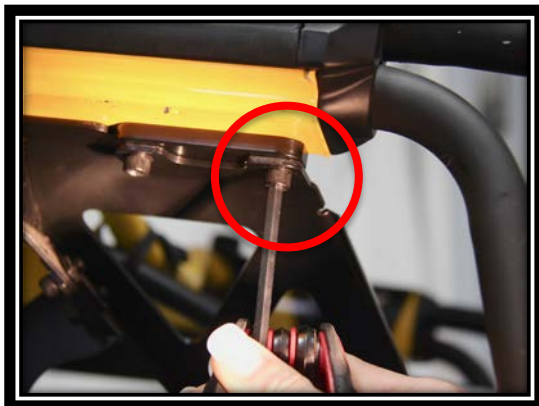
SAFETY ARM SYSTEM INSTALLATION (continued)

INSTALLING THE CLAMP BLOCK

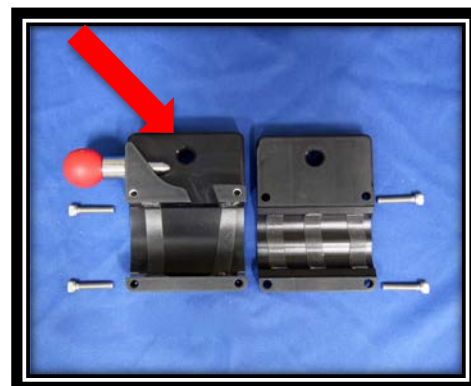
1. Determine the position to install the clamp block; and locate the two (2) screws that are attached to the front section of the frame.



2. Unscrew the 2 bolts with 3/16" Allen key (or *Star bite S2-T27*) and hold on to it until the following step; remove the spacer, and set it aside, as it won't be used in the installation.



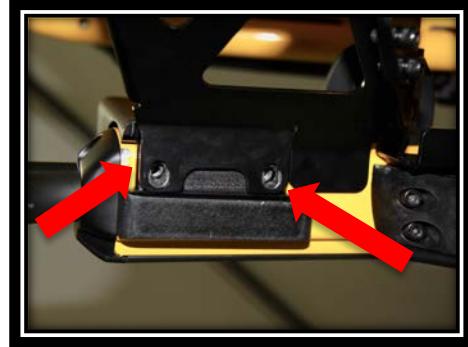
3. Unscrew the four (4) hexagon socket open head screws of the clamp block, with the 3/16" Allen key and place the part with the fixed red handle, on the inside the cot frame, in order to fit it vertical on the tip of frame.



SAFETY ARM SYSTEM INSTALLATION (continued)

INSTALLING THE CLAMP BLOCK

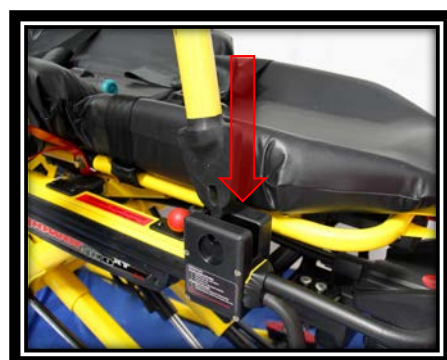
4. Position the clamp block under the black plate of the frame and aligned with the two (2) screw holes.



5. Tighten screws tightly, while alternating screw heads and reconfirm position of the clamp block; it should be positioned close to the tip of the frame and with a tiny yellow line of the frame visible, **NOTE:** Remember to add a couple of drops of blue Loctite 2400 to the screws before installation.



6. Screw the four (4) hexagon socket pan head screws tightly, while alternating screw heads and again, add couple of drops of blue Loctite 2400. Once, clamp block is installed, you are ready to proceed to the next step, installing the arm into the clamp block.



SAFETY ARM SYSTEM INSTALLATION (continued)

INSTALLING THE ARM TO THE CLAMP BLOCK

7. Pull the fixed lock pin back and adjust the arm to align the hole of the clamp block and the hole into the triangle (feet) of the arm; then place and push the side safety pin until the finger ring is flat against the wall of the circle cut-out.



8. Fixed Safety pin (red handle) and side lock pin (finger ring) should be fully inserted and locked when the arm is in the upper position (defined as "Locked position").






 **WARNING**

Please verify that the arm always engages into the clamp block regardless of how the arm is positioned. Failure to insert the side safety pin properly may result of injury to the patient or operator and/or damage to the cot/stretchers and/or the defibrillator.

INSTALLING "SURFACE BASE" ONTO STRETCHER SAFETY ARM RECEIVING UPPER PLATE

SYMBOLS

	Attention, consult accompanying documents, or special attention
	Safe working load symbol
	Pinch point



ATTENTION NOTE :

During the installation process, Technimount System recommends the use of Loctite 2400 (Blue) to avoid premature loosening of screws during regular use.



Note: Brand name as Loctite™ is shown as suggestion only, Technimount System and its subsidiaries is not related to this brand and the trademark of Loctite is not registered under Technimount.

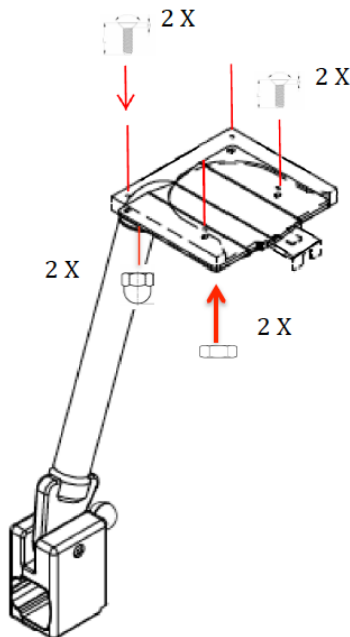
Instructions for part one (surface base mounted onto the Safety Arm plate)

Step 1. *(Position the surface base) –*



- ✓ Identify the receiving base plate of the arm and select the desired location of the surface base, keeping in mind the position of the “red” release mechanism. *(Please note that you’ll use only four (4) holes displayed on the receiving plate).* The normal position provides access to the release button when facing the stretcher’s right side, looking from the foot end of the stretcher.
- ✓ Place the surface base on top of the receiving plate and use the hardware provided to secure the base to the plate. (Refer to the diagram below)

Step 2. *(Secure the surface base)*

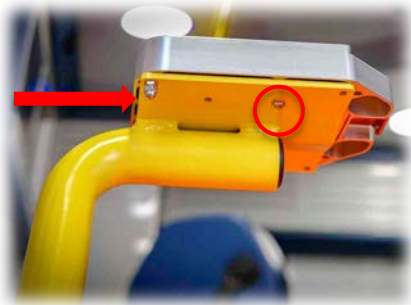


Note: The round headed hexagon nuts (2) should be placed on the same side of the arm to cover the longer of the 4 bolts.

- ✓ Use the (2) longer bolts to secure the back of the surface base *(opposite side of the red release button).*

- ✓ Align the two (2) screws 10-32 x 1-3/4" (*longer of the two*) with the two (2) pre-drilled holes in the **back** of the receiving plate and the surface base. Use *Loctite™* on the four (4) bolts to avoid potential loosening of screws, due to vibration.
- ✓ Then, repeat the same step with the other two (2) screws 10-32 x 1-1/4" (*shorter in length*) at the front or the middle of the base, and screw them in place with the Philips screwdriver.

Step 2. (Final installation)



- ✓ Tighten all four (4) screws of the surface base, at the front, and at the back with the Philips screwdriver and the mechanical wench SAE 3/8".



OPERATING GUIDELINES

Note:

- ✓ Use the Safety Arm System only as described in this manual.
- ✓ Read all labels and instructions on the product before using the *Safety Arm System*.
- ✓ Before first and every use, inspect the clamp block and arm area for cracks and/or damage.
- ✓ Loading or unloading the *Safety Arm System* requires a minimum of one (1) trained operator, but Technimount recommends two (2) where possible.
- ✓ Do not adjust, or change arm position while you roll or work simultaneously with the cot, and/or into a vehicle without advising the patient. Stay with the patient and control the arm at all times.
- ✓ The arm can be positioned in 2 positions: Locked (Upper) & Unlocked (Lower). Technimount recommends operators use the system in the upper or locked position while the cot/stretcher in mobile or vehicle is moving; there is less risk to damaging the system or causing injury to the operator or patient.
- ✓ Always verify the fixed *lock* pin is secure during use of the *Safety Arm System* with or without having a patient on the cot/stretcher.
- ✓ Always verify if the side *safety* pin is firmly pushed and locked into position in the clamp block during use of the cot/stretcher with or without having a patient on the cot.
- ✓ Use properly trained staff, when necessary, to control the arm, or installed the medical device onto the arm's surface base.



WARNING

Improper usage of the *Safety Arm System* can cause injury to the patient or operator. Operate the product only as described in this manual.

Do not allow untrained staff to assist in the operation of the arm. Untrained technicians/staff can cause injury to the patient or themselves.

Always verify if the fixed *safety* pin and the side *lock* pin are firmly pushed and locked into the clamp block during use of the cot/stretcher with or without a patient on the cot/stretcher.



WARNING

- ✓ **ALWAYS HOLD THE ARM SECURELY WHEN YOU MANIPULATE IT. AS WELL, ALWAYS PULL AND HOLD THE LOCKING SAFETY PIN (RED HANDLE) UNTIL IT REACHES THE FINAL POSITION (UP (Locked) OR DOWN (Un-Locked))**

OPERATING GUIDELINES (Continued)



CAUTION

- ✓ Before operating the arm, clear any obstacles that may interfere and cause injury to the operator, patient or damaged the medical equipment or other object.
- ✓ Always keep a safe distance from the foot end of the cot, clear of any obstacles while operating the arm; while maintaining a minimum distance of at least 24 inches (2 feet).

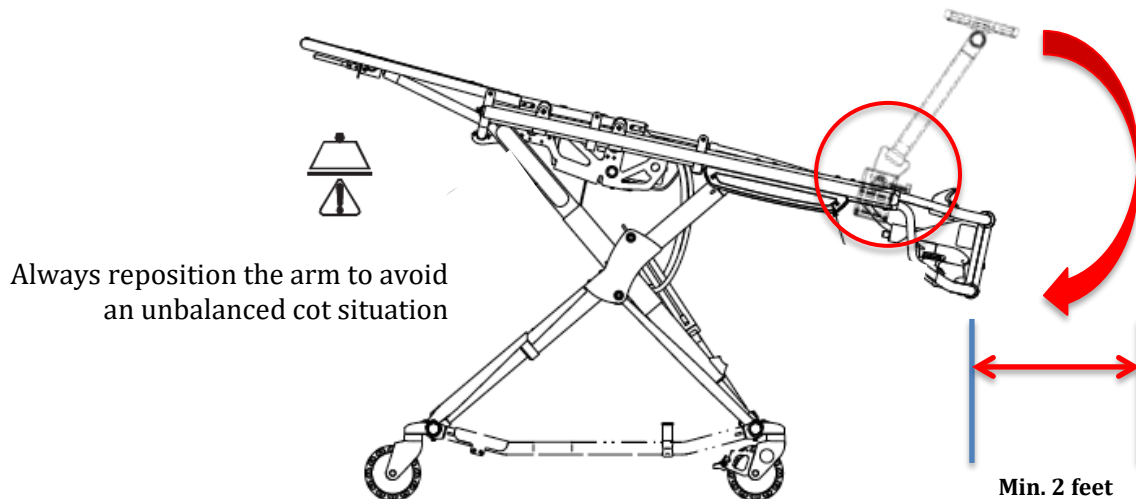


Figure 12: Clearance in front of the cot/stretcher foot end for operating the arm

PROPER LIFTING TECHNIQUES

When lifting the arm, there are six basic guidelines to help you avoid injury:

- ✓ Keep your hands clear from pinch points
- ✓ Keep your back straight.
- ✓ Coordinate your movements with your partner on positioning the arm,
- ✓ Avoid twisting.
- ✓ Always operate the arm as described in this manual.
- ✓ Always secure the movement of the equipment by holding the arm firmly.

PROPER LIFTING TECHNIQUES (continued)

 **WARNING**

- ✓ Never let a patient grab, manipulate or hold the surface base or the arm (pole) on the cot or injury could result. Secure the arm as prescribe, while a patient is on the cot.
- ✓ Always transport patient while the arm is in the upper or locked position; lower or unlocked position should be use only for loading and unloading the patient. The upper or locked position maintains the balance of the cot/stretcher and reduces the potential of a cot/stretcher tipping.

PROPER HANDLING POSITIONS

You should always consider holding and/or grabbing the arm by the tubular frame, at the center or towards the top near the bent; avoid placing your hands at base close to the clamp block or pinch points, failure may cause injury to the operator.

Place your hand to be able to release the fixed lock pin and pulling up the arm on the same axis simultaneously.

Ideal positions are indicated below, depending of the upper (Locked) or lower (Unlocked) position of the arm. Please refer to the **blue zone** for identification.

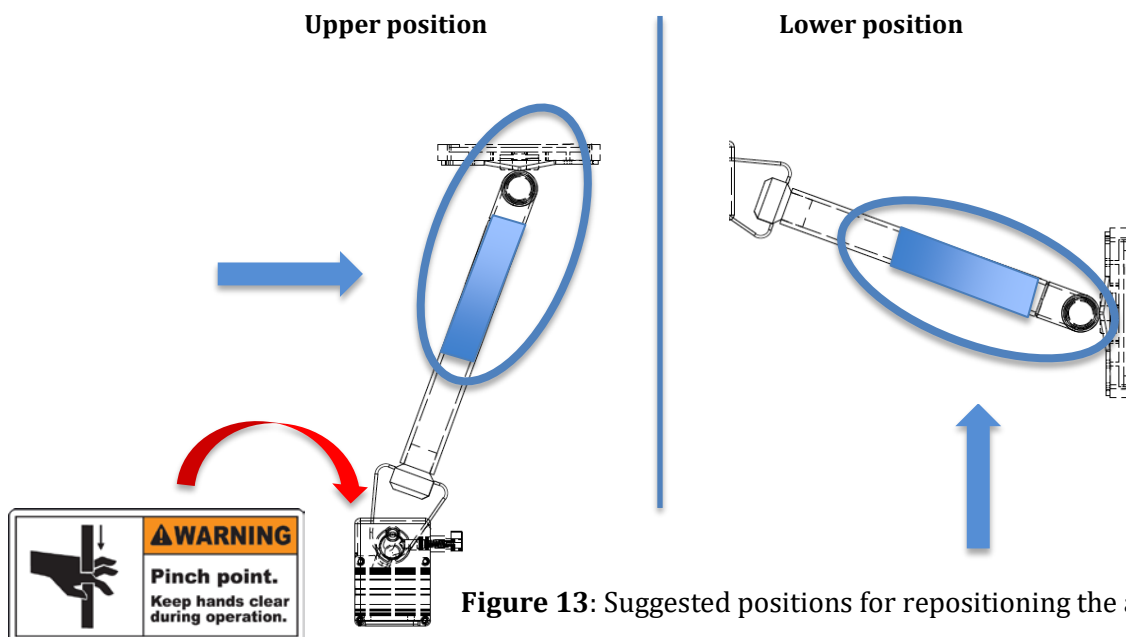


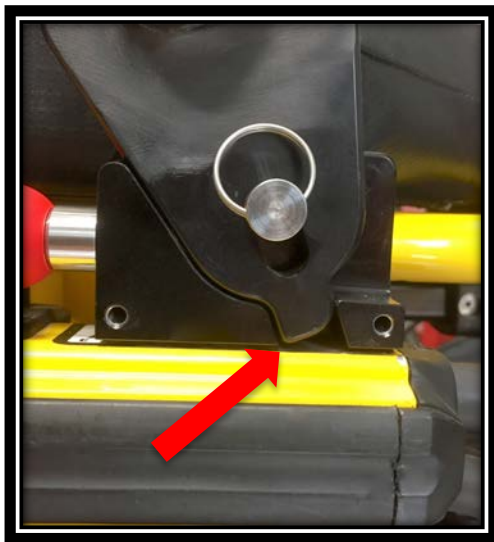
Figure 13: Suggested positions for repositioning the arm

PROPER HANDLING POSITIONS (continued)



WARNING

- **IT IS EXTREMELY IMPORTANT TO RAISE THE SAFETY ARM UP ALONG THE SAME AXIS, TO THE MAXIMUM POSITION, EVEN WITH THE WEIGHT OF THE MEDICAL DEVICE, IN ORDER TO NOT DAMAGE THE TIP OF THE TRIANGLE HEAD. Improper positioning of the arm can cause a premature damage or cause improper function of the system.**
- This system is NOT a mechanical assistance or has a physical assistance for rising or unloaded the weight, but just hold the weight instead of the EMT's. or not leaving it between patient's legs. The user MUST manipulate it with all the strength necessary and apply the manual's recommendations.



Support position
(Arm upper position)



Maximum upper position
(Arm at upper position)

Note:

- ✓ The tip of the triangle head is used to stop the arm from movement (i.e. in case of a rear-end collision) and to secure the arm at a fixed point and engage the fixed locking mechanism. Any modification not approved by Technimount System will void the warranty and exclude any responsibility of the manufacturer.

OPERATING THE SAFETY ARM SYSTEM



WARNING

- ✓ Two operators should be present when repositioning the arm when the cot/stretcher is occupied.
- ✓ Operators must be able to safely and securely lift the total weight of the system, arm, medical device and any items related to the system.
- ✓ Ensure proper hand placement on tubular pole or surface plate. Hands should be clear of the black clamp block and arm pivot points while loading and unloading the medical equipment or whenever changing height position of the arm with two or more operators.

CHANGING POSITION OF THE ARM

1. Hold & rise up the arm on the appropriate position (see page 31), and at the same time pull back the fixed safety pin and pull up the arm in the same axis, in order to disengage the triangle head from the clamp block base.



2. Holding the arm securely with two hands, lower the arm gently until the arm has reached the bottom of the pivot point on the clamp block or is parallel with the cot/stretcher frame.



 **WARNING**

- ✓ The medical device must be removed from the surface base mount, prior to removing the arm; from the clamp block in an emergency situation or if not possible, two operators must do it.
- ✓ Operators must be able to lift the total weight of the system, arm, medical device and any items related to the system.

REMOVING THE ARM

1. Grab and hold the side finger ring of the side lock pin and pull towards you; ensuring the side lock pin is fully removed from the clamp block.



2. While securely holding the arm on the appropriate position (see page 31), and you have removed the side lock pin, pull up on the arm on the same axis, in order to disengage the triangle head from the clamp block. REMEMBER to secure the side lock pin in a safe location or reinsert it into the clamp block.



Always remove the medical device prior to performing this operation.

OPTIONS

The options listed below can be purchased and installed on the Safety Arm System™.

Accessory	Part number	Page reference
Side Lock pin - colour red ring & pin head	910-00-PTR	Page 3
Safety Arm System on Left side	420-20-UN-LFS	Page 4



WARNING

- ✓ Changing of parts either through replacement or modifications of a unit without the consent or approval by Technimount could void the user's authority to operate the system and its warranty.
- ✓ Do not modify the arm or any components of the system. Modifying the product can cause unpredictable operation resulting in injury to the patient or operator. Modifying the product also voids its warranty (see page 44).



WARNING

- ✓ **ALWAYS HOLD THE ARM SECURELY WHEN YOU MANIPULATE IT. AS WELL, ALWAYS PULL AND HOLD THE LOCKING SAFETY PIN (RED HANDLE) UNTIL IT REACHES THE FINAL POSITION (UP (Locked) OR DOWN (Un-Locked))**
- ✓ **Failure to pull the fixed lock safety pin (red handle) when repositioning the arm may cause damage to the Arm or locking mechanism - not covered under warranty -.**

CLEANING

Note:

The *Safety Arm System*™ is designed to utilize a power washer. The unit may show some signs of oxidation or discoloration from continuous washing; however, no degradation of the cot's performance characteristics or functionality will occur due to power washing as long as the proper procedures are followed. The material used to be manufactured is high grade aluminum, it may resist and be durable to corrosion; however high levels of sodium environment or liquid with a very high concentration of sodium or acid may attack prematurely the product; always rinse with soft soap and water if exposed.

WASHING LIMITATIONS



WARNING

- ✓ When cleaning, refer to appropriate personal protection equipment (PPE) based on established protocols (gloves, eye wear, etc.) to ensure the health and safety of those directly involved. Use of power washer equipment can accelerate contamination collected during the use of the product.



CAUTION

- DO NOT STEAM CLEAN OR ULTRASONICALLY CLEAN THE SYSTEM (ALL COMPONENTS).
 - Maximum water temperature should not exceed 180°F/82°C
 - Maximum water pressure should not exceed 1500 psi/130.5 bar. If a hand-held wand is being used to wash the unit, the pressure nozzle must be kept a minimum of 24 inches (61 cm) from the unit.
 - Allow the *Safety Arm System* to air dry
 - Towel dry all casters and interface points, specifically into the slot of the triangle head into of the clamp block.
 - Failure to comply with these instructions may invalidate any/all warranties.
-

CLEANING SOLUTIONS

In general, when used in those concentrations recommended by the manufacturer, either phenolic type or quaternary (*excluding Virex® TB*) type disinfectants can be used. Iodophor type disinfectants, Peracetic acid, Chlorine, and especially Peroxide oxygen are **not** recommended for use because staining and corrosion may result.

Suggested cleaners for the arm surfaces and clamp box:

- Quaternary Cleaners (active ingredient - ammonium chloride)
- Phenolic Cleaners (active ingredient - o-phenyl phenol)
- Chlorinated Bleach Solution (3.25% - less than 1-part bleach to 100 parts water)

Note: Do not immerse the metal parts / components in water. Rinse with clean water. Allow to air dry. Avoid over saturation and ensure that the product does not stay wet longer than the chemical manufacturer's guidelines for proper disinfecting.



WARNING

SOME CLEANING PRODUCTS ARE CORROSIVE IN NATURE AND MAY CAUSE DAMAGE TO THE PRODUCT IF USED IMPROPERLY. If the products described above are used to clean TECHNIMOUNT equipment, measures must be taken to ensure the *Safety Arm System* are wiped with clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the arm will leave a corrosive residue on the surface of the product, possibly causing premature corrosion of critical components.

Note: Failure to follow the above directions when using these types of cleaners may void this product's warranty (see page 44).

REMOVAL OF IODINE COMPOUNDS

Use a solution of 1/4 Tablespoon Sodium Thiosulfate in a pint of warm water to clean the stained area. Clean as soon as possible after staining occurs. If stains are not immediately removed, allow solution to soak or stand on the surface. Rinse surfaces, which have been exposed to the solution in clear water before returning unit to service.



CAUTION

Failure to properly clean or dispose of contaminated parts or arm components will increase the risk of exposure to blood borne pathogens and may cause injury to the patient or the operator.

PREVENTIVE MAINTENANCE

A preventative maintenance program should be established for all TECHNIMOUNT equipment. Preventative maintenance maybe required more frequently based on the usage level of the product. The *Safety Arm System* requires regular preventative maintenance. Establish and follow a preventative maintenance schedule and keep records of preventative maintenance activity (see page 40 for a form). TECHNIMOUNT recommends using the preventative maintenance record sheet to show (see page 40) and support preventative maintenance of the product.



CAUTION

A preventative maintenance program should be established for all Technimount equipment. Preventative maintenance maybe required more frequently based on the usage level of the product. Close attention should be given to safety features including, but not limited to:

- Clamp block
 - Tubular Arm and surface plate (support surface base mount bracket)
-



WARNING

- ✓ Do not modify the arm or any components of the system. Modifying the product can cause unpredictable operation resulting in injury to the patient or operator. Modifying the product also voids its warranty (see page 44).
 - ✓ When using maintenance products, follow the directions of the manufacturer and reference all material safety data sheets.
-



CAUTION

Improper maintenance can cause injury or damage to the product. Maintain the product as described in this manual. Use only Technimount approved parts and maintenance procedures. Using unapproved parts and procedures could cause unpredictable operation and/or injury and will void the product warranty (see page 44).

Failure to use authorized parts, lubricants, etc. could cause damage to the cot/stretcher and will void the warranty of the product.

LUBRICATION

The *Safety Arm System* has been designed to operate **without** the need for lubrication, replaced by an anodization of the metallic parts in contact, using a lubricant silicone base can be used but not necessary. If you're not sure about the product to use, please contact technical support.

REGULAR INSPECTION AND ADJUSTEMENT

Preventative Maintenance Intervals

The following schedule is intended as a general guide to preventative maintenance. Bear in mind that such factors as weather, terrain, geographical location, and individual usage will alter the required maintenance schedule. If you are unsure as to how to perform these checks please contact your Technimount Service Technician. If you are in doubt as to what intervals to follow in maintaining your product, consult your Technimount Service Technician. Check each routine and replace damaged or worn out parts if necessary.

ITEM	ROUTINE	Every (<i>whichever comes first</i>)			
		1 Month or 2 hours	3 Months or 6 hours	6 Months or 12 hours	12 Months or 24 hours
Clamp box	<ul style="list-style-type: none"> ✓ Inspect the 4 hexagon screws of the clamp block, to detect if loose, broken or unscrewed screw; If not secure, then the screw must be replaced. ✓ Inspect and re-tight the 2 bolts under the clamp block that hold the system on the cot/stretchers frame. ✓ Check fixed safety lock - working properly and no particle or obstacle, debris. ✓ Check side safety lock pin - locked properly ✓ Verify if the frame of the cot/stretchers is not cracked or broken surrounding the area of the clamp block. 	X			
Arm - tubular pole	<ul style="list-style-type: none"> ✓ Verify all welds intact, not cracked or broken ✓ Verify not bent, broken, or damaged components ✓ Verify that the system retaining post is secure. ✓ Verify no excessive damage to arm ✓ Verify the pole operates properly 		X		
Bracket mounting	<ul style="list-style-type: none"> ✓ Inspect the 4 bolts and nuts to secure the surface base mount bracket on the surface plate 	X			

QUICK REFERENCE REPLACEMENT PARTS

The parts and accessories listed on these pages are all currently available for purchase. Some of the parts identified on the assembly drawing parts in this manual may not be individually available for purchase. Please call Technimount Customer Service Canada: +1.581-998-9820 or at customerservice@technimount.com or techsupport@technimount.com for availability and pricing.

Part Name / Description	Part Number
Clamp block – Stryker cot/stretcher model	500-10-PXXXX
Tubular Arm with triangle feet – right side- Anodized – yellow	400-20-UN
Side Lock pin stainless steel – NO Color -	910-00-UN
Side Lock pin stainless steel with red color anodized	910-00-PTR
Fixed Safety pin with red handle kit (3 pieces)	920-00-UN
Sticker – brand name -	940-00-UN
Sticker – Instruction in English -	930-00-EN
Sticker – Instruction in French -	930-00-FR
OPTION	Part Number
Clamp block – Stryker cot/stretcher model - - LEFT SIDE INSTALLATION -	500-10-PXXXX-LFS
IV Pro Adapter – IV pole support – Right side (patient's leg) Without Knee Gatch	511-00-UN-LFS - WHKG

CERTIFICATION - TESTING

Contact technical support or your representative for a copy of the certification related to the product.

*INTENTIONNALLY LEFT BLANK
(Certification testing section)*

WARRANTY

TECHNIMOUNT SYSTEM a division of the Technologie CGC offers three warranties options for its products:

- One (1) year additional after the original warranty for parts and labor. Technimount warrants to the original purchaser that its products should be free from manufacturing non-conformances that affect product performance and customer satisfaction for a period of one (1) year after date of end of the original warranty. Technimount's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product that is, in the sole discretion of Technimount, found to be defective.
- Two (2) years additional after the original warranty for parts and labor. Technimount warrants to the original purchaser that its products should be free from manufacturing non-conformances that affect product performance and customer satisfaction for a period of two (2) year after date of end of the original warranty. Technimount's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product that is, in the sole discretion of Technimount, found to be defective.
- Three (3) years additional after the original warranty for parts and labor. Technimount warrants to the original purchaser that its products should be free from manufacturing non-conformances that affect product performance and customer satisfaction for a period of three (3) year after date of end of the original warranty. Technimount's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product that is, in the sole discretion of Technimount, found to be defective.

Note:

Please contact customer service or a representative for price and conditions.

The Safety Arm System™ is designed for a 5-year expected service life under normal use conditions, and with appropriate periodic preventative maintenance as described in the manual. Technimount warrants to the original purchaser that the welds on *the Safety Arm System* (the arm tubing specifically) will be free from structural defects for the expected 5 years' service life of the product as long as the original purchaser owns the product. Original purchasers will obtain a one (1) year limited parts warranty for the clamp box components of the cot system. Technimount obligation under this one (1) year limited warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any part that is, in the sole discretion of Technimount, found to be defective.

Upon Technimount's request, purchaser shall return to Technimount's shipping warehouse any product or part (freight prepaid by Technimount) for which an original purchaser makes a warranty claim.

Any improper use or alteration or repair by unauthorized service providers in such a manner as in Technimount's judgment affects the product materially and adversely, shall void this warranty. Any repair of Technimount products using parts not provided or authorized by Technimount shall void this warranty and exclude any type of responsibility to the product or the use of it. No employee, distributor or manufacturing agent or representative of Technimount is authorized to change this warranty in any way.

WARRANTY (continued)

This statement constitutes Technimount's entire warranty with respect to the aforesaid equipment. TECHNIMOUNT SYSTEM MAKES NO OTHER WARRANTY OR REPRESENTATION EITHER EXPRESSED OR IMPLIED, EXCEPT AS SET FORTH HEREIN. THERE IS NO WARRANTY OF MERCHANTABILITY AND THERE ARE NO WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL TECHNIMOUNT BE LIABLE HEREUNDER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR IN ANY MANNER RELATED TO SALES OR USE OF ANY SUCH EQUIPMENT.

Technimount System (Technologies CGC Inc.) warrants to the original purchaser ("Buyer") of the hardware with which this Limited Warranty is included ("Hardware") that the Hardware will be free from defects in workmanship and materials under normal use ("Defects") for a period of one (1) year from the date that the Hardware was first purchased by you ("Warranty Period"). During the Warranty Period the Hardware will be repaired or replaced ("Limited Warranty") without charge to you for either parts or labour. The parts may be repaired or replaced with either new or refurbished parts; the product may be replaced for a new or refurbished product. For this Limited Warranty "refurbished" entails parts and products, which have been returned to factory specifications. If the Hardware 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/replacement. If the Hardware 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 date of repair or replacement.

The Limited Warranty does not apply to normal wear that should result from, does not apply when the hardware or any components is opened, disassembly, or repaired by someone not authorized by the "Seller" and does not cover repair or replacement of any Hardware or part thereof damaged by: misuse, moisture, liquids, proximity or exposure to heat and accident, abuse, non-compliance with the instructions supplied with the Hardware, neglect or misapplication. The Limited Warranty does not cover physical damage to the surface of the Hardware.

The items, hardware or product define as *any type of mounting, bracket system for clipping and attaching medical equipment* is specifically designed to maintain or supporting medical equipment. It is strictly made to fill this requirement; all other use will avoid the warranty if applicable and will not involve liability of the seller (TECHNIMOUNT), on any form of the claim and may not be adapted or modified for other use.

Any repair, disassembly, work or manipulation of the components or internal mechanism or parts, without a written approbation from Technimount System will avoid warranty and any form of liability directly or indirectly to the product of use of the product automatically without any advice.

RETURN POLICY

TECHNIMOUNT RETURN POLICY

Cot/Stretcher system, as Safety Arm System, components related may be returned up to 60 days of receipt if they meet the following guidelines:

Prior to 30 Days

- ✓ 30-day money back guarantee in effect
- ✓ Technimount is responsible for all **charges (0 %)**
- ✓ Returns will not be approved on modified item

Prior to 45 Days

- ✓ Product must be unused, undamaged and in the original packaging
- ✓ Customer is responsible for a **20% restocking fee**
- ✓ Reasons of returning the product must be provided by written
- ✓ Returns will not be approved on modified item or damaged

Prior to 60 Days

- ✓ Product must be unused, undamaged and in the original packaging
- ✓ Customer is responsible for a **30% restocking fee**
- ✓ Reasons of returning the product must be provided by written
- ✓ Returns will not be approved on modified item or damaged

RETURN AUTHORIZATION

Technimount customer service department must approve any merchandise return and will provide an authorization number to be printed on any returned merchandise. Technimount reserves the right to charge shipping and restocking fees on returned items. **SPECIAL, MODIFIED, OR DISCONTINUED ITEMS NOT SUBJECT TO RETURN.**

DAMAGED MERCHANDISE

ICC Regulations require that claims for damaged merchandise must be made with the carrier within fifteen (15) days of receipt of merchandise. **DO NOT ACCEPT DAMAGED SHIPMENTS UNLESS SUCH DAMAGE IS NOTED ON THE DELIVERY RECEIPT AT THE TIME OF RECEIPT.** Upon prompt notification, Technimount will file a freight claim with the appropriate carrier for damages incurred. Claim will be limited in amount to the actual replacement cost. In the event that this information is not received by Technimount within the fifteen (15) day period following the delivery of the merchandise, or the damage was not noted on the delivery receipt at the time of receipt, the customer will be responsible for payment of the original invoice in full.

Note:

Claims for any short shipment must be made within thirty (30) days of invoice.

INTERNATIONAL WARRANTY CLAUSE

This warranty reflects Canadian domestic policy. Warranty outside the Canada may vary by country. Please contact your local Technimount representative for additional information.



TECHNIMOUNT SYSTEM

445 Papin St. – Office 103

Quebec City (Quebec)

Canada

G1P 3T8

Phone: +1.581.998.9820

Fax: 1.855.339.6351

Email: info@technimount.com

Web : www.technimount.com