



Model 71 Series

Basket Stretchers



Model 71



Model 71-S



Model 71 Basket Stretchers

Ferno Customer Relations

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

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INSTRUCTIONS FOR USE



Read this Manual and Retain for Future Reference. To request additional free manuals, contact Ferno.



Medical Device



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Disclaimer

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

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

Proprietary Notice

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Limited Warranty Statement

Ferno products are covered by a limited warranty, printed on all Ferno invoices. Complete terms and conditions, and limitations of liability, are available from Ferno.

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 Ferno at 1-877-733-0911, or via email at tscoordinator@ferno.com. If the incident occurred outside the U.S., report it to Ferno's Authorized Representative for that area.

Unique Device Identification (UDI)

FERNO Product Name/Model UDI

Date of Manufacture		(01) Global Trade Item Number
Serial Number		(11) Date of Manufacture
		(21) Serial Number

Ferno-Washington Inc. | Wilmington, Ohio 45177 USA | +1.937.382.1451

FERNO Product Name/Model UDI

Date of Manufacture		(01) Global Trade Item Number
Lot Number		(11) Date of Manufacture
		(10) Lot Number

Ferno | Wilmington, Ohio 45177 USA | +1.937.382.1451

TABLE OF CONTENTS

Section	Page	Section	Page
Ferno Customer Relations _____	2	7 - Technical Rescue _____	14
1 - Safety Information _____	4	7.1 General Guidelines _____	14
1.1 Warning _____	4	7.2 Technical Rescue _____	15
1.2 Notice _____	4	8 - Maintenance _____	16
1.3 Symbol Glossary _____	4	8.1 Maintenance Schedule _____	16
2 - Operator Training _____	5	8.2 Service Life _____	16
2.1 Operator Training _____	5	8.3 Bloodborne Disease Notice _____	16
2.2 Using Additional Help _____	5	8.4 Disinfecting/Cleaning the Stretcher and Pad _____	16
3 - About the Stretcher _____	6	8.5 Disinfecting/Cleaning the Patient Restraints _____	17
3.1 Stretcher Description _____	6	8.6 Inspecting the Stretcher _____	17
3.2 General Specifications _____	6	9 - Parts and Service _____	18
4 - Setup _____	7	9.1 Ferno Parts and Service _____	18
4.1 Model 71-S _____	7	9.2 Parts List _____	18
4.2 Attaching and Adjusting the Foot Plate _____	8	10 - Accessories _____	18
5 - Patient Restraints _____	9	Training Record _____	19
5.1 Attaching Restraints _____	9	Maintenance Record _____	19
5.2 Using Two-Bar, Three-Bar Restraints _____	10		
5.3 Using Seat-Belt-Style Restraints _____	11		
6 - Using the Stretcher _____	12		
6.1 General Guidelines for Use _____	12		
6.2 Transferring a Patient Onto the Stretcher _____	12		
6.3 Carrying the Stretcher _____	13		
6.4 Sliding the Stretcher _____	13		
6.5 Using the Stretcher in Water _____	13		

1 - SAFETY INFORMATION

1.1 Warning

Warning safety alerts indicate a potentially hazardous situation that, if not avoided, could result in injury or death.

 WARNING
Professional use by trained operators only. Use the product only for its intended purpose.
Exceeding the load capacity can cause injury and damage. Inspect the product if the load capacity has been exceeded.
Use the product only for its intended purpose. Improper use, operation, or maintenance can cause injury. Use, operate, and maintain only as instructed.
An unattended or unrestrained patient can be injured. Always stay with the patient and use patient restraints.
Improper maintenance can cause injury. Maintain the product only as described in this manual.
Improper parts, modifications, or items not designed for the product can cause injury. Use only Ferno-approved parts and service. Attach only approved items and do not modify the product.

1.2 Notice

Notices emphasize important, but not hazard-related information. Failure to follow Notices could result in product or property damage.

NOTICE

1.3 Symbol Glossary

Ferno uses, as applicable, the following safety and regulatory symbols.

Symbol	Definition
	General warning of potential injury
	Consider instructions for use (ISO 7000)
	Refer to instructions for use (ANSI Z535/ISO 3864)
	Two trained operators required
	Lock
	Unlock
	Load Capacity/Safe Working Load
	Disinfecting
	Cleaning

2 - OPERATOR TRAINING

2.1 Operator Training

Operators must: read and understand this manual, have the physical ability to assist the patient, be trained on proper product operation, be trained on emergency-medical service and patient-handling procedures, and practice with the product before using it with a patient. Keep training records.

2.2 Using Additional Help

Operation requires a minimum of two trained operators. Use help when working with heavy loads (patient plus equipment). Trained operators stand at the ends of the product, maintain control of the product, and direct helpers on where to stand and how to grasp the product.

Refer to the chart for suggested placement for operators and helpers.

WARNING

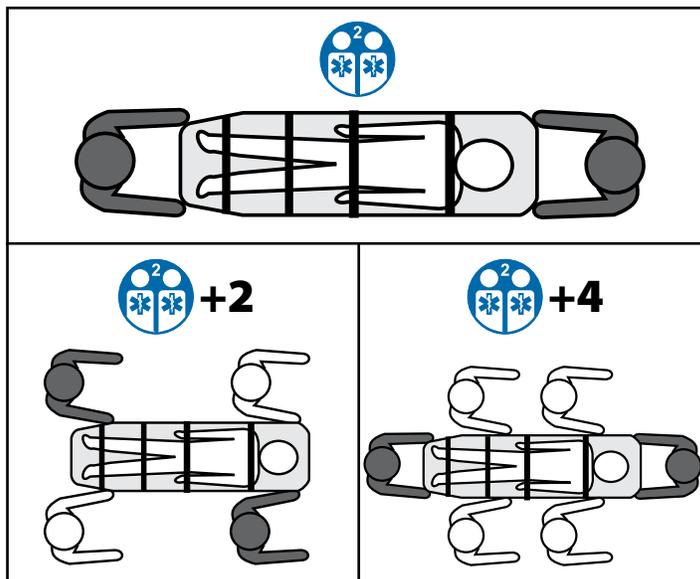
Professional use by trained operators only. Use the product only for its intended purpose.



Exceeding the load capacity can cause injury and damage. Inspect the product if the load capacity has been exceeded.

NOTICE

Personnel using the stretcher in technical rescue situations are responsible for knowing the techniques involved and for selecting the stretcher, patient restraint system and other equipment best suited to each rescue situation.



3 - ABOUT THE STRETCHER

3.1 Stretcher Description

The Model 71 Series Basket Stretchers are emergency patient-handling devices designed to transport patients to conventional cots or stretchers from areas that are difficult to access.

The stretchers are for professional use only. A minimum of two trained operators is required to carry a stretcher. Additional help may be needed for heavy loads.

Versions available:

- Model 71: Standard basket stretcher
- Model 71-S: Splits in two for storage or backpacking to rescue site

FEATURES

- High-Density Polyethylene Shell
- Molded Runners
- Heavy-Duty Aluminum Frame
- Tapered Foot End
- 12 Handholds
- Pre-rigged Nylon Rope for Attaching Restraints
- Replaceable Foam-Filled, Heat-Sealed Vinyl Pad
- Accommodates Standard 18" Tapered-Style Long Backboard
- Foot Plate with Strap and Hooks
- 4 Brass Grommets for Attaching Carabiners or Ropes
- Set of 4 Metal-Buckle Restraints
- Model 71-S: Splits in Half and Nests for Storage/Backpacking

WARNING

Use the product only for its intended purpose. Improper use, operation, or maintenance can cause injury. Use, operate and maintain only as instructed.

3.2 General Specifications

Product specifications are shown in the table. General specifications are rounded. Metric conversions are calculated before rounding the Imperial measurement.

Ferno reserves the right to change specifications without notice. For more information, contact Ferno (page 2).

Weight is without foot plate and patient restraints.

Specifications	71	71-S
Length	86 in/2180 mm	86 in/2180 mm
Width	24 in/610 mm	24 in/610 mm
Depth	8 in/190 mm	8 in/190 mm
Weight	23 lb/10 kg	24 lb/11 kg
Load Capacity	600 lb / 272 kg / 42.9 st	
Temperature	-40°F to 140°F / -40°C to 60°C	

4 - SETUP

4.1 Model 71-S

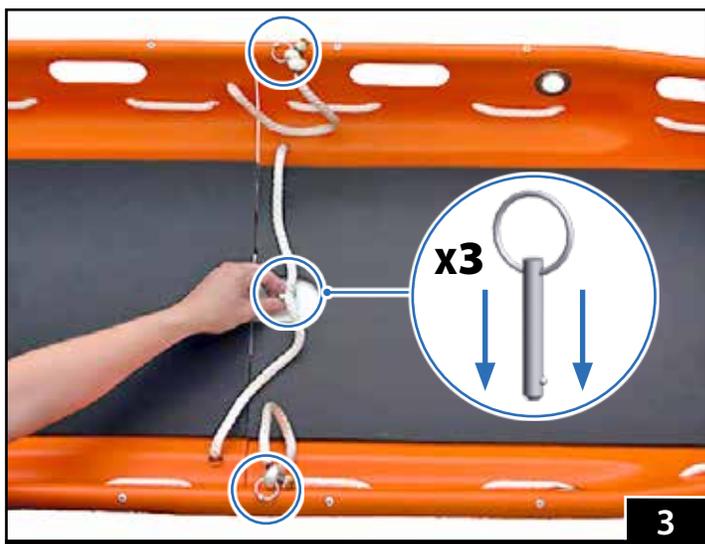
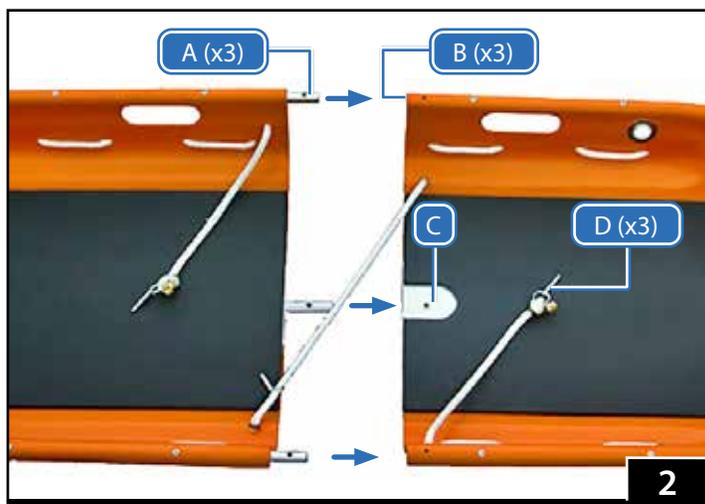
Models 71-S is a two-piece stretcher. The halves separate and nest for storage, or for compact backpacking to a rescue site (Figure 1).

To join the stretcher halves:

1. Align the three metal splices (A) with the mating sleeves (B) and center plate (C) (Figure 2), then push the stretcher halves together until the holes align in the splices, center plate, and sleeves.
2. Insert the three connector pins (D) into the mounting holes (Figure 3), and confirm the connector pins are inserted to full depth.

To separate the stretcher halves:

1. Remove the three connector pins (D) from the center plate (C) and sleeves (B).
2. Separate the two stretcher halves.
3. Nest the foot-end half of the stretcher inside the head-end half (Figure 1).



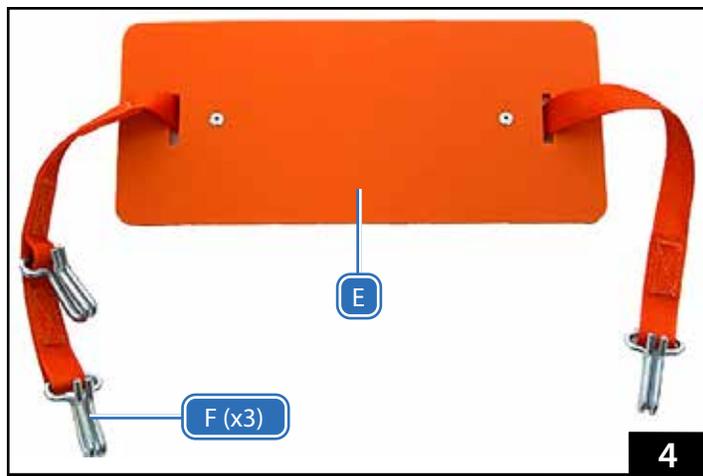
4.2 Attaching and Adjusting the Foot Plate

A foot plate (E) (Figure 4) is supplied with the stretcher. In technical rescue situations, or when the stretcher must be moved over uneven terrain, the foot plate is used to help keep the patient from sliding toward the foot end of the stretcher. It serves as one element of a restraint system that provides multi-directional stability for the patient.

ATTACHING THE FOOT PLATE

Tension hooks (F) sewn onto the foot plate strap attach to the stretcher at handhold openings. One end of the strap is fitted with a single hook and the other is fitted with two hooks (Figure 4).

1. Slide the single hook (F) onto the stretcher shell at the handhold opening closest to the patient's feet (Figure 5).
2. Attach the other end of the strap to the handhold opening on the opposite side of the stretcher (Figure 6). Choose the hook that positions the foot plate closest to the patient's feet.
3. Center the foot plate (E) on the strap, parallel with the end of the stretcher (Figure 6). The foot plate should press firmly against the bottom of the patient's feet. It may be necessary to reposition the patient slightly to achieve this.



5 - PATIENT RESTRAINTS

5.1 Attaching Restraints

Four patient restraints are supplied with the stretcher. Restraints have either seatbelt-style buckles or two-bar/three-bar style buckles. Use all four supplied restraints to secure the patient on the stretcher. Do not use patient restraints for lifting, attaching equipment to the stretcher, or other purposes.

Additional restraints or a different restraint system may be required for certain rescue situations. Trained rescue personnel must select proper restraints for the rescue situation and patient condition.

All stretchers are pre-rigged with nylon rope that provides attachment points for a restraint system. Select attachment points appropriate for the rescue situation, the patient's size and condition, and the restraint system being used.

To attach restraints:

1. Unbuckle the restraint to separate the straps.
2. Pass the looped end of the strap down between the rope and the stretcher at the selected attachment point (Figure 7).
3. Thread the buckle through the restraint loop and pull the free end until the loop is tight around the rope (Figure 8).
4. Attach the remaining strap to the attachment point on the opposite side of the stretcher.
5. Repeat Steps 1-4 to attach the remaining restraints.

NOTICE

Rescue situations vary and may require a restraint system different from the one supplied with the stretcher. Trained rescue personnel must select proper restraints for the rescue situation and patient condition.



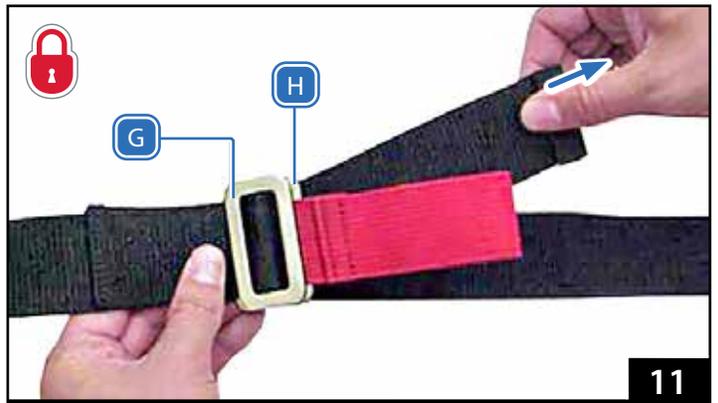
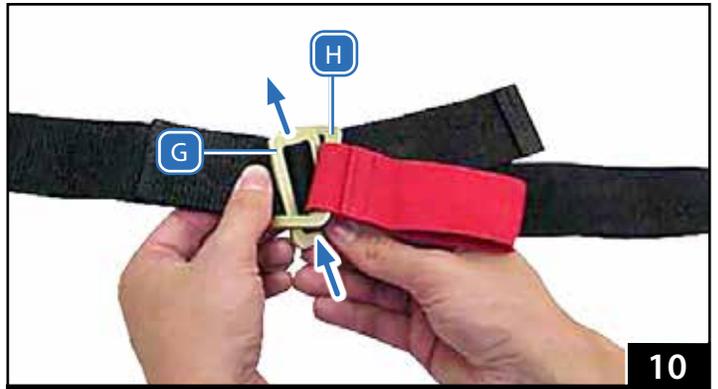
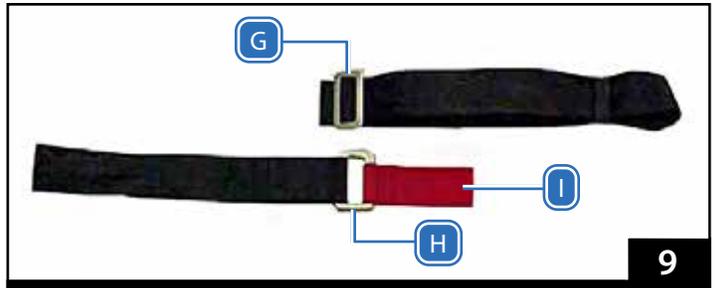
5.2 Using Two-Bar, Three-Bar Restraints

Buckle: To buckle the restraint, pass the three-bar buckle (G) and webbing up through the opening in the two-bar buckle (H) (Figure 10). Pull the free end of the webbing completely through the opening. Pull the free end of the webbing to seat the three-bar buckle on top of the two-bar buckle (Figure 11).

Tighten: To tighten a restraint, pull the free end of the webbing.

Loosen: To loosen a restraint, pull the red tab (I) against the buckle (Figure 12). Continue pulling until the restraint is as loose as desired.

Unbuckle: To unbuckle a restraint, first loosen it. Then, turn the three-bar buckle at an angle and pass it down through the open space in the two-bar buckle (Figure 10).



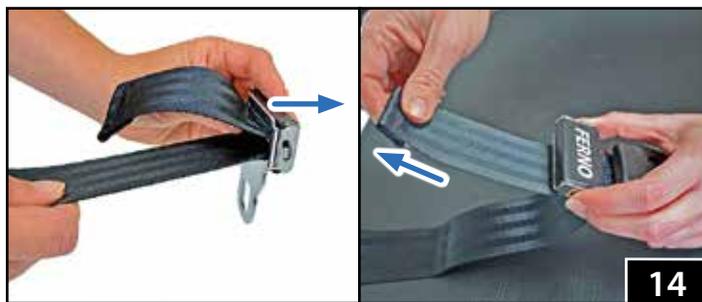
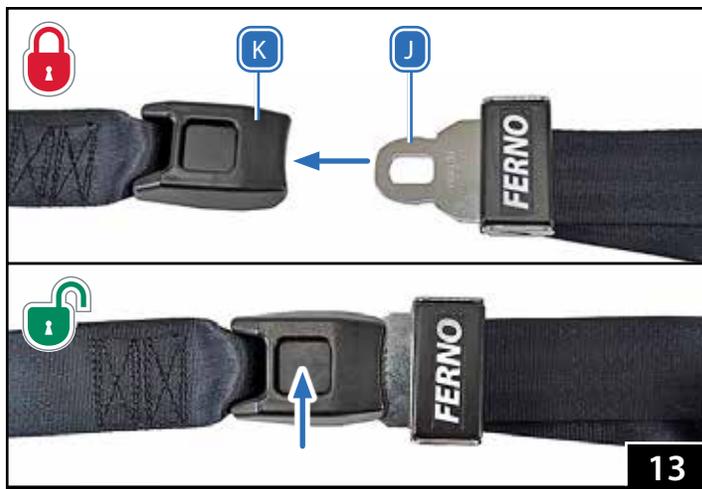
5.3 Using Seat-Belt-Style Restraints

Buckle: Insert the tang (J) into the receiver (K) slot until it locks into place (Figure 13, top). Always confirm the buckle is securely fastened.

Unbuckle: Press the release button in the center of the receiver (Figure 13, bottom) and separate the straps.

Lengthen: Unbuckle the restraint. Then, grasp the tang and turn it perpendicular to the webbing. Pull the tang away from the attachment point until the restraint is the desired length (Figure 14, left).

Shorten: Grasp the hemmed tab and pull the webbing through the tang slide bar assembly until restraint is the desired length (Figure 14, right).



6 - USING THE STRETCHER

6.1 General Guidelines for Use

Medical advice is beyond the parameters of this manual. It is the operators' responsibility to ensure safe practices for the patient and themselves.

A minimum of two trained operators is required. In most rescue situations, operators will need additional help. For information about placement and direction of helpers, see page 5.

Operators must:

- Follow standard emergency patient-handling procedures when operating the stretcher.
- Work together and maintain control of the stretcher at all times. Communicate with one another and use coordinated movements to operate the stretcher.
- Stay with the patient at all times.
- Use additional trained helpers as needed. See page 5.
- Always use the supplied patient restraints or rescue situations may require a restraint system different from the one supplied with the stretcher. Follow local service's protocols and government requirements.
- If ropes, winches, ladders, lifting bridles ("spiders") or other special equipment will be used, the procedure is considered high-angle or technical in nature and must be carried out only by specially-trained rescue personnel (see pages 14 -15).

WARNING

Use the product only for its intended purpose. Improper use, operation, or maintenance can cause injury. Use, operate and maintain only as instructed.

An unattended or unrestrained patient can be injured. Always stay with the patient and use patient restraints.

NOTICE

Before using a Series 71 stretcher in a technical rescue, read the information and instructions on pages 14-15.

6.2 Transferring a Patient Onto the Stretcher

If the patient must be immobilized, follow your local protocols. Refer to Figure 15 for examples of compatible Ferno products.

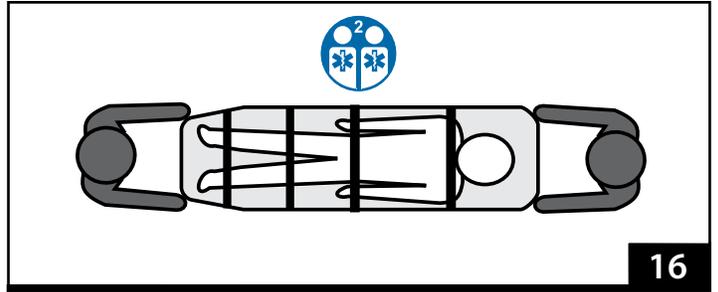
1. Attach the pad to the stretcher by pressing the hook-and-loop strips on the pad and stretcher together.
2. If desired, line the basket with blankets to protect the patient from weather, to provide warmth, or for other factors.
3. Follow local protocols or your medical director's guidelines to transfer the patient onto the stretcher.
4. Secure the patient with the supplied restraints or with a restraint system selected by specially-trained high-angle rescue personnel.
5. Use additional restraints, rope, or other means to secure additional equipment to the stretcher.



6.3 Carrying the Stretcher

Carrying the stretcher requires a minimum of two trained operators positioned at opposite ends of the stretcher, facing each other (Figure 16).

Use additional help as needed. See page 5.



6.4 Sliding the Stretcher

In some rescue situations it may be necessary to slide the stretcher on its runners over the ground. Avoid rocks, stumps, branches or other hazards that could damage or penetrate the stretcher.

If ropes, winches, ladders, lifting bridles ("spiders") or other special equipment must be used, the rescue is considered high-angle or technical in nature and must be carried out only by specially-trained rescue personnel.

6.5 Using the Stretcher in Water

In a water rescue situation, the stretcher may be used in conjunction with Ferno's Model 471 Flotation Collar (Figure 17), sold separately.

Water-rescue situations are technical in nature and must be carried out only by specially-trained rescue personnel.

Refer to the Model 471 Flotation Collar users' manual for instructions on attaching, using, and maintaining the collar.

NOTICE

Using a stretcher in a water rescue situation requires the attachment of Ferno's Model 471 Flotation Collar (sold separately).



7 - TECHNICAL RESCUE

7.1 General Guidelines

It is the responsibility of personnel specially trained in technical rescue to select the proper stretcher, patient restraint system, and other equipment for each rescue situation.

GUIDELINES

- Models 71 and 71-S stretcher are suitable for horizontal and vertical lifting in certain technical rescue situations.
- The stretcher load capacity of 600 lb/272 kg includes the combined weight of the stretcher, patient, life-support equipment, and where applicable, a rescuer.
- When using technical rescue equipment with a stretcher, every component of the equipment must have a load rating at least equal to that of the stretcher.
- During a technical rescue, the stretcher may be suspended horizontally, vertically, or at an angle, and rescuers may slide or carry it at various angles. Secure the patient in the stretcher so that he or she does not slip lengthwise, slide from side to side, or come out of the stretcher.



WARNING

Professional use by trained operators only. Use the product only for its intended purpose.



Exceeding the load capacity can cause injury and damage. Inspect the product if the load capacity has been exceeded.

NOTICE

Rescue procedures using ropes, harnesses, lifting bridles (“spiders”), and other specialized gear are considered technical in nature. They are potentially hazardous activities and require special skills. No rescue personnel should attempt technical rescue procedures unless they have received professional instruction and training.

Personnel using the stretcher in technical rescue situations are responsible for knowing the techniques involved and for selecting the stretcher, patient restraint system and other equipment best suited to each rescue situation.

7.2 Technical Rescue

TIE-IN POINTS FOR LIFTING BRIDLES OR ROPES

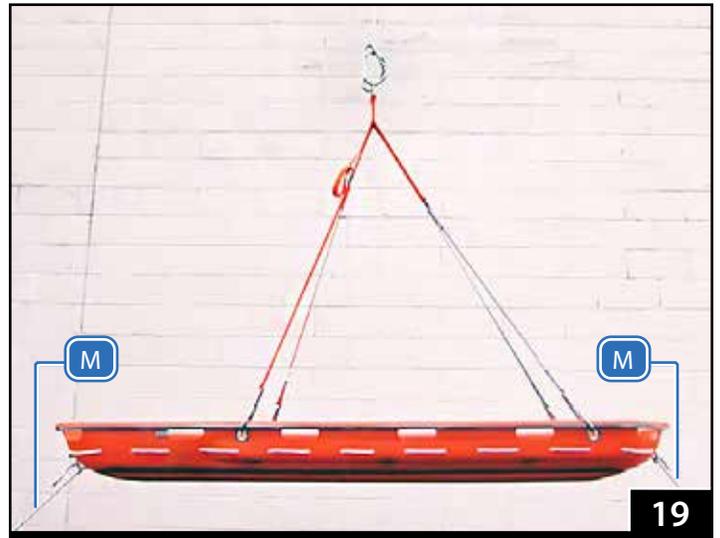
For horizontal lifting/lowering, the stretchers are fitted with four brass grommets (L) that provide tie-in points for ropes or carabiners (Figure 18).

For vertical lifting or lowering, handholds at the head end of the stretchers provide tie-in points (Figure 20).

When using a lifting bridle ("spider") with the stretcher, attach and use the bridle according to the bridle manufacturer's instructions. Ferno's Model 418-1 Lifting Bridle is designed for use with the stretcher.

TAG LINES

Attach tag lines (M) to the stretcher to allow rescuers to position or maneuver the stretcher and to prevent it from spinning (Figure 19 and Figure 20). Personnel trained in technical rescue must determine when to use and where to apply tag lines.



8 - MAINTENANCE

8.1 Maintenance Schedule

The stretcher requires regular maintenance. Set up and follow a maintenance schedule. Refer to the table for minimum intervals for maintenance. Keep maintenance records. For a sample record sheet, see "Maintenance Record" on page 19. When using maintenance products, follow the manufacturers' directions and read the manufacturers' material safety data sheets.

8.2 Service Life

Factors affecting product service life include frequency of use, local environment (temperature, humidity, etc.); maintenance (adherence to the inspection and maintenance schedule); and other factors. Follow the disinfecting, cleaning, and inspection procedures in this manual to ensure long life for the product.

8.3 Bloodborne Disease Notice

To reduce the risk of exposure to blood or other potentially infectious materials when using the product, follow the disinfecting and cleaning instructions in this manual.

8.4 Disinfecting/Cleaning the Stretcher and Pad

Remove the pad and restraints as needed. Refer to page 19 for instructions to disinfect and clean restraints. Reattach mattress and restraints only when clean and dry. Inspect all items for damage while disinfecting and cleaning.



Wipe all surfaces with disinfectant. Follow the disinfectant manufacturer's instructions for application method and contact time.



Hand clean with warm water and a mild detergent. Rinse with warm, clear water. Dry with a towel or allow it to air-dry.

WARNING

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

Improper parts, modifications, or items not designed for the product can cause injury. Use only Ferno-approved parts and service. Attach only approved items and do not modify the product.

Minimum Maintenance	Each Use or Daily	As Needed	Monthly
Disinfecting (this page)	•		
Cleaning (this page)		•	
Inspecting (page 17)		•	•

NOTICE

Do not use disinfectants or cleaners containing phenolics or iodines. If bleach is used, rinse with plenty of clear water to remove bleach residue.

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

The stretcher is constructed of high-density polyethylene (HDPE). High temperatures and/or direct sunlight may affect the performance and service life of the stretcher. Store the stretcher in a cool, dry area away from direct sunlight. Inspect the stretcher for cracks or discoloration of the material during your regular inspection. See "Inspecting the Stretcher" on page 17.

8.5 Disinfecting/Cleaning the Patient Restraints

Remove the restraints from the stretcher before cleaning/disinfecting them. Reattach only clean, dry restraints.

TWO-BAR/THREE-BAR RESTRAINTS

Apply disinfectant to all surfaces of the restraint following the disinfectant manufacturer's instructions.

Buckle restraints, place in mesh bag (not supplied), and wash in an industrial washing machine using warm water, mild detergent, and gentle agitation. Hang restraints to dry. Do not place restraints in a dryer.

SEAT BELT-STYLE RESTRAINTS

Apply disinfectant/cleaner to the buckles and webbing according to the disinfectant manufacturer's instructions. To clean, immerse restraint webbing, but not buckles, in warm water with mild detergent. To rinse, immerse webbing in clear water. Hang restraints to dry. Do not place restraints in a dryer.

8.6 Inspecting the Stretcher

Have your service's equipment maintenance personnel inspect the stretcher regularly. Follow the checklist at right. If inspection shows damage or excessive wear, remove the stretcher from service until repair is made. See "Parts and Service" on page 18.

NOTICE

Do not immerse restraint metal buckles, slide bars, and clips in liquids or by washing-machine action. See the restraint users' manuals.

Inspection Checklist

- Are all components present and securely attached?
- Is the stretcher and pad free of punctures, cracks, deep gouges, and cuts?
- Inspect for discoloration of the orange HPDE material that could indicate wear or damage. Store the stretcher away from heat and direct sunlight.
- Is the stretcher frame free of bends and cracks?
- Is restraint webbing in good condition with no cuts or frayed and edges?
- Are restraint buckles free of visible damage and do they operate properly?
- Does the pad attach to the stretcher properly?
- **Model 71-S:** Are the center plate, connector pins, and splice pins and housings present and in good condition, and do the stretcher halves attach and detach properly?

9 - PARTS AND SERVICE

9.1 Ferno Parts and Service

For parts or professional repair, contact your Ferno distributor, Ferno Customer Relations, or visit our website for a list of Authorized Service providers.

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

Information www.ferno.com
Authorized Service and Support ferno.com/service-and-support

U.S., Canada	1.877.733.0911
International	Country Code +1.937.382.1451
Fax	1.888.388.1349

9.2 Parts List

Patient restraints are available from Ferno Customer Relations (page 2) or from your Ferno distributor.

The stretcher basket body (or body halves) and the metal frame are not available for the end user to install. These must be replaced by an authorized service provider.

Note: Replacement pad is compatible only with stretchers after serial number 07-050801.

WARNING

Improper parts, modifications or items not designed for the product can cause injury. Use only Ferno-approved parts and service. Attach only approved items to the product. Do not modify the product.

MODEL 71

Part	Description	Qty
039-0354	Pad* with Clips	1
090-1650	Rope with Clips	1
090-1670	Foot Plate with Stiffener Tube	1
039-0131	Foot Plate Strap and Clips	1

MODEL 71-S

Part	Description	Qty
039-0355	Stretcher Pad w/8 Clips, Head-End Half for 71-S	1
039-0356	Stretcher Pad w/8 Clips, Foot-End Half for 71-S	1
090-2060	Rope with Clips for 71-S	1
090-2080	Side and Center Connector Pins for 71-S	1
090-1670	Foot Plate with Stiffener Tube	1
039-0131	Foot Plate Strap and Clips	1

10 - ACCESSORIES

Ferno offers accessories approved for use with the stretcher. Follow all instructions in accessory users' manuals. Keep the instructions with this manual.

When using accessories, be aware of any special considerations such as doorway heights and widths, or other factors which may be affected by the addition of the accessory/accessories to the stretcher.

Contact Ferno Customer Relations (page 2) or your Ferno distributor for product information.

Description	Part Number
471 Flotation Collar	031-3943
418-1 Adjustable Lifting Bridle	031-2390
513-4 IV Pole for 71 & 71-S Stretchers	008-5480
430 Restraint, blk, 2-pc., w/ metal buckle	031-3892
Int'l. Restraint, org, 2-pc, w/ metal buckle	031-4008
416 Restraint, red, 2-bar, 3-bar buckle	031-3927
Restraint for 71-M Stretcher only	039-0135
71 Stretcher Pad w/16 clips	039-0354
71-S Stretcher Head-End Pad w/8 clips	039-0355
71-S Stretcher Foot-End Pad w/8 clips	039-0356

 **FERNO**[®] 70 Weil Way
Wilmington, OH 45177

Aviation

Military

Mortuary

EMS

Rescue

