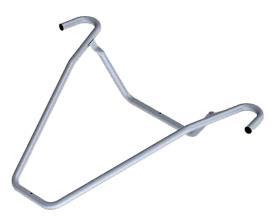
# **Model 175** Fastening System









**Users' Manual** 

Pub. No. 234-3163-0







#### **Ferno Customer Relations**

For ordering assistance or general information:

#### **CANADA AND THE U.S.A.**

Telephone (Toll-free)	1.877.733.0911
Telephone	1.937.382.1451
Fax (Toll-free)	1.888.388.1349
Fax	1.937.382.1191
Internet	www.ferno.com

#### **ALL OTHER LOCATIONS**

For assistance or information, please contact your Ferno distributor. If you do not have a Ferno distributor, please contact Ferno Customer Relations:

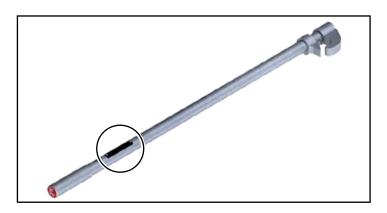
Ferno-Washington, Inc., 70 Weil Way Wilmington, Ohio 45177-9371, U.S.A.

Telephone	Country Code +1.937.382.1451
Fax	Country Code +1.937.382.6569
Internet	www.ferno.com



#### **USERS' MANUALS**

To request additional free users' manuals, contact Ferno Customer Relations, your Ferno distributor, or <u>www.ferno.com</u>.



Serial Number

Location: Handle-end of the fastening-system rail

#### **Disclaimer**

This manual contains general instructions for the use, operation and care of this product. The instructions are not all-inclusive. Safe and proper use of this product is solely at the discretion of the user. Safety information is included as a service to the user. All other safety measures taken by the user should be within and under consideration of applicable regulations and local protocol. Training on the proper use of this product must be provided before using this product in an actual situation.

Retain this manual for future reference. Include it with the product in the event of transfer to new users. Additional free copies are available upon request from Customer Relations.

## **Proprietary Notice**

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## **Limited Warranty Statement**

The products sold by Ferno are covered by a limited warranty, which is printed on all Ferno invoices. The complete terms and conditions of the limited warranty, and the limitations of liability and disclaimers, are also available upon request by calling Ferno at 1.800.733.3766 or 1.937.382.1451.



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## 1 - SAFETY INFORMATION

#### 1.1 Warning

Warning notices indicate a potentially hazardous situation which, if not avoided, could result in injury or death.

## **⚠** WARNING

Untrained operators can cause injury or be injured. Permit only trained personnel to operate the fastening system.

Improper use of the fastening system can cause injury. Use the fastening system only for the purpose described in this manual.

An incompatible cot can cause injury. Use only a Ferno cot or iN[X] designed for use with the fastening system.

Improper or inadequate installation can cause injury. The installer must test the fastening system setup to meet or exceed all applicable guidelines before using the setup in an ambulance.

A fastening system installed without backing plates can fail. Secure the fastening system to properly-installed backing plates at all mounting points.

Improperly-installed backing plates can fail. Secure the backing plates to primary structural members of the ambulance at all mounting points.

Improper operation can cause injury. Operate the fastening system only as described in this manual.

Improper adjustment can cause injury. Stay within the range between the jaw and the adjustment limit label.

Improper maintenance can cause injury. Maintain the fastening system only as described in this manual.

Pressing the lock button with your fingers can cause injury. Use caution when lubricating the jaw shaft. Always use the cot or iNJX to activate the lock button.

Improper parts and service can cause injury. Use only Ferno parts and Ferno-approved service on the fastening system.

Modifying the fastening system can cause injury and damage. Use the fastening system only as designed by Ferno.

## 1.2 Important

Important notices emphasize important usage or maintenance information. Failure to follow Important notices could result in damage to the product or property damage.

### **Important**

#### 1.3 Tip

Tips provide recommendations for easier use of the product.



## 1.4 Fastening System Compatibility

Combining different manufacturers' products such as a Ferno cot with a non-Ferno fastening system can increase the user's risk of injury and damage. Ferno-Washington, Inc. cots are designed for use only with Ferno-manufactured fastening systems. Use of a Ferno cot with a non-Ferno fastening system is misuse of the Ferno product. The user assumes responsibility for the outcome of known, intentional misuse.

#### 1.5 Symbol Glossary

The symbols defined below are used on the fastening system and/or in this' manual. Ferno uses symbols recognized by the International Standards Organization (ISO), American National Standards Institute (ANSI) and the emergency medical services industry.



General Warning of Potential Injury



Read the Users' Manual



Unlocked



Locked



Do Not Lubricate



t Lubricate



Manufacturer



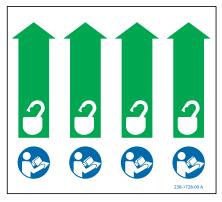
Authorized Representative in the European Community



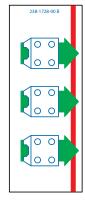
## Safety Information, Operator Focus

## 1.6 Safety and Instruction Labels

Safety and instruction labels place important information from the users' manual on the fastening system. Read and follow label instructions. Replace worn or damaged labels immediately.



**Release Handle Label:** Push to unlock. Read the users' manual for complete operating instructions.



Adjustment Limit Label: Do not allow the rail clamp to overlap the red line.

## 2 - OPERATOR FOCUS

#### 2.1 Operator Training

Operator using the fastening system:

- must read and understand this manual.
- must have training on proper use of the fastening system and the cot or iN∫X that will be used with the fastening system.
- must have a training on emergency-medical service and emergency patient-handling procedures.
- must practice with the fastening system before using it in service.
- must keep training records. For a sample training record sheet, see "Training Record" on page 18.

#### 2.2 Terms

The following terms are used in this manual.

- **CONTROL END:** The control end of the cot or iNJX is where the shock frame and control handles are located. This area is also known as the (patient's) foot end.
- **LOADING END:** The loading end of the cot or iNJX is where the backrest, drop frame and safety bar are located. This area is also known as the (patient's) head end.
- LOADING HEIGHT: The loading height is the level at which the cot or iNJX will roll into an ambulance. Raise the cot or iNJX to the loading height only to load it into an ambulance or unload it from an ambulance.

#### ♠ WARNING

Untrained operators can cause injury or be injured. Permit only trained personnel to operate the fastening system.

#### 3 - ABOUT THE FASTENING SYSTEM

#### 3.1 Description

The Model 175 Antler and Rail Fastening System (called the fastening system in this manual) is designed to limit the movement of a Ferno® ambulance cot or the  $iN\S^m$  Integrated Patient Transport & Loading System™ inside the patient compartment of a ground-based ambulance. The fastening system is for professional use only.

#### **ANTLER AND RAIL**

The standard fastening system consists of a standard antler and rail (Figure 1). An  $iNJX^{m}$  Model 175 fastening system consists of an iNJX antler and rail (Figure 2).

A mounting kit is needed to install the antler and rail.

**Note:** The  $iN\int X$  requires the use of the  $iN\int X$  antler (Figure 2). Purchase an antler/rail kit that includes the  $iN\int X$  antler.

**Note:** The antler/rail kit is sold separately from the mounting kit. For a complete system, purchase an antler/rail kit **and** a mounting kit. See "Parts and Service" on page 16.

#### STANDARD MOUNTING KITS

The mounting kits listed below provide removable or permanently-mounted components to affix the antler and rail in the ambulance.

- 175-1: Permanent, wall-mount rail, permanent antler
- 175-2: Permanent, floor-mount rail, permanent antler
- 175-3: Removable floor-mount rail, removable antler
- 175-4: Dual, removable floor-mounted fastening system
- 175-5: Permanent, wall-mount rail, removable antler

#### MOUNTING KIT VARIATIONS

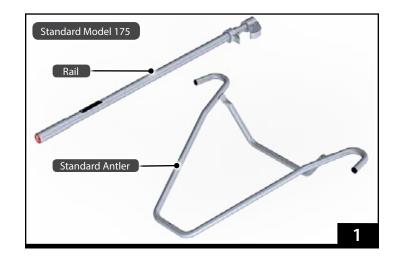
- Stainless Steel Rail: A stainless steel rail is available as an option to
  the standard aluminum rail. The stainless steel rail is recommended
  for high-use ambulance services, but functions identically to the
  aluminum rail. See "Parts and Service" on page 16.
- Rail Length: Some variations in fastener-rail length are available for installers with unique ambulance conditions. See "Parts and Service" on page 16. Contact Ferno for assistance. See "Ferno Customer Relations" on page 2.

#### ♠ WARNING

Improper use of the fastening system can cause injury. Use the fastening system only for the purpose described in this manual.

#### **Important**

The standard antler is compatible with the Ferno® cots listed in "Compatible Cots and iNJX" on page 7, **except the** iNJX. The iNJX antler must be used with the iNJX and is compatible with all other 175-compatible Ferno® cots.





## 3.2 Compatible Cots and iN∫X™

The fastening system is designed for use with Ferno® cots and the iN∫X™ Integrated Patient Transport & Loading System™. Do not use the fastening system with cots manufactured by other companies. See "Fastening System Compatibility" on page 4.

Refer to the list of compatible products below.

- X-frame cots: Series 30, 35A, 5848, S-76, XCalibur, PROFlexx® 35P, 35X, 35X-EFNY, POWERFlexx®+ Powered Cots Series
- H-frame cots: Series 29, 93, PROFlexx® 93P, 93H
- Independent leg: iN∫X<sup>™</sup> Integrated Patient Transport & Loading System<sup>™</sup> (\*), Series 25, 26

**Note:** \*Requires iNJX antler. See "About the Mounting Kits" on page 6.

#### 3.3 Compliance

#### INSTALLER RESPONSIBILITIES

The fastening system must be installed properly to meet or exceed all applicable standards and guidelines in the country in which it is installed.

**International installers:** The fastening system is designed to U.S.A. standards. Ferno strongly recommends you follow the recommended installation practices. Refer to the *Model 175 Installation Manual* for additional information. To obtain a free copy of the manual, contact Ferno. See "Ferno Customer Relations" on page 2.

**U.S.A. installers:** The fastening system has been designed and tested by Ferno to meet or exceed existing ambulance standards from:

- Ambulance Manufacturer's Division (AMD) of the National Truck Equipment Association Standard 004 (August 2007 edition), Litter Retention System Static Test.
- Federal Ambulance Specification KKK-A-1822 revision F (2007) as applicable; NFPA 1917 (2013 edition).
- The Model 175 Fastening System does not meet the recommended practice of SAE J3027 (proposed, 2014).

Standards and specifications are updated periodically. Current guidelines are available from these organizations. See the addresses at right.

Non-compliant ambulances may have design features that interfere with the normal function of the iNJX or cot with the fastening system. If the ambulance does not meet U.S. specification KKK-A-1822, contact the ambulance manufacturer for assistance.

#### **USER RESPONSIBILITIES**

The user must regularly inspect and maintain the fastening system. In addition, the user should do the following:

- **Installer consultation:** Consult your installer to ensure your fastening-system setup meets all applicable standards. For installations in the U.S.A., the installer should be able to show that your fastening system was installed in a way that is equal to a setup that has passed the pull test stipulated in AMD 004.
- **Backing-plate inspection:** Verify that the fastening system has been installed with backing plates at all mounting points beneath the ambulance floor (and behind the wall, for some installations).
- Inspect the fastening system a minimum of once each month, or more often with frequent use. See "Inspecting the Fastening System" on page 15.

#### **⚠ WARNING**

An incompatible cot can cause injury. Use only a Ferno cot or iN∫X designed for use with the fastening system.

Improper or inadequate installation can cause injury. The installer must test the fastening system setup to meet or exceed all applicable guidelines before using the setup in an ambulance.

A fastening system installed without backing plates can fail. Secure the fastening system to properly-installed backing plates at all mounting points.

Improperly-installed backing plates can fail. Secure the backing plates to primary structural members of the ambulance at all mounting points.

#### **U.S.A. Standards**

For information about Federal Ambulance Specification KKK-A-1822 revision F (2007) and NFPA 1917 (2013):

Office of Motor Vehicle Management, General Services Administration, 2200 Crystal Drive, Suite 1006 Arlington, VA, 22202

Internet: www.gsa.gov/automotive

For information about AMD standards (August, 2007):

Ambulance Manufacturer's Division National Truck Equipment Association 37400 Hills Tech Drive Farmington Hills, MI, 48331-3414

Internet: www.ntea.com



# About the Fastening System

## 3.4 Fastening System Kits

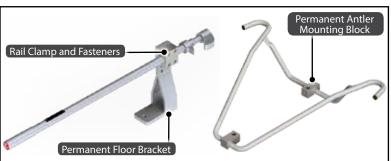
Model 175 with 175-1 Mounting Kit		
Part	Quantity	
Permanent Antler Mounting Block	2 ea.	
Wall Bracket	1 ea.	
Rail Clamp	1 ea.	
.313-18 Jam Nut	4 ea.	
.313-18x1.5" Socket Head Cap Screw	4 ea.	
.313 Split Lock Washer	4 ea.	

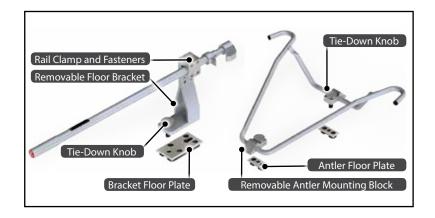
Model 175 with 175-2 Mounting Kit	
Part	Quantity
Permanent Antler Mounting Block	2 ea.
Permanent Floor Bracket	1 ea.
Rail Clamp	1 ea.
.313-18 Jam Nut	4 ea.
.313-18x1.5" Socket Head Cap Screw	4 ea.
.313 Split Lock Washer	4 ea.

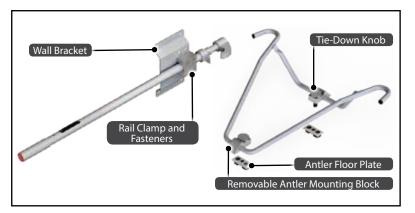
Model 175 with 175-3 or 175-4 Mounting Kits		
Part	175-3 Quantity	175-4 Quantity
Antler Floor Plate	2 ea.	4 ea.
Removable Antler Mounting Block	2 ea.	2 ea.
Tie-Down Knob	3 ea.	3 ea.
Removable Floor Bracket	1 ea.	1 ea.
Rail Clamp	1 ea.	1 ea.
.313-18 Jam Nut	4 ea.	4 ea.
.313-18x1.5" Socket Head Cap Screw	4 ea.	4 ea.
.313 Split Lock Washer	4 ea.	4 ea.
Bracket Floor Plate	1 ea.	2 ea.

Model 175 with 175-5 Mounting Kit	
Part	Quantity
Antler Floor Plate	2 ea.
Removable Antler Mounting Block	2 ea.
Tie-Down Knob	2 ea.
Wall Bracket	1 ea.
Rail Clamp	1 ea.
.313-18 Jam Nut	4 ea.
.313-18x1.5" Socket Head Cap Screw	4 ea.
.313 Split Lock Washer	4 ea.









Tip

#### iN∫X and Model 175

The standard antler is compatible with all Ferno Model 175-compatible cots except the iNJX. See "Compatible Cots and iNJX" on page 7.

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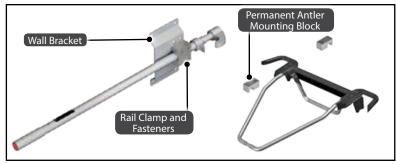
## About the Fastening System

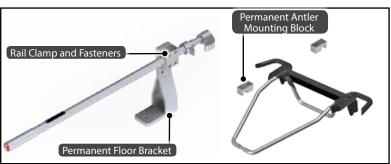
iN∫X™ Model 175 with 175-1 Mounting Kit		
Part	Quantity	
Permanent Antler Mounting Block	2 ea.	
Wall Bracket	1 ea.	
Rail Clamp	1 ea.	
.313-18 Jam Nut	4 ea.	
.313-18x1.5" Socket Head Cap Screw	4 ea.	
.313 Split Lock Washer	4 ea.	

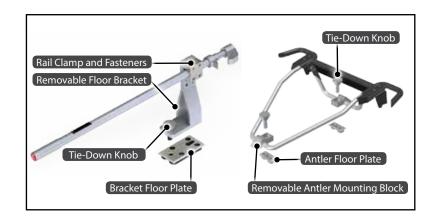
iN∫X™ Model 175 with 175-2 Mounting Kit		
Part	Quantity	
Permanent Antler Mounting Block	2 ea.	
Permanent Floor Bracket	1 ea.	
Rail Clamp	1 ea.	
.313-18 Jam Nut	4 ea.	
.313-18x1.5" Socket Head Cap Screw	4 ea.	
.313 Split Lock Washer	4 ea.	

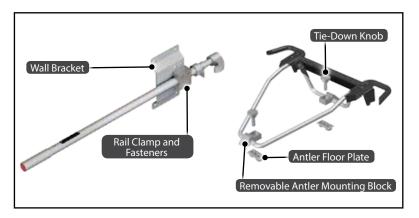
#### iN∫X<sup>™</sup> Model 175 with 175-3 or 175-4 Mounting Kits 175-3 175-4 Part Quantity Quantity **Antler Floor Plate** 2 ea. 4 ea. Removable Antler Mounting Block 2 ea. 2 ea. Tie-Down Knob 3 ea. 3 ea. Removable Floor Bracket 1 ea. 1 ea. Rail Clamp 1 ea. 1 ea. .313-18 Jam Nut 4 ea. 4 ea. .313-18x1.5" Socket Head Cap Screw 4 ea. 4 ea. .313 Split Lock Washer 4 ea. 4 ea. **Bracket Floor Plate** 1 ea. 2 ea.

iN∫X™ Model 175 with 175-5 Mounting Kit		
Part	Quantity	
Antler Floor Plate	2 ea.	
Removable Antler Mounting Block	2 ea.	
Tie-Down Knob	2 ea.	
Wall Bracket	1 ea.	
Rail Clamp	1 ea.	
.313-18 Jam Nut	4 ea.	
.313-18x1.5" Socket Head Cap Screw	4 ea.	
.313 Split Lock Washer	4 ea.	









#### iN∫X and Model 175

The iNJX antler must be used with the iNJX. The iNJX antler is compatible with all other Model-175-compatible Ferno cots. See "Compatible Cots and iNJX" on page 7

#### 4 - USING THE FASTENING SYSTEM

# 4.1 Before Placing the Fastening System in Service

- Before use, personnel who will work with the fastening system must read and understand this manual. Appropriate skills and training are also required. See "Operator Training" on page 5.
- Confirm that the fastening system operates properly. See "Inspecting the Fastening System" on page 15.
- The fastening system is for use only with a Ferno cot or iN∫X. See "Compatible Cots and iN∫X" on page 7.
- If the ambulance is involved in a traffic accident, the fastening system could sustain **hidden damage** (damage that is not visible to the eye). Replace the fastening system if the ambulance is involved in a traffic accident.



Improper operation can cause injury. Operate the fastening system only as described in this manual.

#### **Important**

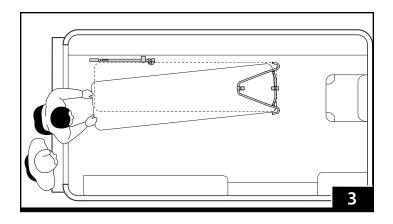
If the ambulance is involved in a traffic accident, replace the fastening system.

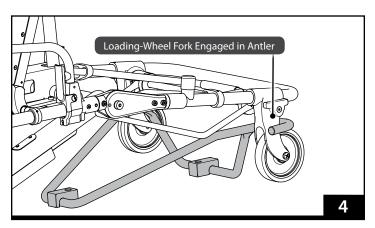
## 4.2 Loading a Cot or iN∫X

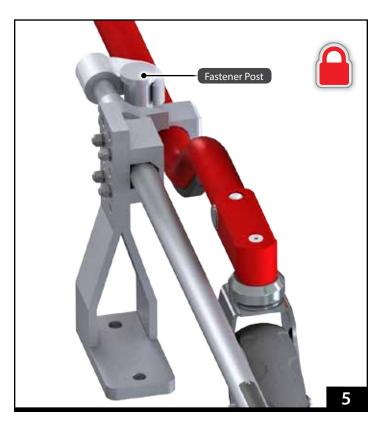
- 1. Push the release handle on the rail until the jaws lock in the unlocked (open) position.
- Roll the cot or iN∫X into the ambulance. See the cot or iN∫X users'
  manual for instructions.
- 3. Guide the cot or iN∫X into the antler at an angle, keeping the control end (foot end) away from the rail (Figure 3).
- 4. Push the cot or iNJX into the antler until the wheel fork of the loading wheel engages the antler (Figure 4).
  - For most fastening-system installations, the rail is mounted at the left side of the ambulance. Guide the **right** loading-wheel fork into the antler as shown in Figure 3.
  - If the rail is mounted at the right side of the ambulance, guide the cot or iN∫X left loading-end wheel into the antler.

**Note:** Model 30 Series cots do not have loading wheels. Instead, guide the head-end transport wheels into the antler.

- 5. Slide the control end of the cot or iNJX toward the rail until the rail jaws close around the fastener post on the cot or iNJX (Figure 5).
- 6. Verify that the jaws have closed around the fastener post. To test, attempt to pull the cot or iNJX away from the rail. The jaws should hold the cot or iNJX firmly in place.



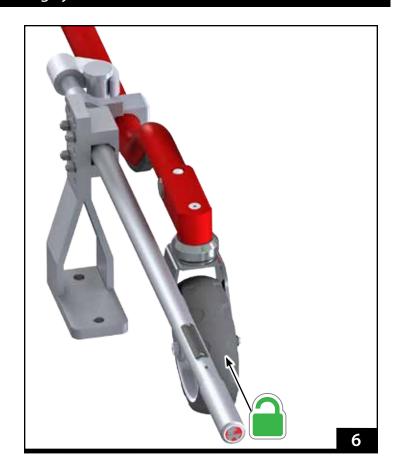




## Using the Fastening System

## 4.3 Unloading a Cot or iN∫X

- 1. Unlock the rail by pushing the release handle forward until the jaws lock in the open position.
- 2. With both hands, grasp the cot or iNJX control-end main frame and pull the cot or iNJX away from the rail.
- 3. Refer to the cot or iNJX users' manual for unloading instructions.



#### Using the Fastening System

# 4.4 Using the Removable Antler (Models 175-3, 175-4, 175-5)

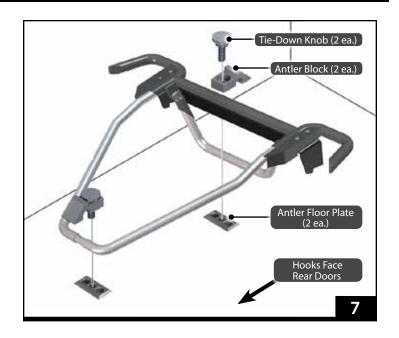
The 175-3, 175-4, and 175-5 mounting kits allow the antler to be removed for cleaning or for repositioning to accept a different model cot or iNX.

These mounting kits provide removable antler blocks and tie-down knobs that secure the antler to plates that are permanently mounted in the ambulance floor (Figure 7). To detach the antler:

- 1. Unscrew and remove the tie-down knobs (Figure 7).
- 2. Remove the antler blocks (Figure 7).

#### To attach the antler:

- 1. If there are multiple cot-fastener setups in the ambulance, locate the proper set of antler floor plates for the configuration you will use.
- 2. Place the antler in position with the antler frame outside the two floor plates, and with the antler hooks open toward the rear ambulance doors (Figure 7).
- Secure the antler to the floor with the antler blocks and tie-down knobs. The slope of the blocks faces away from the center of the antler (Figure 7).



# 4.5 Using the Removable Bracket (Models 175-3 and 175-4)

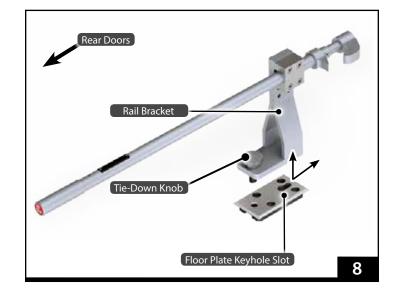
The floor-mounted rail bracket of the 175-3 and 175-4 mounting kits can be easily removed for cleaning or for repositioning to accept a different model cot or iNJX. These mounting kits provide a removable rail bracket that is secured by a tie-down knob to a plate that is permanently mounted in the ambulance floor (Figure 8).

To detach the removable rail bracket:

- 1. Unscrew and remove the tie-down knob (Figure 8).
- 2. Slide the rail bracket toward the rear of the ambulance to position the bolt on the bottom of the rail bracket in the large end of the keyhole slot in the floor plate (Figure 8).
- 3. Lift the rail bracket straight up and out of the floor plate.

#### To attach the removable rail bracket:

- If there are multiple fastening-system setups in the ambulance, locate the proper floor plate for the configuration you will use.
- 2. Place the bolt on the bottom of the rail bracket inside the large end of the keyhole slot on the floor plate (Figure 8).
- 3. Slide the rail bracket toward the front of the ambulance to secure the bolt in the small end of the keyhole.
- 4. Thread the tie-down knob into the rail bracket to secure it.



## 4.6 Adjusting the Rail

For proper function, the rail jaws must grasp the center of the fastener post on the cot or iNJX. Load the cot or iNJX into the fastening system and verify it locks properly into the system.

If the cot or iNJX does not lock properly into the fastening system, visually inspect the position of the cot or iNJX fastener post in relation to the position of the rail of the fastening-system. Follow the instructions below to adjust the position of the rail.

#### **ADJUST THE RAIL HEIGHT**

- 1. Use a 1/4" Allen wrench to remove the four rail-clamp screws.
- The rail clamp can be mounted at any of three positions (Figure 9).
   Use the position that best allows the rail jaws to grasp the center of the fastener post on the cot or iN∫X.
- 3. If this adjustment properly aligns the rail with the post, hand-tighten the rail-clamp screws, then continue to "Finishing the Adjustment" below. If not, adjust the rail side-to side as needed.

#### **ADJUST THE RAIL SIDE-TO-SIDE**

 Use a 1/4" Allen wrench to loosen the four rail-clamp screws if needed and adjust the rail side-to-side as needed.

**Be Aware:** The rail clamp **must** be kept within the range of the adjustment limit label on the rail (Figure 10). Adjust the rail clamp so it does not cover the red line on the adjustment-limit label.

If the side-to-side adjustment properly aligns the rail with the post, hand-tighten the rail-clamp screws, then continue to "Finishing the Adjustment" below.

If the rail cannot be adjusted properly, inspect the fastening system. Verify that you are using the correct fastening-system setup for the model cot or iNJX you are using. If you need further assistance, contact Ferno. See "Ferno Customer Relations" on page 2.

#### FINISHING THE ADJUSTMENT

- Verify that the rail jaws are perpendicular to the wall and verify that the rail jaws properly capture the fastener post on the cot or iN(X.
- 2. Secure the rail to the bracket. Refer to the torque specifications provided below. Use a torque wrench to tighten the rail-clamp screws in an "X" pattern to provide even pressure on the rail.

#### **Tightening the Rail Clamp**

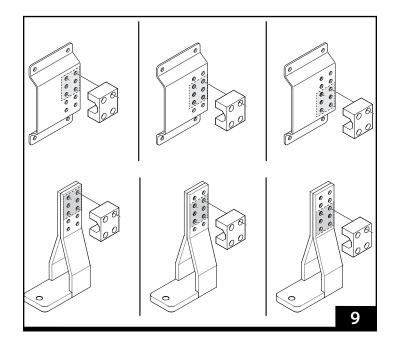
- Do not over-tighten the rail clamp.
- Do not apply oil or lubricant to the sockethead screws prior to tightening.
- Tighten the rail clamp screws in an X-pattern to provide even pressure. Tighten to one of the following (equivalent) torque specifications:
  - o 180 inch-pounds **OR**
  - o 15 foot-pounds **OR**
  - o 20.337 Newton-meters

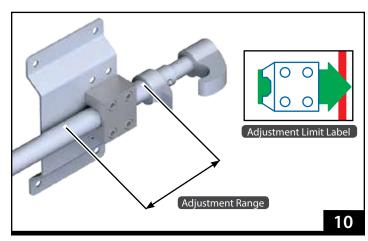
#### **⚠ WARNING**

Improper adjustment can cause injury. Stay within the range between the jaw and the adjustment limit label.

#### **Important**

The adjustment limit label ensures the cot or iNJX will be held near the reinforcements offered by the bracket. Do not exceed the adjustment range between the jaw and the label.





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#### 5 - MAINTENANCE

#### **5.1 Maintenance Schedule**

The fastening system requires regular maintenance. Set up and follow a maintenance schedule. The table at right represents **minimum** intervals for maintenance.

Keep maintenance records. For a sample record sheet, see "Maintenance Record" on page 19.

When using maintenance products, follow the manufacturers' directions and read the manufacturers' material safety data sheets.

Minimum Maintenance	Each Use	As Needed	Monthly
<b>Disinfecting</b> (this page)		•	
Cleaning (this page)		•	
Lubricating (this page)		•	
Inspecting (page 15)		•	•

## 5.2 Disinfecting and Cleaning

- **To disinfect:** Wipe all surfaces with disinfectant. Follow the disinfectant manufacturer's instructions for application method and contact time. Ferno recommends you inspect the fastening system for damage as you disinfect it.
- To clean: Hand clean all surfaces of the fastening system with warm water and a mild detergent. Rinse with warm, clear water. Dry with a towel or allow the fastening system to air-dry.

**Note:** With some mounting kits, the antler and floor bracket are removable for easier cleaning. See "Using the Removable Antler" on page 12 and "Using the Removable Bracket" on page 12.

## 5.3 Lubricating the Jaw Shaft

Disinfect and clean the fastening system before applying lubricant.

To lubricate the jaw shaft, push the release handle until the jaws lock in the unlocked (open) position. Apply a small amount of WRL-191-S or white lithium grease to the shaft of the movable jaw (Figure 11).

After applying lubricant, cycle the jaw a few times, using **only** the cot or  $iN\$ X to activate the lock.

- Do not use your fingers to activate the lock button.
- Do not use Teflon or silicone-based lubricants.

#### **Important**

Disinfectants and cleaners containing bleach, phenolics, or iodines can cause damage. Do not use products containing these chemicals.

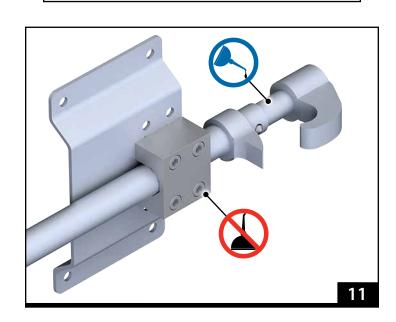
Using abrasive cleaning compounds or applicators on the fastening system can cause damage. Do not use abrasive materials to clean the fastening system.

Using Teflon or silicone-based lubricants can lead to silicone buildup on parts, causing damage. Use only the lubricants specified in this manual.

#### **↑** WARNING

Improper maintenance can cause injury. Maintain the fastening system only as described in this manual.

Pressing the lock button with your fingers can cause injury. Use caution when lubricating the jaw shaft. Always use the cot or iN/X to activate the lock button.



## 5.4 Inspecting the Fastening System

Have your service's equipment maintenance personnel inspect the fastening system regularly. Follow the checklist below and operate the fastening system through all its functions as described in this manual.

If inspection shows damage or excessive wear, remove it from service until repair is made. See "Parts and Service" on page 16.

## **Inspection Checklist**

- Are all components present?
- Is the fastening system free of excessive wear?
- Are all parts in good condition (no cracks, corrosion, or damage)?
- Do all moving parts operate smoothly and properly?
- Does the fastening system lock and unlock properly?
- Can the cot or iN∫X be loaded into and unload from the fastening system properly?
- Do the antler hooks properly engage the cot or iNJX loading wheel forks (or transport-wheel forks on a Model 30 Series cot)?
- Do the rail jaws firmly lock onto the center of the fastener post on the cot or iNJX?
- For removable components: do the components lock properly to the floor plates?
- Is the fastening-system setup worn? Has exposure to the environment caused noticeable damage? Inspect the ambulance floor (and wall, for wall-mounted components) including beneath the ambulance, and monitor the integrity of the fastening system.
- Are the required backing plates present, and are they securely welded to primary a structural member of the ambulance floor?
- Is all hardware tight? Verify the hardware is tight but is NOT pulling through the backing plates (See the Important notices at right).

#### ♠ WARNING

Pressing the lock button with your fingers can cause injury. Use caution when lubricating the jaw shaft. Always use the cot or  $iN\X$  to activate the lock button.

#### **Important**

If the required backing plates are not present, take the fastening system out of service and have the backing plates installed immediately. Then, install a new fastening system.

Make sure all connections are tight, but do not overtighten the hardware. Overtightening, especially with powered tools, can cause the nut and bolt to pull through the backing plate.

If the inspection indicates that components are pulling through the backing plates, take the fastening system out of service immediately and install a new fastening system and new backing plates.

## 6 - PARTS AND SERVICE

#### 6.1 U.S.A. and Canada

In the United States and Canada, to order parts or for professional fastening-system repair, contact EMSAR® – the only agent authorized by Ferno to manage, service, and repair Ferno products.

Telephone (Toll-Free)	1.800.73.EMSAR
Telephone	1.937.383.1052
Fax	+1.937.383.1051
Internet	www.EMSAR.com

#### 6.2 Worldwide

To order Ferno parts, and for professional fastening-system repair, contact your Ferno distributor. Your distributor is the only agent authorized by Ferno to manage, service, and repair Ferno products.

#### **⚠ WARNING**

Improper parts and service can cause injury. Use only Ferno parts and Ferno-approved service on the fastening system.

Modifying the fastening system can cause injury and damage. Use the fastening system only as designed by Ferno.

#### **Parts Listing**

A chart listing available kits and repair parts is provided on page 17.



## Parts and Service

## 6.3 Parts List

Mounting Kit 175-							
1	2	3	4	5	Description	Kit Number	Qty.
•	•	•	•	•	Antler (only)	090-0271	1
•	•	•	•	•	iN∫X Antler (only)	056-7052	1
		•	•	•	Antler Mounting Block (Removable)	090-0264	1
•	•				Antler Mounting Block (Permanent)	090-0272	2
		•	•	•	Floor Plate for Removable Antler	090-0265	2
		•	•		Floor Plate for Removable Mounting Bracket	090-0266	1
		•	•	•	Removable Tie-Down Knob, Short (for Bracket or Antler)	090-0268	1
•	•	•	•	•	Replacement Split Fastener Post (25, 26, 29-M, 35A/35A+, 93ES/93EX)	090-0277	1
•	•	•	•	•	Replacement Split Fastener Post (35P, 35X PROFlexx, POWERFlexx)	190-1240	1
•	•	•	•	•	Replacement Split Fastener Post (93P, 93H PROFlexx)	190-1154	1
•	•	•	•	•	Replacement Split Fastener Post (original side-mount POWERFlexx)	190-1469	1
•	•	•	•	•	Label Kit (Set)	090-4229	1
		•	•		Removable Floor Mounting Bracket (New 10-Hole)	090-0263	1
	•				Permanent Floor Mounting Bracket (New 10-Hole)	190-1400	1
•				•	Wall Mounting Bracket (New wide plate)	190-1398	1
•				•	Rail Clamp for <b>Wall Bracket</b> w/hardware (New wide clamp, 4-hole)	190-1451	1
	•	•	•		Rail Clamp for <b>Floor Bracket</b> w/hardware (New wide clamp, 4-hole)	190-1399	1
•	•	•	•	•	Rail, Aluminum (Standard)	090-0278	1
•	•	•		•	Rail, Stainless Steel	090-5692	1
•	•	•	•	•	Rail, Short (13.5")	056-7051	1
•	•	•	•	•	Rail, Short (16.5")	056-7050	1
•	•	•	•	•	Rail Push Handle	090-4226	1
•	•	•	•	•	Rail Spring and Bushing	090-4227	1
		•	•		1.5" SHCS and Nut (Coverts Permanent Floor Rail Bracket to Removable)	090-5048	1
		•			Mounting Plate Plastic Cover Kit (set: 2 antler, 1 rail)	081-9734	1
		•	•	•	Modified Antler Mounting Block for Series 35 and Series 30 in-line	081-9912	1
•	•	•	•	•	Rail Clamp Hardware (Set: Wall or Floor)	190-2091	1
		•	•	•	(Old-Style) Removable Tie-Down Knob, Long	090-0267	1
	•				(Old-Style) 5-Hole Floor Mounting Bracket (Permanent)	090-0261	1
		•	•		Old 5-Hole Floor Mounting Bracket (Removable)	090-0263	1
•				•	(Old-Style) Wall Mounting Bracket	090-0275	2
	•	•	•		(Old-Style) 2-Hole Rail Clamp	090-0262	1
•				•	(Old-Style) 2-Hole Rail Clamp	090-0274	2

# Training Record

# **TRAINING RECORD**

Date	Printed Name	Signature	Training Method			Trainer
			Read Manual	Video/ Online	Hands-On	Initials

## Maintenance Record

# **MAINTENANCE RECORD**

Date	Maintenance Performed	Ву

# **GFERNO**°



