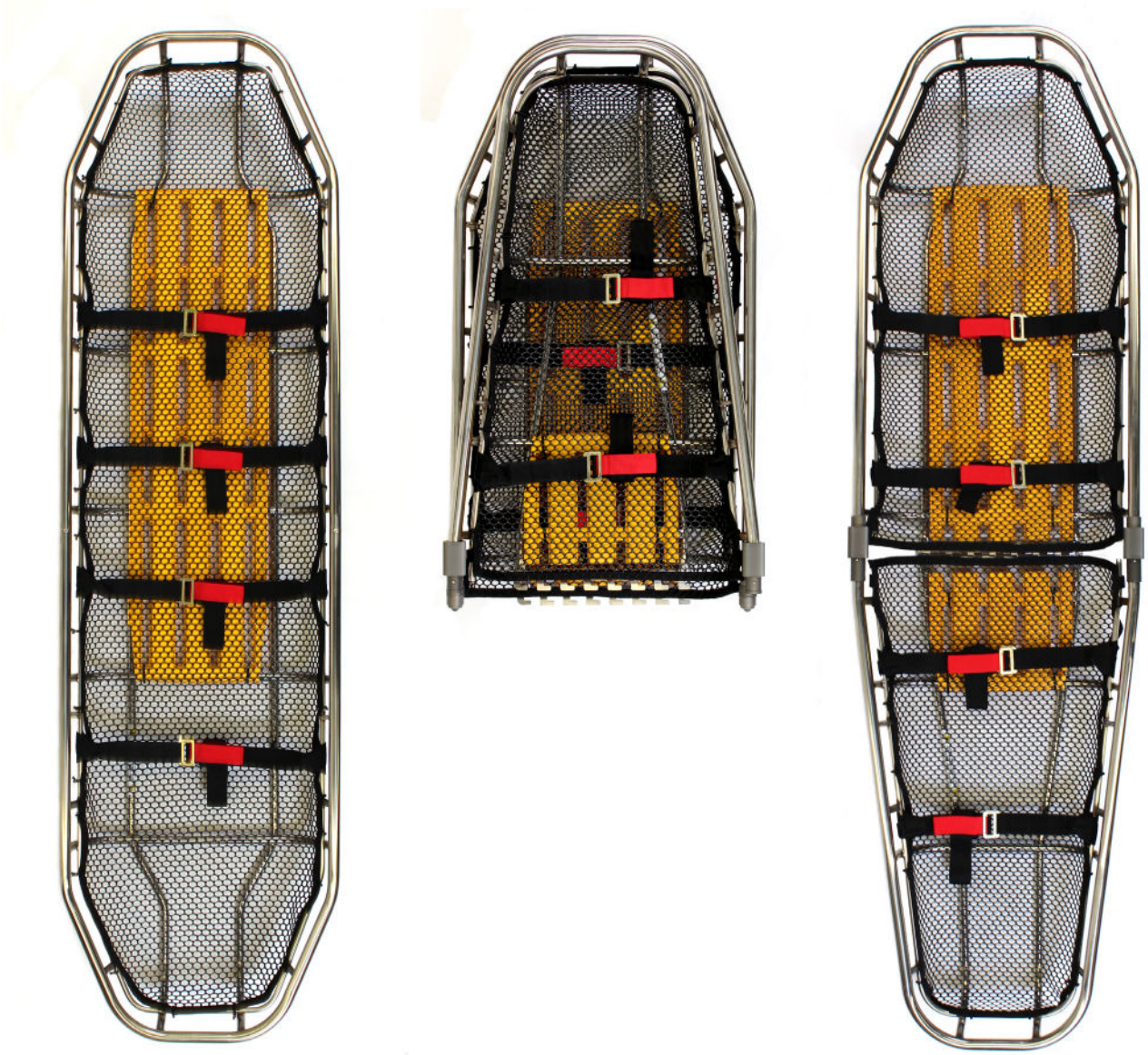
TRAVERSE rescue®
A FERNO GROUP COMPANY

Engineered For Your Mission

Titan Series Rescue Litters
USER MANUAL
PROFESSIONAL USE



Model 11-0100A.....Titan Tapered SS
Model 11-0101A.....Titan Regular SS
Model 11-0104A.....Titan SS Tapered Split
Model 11-0103A.....Titan SS Regular Split

Model 11-0115SL .....Titan-Ti Split Regular
Model 11-0116SL.....Titan-Ti Regular
Model 11-0118SL .....Titan-Ti Tapered
Model 11-0119SL.....Titan-Ti Split Tapered

Includes StratLoad
TI- Titanium Rescue Litter
SS- Stainess Steel Rescue Litter

Read this Manual and Retain for Future Reference

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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 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 Care.

Refer to this manual before and after each use. Failure to follow instructions for use and maintenance may rescult in serious consequences for the operator and/or patient.

Adverse Event Notice

In the event of an adverse event or serious incident related to the use of this device, the end user/operator must report the incident to Traverse Rescue LLC at 2715 Bristol Circle, #2, Oakville, Ontario L6H 6X5, (905) 279-7866, or via email at info@traverserescue.com. If the incident occurred in the European Union, report it to Traverse's Authorized EU Representative and the competent authority of the Member State in which the end user is established.

Proprietary Notice

The information disclosed in this manual is the property of Traverse Rescue, LLC., Oakville, ON Canada. Traverse Rescue, LLC. 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.

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MEETS THE LITTER REQUIREMENTS OF NFPA 1983, INCORPORATED IN THE 2022 EDITION OF NFPA 2500.

STAINLESS STEEL RESCUE LITTER	TITANIUM RESCUE LITTER
Vertical Breaking Strength: 24.9 kN	Vertical Breaking Strength: 24.9 kN
Horizontal Breaking Strength: 13.7 kN	Horizontal Breaking Strength: 13.7 kN

Additional information regarding litters can be found in NFPA 1500 and NFPA 1858 and NFPA 1983, incorporated in the 2022 edition of NFPA 2500.

Rescue Litters manufactured by Traverse Rescue, LLC have been determined to be Class 1 Medical devices.

Traverse Rescue, LLC manufactures its products under a strict Quality Management System. We also recognize and comply to any applicable standards that apply to each product.

1. Safety Information

1.1 Warnings

The following are warnings in this manual:

⚠ WARNING

Untrained operators can cause injury or be injured. Permit only trained personnel to operate this Rescue Litter.

An unrestrained or improperly restrained patient can suffer injuries. Always secure the patient in the Rescue Litter with a restraint system suitable to the situation

Improper operation can cause injury. Operate the Rescue Litter only as described in this manual

An un-attended patient can be injured. Stay with the patient at all times

Improper maintenance can cause injury and damage. Maintain Rescue Litter only as described in this manual

Improper parts and service can cause injury. Use only Traverse-approved parts and service on the Rescue Litter

Modifying the Rescue Litter can cause injury and damage. Use the Rescue Litter only as-sold by Traverse.

Attaching improper or inappropriate items to the Rescue Litter can cause injury. Use only Traverse-Approved items on the Rescue Litter

1.2 Important

Boxes like the one below emphasize important information.

IMPORTANT

Rescue procedures using ropes, harnesses, bridles and other Personal Protective Equipment require special skills and are potentially hazardous activities. Rescue personnel should not attempt such rescue procedures until they have received professional instruction and training.

1.3 Bloodborne Disease Notice

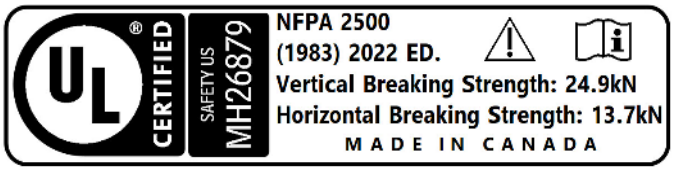
OSHA (Occupational Safety and Health Administration) requires employers to protect workers from workplace exposure to bloodborne diseases such as HIV-1 and hepatitus. To reduce the risk of exposure when using the Rescue Litter, follow disinfecting and cleaning instructions in this manual.

1.4 Safety Labels

Labels place important information from the Users' Manual on the Rescue Litters.

Read and follow label instructions. Replace worn or damages labels immediately. New labels are available from Traverse.

The Load-Limit label shown is affixed to the Rescue Litter.



2. Operator Skills and Training

2.1 Skills

Operators using the Rescue Litter need:

- A working knowledge of emergency patient-handling procedures.
- The ability to assist the patient
- A complete understanding of the procedures described in this manual

2.2 Training

Trainees need to:

- Follow a training program designed or approved by their training officer
- Read this manual. For additional free users' manuals, contact Traverse Customer Care.
- Practice with the Rescue Litter before using it in regular service
- Be tested on their understanding of the Rescue Litter
- Record their training information

3. About the Rescue Litter

3.1 General Specifications

Polyethylene Netting...-65°F/-54°C to +200°F/+93°C

Restraint Webbing
Tensile Strength.....975 lbs. / 442 kg
Load Rating .....500 lbs. / 227 kg
Restraint Buckles
Minimum Tensile Load.....4000 lbs. / 1814 kg
Buckles meet ANSI Z359.1 and CSA Z259.1

Traverse Rescue LLC reserves the right to change specifications with out notice.

Titan SS (Stainless Steel)		
Length	83.5 in	212.1 cm
Width	23.4 in	59.4 cm
Width (Split-Apart)	24.3 in	61.6 cm
Depth	7.4 in	18.7 cm
Depth (Split-Apart)	7.5 in	19.1 cm
Weight	32 lb	14 kg
Weight (Split Apart)	33 lb	15 kg
Rated Load Limit	2500 lb	11 kN

Titan Ti (Titanium)		
Length	83.5 in	212.1 cm
Width	23.3 in	59.1 cm
Width (Split-Apart)	23.8 in	60.3 cm
Depth	7.4 in	18.7 cm
Depth (Split-Apart)	7.6 in	19.4 cm
Weight	18 lb	8 kg
Weight (Split Apart)	19 lb	9 kg
Rated Load Limit	2500 lb	11 kN

⚠ WARNING

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

4. Restraints

4.1 About the Restraints

A total of four restraints are included with this Rescue Litter. These restraints are to supplement what you will typically use to tie-in a patient in a high-angle situation. We have made them to a suitable strength in order to complement your own system of tubular webbing, cord or the like. These restraints are only for securing the patient into the Rescue Litter, and are not to be used for lifting or for any other purpose. Restraints are considered a consumable item and can be replaced. (see section #7)

4.2 Fastening and Tightening the Restraints

The strap with the three-bar buckle is constructed with a looped end that attaches to the Rescue Litter, and a free end that that is used to tighten the restraint (figure 1).

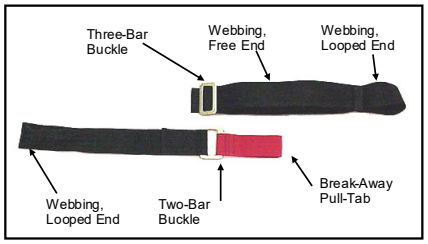


Figure 1, Components

IMPORTANT

Personnel using the Rescue Litter in high-angle rescue situation are responsible for knowing the techniques involved and for selecting the equipment and procedures best suited to each rescue situation.

1. Pass the three-bar buckle and webbing upward through the opening in the two-bar buckle (fig. 2). Make sure to pull the free end of the webbing completely through the opening.

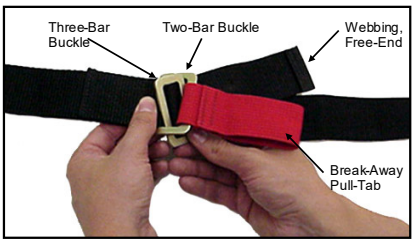


Figure 2, Fastening the Buckle

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2. Pull slightly on the free end of the webbing to firmly seat the three-bar buckle on top of the two-bar buckle (fig. 3).

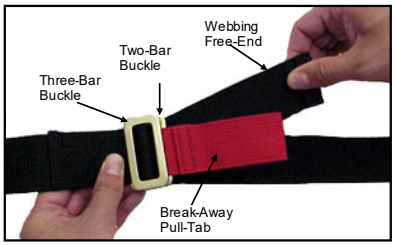

Figure 3, Seating the Buckles

3. Tighten the restraint by pulling on the free end of the webbing.

⚠ WARNING

An unrestrained or improperly restrained patient can suffer injuries. Always secure the patient in the Rescue Litter with a restraint system suitable to the rescue operation.

4.3 Loosening and unfastening the Restraints

To loosen a restraint, pull the breakaway tab toward the buckle (fig. 4). Continue pulling until the restraint is as loose as desired.

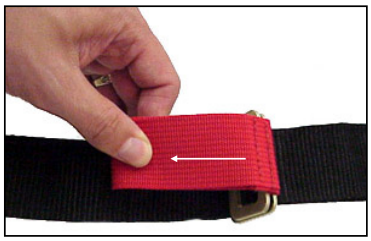

Figure 4, Loosening Restraint

To unfasten the restraint, first loosen as in step number 1, then angle the three-bar buckle and pass it downward through the opening in the two-bar buckle (fig. 5).

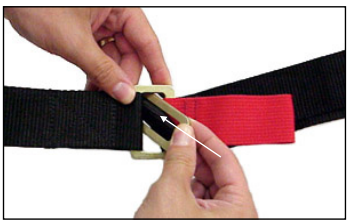

Figure 5, Unfastening Buckle

4.4 Attaching the Restraints

The top edge of the High Density Polyethylene netting is shaped with coves to provide points where restraints can easily be fastened to the lower-rail of the Rescue Litter (fig. 6).

Figure 6, Restraint Cove

⚠ WARNING

Improper operation can cause injury. Operate the Rescue Litter only as described in this manual.

⚠ WARNING

An unattended patient can be injured. Stay with the patient at all times.

Select attachment points that are appropriate for effective securing of the patient, as well as for working together with your own fastening system.

Attach the supplied restraints as folows:

1. Unfasten the buckle to seperate the restraint straps.
2. Starting outside the Rescue Litter, pass the looped end of the strap inward between the Rescue Litter rail and the netting at a chosen attachment point. (Fig. 7)

Figure 7, Passing Looped End Through Cove

3. Thread the buckle through the restraint loop (Fig. 8) and pull until the loop is tight around the Rescue Litter rail.

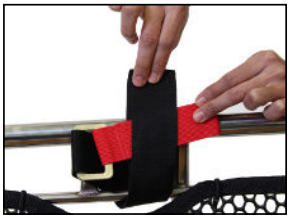

Figure 8, Threading Buckle

4. Attach the remaining strap to the opposite side of the Rescue Litter following steps 2 and 3.

5. Using the Rescue Litter

5.1 Before Placing the Rescue Litter in Service

- Personnel who use this Rescue Litter are required to read this manual.
- If using the supplied restraints, attach them as instructed in Attaching the Restraints.
- Confirm that the Rescue Litter, restraints and mesh netting are in good condition. Follow instructions in Inspecting the Rescue Litter in this manual.

5.2 General Guidelines for Use

- The Rescue Litter requires a minimum of two trained operators. In most situations, operators may require additional help. For information about placement and direction of helpers, see Carrying the Rescue Litter in this manual.
- Follow standard emergency patient-handling procedures when using the Rescue Litter.
- Stay with the patient at all times.
- Always use the patient restraints provided, as well as a supplimentary restraining system as per your training and team protocols, and the situation.

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- Personnel using the Rescue Litter in high-angle environments are responsible for learning the proper techniques involved, and for selecting the equipment and procedures best suited to the rescue situation.

5.3 Carrying the Rescue Litter

Carrying the Rescue Litter requires a minimum of two operators. Additional personnel will be helpful or even needed in most situations. Use an even number of personnel and position them to keep the Rescue Litter as even as possible.

Using Additional Help

Operators should maintain control of the Rescue Litter and direct any helpers.

5.4 Sliding the Rescue Litter

Slide the Rescue Litter on its runners over smooth surfaces. Avoid rock, stumps, branches or other hazards that could penetrate the netting, or cause discomfort or injury to the patient.

5.5 Transporting the Rescue Litter on a Cot

Use the cot restraints to secure the Rescue Litter to the cot.

5.6 Using High-Angle Rescue Procedures

High angle and rope-access rescue can involve any combination of ropes, winches, pulleys, litter bridles, belay devices and many other specialized items and devices too numerous to mention. Proper and safe use of these tools requires professional instruction and training.

When using high-angle or rope-access equipment with the Rescue Litter, ensure the equipment has an adequate load-rating, and that it is at least as great as that of the Rescue Litter.

During a high-angle rescue, the Rescue Litter may be oriented vertically, horizontally or in other positions. Secure the patient in the Rescue Litter so that he/she does not slip in any direction, or be able to accidentally come out of the Rescue Litter.

IMPORTANT

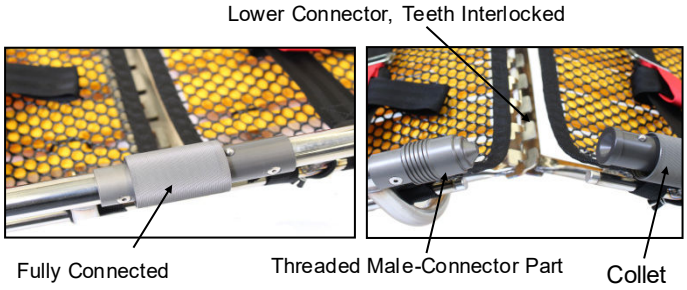
Rescue procedures using ropes, harnesses, bridles and other Personal Protective Equipment require special skills and are potentially hazardous activities. Rescue personnel should not attempt such rescue procedures until they have received professional instruction and training.

Tie-In Points

The Rescue Litter has several Tie-In points where carabiners or ropes may be attached to the upper rail. As an option, this Rescue Litter has incorporated into it a patent StrātLoad™ feature which allows for dedicated attachment points when being rigged with a four-point litter-bridle for a horizontal raise or lower.

5.7 Using Split-Apart Feature

The Traverse Split-Apart Rescue Litters offer very fast assembly time, and there are no pins to place etc.



⚠ WARNING

Possible pinch point take precautions

Before starting, be sure to clean all parts of dirt, mud, snow etc.
To assemble:

1. Face the two open parts of Rescue Litter toward each other
2. Lift the open ends simultaneously to about a 30° angle, and slide the two parts together, interlocking all of the teeth of the Bottom Connectors.
3. Lower the now-inter-locked parts to the floor
4. Ensure Upper Connector parts mate
5. Turn Collets onto the opposing threaded parts of the Upper Connectors. Ensure these Collets are snug, and that there are no threads showing.
6. To disassemble, simply reverse the above sequence.

Please Note: It is imperative that throughout the operation of this Rescue Litter during a rescue or in practice, that you check the integrity of the connection. If you see threads on the Upper Connector, re-tighten the collets.

6. Maintaining the Rescue Litter

6.1 Maintenance Schedule

The Rescue Litter requires regular maintenance. Set up and follow a maintenance schedule, such as provided by the form below. This form represents minimum maintenance, and you can modify your own program based on your needs.

	Each Use	As Needed	Each Month
Disinfecting (6.3)	•		
Cleaning (6.3)		•	
Inspecting (6.4)		•	•

When using maintenance products, follow the manufacturers' directions.

⚠ WARNING

Improper maintenance can cause injury. Maintain the Rescue Litter only as described in this manual.

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⚠ WARNING

Do not expose any software component of the litter to flame or high temperature. This may cause severe damage, resulting in equipment failure.

6.2 Disinfecting and Cleaning the Restraints

1. Remove restraints from Rescue Litter.
2. Buckle restraints before cleaning. This helps prevent damage to buckles or washing machine.
3. Place buckled restraints inside a mesh bag (not supplied) and place in an industrial washing machine.
4. Launder restraints in warm water, using a disinfectant soap and gentle agitation. Do not use bleach.
5. Remove restraints from mesh bag and hang to dry. Do not put restraints into home or commercial dryer.
6. Attach clean, dry restraints to Rescue Litter as instructed in Section 4.

6.3 Disinfecting and Cleaning the Rescue Litter

Wipe or spray all surfaces of Rescue Litter and netting with disinfectant. Follow disinfectant manufacturers' directions.
Traverse recommends inspecting the Rescue Litter for obvious damage as you disinfect it.
Hand clean the Rescue Litter and netting with a mild detergent in warm water. Rinse well, and dry with a towel.

IMPORTANT

Disinfectants and cleaners containing bleach, phenolics, or iodine can cause damage to the restraints and Rescue Litter. Disinfect and clean only with products that do not contain these chemicals..

6.4 Inspecting the Rescue Litter

Have your stations/services' maintenance personnel check the following:

- All components should be present
- Weld joints should be free of cracks or any other sign of breakage
- Rescue Litter frame (top and lower rails, runners, ribs) should be free of dents, cracks or un-intentional bends
- Polyethylene netting should be free of breaks and tears, and should be securely fastened to the lower rail.
- Back support should be securely fastened into place
- Warning labels should be clear and legible for all users to see and read.
- Restraint webbing should be in good condition with no cuts or frays
- Restraint buckles should be free of visible damage, and should operate properly.

If inspection shows damage or excessive wear, remove the Rescue Litter from service until appropriate repairs are completed (see Repair, Parts and Service, Section 7).

6.5 Storing the Rescue Litter

Store the Rescue Litter in a dry area. Make sure the Rescue Litter is clean and dry before placing it into storage.

7. Repair, Parts and Service

If your Rescue Litter is showing excessive wear or cracks (either in the material or at welds), it is time to retire it from service. Do not attempt to repair or replace any metal component or weld.

If the Mesh Liner, the Back Support, Patient Restraint straps or any labels are damaged and need repair, please call your Dealer or us to have them replaced.

See the table below for further description.

Part Number	Description
05-0102	Full Back Support
05-01025	Split Back Support
05-0125, TAP	Mesh, Titan Tapered
05-0125, TS	Mesh, Titan Split Tapered
05-0125, REG	Mesh, Titan Regular
05-0125, RS	Mesh, Titan Split Regular

Accessories

Traverse offers a full line of accessories that are approved for use with the Titan Series Rescue Litters.

Always follow the instructions packaged with accessories. Keep the instructions with this manual. Be aware of any special considerations (loading heights, door heights, etc.)

Part Number	Description
15-0240	Rescue Litter Handle
05-0144	Rescue Litter Cover
11-2220	Mule Rescue Litter Wheel
04-0108-TR4	Traverse Restraints, 4 pk
15-0105	Traverse Hard Eye Adjustable Lifting Bridle (INT'L)
15-0106	Traverse Soft Eye Adjustable Lifting Bridle (INT'L)

Related Products

Part Number	Description
16-0100	540°™ Rescue Belay-Large
19-0100A	TRS - Traverse Rescue Litter
11-0124A	Traverse Flotation Collar, Yellow, 2 pc

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8. Limited Warranty

Traverse Rescue, LLC (Traverse) Limited Warranty states that all Traverse products are warranted for a period of one year after the date of invoice, to the original purchaser. This warranty is provided against any material or workmanship flaws or defects. In the event of such a flaw or defect during this warranty period, please contact Traverse Rescue immediately. Traverse Rescue, LLC agrees to repair or replace (at our choice) the defective product. Our Limited Warranty does not cover damage due to abuse, misuse, lack of care, improper use or accidents. It also does not cover damage due to attempted repair by the purchaser that was not authorized by Traverse Rescue, LLC. No other warranties exist or are implied by Traverse Rescue, LLC. This limited warranty excludes, and Traverse shall not be held liable for any punitive, incidental, special or exemplary damages arising out of the breach of the warranty on sales by Traverse or otherwise, or through the performance or non-performance of any third-party part, product, service or system. This limited warranty does not limit in any way, nor alter in any way, other manufacturer's warranties on products that are sold by Traverse Rescue, LLC.

9. Traverse Customer Care

Customer Care and product support are important aspects of each Traverse product.

For assistance with this, or any other Traverse product, please contact Traverse Customer Care.

Please have the serial number of your Traverse Rescue Litter available when calling Traverse Customer Care, and include this number with any written communications.

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Training Schedule		
Date	Name	Training Method

Maintenance Record		
Date	Maintenance Performed	By

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