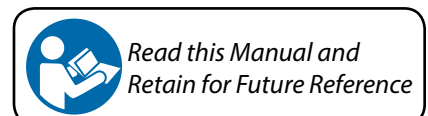




Model 185, 185-MT, 185-LT

Stat Trac[®] Cot Fastening System

April 2013
Pub. No. 234-2132-04



Ferno Technical Support

Customer service and product support are important aspects of each Ferno product. Please have the product serial number available when calling, and include it in all written communications. For technical support questions:

Telephone (Toll-free)	1.800.733.3766 ext. 1010
Telephone	1.937.382.1451 ext. 1010
Email	quality.products@ferno.com

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	+1.937.382.1451
Fax	+1.937.382.6569
Internet	www.ferno.com

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. It is recommended that training on the proper use of this product 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

The information disclosed in this manual is the property of Ferno-Washington, Inc., Wilmington, Ohio, USA. Ferno-Washington, Inc. reserves all patent rights, proprietary design rights, manufacturing rights, reproduction use rights, and sales use rights thereto, and to any article disclosed therein except to the extent those rights are expressly granted to others or where not applicable to vendor proprietary parts.

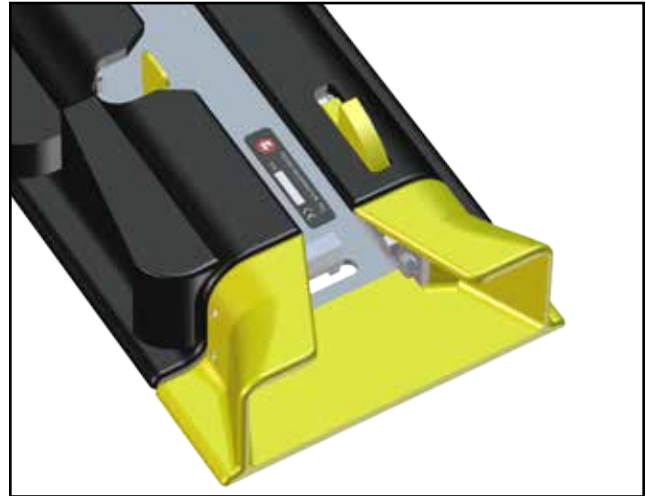
Limited Warranty Statement

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.




USERS' MANUAL

To request additional free users' manuals, contact Ferno Customer Relations, your Ferno distributor, or visit www.ferno.com.



Serial Number _____

Location: Inside the track, near the funnel

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

EC	REP	Ferno (UK) Limited Stubs Beck Lane, Cleckheaton West Yorkshire BD19 4TZ, United Kingdom
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STAT TRAC® USERS' MANUAL

1 - SAFETY INFORMATION

1.1 Warning

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


WARNING

Improper or inadequate installation can cause injury. The installer should test your fastening system setup to meet or exceed all applicable guidelines.

A Stat Trac installed without backing plates can fail in a crash. Use properly installed backing plates to secure the Stat Trac at all mounting points.

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

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

Improper use can cause injury. Use the Stat Trac only for the purpose described in this manual.

An improper cot can cause injury. Use only Ferno cots designed or properly modified for use with the Stat Trac.

Improper operation can cause injury. Operate the Stat Trac only as described in this manual.

Improper maintenance can cause injury. Maintain the Stat Trac only as described in this manual.

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.

Tip

1.4 Bloodborne Disease Notice

To reduce the risk of exposure to bloodborne diseases such as HIV-1 and hepatitis when using the Stat Trac® follow the disinfecting and cleaning instructions in this manual.

1.5 Cot and Fastening System Compatibility

Note: For the purpose of this notice, all Ferno® transporters are included under the generic term, "cot."

Combining different manufacturers' products into a "mixed-component" cot/cot fastening system can increase the user's risk of injury and damage.

Ferno-Washington, Inc. strongly recommends that only Ferno-manufactured cots be used in Ferno-manufactured cot fastening systems, and that only Ferno-manufactured cot fastening systems be used for securing Ferno-manufactured cots in ambulances.

ANY COMBINATION OF A FERNO COT OR COT FASTENING SYSTEM WITH A NON-FERNO COT OR COT FASTENING SYSTEM IS MISUSE OF THE FERNO PRODUCT. Responsibility for the outcome of known, intentional misuse rests squarely on the misuser.

1.6 Symbol Glossary

The symbols defined below are used on the Stat Trac® and/or in this users' 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



Product meets European Union Standards



Unlocked



Locked

1.7 Responsibility of User to Maintain a Safe Fastening System

The Ferno® Stat Trac® Cot Fastening System is designed to securely hold an ambulance cot inside a ground-based ambulance.

It 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.
- Federal Ambulance Specification KKK-A-1822.

Note: AMD and KKK-A-1822 standards are updated periodically. Current guidelines are available from these organizations. See page 6.

The integrity of the fastening system relies heavily on the installer to secure the fastening system to the ambulance in a way that meets or exceeds these guidelines (See the *Installation Manual* for details). Also, the integrity of the fastening system relies on the user to regularly inspect and maintain the system.

Ferno's Stat Trac Cot Fastening System, when installed and maintained properly, meet or exceed all applicable KKK-A-1822 specifications and AMD standards. To help the user achieve a compliant system, **Ferno strongly recommends:**

USER:

1. **Inspect the fastening system a minimum of once each month, or more often with frequent use.** Check under the ambulance to see if exposure to the environment has damaged the backing plates, nuts or bolts. Make sure the nuts are tight and secure, while observing Point 2, below. Replace the fastening system if its integrity is in question.
2. **During inspections, make sure all fastening system components are tight, however, DO NOT repeatedly tighten the bolts with powered equipment.** Over time, using powered tools to repeatedly tighten connections can cause damage to the fastening system by compressing the nut and bolt through the backing plate. If inspection indicates the components are "pulling through" the backing plate, **immediately** take the ambulance out of service and install a new fastening system with new backing plates.
3. **Consult your installer to ensure your fastening system meets all applicable standards.** The installer's responsibility includes installing a test fastening system in the same manner as the fastening systems are to be installed on your ambulance(s) and testing this setup to **MEET OR EXCEED** the pull test stipulated in AMD .004. Your installer should be able to show that your fastening system setup is equal to a setup that passes this test.
4. **Make sure your fastening system has been installed with backing plates beneath the ambulance floor at all mounting points.** If the backing plates are not present, **immediately** take the ambulance out of service and have a new fastening system with backing plates installed.

WARNING

Improper or inadequate installation can cause injury. The installer should test your fastening system setup to meet or exceed all applicable guidelines.

WARNING

A Stat Trac installed without backing plates can fail in a crash. Use properly installed backing plates to secure the Stat Trac at all mounting points.

WARNING

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

2 - OPERATOR SKILLS AND TRAINING

2.1 Skills

Operators using the Stat Trac need:

- a working knowledge of emergency patient-handling procedures.
- a complete understanding of the procedures described in this manual.

2.2 Training

Operator trainees need to:

- read and understand this manual.
- be trained on the use of the Stat Trac.
- practice with the Stat Trac before using it with a patient.
- record their training information. A sample training record sheet is provided on page 15.



WARNING

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

3 - ABOUT THE STAT TRAC

3.1 Description

Models 185, 185-MT and 185-LT Stat Trac® Cot Fastening Systems (referred to as the Stat Trac in this manual) are devices designed to secure a Ferno cot or transporter inside a ground-based ambulance. See *Cot and Fastening System Compatibility*, page 4, for more information.

Each Stat Trac is sold with one track and one Combined Users' and Installation Manual. Installation kits are sold separately. Stat Trac features include:

- **Wide-Angle Funnel:** makes loading cots easy
- **Track Loading:** allows straight-in cot loading without cot drift
- **Safety Stop:** holds cot secure inside ambulance while operators unlock the undercarriage during the loading and unloading process
- **Single-Hand Cot Release**
- **Aluminum shell:** impact resistant, easy to clean
- **Easy Removal:** for cleaning

The Stat Trac is for professional use only. Ferno strongly recommends that the Stat Trac is installed according to AMD (Ambulance Manufacturer's Division) guidelines. See the *Installation Manual* for more information. It is designed for use with ambulances that meet the requirements of the Federal Ambulance Specification KKK-A-1822.



WARNING

Improper use can cause injury. Use the Stat Trac only for the purpose described in this manual.

CONTACTS FOR INDUSTRY STANDARDS

For information about Federal Ambulance Specification KKK-A-1822, contact:

Federal Supply Services
Specifications Section
Suite 8100
470 E. L'Enfant Plaza, SW
Washington, DC 20407

For information about AMD standards, contact:

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

3.2 Compatible Cots/Transporters

The Stat Trac is for use with the following Ferno cots that have been designed specifically for use with the Stat Trac:

- POWERFlexx-ST®
- PROFlexx® Series 35PST, 35XST, 93PST, 93HST
- 35A-ST, 35A+ST, 93ES-ST, 93EX-ST, and XCalibur (if factory-equipped).

Adaptor kits are available to modify Ferno Series 35A, 35A+, 35P, 93ES, 93EX, 93H, POWERFlexx® and XCalibur (if not factory-equipped) for use with the Stat Trac.

3.3 General Specifications

Specifications are rounded to whole numbers. Contact Ferno Customer Relations for additional information (page 2). Ferno reserves the right to change specifications without notice.

3.4 Using This Manual

In this manual, the term Stat Trac is used to refer to all models of the Stat Trac. When differences exist, the specific model name (Model 185, Model 185-MT or Model 185-LT) is used.

3.5 Before Using the Stat Trac

To install the Stat Trac, refer to the *Installation Manual*, pages 17-40. As a user, be aware of the following:

- In the USA, the ambulance must comply with the current version of Federal Ambulance Specification KKK-A-1822.
- Stat Trac installation requires the use of backing plates beneath the ambulance floor at all mounting points. If your ambulance does not have the required backing plates, have them installed.
- Inspect the Stat Trac regularly to ensure it meets all required standards required by your local government. See *Inspecting the Stat Trac*, page 14.
- Install a new Stat Trac when remounting an ambulance box. Removing and reinstalling an old Stat Trac can weaken the Stat Trac.
- Replace the Stat Trac if the ambulance is involved in a traffic accident.

 **WARNING**

An improper cot can cause injury. Use only Ferno cots designed or properly modified for use with the Stat Trac.

Tip

Stat Trac Change

In 2012, the Stat Trac changed from plastic to aluminum sides. The function of the Stat Trac is identical. Only the weight and appearance changed.

Specification	Imperial	Metric
Length		
Model 185	86 in	2184 mm
Model 185-MT	96 in	2438 mm
Model 185-LT	103 in	2616 mm
Width		
Overall	8 in	203 mm
Height		
Overall	3 in	76 mm
Weight		
Model 185	55 lb	24.9 kg
Model 185-MT	61 lb	27.7 kg
Model 185-LT	65 lb	29.5 kg

Important

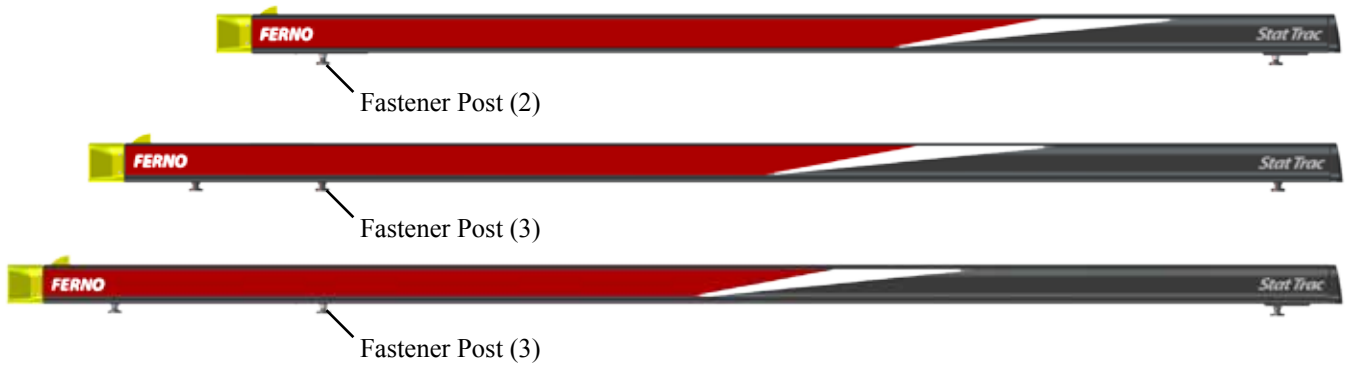
Owners of cots in the PROFlexx®, POWERFlexx®, and XCalibur series:

Cots with 6"/152 mm wheels require the Stat Trac to be installed at least 17"/431.8 mm from the side walls. Installing closer than 17"/431.8 mm may not allow clearance for the wheels to swivel during transporter removal.

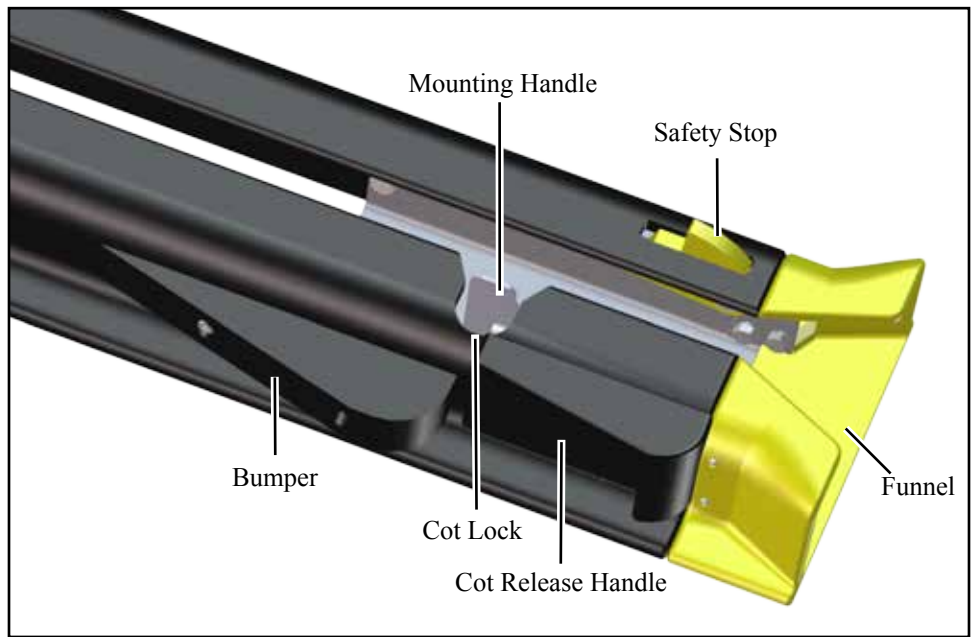
If you installed a Stat Trac at the old minimum distance prior to June 1, 2000, you must adjust your Stat Trac to the new 17"/431.8 mm minimum wall clearance. Center-mounted Stat Tracs and those installed 17"/431.8 mm or more from the wall do not require adjustment.

Follow the instructions on pages 17-40 of this manual for proper installation.

3.6 Components



Length Comparison (Top to Bottom): Model 185, Model 185-MT, Model 185-LT



**The Components are Common to All Models
The Only Variation is the Distance of the Components from the Funnel**

4 - FEATURES

4.1 Mounting Handle

The mounting handle locks the Stat Trac in the ambulance. It is also designed to stop a cot from being loaded when the Stat Trac is not completely secured to the floor.

If the cot will not load into the Stat Trac, make sure the mounting handle is engaged. See *Troubleshooting*, page 36. To mount the Stat Trac to the ambulance floor:

1. Slide the Stat Trac toward the front of the ambulance so that each fastener post slides into its mounting block (Figure 1).
2. To lock the Stat Trac in place, swing the mounting handle down and toward the safety stop (Figure 2) until it is parallel with the floor.
3. Verify that the Stat Trac is locked before use. To do this, pull on the track with your hands. The Stat Trac should remain firmly in place.

To un-mount the Stat Trac from the ambulance floor:

1. Swing the mounting handle upward, toward the cot lock, to release the Stat Trac from the mounting blocks (Figure 2).
2. Pull the Stat Trac toward the rear of the ambulance to remove it.

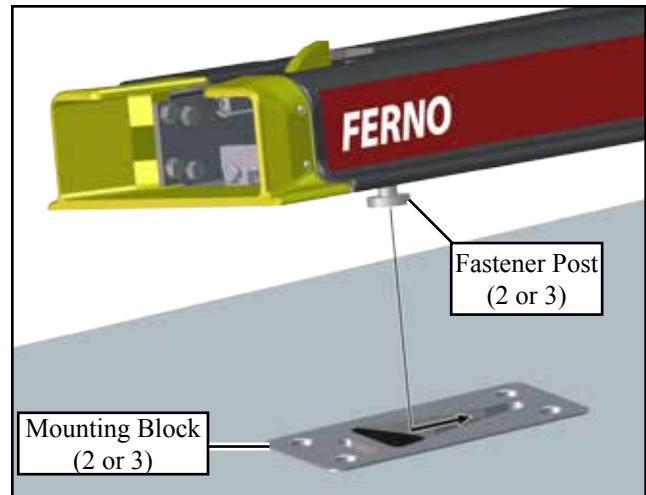


Figure 1 - Mounting the Stat Trac



Figure 2 - Using the Mounting Handle

4.2 Cot Lock, Cot Release Handle

The cot lock (Figure 3) holds the cot securely in the Stat Trac during transport in an ambulance and prevents the cot from being removed from the Stat Trac.

To engage the cot in the cot lock, load the cot into the Stat Trac and slide the foot-end loading post to the left, into the cot lock.

To disengage the cot lock, simultaneously pull the cot release handle toward the rear of the ambulance (Figure 3) and pull the cot to the right to position the foot-end loading post in the center of the channel.

For complete unloading instructions, see *Unloading a Cot*, page 12.

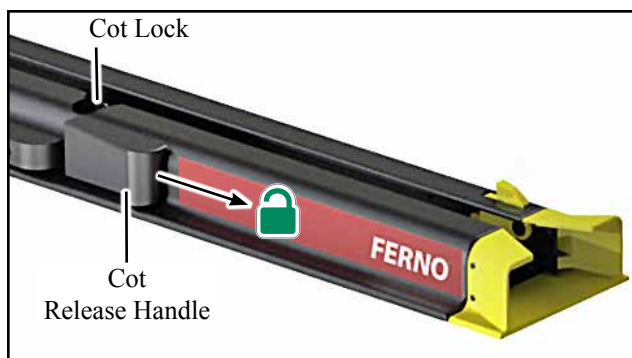


Figure 3 - Cot Release Handle

4.3 Safety Stop

The safety stop (Figure 4) holds the head end of the cot securely in the ambulance while the operators unlock the undercarriage during loading or unloading. At the proper time, the head-end operator uses the release mechanism on the cot to disable the safety stop.

For complete loading and unloading instructions, see Section 5, *Using the Stat Trac*, pages 11-12.

USING THE SAFETY STOP DURING LOADING

When loading a cot into the ambulance, the operators:

1. Roll the loading end of the cot into the Stat Trac until the head-end loading post passes the safety stop.
2. Roll the cot out of the ambulance until it stops on the safety stop. This verifies the cot is being held by the safety stop.

USING THE SAFETY STOP DURING UNLOADING

When unloading a cot from the ambulance, pull the cot out of the ambulance until the safety stop catches the cot's head-end loading post.



Figure 4 - Safety Stop

Tip

Engaging the Safety Stop

The safety stop holds the cot secure while the operators unlock and raise or lower the undercarriage during loading and unloading.

During cot loading and unloading, the operators should roll the cot firmly against the safety stop to verify that the cot is held securely. This safety step confirms to the operators that they are using the Stat Trac and cot properly.

5 - USING THE STAT TRAC

5.1 Compatible Cots

The Stat Trac is for use only with Ferno® cots and transporters. See *Cot and Fastening System Compatibility*, page 4, and *Compatible Cots/Transporters*, page 7.

WARNING

Improper operation can cause injury. Operate the Stat Trac only as described in this manual.

WARNING

An improper cot can cause injury. Use only Ferno cots designed or properly modified for use with the Stat Trac.

5.2 Loading a Cot

To secure a cot in the Stat Trac:

1. If the ambulance has a folding step bumper, raise it.
2. Place the cot in a loading position (see the cot Users' Manual for instructions).
3. Roll the cot to the open rear doors of the ambulance and align the head-end loading post on the cot with the Stat Trac (Figure 5).
4. Using the Stat Trac funnel as a guide, roll the cot into the ambulance until the head-end loading post passes the safety stop.
5. Roll the cot out of the ambulance until it stops against the safety stop. This verifies the cot is held securely before the operators unlock the undercarriage.
6. Keeping the cot level with the ambulance floor, fold the cot undercarriage as instructed in the cot Users' Manual and begin pushing the cot into the ambulance and Stat Trac.
7. While keeping the cot level with the ambulance floor, align the cot's foot-end loading post with the funnel and push the cot into the Stat Trac as far as possible.
8. Slide the foot end of the cot to the left to engage the foot-end loading post in the cot lock (Figure 6).

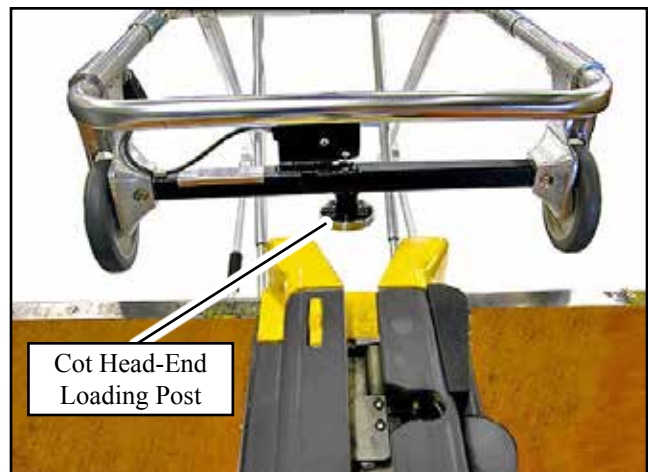


Figure 5 - Loading Post Aligned for Loading

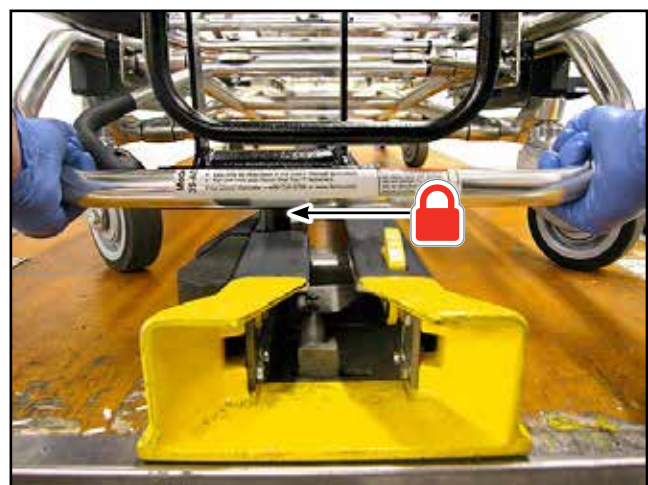


Figure 6 - Locking the Cot in the Stat Trac

5.3 Unloading a Cot

To release a cot from the Stat Trac:

1. If the ambulance has a folding step bumper, raise it.
2. Pull the cot release handle toward the rear of the ambulance (Figure 7) and slide the foot-end of the cot to the right to free it from the cot lock.
3. **Both Operators:** Pull the cot out of the patient compartment until the safety stop engages the cot's head-end loading post.
4. **Both Operators:** Follow the instructions in the cot Users' Manual to properly unfold and lock the undercarriage of your cot.
5. Verify that the undercarriage is locked before continuing.
6. **Head-End Operator:** Use the fastener release lever (or fastener release handle) on the cot to disengage the cot from the safety stop (Figure 8 and Figure 9).

Note: The mechanism to release the cot from the Stat Trac varies from model to model. See your cot Users' Manual for instructions.

7. While the head-end operator engages the fastener release lever/handle, both operators pull the cot out of the patient compartment to release the safety stop. Let go of the fastener release lever/handle after the head-end loading post moves beyond the safety stop.

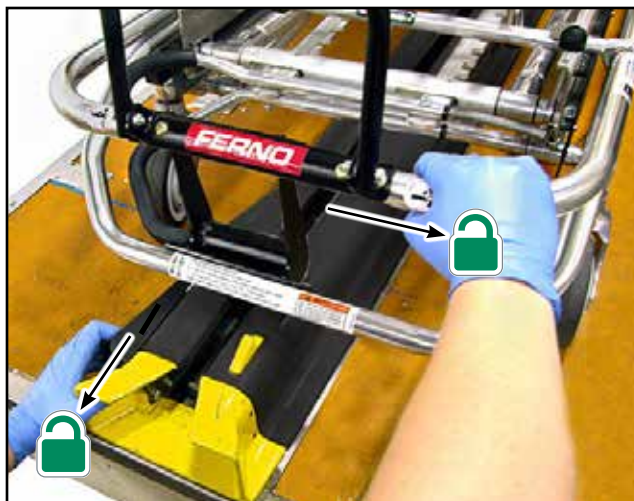


Figure 7 - Releasing the Cot from the Stat Trac

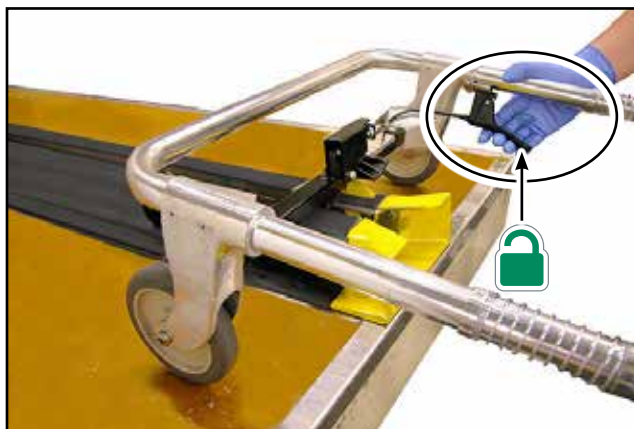


Figure 8 - Using the Fastener Release Lever



Figure 9 - Using the Fastener Release Handle (PROFlexx® Series Cots)

6 - MAINTENANCE

6.1 Maintenance Schedule

The Stat Trac requires regular maintenance. Set up and follow a maintenance schedule. A form is provided on page 16. The chart at right represents minimum maintenance.

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

Contact Ferno Customer Relations to order Ferno cleaners and disinfectants (page 2).

6.2 Disinfecting the Stat Trac

Remove the Stat Trac from the ambulance. Wipe all surfaces with a disinfectant, following the disinfectant manufacturer's directions. Ferno recommends you inspect the Stat Trac for obvious damage as you disinfect it.

6.3 Cleaning the Stat Trac

Remove the Stat Trac from the ambulance. Wash all surfaces with a mild detergent. Use a stiff-bristled brush if necessary to remove stains. Rinse with warm water and dry with a towel.

 WARNING
Improper maintenance can cause injury. Maintain the Stat Trac only as described in this manual.

Minimum Maintenance Intervals	Each Use	As Needed	Each Month
Disinfecting (this page)	•		
Cleaning (this page)		•	
Inspecting (page 14)		•	•

Important
Disinfectants and cleaners containing bleach, phenolics, or iodines can harm the Stat Trac. Disinfect and clean the Stat Trac only with products that do not contain these chemicals.

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

6.4 Inspecting the Stat Trac

Have your service's equipment maintenance personnel inspect the Stat Trac. Follow the checklist below and work the Stat Trac through all its functions as described in this manual. Also see the *Responsibility of User to Maintain a Safe Fastening System*, page 5.

If the inspection indicates damage or excessive wear, see *Troubleshooting*, page 36. For service, see *Parts and Service*, page 37.

- Are all components present?
- Are all parts in good condition (no cracks, corrosion, or damage)?
- Do all moving parts operate smoothly and properly?
- Does the Stat Trac lock properly to the mounting blocks?
- Does the cot load and unload properly?
- Does the cot lock properly into the Stat Trac?
- Monitor the ambulance floor, including beneath the ambulance, and check the integrity of the fastening system. Is the system worn? Has exposure to the environment caused noticeable damage?
- Are the required backing plates present, and are they securely welded to a primary structural member of the ambulance floor?
- Is all the hardware tight? (Reminder: Do not repeatedly tighten the hardware.)

Important

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

Important

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

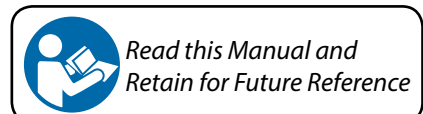
If inspection indicates the components are pulling through the backing plate, take the Stat Trac out of service immediately and install a new Stat Trac with new backing plates.



Model 185, 185-MT, 185-LT

Stat Trac® Cot Fastening System

April 2013
Pub. No. 234-2132-04



STAT TRAC® INSTALLATION MANUAL

1 - SAFETY INFORMATION

1.1 Warning

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

WARNING

An improper cot can cause injury. Use only Ferno cots designed or properly modified for use with the Stat Trac.

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.

Improper testing can cause injury. Installers must test the fastening-system setup to pass AMD Standard 004 before installing a Stat Trac in an ambulance.

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

Improper adjustment can cause injury and damage. Do not loosen the fastener posts. If needed, adjust only the height of the fastener-post brackets.

Improper parts and service can cause injury. Use only Ferno-approved parts and Ferno-approved service on the Stat Trac.

Modifying the Stat Trac can cause injury and damage. Use the Stat Trac 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.

Tip

1.4 Cot and Fastening System Compatibility

Note: For the purpose of this notice, all Ferno® transporters are included under the generic term, “cot.”

Combining different manufacturers’ products into a “mixed-component” cot/cot fastening system can increase the user’s risk of injury and damage.

Ferno-Washington, Inc. strongly recommends that only Ferno-manufactured cots be used in Ferno-manufactured cot fastening systems, and that only Ferno-manufactured cot fastening systems be used for securing Ferno-manufactured cots in ambulances.

ANY COMBINATION OF A FERNO COT OR COT FASTENING SYSTEM WITH A NON-FERNO COT OR COT FASTENING SYSTEM IS MISUSE OF THE FERNO PRODUCT. Responsibility for the outcome of known, intentional misuse rests squarely on the misuser.

2 - ABOUT THE STAT TRAC

2.1 Description

Model 185, Model 185-MT and Model 185-LT Stat Trac® Cot Fastening Systems (referred to as the Stat Trac in this manual) are devices designed to secure a Ferno cot or mobile transporter inside a ground-based ambulance. See *Cot and Fastening System Compatibility*, page 18, for more information.

Each Stat Trac is sold with one track and one Combined Users' and Installation Manual. Installation kits are sold separately.

The Stat Trac is for professional use only. It is designed for use with ambulances that meet the requirements of the Federal Ambulance Specification KKK-A-1822.

For information about Federal Ambulance Specification KKK-A-1822, see *Contacts for Industry Standards*, page 23.

2.2 Compatible Cots/Transporters

The Stat Trac is for use with the following Ferno cots that have been designed specifically for use with the Stat Trac:

- POWERFlexx-ST®
- PROFlexx® Series 35PST, 35XST, 93PST, 93HST
- 35A-ST, 35A+ST, 93ES-ST, 93EX-ST, and XCalibur (if factory-equipped).

Adaptor kits are available to modify Ferno Series 35A, 35A+, 35P, 93ES, 93EX, 93H, POWERFlexx® and XCalibur (if not factory-equipped) for use with the Stat Trac.

2.3 General Specifications

Specifications are rounded to whole numbers. Contact Ferno Customer Relations for additional information (page 2). Ferno reserves the right to change specifications without notice.

Important

Owners of cots in the PROFlexx®, POWERFlexx®, and XCalibur series:

Cots with 6"/152 mm wheels require the Stat Trac to be installed at least 17"/431.8 mm from the side walls. Installing closer than 17"/431.8 mm may not allow clearance for the wheels to swivel during transporter removal.

If you installed a Stat Trac at the old minimum distance prior to June 1, 2000, you must adjust your Stat Trac to the new 17"/431.8 mm minimum wall clearance. Center-mounted Stat Tracs and those installed 17"/431.8 mm or more from the wall do not require adjustment.

Follow the instructions on pages 17-40 of this manual for proper installation.



WARNING

An improper cot can cause injury. Use only Ferno cots designed or properly modified for use with the Stat Trac.

Specification	Imperial	Metric
Length		
Model 185	86 in	2184 mm
Model 185-MT	96 in	2438 mm
Model 185-LT	103 in	2616 mm
Width		
Overall	8 in	203 mm
Height		
Overall	3 in	76 mm
Weight		
Model 185	55 lb	24.9 kg
Model 185-MT	61 lb	27.7 kg
Model 185-LT	65 lb	29.5 kg

2.4 Items Required: Model 185 Only

The following items (not supplied) are required to install the Model 185 Stat Trac:

Mounting block (2 ea.)	Order kit 056-7027
Beauty Shim plate (2 ea., may be needed)	Order kit 056-7027
Backing (anchor) plates*	2 ea.
3/8" SAE Grade 5, UNC 2, Zinc-plated socket head cap screws**	8 ea.
3/8" SAE Grade 5, UNC 2, Zinc-plated elastic lock nuts**	8 ea.
3/8" Drill bit	1 ea.
1/8" Drill bit	1 ea.
1/8" Socket head wrench	1 ea.
3/8" Box wrench	1 ea.
Tube of silicone caulking	1 ea.
Router or saber saw	1 ea.
Template Model 185 (optional)	Order kit 081-9539

* The Stat Trac is designed to be installed with, at minimum: A36 Grade steel backing plates, 6061-T6 Grade aluminum backing plates, or equivalent at all mounting points. (See *Backing Plate Requirements*, page 23 for more information). If the vehicle in which you are installing the Stat Trac does not have the required backing plates or their equivalent, have them installed. Consult the ambulance manufacturer for installation information.

** The socket head cap screws and nuts should be of at least SAE Grade 5, with a corrosion-resistant coating (zinc plating recommended) and a UNC-2 threading. The length of the screws will be determined by the combined thickness of the patient compartment floor, the mounting block, any shim plates used, and the backing plate. When installed, the cap screws should extend beyond the backing plates a minimum of 3/4"/19 mm.

Note: To order the required mounting kit or an optional Installation Template, see Accessories, page 37.

2.5 Items Required: Model 185-MT, Model 185-LT

The following items (not supplied) are required to install the Model 185-MT and 185-LT Stat Trac:

Mounting blocks (3 ea.)	Order kit 056-7030
Beauty Shim plates (3 ea., may be needed)	Order kit 056-7030
Backing (anchor) plates*	3 ea.
3/8" SAE Grade 5, UNC 2, Zinc-plated socket head cap screws**	12 ea.
3/8" SAE Grade 5, UNC 2, Zinc-plated elastic lock nuts**	12 ea.
3/8" Drill bit	1 ea.
1/8" Drill bit	1 ea.
3/8" Socket head wrench	1 ea.
3/8" Box wrench	1 ea.
Tube of silicone caulking	1 ea.
Router or saber saw	1 ea.
Template Model 185-MT (optional)	Order kit 081-9875
Template Model 185-LT (optional)	Order kit 081-9543

* The Stat Trac is designed to be installed with, at minimum: A36 Grade steel backing plates, 6061-T6 Grade aluminum backing plates, or equivalent at all mounting points. (See *Backing Plate Requirements*, page 23 for more information). If the vehicle in which you are installing the Stat Trac does not have the required backing plates or their equivalent, have them installed. Consult the ambulance manufacturer for installation information.

** The socket head cap screws and nuts should be of at least SAE Grade 5, with a corrosion-resistant coating (zinc plating recommended) and a UNC-2 threading. The length of the screws will be determined by the combined thickness of the patient compartment floor, the mounting block, any shim plates used, and the backing plate. When installed, the cap screws should extend beyond the backing plates a minimum of 3/4"/19 mm.

Note: To order the required mounting kit or an optional Installation Template, see Accessories, page 37.

2.6 Components

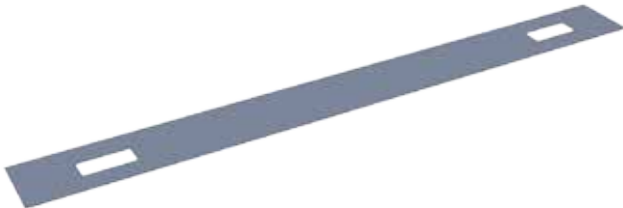
Model 185 Components



185 Stat Trac



Mounting Kit 056-7027 (Required)
2 - Mounting Blocks
2 - Beauty Shim Plates (.030 thick)



Installation Template Accessory Kit 081-9539 for 185

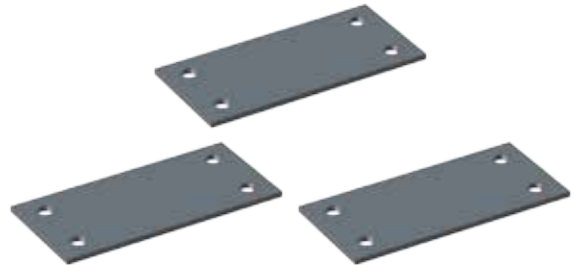


Backing Plate (2 required, not supplied)

Model 185-MT and Model 185-LT Components



185-MT Stat Trac



Backing Plate (3 required, not supplied)



185-LT Stat Trac



Mounting Kit 056-7030 (Required):
3 - Mounting Blocks
3 - Beauty Shim Plates (.030 thick)



Installation Template
Accessory Kit 081-9875 for 185-MT
Accessory Kit 081-9543 for 185-LT

3 - BEFORE YOU BEGIN

3.1 Installation Requirements

INSTALLER REQUIREMENT

The integrity of the cot-fastening system relies on the installer to mount the Stat Trac to meet or exceed the AMD standards and KKK-A-1822 guidelines.

Installers must confirm the validity of their installation method by mounting and pull-testing a cot fastening system separate from an ambulance.

Before mounting a Stat Trac in an ambulance, install a test Stat Trac fastening system and test this setup to meet or exceed the pull test specified in AMD 004. When the setup has passed this test, use the same setup when installing new Stat Trac(s) in your ambulance(s).

For more information, see *Contacts for Industry Standards*, page 23.

GENERAL REQUIREMENTS


- To install the Stat Trac, a skilled professional who is familiar with ambulance construction is required.
- Install the Stat Trac to meet or exceed all applicable standards in your country.
- Properly-installed backing plates (not supplied) must be used at all mounting points. See *Backing Plate Requirements*, page 23.

VEHICLE REQUIREMENTS

- Consult the ambulance manufacturer for ambulance structural details and ambulance warranty information.
- Inspect the ambulance for anything that might interfere with the installation.
- The floor to which the mounting components are attached must have sufficient strength to hold the mounted Stat Trac and cot with patient.
- Install a new Stat Trac when remounting an ambulance box.
- If the ambulance is involved in a traffic accident, the Stat Trac could sustain **hidden damage** (damage that is not visible to the eye). Replace the Stat Trac if the ambulance is involved in a traffic accident.
- The ambulance bumper extension should not exceed 14" (356 mm). The patient compartment should have a level floor large enough for the folded cot and cot Stat Trac. See the cot users' manual for details.

 **WARNING**

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.

 **WARNING**

Improper testing can cause injury. Installers must test the fastening-system setup to pass AMD 004 before installing a Stat Trac in an ambulance.

 **WARNING**

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

 **WARNING**

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

Important

The Stat Trac is designed to be installed with backing plates welded to rigid structural frame members at all mounting points. See Specification KKK-A-1822, Section 3.10.6 and the instructions in this manual.

Important

Inspect under the floor and behind the wall of the ambulance for anything (fuel tank, wiring, brake lines, fuel lines, oxygen lines or other items) that might interfere with the installation.

Important

If the ambulance is involved in a traffic accident, replace the Stat Trac.

3.2 Backing Plate Requirements

- Backing plates must be used at all mounting points.
- Backing plates must be ASTM A36 grade steel, aluminum 6061-T6, or equivalent (minimum).
- At all mounting points, the backing plates must be large enough to be welded at both ends to a rigid structural frame or structural reinforcement of the ambulance. See Table 1 below for recommendations. Ferno’s recommendations do not replace the need to test your fastening system setup.
- At all mounting points, use a full penetration weld to secure the backing plates to the rigid structural frame members. Spot-welding is not sufficient for a quality installation.

Install backing plates on the ambulance if none are present. Contact the ambulance manufacturer for installation information.

CONTACTS FOR INDUSTRY STANDARDS

For information about Federal Ambulance Specification KKK-A-1822, contact:

Federal Supply Services
 Specifications Section
 Suite 8100
 470 E. L’Enfant Plaza, SW
 Washington, DC 20407

For information about AMD standards, contact:

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

TABLE 1 - RECOMMENDED MINIMUM BACKING PLATES

	Span Between Two Rigid Structural Frame Members	Recommended Minimum* Backing Plate		
		Thickness and Style	Width	Length
A36 Steel	Less than 9" (229 mm)	1/2" (13 mm) plate	4" (102 mm)	Sufficient to span the distance between two rigid structural frame members
	9"-21" (229-533 mm)	3/4" (19 mm) plate		
	21"-38" (533-965 mm)	1" (25 mm) plate		
	38"-54" (965-1372 mm)	Structural C-channel, 7.25 lb/ft, 1.721" legs, 0.321" flange		
6061-T6 Aluminum	Less than 6" (152 mm)	1/2" (13 mm) plate		
	6"-13" (152-330 mm)	3/4" (19 mm) plate		
	13"-24" (330-610 mm)	1" (25 mm) plate		

Note: (*) *These recommendations are guidelines. Test your fastening system setup to meet or exceed all applicable standards. Contact your ambulance manufacturer for installation assistance and for alternate materials of equal or greater strength.*

Important

The Stat Trac is designed to be installed with backing plates welded to rigid structural frame members at all mounting points. See *Contacts for Industry Standards* above.

Important

Ambulance construction varies widely. Ferno’s backing-plate recommendations do not replace the installer’s requirement to test the setup to meet or exceed all applicable standards.

4 - MARKING THE FLOOR

4.1 Using this Section

Use the measurements in Subsection 4.2 to begin marking the floor of the ambulance for the Stat Trac. Then, if you purchased the optional template, use Subsection 4.3, "Positioning For Any Model Stat Trac Using a Template," to finish marking the floor.

If you do not have a template, use the appropriate measurements for your model Stat Trac in Subsections 4.4, 4.5 or 4.6 to finish marking the floor of the ambulance.

4.2 Finding the Centerline

Items Needed:

1	Pen, pencil, or similar to mark the floor
1	Measuring tape

Before you begin, remove the cot and any existing cot fastening system from the ambulance.

Then, decide where to place the Stat Trac. Follow the instructions below to place it to one side of the ambulance, in the center of the ambulance, or prepare for dual Stat Trac mountings.

LBS and LBS Jr. Customers: *The width of the Large Body Surface accessories requires the Stat Trac to be mounted in the center of the vehicle.*

SIDE-MOUNTED STAT TRAC (AS CLOSE AS POSSIBLE TO ONE WALL)

- Starting at the patient compartment wall near the (rear) compartment doors, measure toward the center of the patient compartment and mark a point at 17 inches/432 millimeters.
- From the same wall but near the forward end of the patient compartment, measure and mark a second point at 17 inches/432 millimeters.
- Starting at the rear doors, draw a straight line between the 17-inch/432 millimeters marks. This will be the Centerline.

CENTER-MOUNTED

(STAT TRAC IN CENTER OF PATIENT COMPARTMENT)

- Measure across the patient compartment from one side wall to the other (or to the bench seat, if present), and divide the total by two. This is the distance to the center of your patient compartment.
- Starting at the patient compartment wall near the rear doors, measure toward the center of the patient compartment and mark a point at the distance you calculated in Step 1.
- From the same wall but near the forward end of the patient compartment, measure and mark a second point at the distance you calculated in Step 1.
- Start at the rear doors and draw a line between the marks you make. This is the Centerline.

DUAL STAT TRAC MOUNTING

If you want two Stat Trac mounting positions in the patient compartment, use one or both of the above measuring methods while following the guidelines below.

When installing two Stat Trac mounting positions in a single ambulance compartment, the Centerlines:

- ✓ **MUST BE** A minimum of 17 inches/432 millimeters from the patient compartment walls¹ and more than 5 inches/127 millimeters apart.²
- × **CANNOT BE** Between 15-20 inches/381-508 millimeters apart.³

¹ **Note:** Each Centerline must be a minimum of 17 inches/432 millimeters from the patient compartment's side walls to allow room between the cot wheels and wall.

² **Note:** The Centerlines must be a minimum of 5 inches/127 millimeters apart to ensure the mounting blocks or backing plates do not overlap.

³ **Note:** Keep the Centerlines less than 15 inches/381 millimeters apart or greater than 20 inches/508 millimeters apart to ensure the cot wheels do not rest on top of the alternate mounting blocks.

4.3 Positioning For Any Model Stat Trac Using a Template

Note: Refer to Figure 1 for these instructions.

1. Close the rear doors.
2. Mark the floor along the line where the (closed) rear doors meet the patient compartment floor. If the doors close flush with the patient compartment floor, start from this edge.
3. Use the mark on the floor at the doors' edge and place the template at this line with the lip facing up. Or, if the doors close flush with the edge of the patient compartment floor, place the template at the edge of the floor with the lip facing down.
4. Center the template on the Centerline and inspect for any interference between the mounting block slots and the wheel plates in the patient compartment. Remove the wheel plates and any other fixtures that interfere with the mounting slots.
5. With the template on the Centerline, mark the outline of the mounting block slots on the floor.

If you are installing two mounting positions in the same ambulance, repeat Steps 1-5, using the second Centerline.

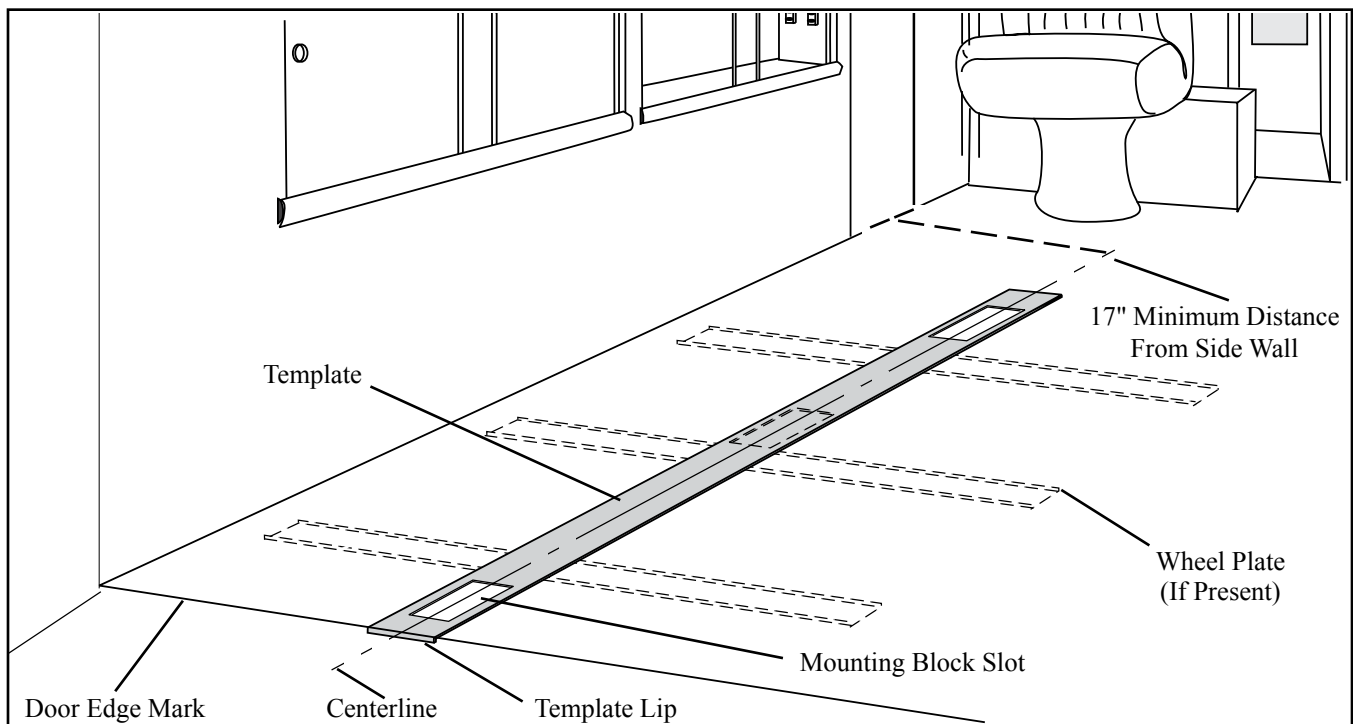


Figure 1 - Floor Markings Using a Template

4.4 Measuring for the Model 185 (Short) Stat Trac®

Note: Refer to Figure 2 for these instructions.

1. Mark the floor along the line where the (closed) rear doors meet the patient compartment floor. If the doors close flush with the edge of the patient compartment floor, start from this edge.
2. Starting from the mark made in Step 1 (or the floor edge), measure and mark a point on each side of the Centerline at 2.26 (2-17/64) inches/57 millimeters into the patient compartment.
3. Connect the two marks made in Step 2. This line (Line A) will be the rear edge of the first mounting block.
4. Starting from the Centerline on Line A, mark a point 1.5 (1-1/2) inches/38 millimeters to each side of the Centerline. These points show the width of the first mounting block.
5. Place a mounting block on Line A with the corners on the 1.5-inch/38 millimeter marks made in Step 4. Trace the outline of the bottom edge of the mounting block.
6. Starting at Line A, measure 73.236 (73-15/64) inches/1860 millimeters into the patient compartment and mark a point on each side of the Centerline.
7. Connect the two marks made in Step 6. This line (Line B) will be the rear edge of the second mounting block.
8. Starting from the Centerline on Line B, mark a point 1.5 (1-1/2) inches/38 millimeters to each side of the Centerline. These points show the width of the second mounting block.
9. Place a mounting block on Line B with the corners on the 1.5-inch marks made in Step 8. Trace the outline of the bottom edge of the mounting block.

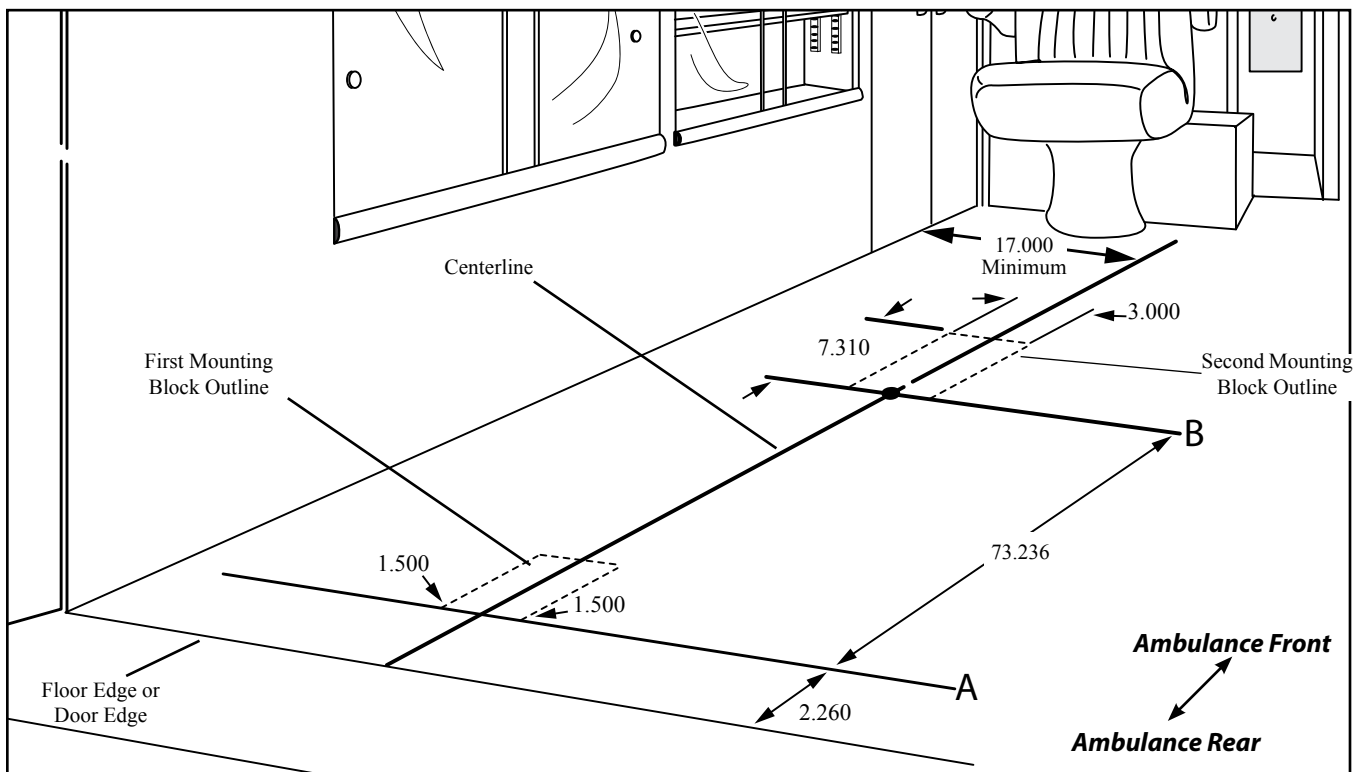


Figure 2 - Floor Markings for Model 185 (Short/86'') Stat Trac®

4.5 Measuring for the Model 185-MT (Medium) Stat Trac®

Note: Refer to Figure 3 for these instructions.

1. Mark the floor along the line where the (closed) rear doors meet the patient compartment floor. If the doors close flush with the patient compartment floor, start from this edge.
2. Starting from the mark made in Step 1 (or the floor edge), measure and mark a point on each side of the Centerline at 2.385 (2-25/64) inches/60.58 millimeters into the patient compartment.
3. Connect the two marks made in Step 2. This line (Line **A**) will be the rear edge of the first mounting block.
4. Starting from the Centerline on Line **A**, mark a point 1.5 (1-1/2) inches/38 millimeters to each side of the Centerline. These points show the width of the first mounting block.
5. Place a mounting block on Line **A** with the corners on the 1.5-inch marks made in Step 4. Trace the outline of the bottom edge of the mounting block.
6. Starting at Line **A**, measure 9.547 (9-35/64) inches/242.5 millimeters into the patient compartment and mark a point on each side of the Centerline.
7. Connect the two marks made in Step 6. This line (Line **B**) will be the rear edge of the second mounting block.
8. Starting from the Centerline on Line **B**, mark a point 1.5 (1-1/2) inches/38 millimeters to each side of the Centerline. These points show the width of the second mounting block.
9. Place a mounting block on Line **B** with the corners on the 1.5-inch marks made in Step 8. Trace the outline of the bottom edge of the mounting block.
10. Starting from Line **B**, measure 73.236 (73-15/64)/1860.2 millimeters inches into the patient compartment and mark a point on each side of the Centerline.
11. Connect the two marks made in Step 10. This line (Line **C**) will be the rear edge of the third mounting block.
12. Starting from the Centerline on Line **C**, mark a point 1.5 (1-1/2) inches/38 millimeters to each side of the Centerline. These points show the width of the third mounting block.
13. Place a mounting block on Line **C** with the corners on the 1.5-inch marks made in Step 12. Trace the outline of the bottom edge of the mounting block.

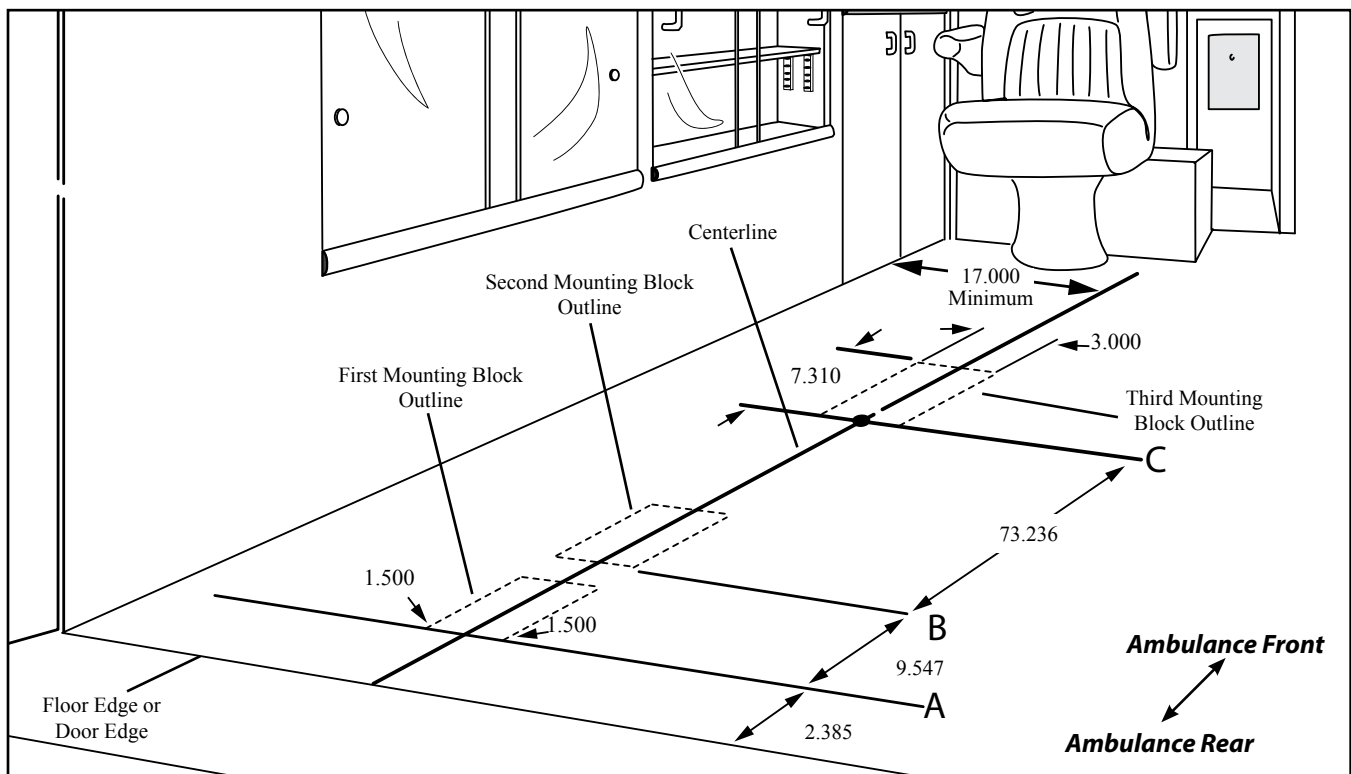


Figure 3 - Floor Markings for Model 185-MT (Medium/96'') Stat Trac®

4.6 Measuring for the Model 185-LT (Long) Stat Trac®

Note: Refer to Figure 4 for these instructions.

1. Mark the floor along the line where the (closed) rear doors meet the patient compartment floor. If the doors close flush with the patient compartment floor, start from this edge.
2. Starting from the mark made in Step 1 (or the floor edge), measure and mark a point on each side of the Centerline at 2.385 (2-25/64) inches/60.58 millimeters into the patient compartment.
3. Connect the two marks made in Step 2. This line (Line **A**) will be the rear edge of the first mounting block.
4. Starting from the Centerline on Line **A**, mark a point 1.5 (1-1/2) inches/38 millimeters to each side of the Centerline. These points show the width of the first mounting block.
5. Place a mounting block on Line **A** with the corners on the 1.5-inch marks made in Step 4. Trace the outline of the bottom edge of the mounting block.
6. Starting at Line **A**, measure 15.875 (15-7/8) inches/403.23 millimeters into the patient compartment and mark a point on each side of the Centerline.
7. Connect the two marks made in Step 6. This line (Line **B**) will be the rear edge of the second mounting block.
8. Starting from the Centerline on Line **B**, mark a point 1.5 (1-1/2) inches/38 millimeters to each side of the Centerline. These points show the width of the second mounting block.
9. Place a mounting block on Line **B** with the corners on the 1.5-inch marks made in Step 8. Trace the outline of the bottom edge of the mounting block.
10. Starting from Line **B**, measure 73.236 (73-15/64) inches/1860.20 millimeters into the patient compartment and mark a point on each side of the Centerline.
11. Connect the two marks made in Step 10. This line (Line **C**) will be the rear edge of the third mounting block.
12. Starting from the Centerline on Line **C**, mark a point 1.5 (1-1/2) inches/38 millimeters to each side of the Centerline. These points show the width of the third mounting block.
13. Place a mounting block on Line **C** with the corners on the 1.5-inch marks made in Step 12. Trace the outline of the bottom edge of the mounting block.

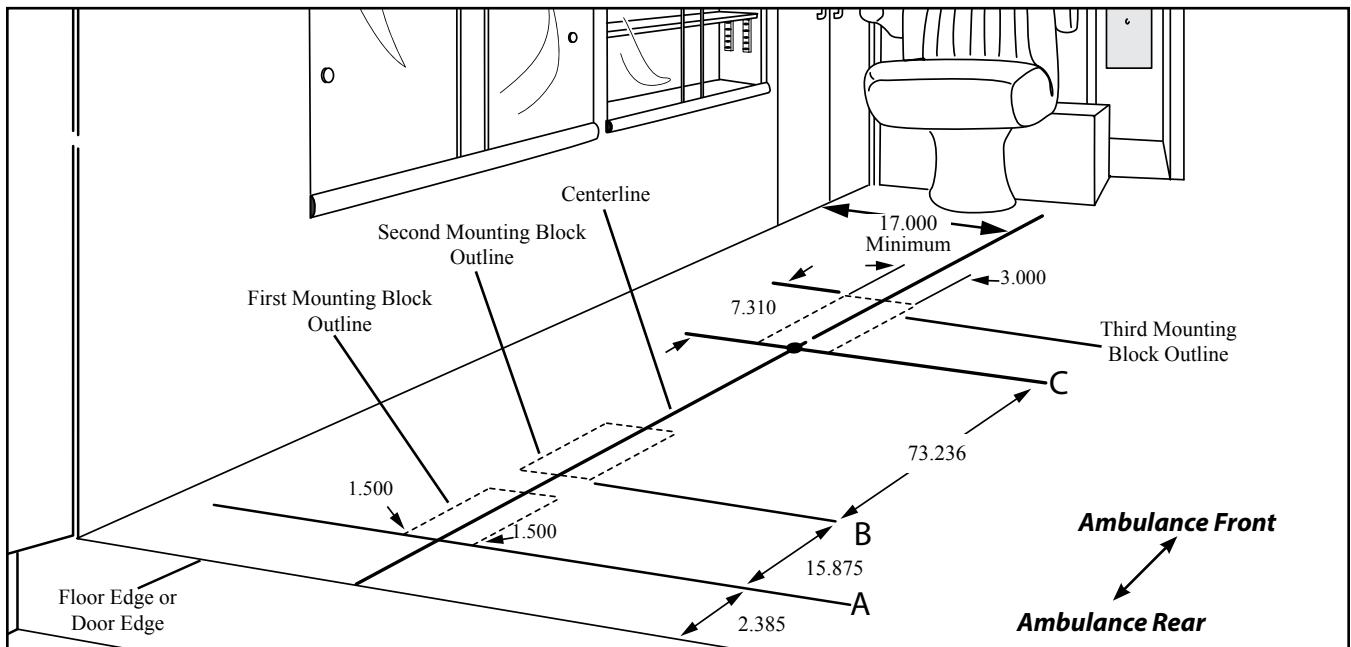


Figure 4 - Floor Markings for Model 185-LT (Long/103'') Stat Trac®

5 - INSTALLING THE STAT TRAC

5.1 Drilling the Holes

Items Needed:

1	Mounting Block
1	1/8" inch Diameter Drill Bit
1	5/16" inch Diameter Drill Bit
1	3/8-16 Tap
1	Backing Plates

Note: Refer to Figure 5 for these instructions.

- Before drilling, inspect the underside of the ambulance for obvious obstructions to the installation. If the fuel tank, oxygen lines, or other elements are in the way, contact the ambulance manufacturer for advice on how to avoid them.
- Place a mounting block on each mounting block outline and mark the mounting hole positions.
- Cautiously drill a small guide hole (or pilot hole) through the floor at each mounting hole position, using a 1/8 inch diameter drill bit.
- Reinspect the underside of the ambulance to verify nothing will be damaged by drilling the mounting holes. Align the backing plates with the holes.
- Consult the ambulance manufacturer to make sure the backing plates can be installed without interference and welded safely.
- Weld backing plates beneath the ambulance floor at all mounting points using a full penetration weld. Use a setup identical to one you have tested to meet or exceed all applicable guidelines. See page 22 to obtain AMD standards and federal specification KKK-A-1822. Also see *Backing Plate Requirements*, page 23.
- Using the guide holes, drill completely through the ambulance floor and backing plates with the 5/16 inch diameter drill bit. These larger holes are for the mounting block bolts. Repeat for each guide hole.
- Use a 3/8-16 tap to tap the backing plates for use with 3/8 inch socket head cap screws.

WARNING

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

Important

The Stat Trac is designed to be installed with backing plates at all mounting points.

If the vehicle in which you are installing the Stat Trac does not have the required backing plates, have them installed. Consult the ambulance manufacturer for installation information.

Important

Inspect the underside of the ambulance for anything (wiring, brake lines, fuel tank, oxygen lines or other elements) that might interfere with the installation.

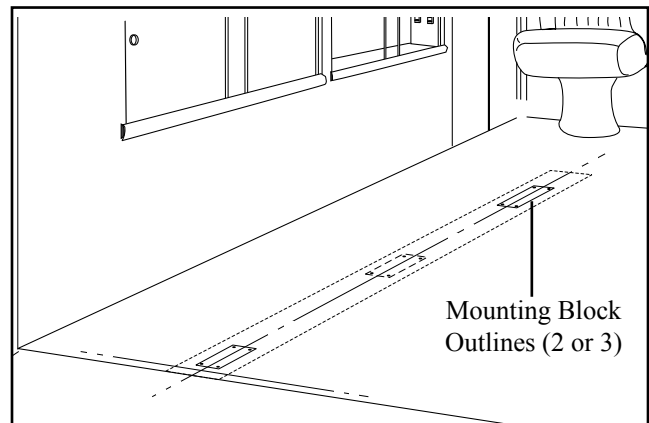


Figure 5 - Drilling the Guide Holes and Bolt Holes

5.2 Cutting Cavities for the Mounting Blocks

Items Needed:

1	3/8" Drill bit
1	Router, saber saw or other device
1	Measuring tape

Note: Refer to Figures 6-8 for these instructions.

Note: A typical ambulance floor cross-section, showing a floor covering, floor, and subfloor is shown in Figure 7. Your ambulance floor may vary from this.

1. Mark a point at one corner of each mounting block outline.
2. Carefully and slowly drill a starting hole through the floor covering (typically linoleum or similar) and floor (typically plywood) and stop when you reach the subfloor (typically metal). Use a 3/8 inch diameter drill bit (Figure 6).
3. Measure the thickness of the floor (typically plywood, Figure 7). Set the router or saber saw to the proper height to cut through the floor but not the subfloor (typically metal).
4. Insert the saw or router blade into the starter hole you drilled in Step 2. Beginning in this hole, carefully and evenly cut along each mounting block outline.
5. Remove the section of floor covering and floor (Figure 8). Smooth the edges of the cavity with the router or saw. Make sure the mounting block will fit inside the mounting block cavity.

Note: If a threshold plate at the door interferes with the mounting block cavity, notch the threshold plate to allow proper installation of the mounting block.

Important

Ambulance flooring styles vary widely. Consult the ambulance manufacturer for the proper method and tools to recess the floor for your style of ambulance.

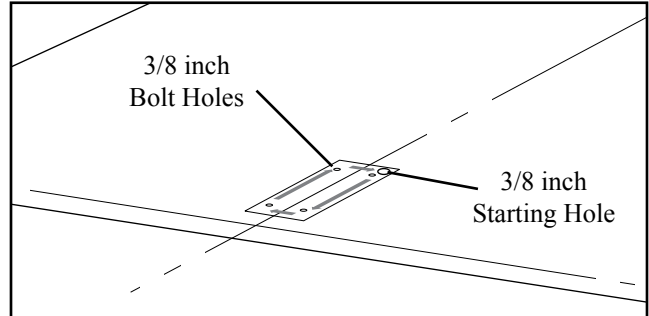


Figure 6 - Drilling to Measure Floor Thickness

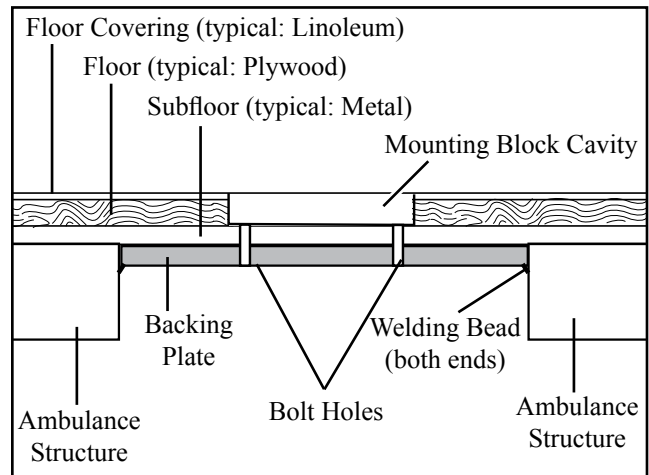


Figure 7 - Typical Floor Cross-Section for Cutting the Mounting Block Cavities

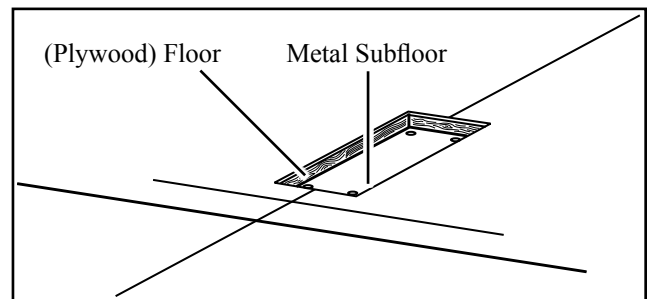


Figure 8 - Finished Mounting Block Cavity

5.3 Placing the Mounting Blocks

Items Needed:

2 Mounting Blocks (3 ea. for 185-MT and 185-LT)

2 Beauty Shim Plates* (3 ea. for 185-MT and 185-LT)

**Use as needed*

Note: Refer to Figure 9 for these instructions.

1. Place the mounting block in the mounting block cavity, with the ramp toward the door (Figure 9) and test the fit.

The flange (or lip) on the mounting block should rest flat on the floor. Refer to the *Placement Notes* at right to resolve any issues.

2. If the mounting block does not completely fill the cavity, place the beauty shim plate in the cavity and then the mounting block. Test the fit.
3. Repeat Steps 1-2 to place the other mounting block(s).

Placement Notes

- If the mounting block does not completely fill the cavity, place the beauty shim plate in the cavity. Add additional shims (thin metal plates) as needed to fill the space between the metal subfloor and the mounting block. Use the beauty shim plate as the top shim, placing any additional shims beneath it.
- If you have properly cut the floor down to the metal subfloor and the mounting block is too high, contact the ambulance manufacturer or Ferno Customer Relations (page 2) for assistance.
- If your ambulance has a corrugated subfloor, use shims to fill any areas that do not provide stable support for the mounting blocks.

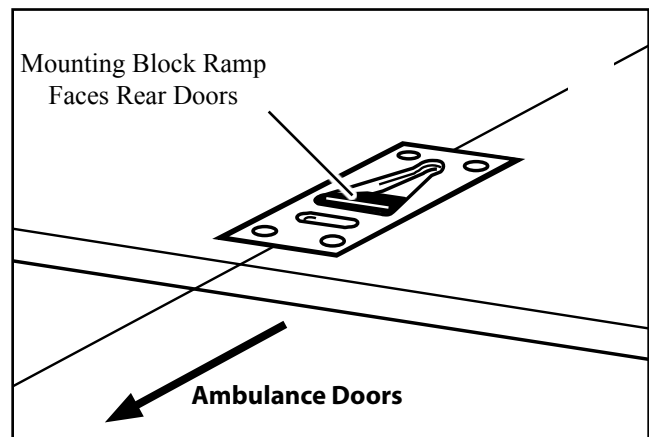


Figure 9 - Installing the Mounting Blocks

5.4 Installing the Mounting Blocks

Items Needed (Model 185):

8	3/8" inch Socket Head Cap Screws
2	Backing Plates
8	3/8" inch Elastic Locknuts
1	Tube of Silicone Caulking

Items Needed (Models 185-MT, 185-LT):

12	3/8" inch Socket Head Cap Screws
3	Backing Plates
12	3/8" inch Elastic Locknuts
1	Tube of Silicone Caulking

Note: Use Figure 10 below for reference as you follow the instructions.

1. Measure floor thickness to determine the proper screw length needed. The 3/8 inch socket head cap screws must be long enough to pass through the mounting block, shim plate, any additional shims used, the metal subfloor, and the backing plate, and still have 3/4 inches of threads extending past the backing plate.
2. Apply silicone caulk to the entire mounting block cavity, especially the areas around the holes. This will provide a corrosion barrier.
3. Place a mounting block, beauty shim plate and any additional shims needed inside each mounting block cavity.
4. Insert the screws into the mounting holes. The screws should extend at least 3/4 inch past the backing plates. Attach the elastic locknuts to the socket head cap screws and tighten.
5. Apply silicone caulk around the floor edge and mounting block flange. This will keep contaminants out of the cavity.
6. Repeat steps 1-5 to place the other mounting block(s).
7. Verify the mounting blocks are mounted and secured properly.

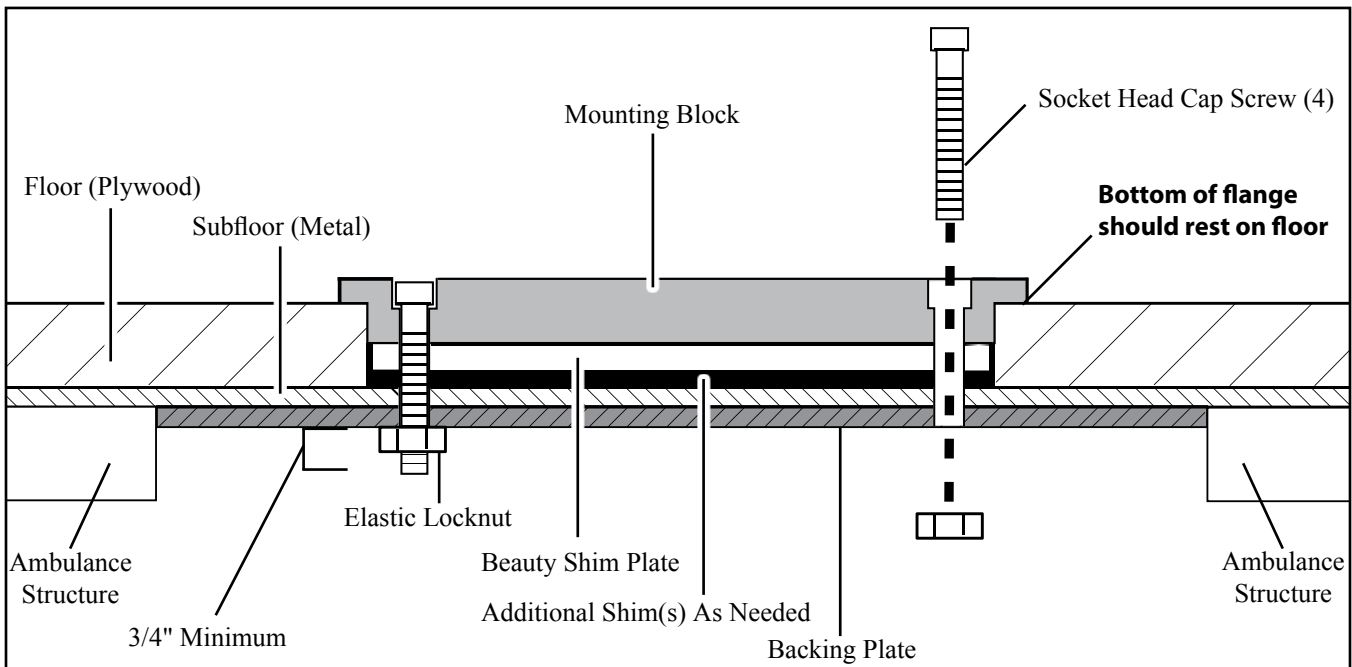


Figure 10 - Mounting the Mounting Blocks

5.5 Checking the Stat Trac With the Ambulance Floor

The Stat Trac is adjustable to account for dips, swells, or other imperfections in the ambulance floor. Check the fit of the Stat Trac with the floor, and then follow the procedures in Section 5.6 and/or Section 5.7 to make adjustments.

MOUNTING THE STAT TRAC TO THE AMBULANCE FLOOR

Before making any adjustments, test the Stat Trac with the floor:

1. Slide the Stat Trac toward the front of the ambulance to seat the fastener posts in the mounting blocks (Figure 11).
2. To lock the Stat Trac in place, swing the mounting handle down and toward the safety stop (Figure 12) until it is parallel to the floor.
3. Verify that the Stat Trac is locked. To do this, pull on the track with your hands. The Stat Trac should remain firmly in place.
4. If there is any difficulty mounting the Stat Trac to the floor or locking the mounting handle, inspect the fastener posts inside the track (Figure 11) and determine if the ends of the fastener posts are slotted (capable of being adjusted with a slotted [flat-blade] screwdriver).

FASTENER POSTS ARE NOT SLOTTED

If the fastener posts are not slotted, they are not adjustable. However, you can adjust the fastener-post brackets. See *Adjusting the Fastener-Post Brackets*, page 35. If the Stat Trac cannot be adjusted to fit the mounting blocks, see *Troubleshooting*, page 36.

FASTENER POSTS ARE SLOTTED

If the fastener posts are slotted (Figure 13) you can adjust the height of the fastener posts and the fastener-post brackets. If adjustment is needed:

1. Adjust the height of the fastener posts first (See *Adjusting the Fastener Posts*, page 34).
2. Adjust the fastener-post brackets second (See *Adjusting the Fastener-Post Brackets*, page 35).
3. If the Stat Trac cannot be adjusted to fit the mounting blocks, see *Troubleshooting*, page 36.

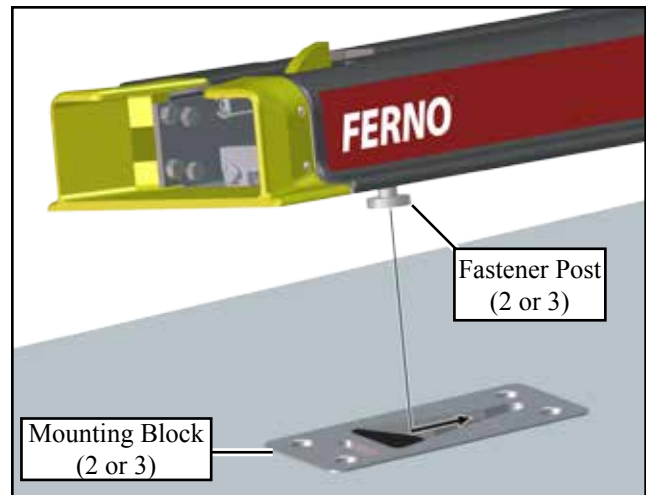


Figure 11 - Mounting the Stat Trac



Figure 12 - Using the Mounting Handle

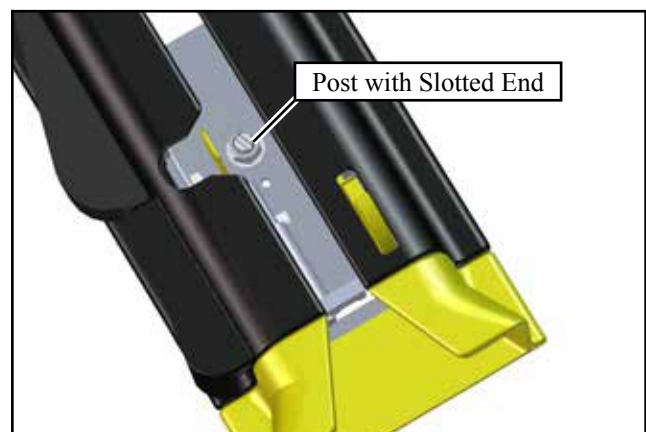


Figure 13 - Adjustable Fastener Post

5.6 Adjusting the Fastener Posts

Items Needed:

1	Stat Trac
1	Slotted Screwdriver
1	Socket Wrench with 3/4" Socket
1	Deep-Well Socket or Socket Extension

The slotted fastener posts (Figures 14) extend both below and into the center of the Stat Trac to secure the Stat Trac to the ambulance floor. The depth of the fastener posts can be adjusted using a slotted screwdriver and 3/4" socket and socket wrench.

Note: A deep-well socket or socket wrench with an extension is needed.

1. Use the 3/4" socket wrench to loosen and raise each fastener-post nut until it is at the end (top) of the fastener post (Figures 14-15). Repeat for the remaining nut(s).
2. Use the slotted screwdriver to lower (turn clockwise) each fastener post until the fastener posts fit into the mounting blocks.
3. Mount the Stat Trac to the floor (see *Mounting the Stat Trac to the Ambulance Floor*; page 33).
4. With the Stat Trac still locked in the floor, use the screwdriver to raise each fastener post (turn counter-clockwise) until the fastener posts stop against the top inside of the mounting blocks. Do not overtighten.
5. Using the screwdriver to hold the position of the fastener posts if needed, hand-tighten the nuts to the welded insert in the floor of the channel (Figure 14) to set the fastener posts at the correct height for your ambulance. (Note that the welded insert is not removable).
6. Use the 3/4" socket wrench to finish tightening each nut. Tighten until snug.

Note: Inspect the nut and fastener post after you have finished the adjustment. The fastener posts should be fully engaged with the nut, with at least one or two threads showing above the nut. If the fastener post does not fully engage the nut (some of the threads inside the nut are visible) adjust the installation. See *Adjusting the Fastener-Post Brackets*, page 35, and *Troubleshooting*, page 36 for additional methods to adjust the Stat Trac.

7. Un-mount and remount the Stat Trac. Verify the installation is correct. Inspect the mounting blocks and Stat Trac for binding, friction, wedging, or loose/wobbly mounting. If the Stat Trac shows any of these symptoms, see *Troubleshooting*, page 36.

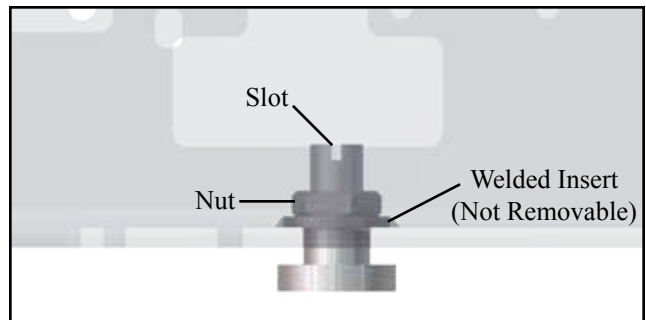


Figure 14 - Fastener Post (Side View)

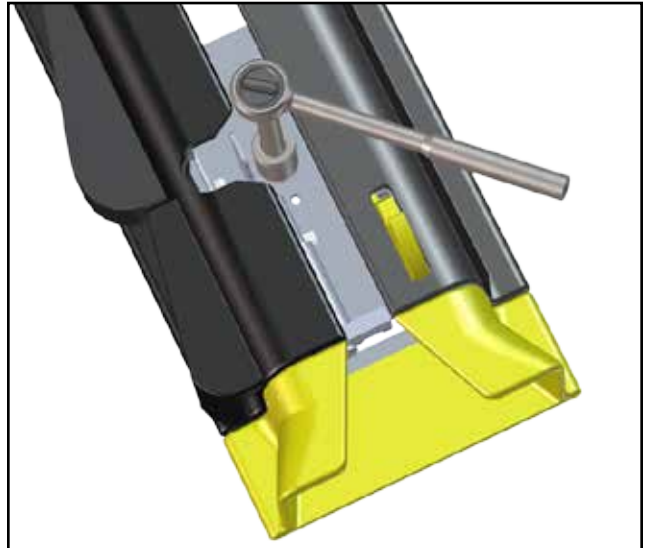


Figure 15 - Using the Socket Wrench

Tighten Until Snug

Tighten the fastener posts nuts until snug. Overtightening may cause difficulty in un-mounting and mounting the Stat Trac to the ambulance floor.

Tip

5.7 Adjusting the Fastener-Post Brackets

To adjust the height of the fastener-post brackets, loosen the screws, set the adjustment height, and retighten as follows:

1. **All models:** Loosen but do not remove the four screws on the end opposite the funnel (Figure 16) using a 1/2" socket or angled open wrench. Access the screws either from above or below the Stat Trac.

Note: Loctite® threadlocker was applied to the screws during the manufacturing process. The screws may be difficult to loosen, but do not apply heat.

Note: Owners of a Model 185 (short) Stat Trac skip Step 2.

2. **Models 185-MT, 185-LT only:** Loosen but do not remove the 11 screws on the funnel end (Figure 16) using a 7/16" socket or angled open wrench. (There are five screws on the side with the safety stop, and six on the opposite side).
3. With the brackets loosened, mount the Stat Trac (See *Mounting the Stat Trac to the Ambulance Floor*, page 33). If the Stat Trac cannot be mounted to the floor, contact Ferno Customer Relations, page 2.
4. With the Stat Trac mounted to the floor, tighten all screws to set the position of the fastener-post brackets.
5. Unlock and remove the Stat Trac from the floor plates.
6. Working with **only one screw at a time**, remove the screw from the Stat Trac, clean the threads with acetone or a Loctite®

⚠ WARNING

Improper adjustment can cause injury and damage. Do not loosen the fastener posts. If needed, adjust only the height of the fastener-post brackets.

Important

- The funnel-end fastener-post bracket (below the cot lock) is not adjustable on Model 185.
- The center fastener-post bracket (below the cot lock) is not adjustable on Model 185-MT and Model 185-LT.

cleaner/primer (not provided), then apply 1-2 drops of Loctite® 242 (blue) threadlocker (provided) and immediately reinstall the screw.

7. **Model 185 (short) Stat Trac:** Repeat Step 6 three times to clean and reinstall the remaining screws in the bracket opposite the funnel.

Models 185-MT and 185-LT: Repeat Step 6 a total of 15 times to clean and reinstall the screws at each end of the Stat Trac.

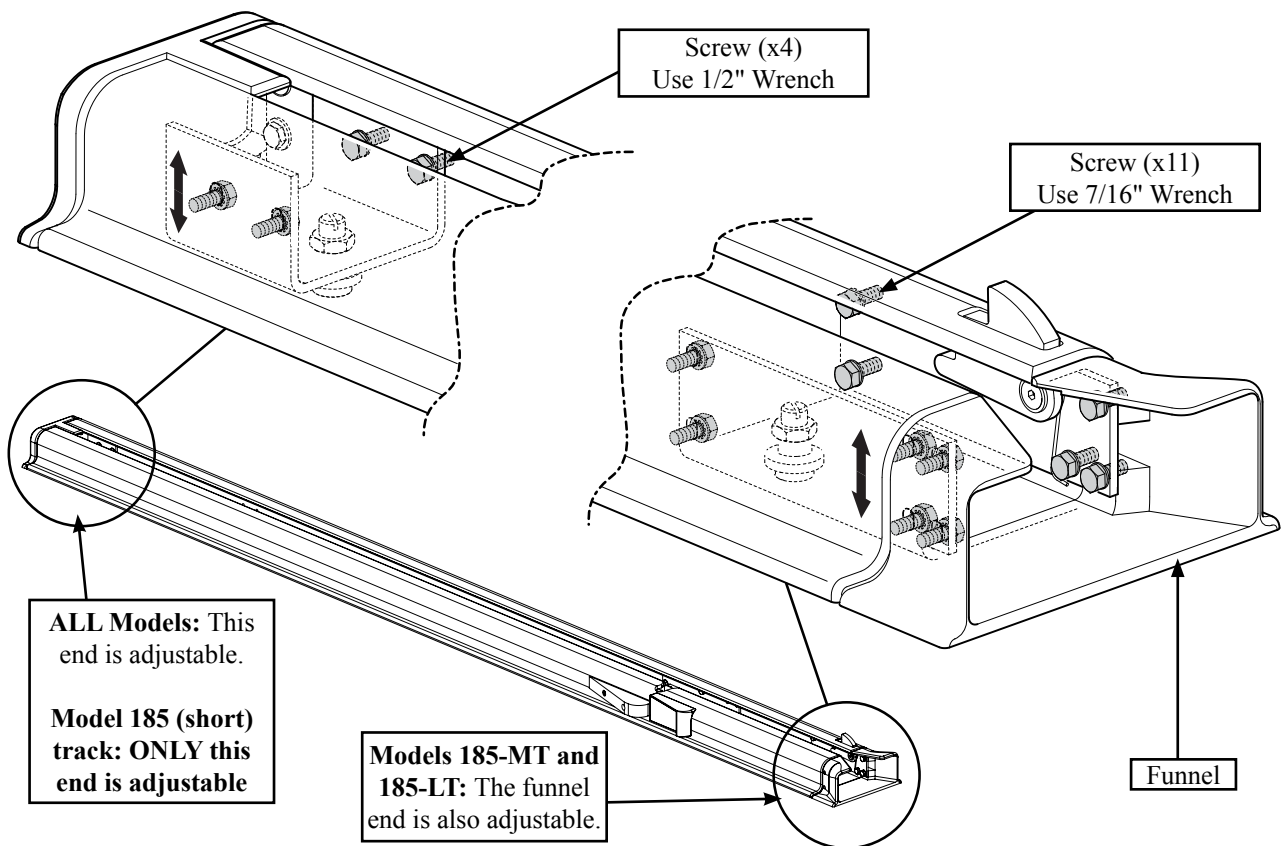


Figure 16 - Adjusting the Height of the Fastener-Post Brackets (Model 185-MT or 185-LT shown)

6 - TROUBLESHOOTING

6.1 Troubleshooting Table

Problem	Cause	Corrective Action
Wedging	Stat Trac is being inserted into the mounting blocks incorrectly.	Load both ends of the Stat Trac in the mounting blocks at the same time.
	One of the mounting blocks is installed at a different level than the other(s).	1) Adjust the Stat Trac (see <i>Adjusting the Fastener Posts</i> , page 34 and <i>Adjusting the Fastener-Post Brackets</i> , page 35). 2) Remount the mounting blocks so they are level or 1/16"/1.6 mm above the floor.
Loose Mounting (Vertical looseness)	The mounting blocks are loose.	Tighten the mounting block socket-head cap screws.
	The fastener posts are not adjusted properly.	Adjust the Stat Trac (see <i>Adjusting the Fastener Posts</i> , page 34 and <i>Adjusting the Fastener-Post Brackets</i> , page 35).
Wobbly Mounting (Side-to-side looseness)	The mounting blocks are more than 1/16"/1.6 mm inch above the floor.	1) Take out the mounting block and remove shim(s) as needed. Reinstall the mounting blocks and remaining shim(s). 2) Adjust the Stat Trac (see <i>Adjusting the Fastener Posts</i> , page 34 and <i>Adjusting the Fastener-Post Brackets</i> , page 35).
Stat Trac Will Not Lock Into the Mounting Blocks	Dirt or debris is inside the mounting block.	Remove debris and clean the mounting blocks and/or Stat Trac.
	The floor of the ambulance is not level.	Adjust the Stat Trac (see <i>Adjusting the Fastener Posts</i> , page 34 and <i>Adjusting the Fastener-Post Brackets</i> , page 35).

Note: If the corrective actions above do not solve the problem, contact Ferno Customer Relations (page 2) or your ambulance manufacturer for assistance.

7 - PARTS AND SERVICE, ACCESSORIES

7.1 U.S.A. and Canada

In the United States and Canada, to order parts or for professional repairs, 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

7.2 Worldwide

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

7.3 Retrofitting a Cot for Stat Trac

If your cot does not have the required Stat Trac components (loading posts and release handle or lever), the cot must be retrofitted to make it compatible with the Stat Trac.

Contact EMSAR (above) or Ferno (page 2) for information.

7.4 Accessories

Ferno offers a full line of accessories approved for installing the Stat Trac. Always follow the instructions packed with accessories. Keep the instructions with this manual.

Ferno also offers a full line of emergency products for the EMS professional. Contact Ferno Customer Relations (page 2) or your Ferno distributor for product information.



WARNING

Improper parts and service can cause injury. Use only Ferno-approved parts and Ferno-approved service on the Stat Trac.



WARNING

Modifying the Stat Trac can cause injury and damage. Use the Stat Trac only as designed by Ferno.

REQUIRED COMPONENTS

Kit #	Description	Use With
056-7027	Mount Block/Bty Shim Kit	185
056-7030	Mount Block/Bty Shim Kit	185-MT, 185-LT

INSTALLATION TEMPLATES

Kit #	Description	Use With
081-9539	Installation Template	185
081-9875	Installation Template	185-MT
081-9543	Installation Template	185-LT

STAT TRAC ACCESSORIES

Kit #	Description	Use With
081-9540	Safety Yellow Touch-up Paint	All
081-9977	Black Touch-up Paint	All
056-7028	Deluxe Retrofit Install. Kit*	185
056-7040	Deluxe Retrofit Install. Kit*	185-MT
056-7031	Deluxe Retrofit Install. Kit*	185 LT

Note: The three Deluxe Retrofit Installation Kits include plastic covers to cover mounting points for a Ferno® Model 175 cot fastener plus shims and beauty rings for use with the Stat Trac floor mounting blocks.

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