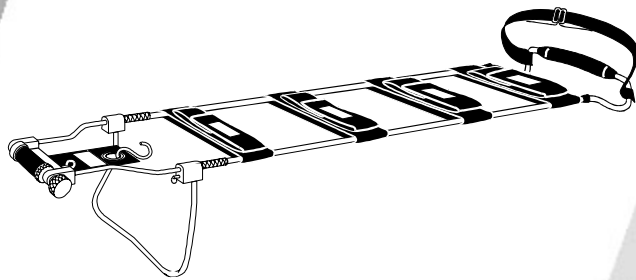


Fernotrac

Model 441 Combination Kit

Model 443 Traction Splint

Model 444 Traction Splint



Disclaimer

This manual contains general instructions for the use, operation and care of the Model 441 Fernotrac Combination Kit, Model 443 Fernotrac Traction Splint (ped.), and the Model 444 Fernotrac Traction Splint (adult). 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 Fernotrac in the event of transfer to new users. Additional free copies are available upon request from Customer Service (Page 14).

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.

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SECTION 1 - SAFETY INFORMATION

1.1 Safety Alerts

Safety alerts identify hazards to avoid. The following safety alerts appear in this manual:

WARNING

Improper use can cause serious injury. Use the splint only as described in this manual.

Improper maintenance can cause serious injury. Maintain the splint as described in this manual.

Using improper parts and service can cause serious injury. Use only Ferno-approved parts and service.

1.2 Bloodborne Disease Notice

OSHA requires employers to protect workers from workplace exposure to bloodborne diseases like HIV-1 and hepatitis. To reduce the risk of exposure when using the splint, follow the maintenance instructions in this manual.

For more information, contact:

U.S. Department of Labor, OSHA
Office of Public Affairs, Room N-3647
200 Constitution Ave., N.W.
Washington, DC 20210

SECTION 2 - LEARNING ABOUT THE SPLINT

2.1 Product Description

Model 441 is a combination kit containing a Model 443 pediatric splint and a Model 444 adult splint.

Fernotrac™ Splints (splints) are traction splints designed to immobilize and provide traction for a patient's leg.

Each splint features adjustable length, adjustable leg straps, an ankle wrap, a thigh pad, and a heel stand.

The splints are for professional use only. Two operators are required to apply the splint.

2.2 General Specifications

Measurements are rounded to whole numbers. For detailed specifications contact Ferno Customer Service (page 13).

Model 443 (Pediatric) Splint

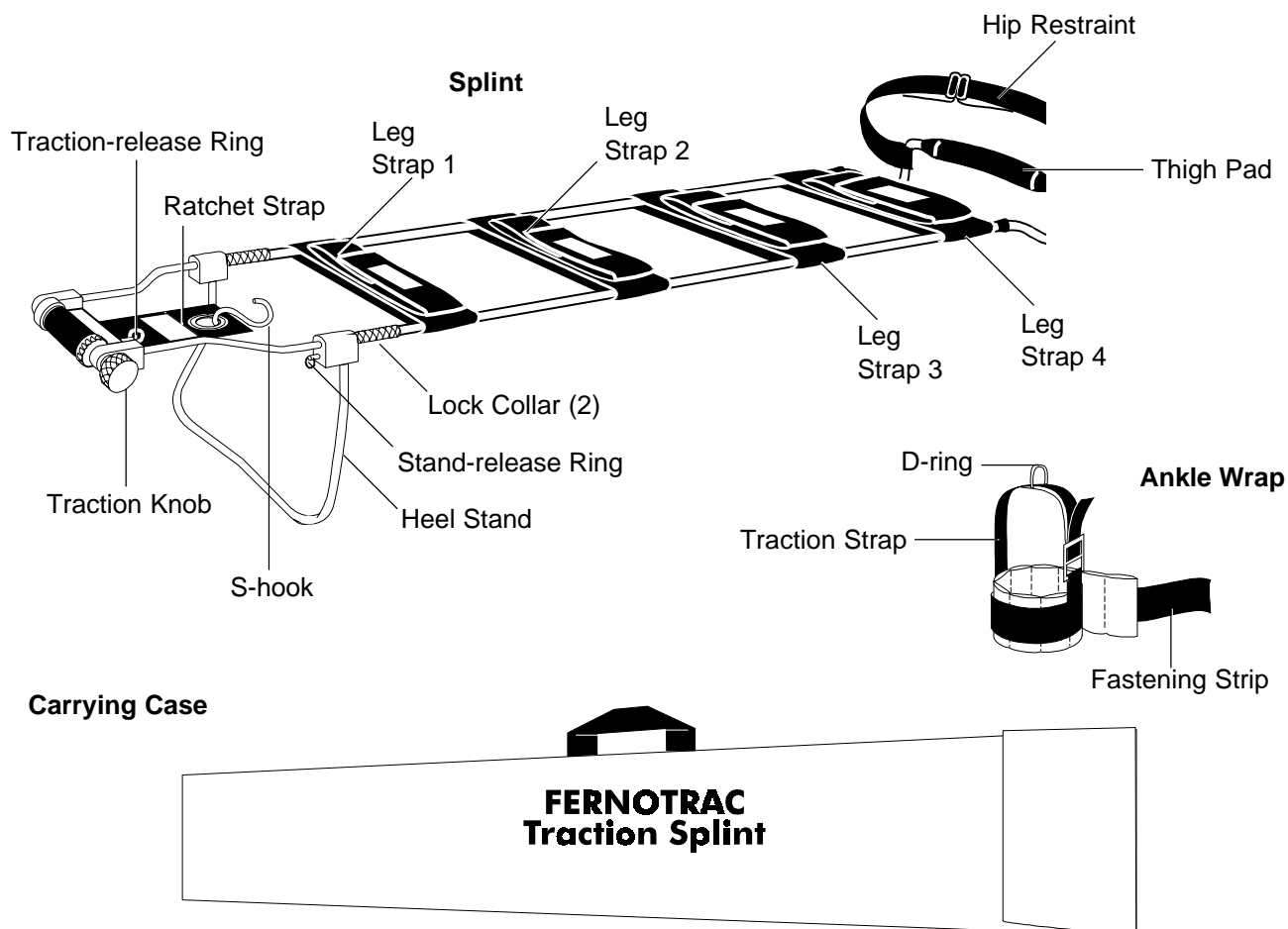
Length (Min.)	31 in	79 cm
Length (Max.)	46 in	117 cm
Width	8 in	20 cm
Height (Min.)	2 in	5 cm
Height (Max.)	8 in	20 cm
Weight	3 lb	1 kg

Model 444 (Adult) Splint

Length (Min.)	35 in	89 cm
Length (Max.)	54 in	137 cm
Width	9 in	23 cm
Height (Min.)	3 in	8 cm
Height (Max.)	9 in	23 cm
Weight	5 lb	2 kg

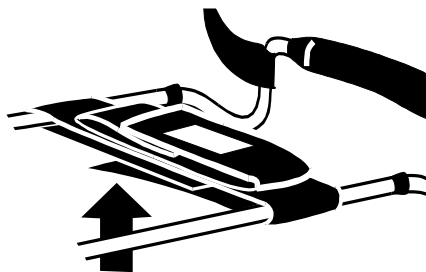
Ferno reserves the right to change specifications without notice.

2.3 Components



2.4 Attaching the Leg Straps

Four leg straps are included with the splint. These straps are labeled 1 through 4 with instructions as to their position.

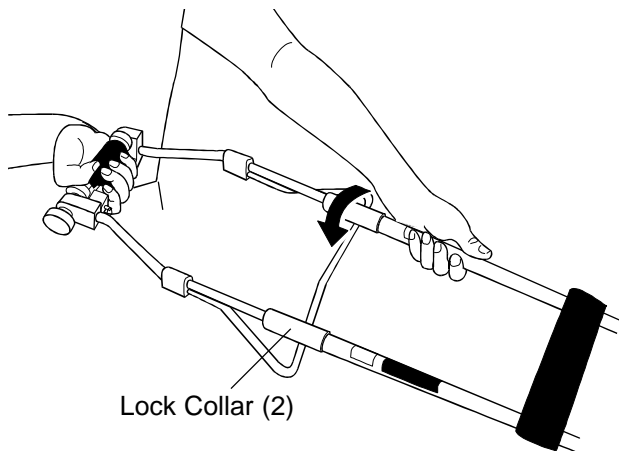


Attach the leg straps to the splint. Wrap the nylon webbing strap around the metal frame of the splint, using the velcro to fasten the strap to the splint.

Locate strap 1 at the ankle end of the splint, followed by straps 2 and 3 in the center, and strap 4 at the thigh end of the splint.

2.5 Adjustable Length

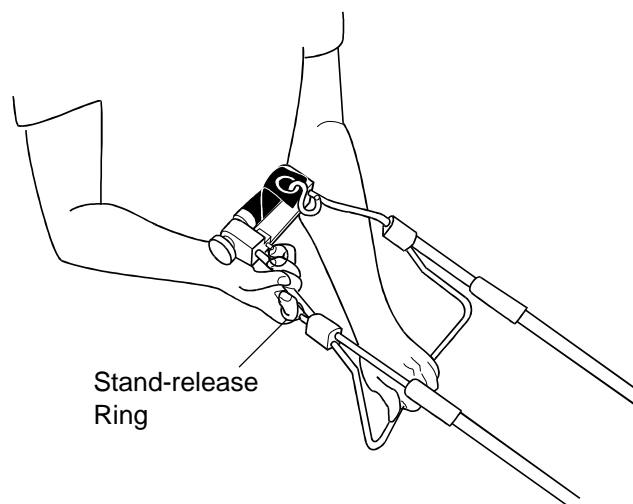
The overall length of the splint is adjustable to fit each patient's leg.



To adjust the length of the splint, loosen the lock collars by turning them counterclockwise. Pull or push the splint to the appropriate length. Tighten the lock collars by turning them clockwise.

2.6 Heel Stand

The heel stand elevates the injured leg.



To unfold the heel stand, pull the stand-release ring, and pull down the heel stand. Release the heel stand-release ring and make certain the heel stand is locked into place.

To fold the heel stand, pull the stand-release ring, and fold up the heel stand.

SECTION 3 - OPERATOR CONSIDERATIONS

3.1 Skills

- ☐ Operators should have a working knowledge of emergency patient-handling procedures.
- ☐ Operators should have the ability to assist the patient.
- ☐ Operators should have a complete understanding of the procedures described in this manual.

3.2 Training

- ☐ Trainees should follow a training plan approved by the EMS training officer.
- ☐ Trainees should read this manual.
- ☐ Trainees should practice using the splint before using with a patient.

Test each trainee's understanding of the splint.
Keep training records. A convenient form is provided on page 13.

SECTION 4 - USING THE SPLINT

4.1 Adjust the Splint

! WARNING

Improper use can cause serious injury. Use the splint only as described in this manual.

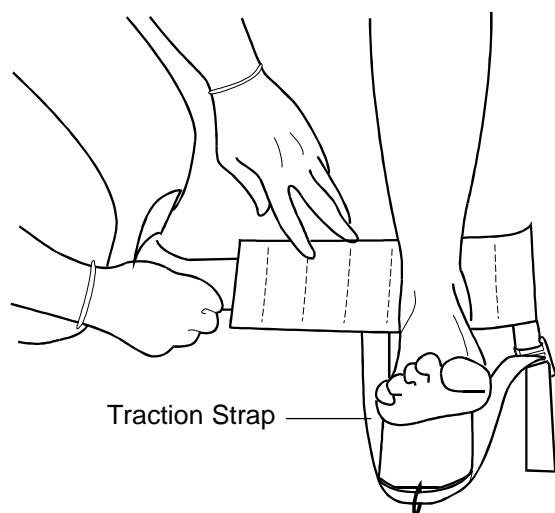
Place the splint alongside the patient's uninjured leg and adjust the splint to the appropriate length. The patient's heel should be three to four inches above the heel stand bracket.

Slide the leg straps along the splint until they are evenly spaced, then unfasten them.

Unfold the heel stand by pulling the heel-stand release ring and unfolding the stand. After releasing the heel-stand release ring, check to make sure the heel stand is locked into place.

4.2 Apply the Ankle Wrap

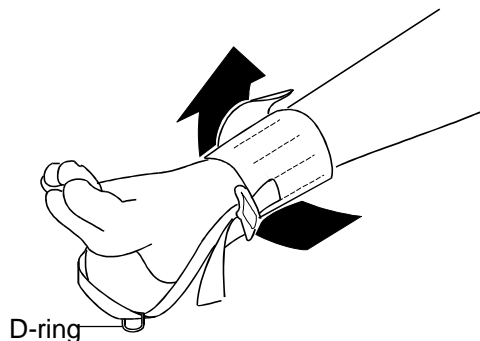
Follow your normal protocol for splinting a fracture. One operator should support the injured leg while the other applies the splint.



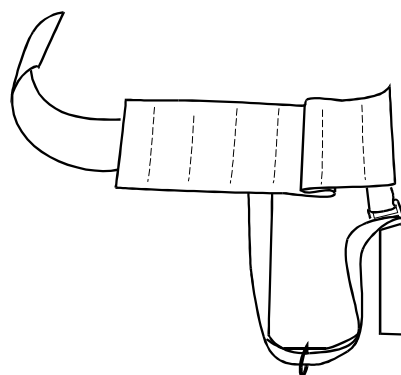
Slide the ankle wrap under the ankle of the injured leg. The traction strap will extend below the foot.

Align the bottom edge of the ankle wrap with the top of the heel.

Adjust the ankle wrap so the foot is centered on the wrap and the ends of the traction strap are aligned with the ankle bones.

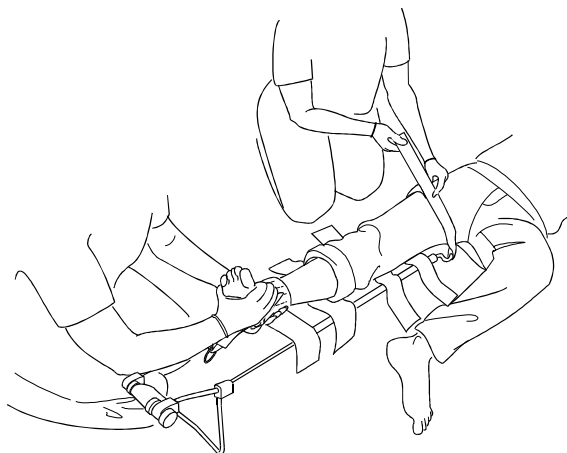


Wrap the ankle wrap around the patient's ankle, and secure it with the fastening strip. If necessary, adjust the traction strap to center the D-ring on the traction strap.

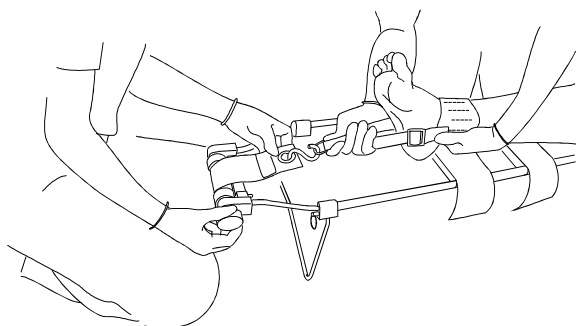


If the ankle wrap is too wide for the ankle to center between the ends of the traction strap, fold the ankle wrap. If the ankle wrap slides off the patient's ankle and foot, place additional padding (such as 4" X 4" dressing) around the ankle, and reapply the ankle wrap.

4.3 Apply the Splint



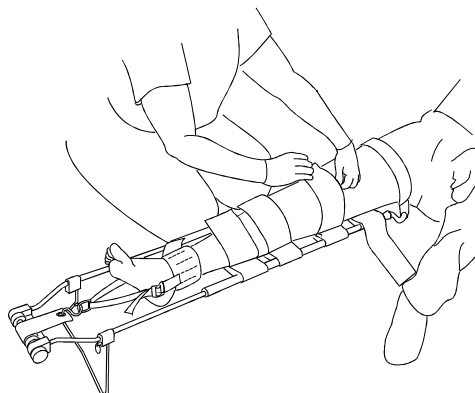
While continuing to support the injured leg, slide the splint under the injured leg until the thigh pad rests against the lower pelvic bone. Fasten the hip strap.



Pull the traction-release ring to loosen the ratchet strap. Bring the S-hook over the top of the splint. Attach the S-hook to the D-ring.

Turn the traction knob to apply traction. Check with your medical advisor to determine the amount of traction to apply to the leg.

Make sure the leg strap 1 is directly under the ankle, then release the ankle, allowing it to rest on the leg straps.



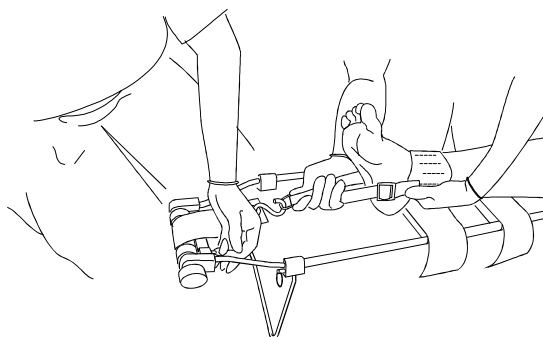
Re-position and fasten leg straps 1 through 4, making certain no leg strap covers any part of the injury.

Transfer the patient to a back-board and ambulance in preparation of transporting the patient.

Consult your EMT training textbook regarding immobilizing the splinted patient on a back-board before moving.

4.4 Remove the Splint

When the appropriate medical authority agrees, remove the splint from the patient's leg.



Unfasten the leg straps and support the foot and ankle.

Grasp the traction strap above the d-ring to keep the leg stable when the traction is released. Release the traction by pulling the traction-release ring. Unhook the s-hook from the d-ring.

Gently slide the splint from under the patient's leg.

Wipe down the splint with disinfectant.

If the splint is visibly dirty or you suspect exposure to body fluids, clean and disinfect it immediately after the ambulance call.

4.5 Maintenance Schedule

Set up and follow a maintenance schedule to insure the long life of this splint.

Follow the maintenance schedule below as a minimum.

WARNING

Improper maintenance can cause serious injury. Maintain the splint as described in this manual.

Maintenance	Each Use	As Needed	Each Month
Disinfect (see 4.6)	•	•	
Clean (see 4.7)		•	
Inspect (see 4.8)			•

When using a maintenance product, follow the manufacturer's directions and read the manufacturer's material safety data sheet.

Contact Ferno Customer Service to order Ferno cleaners and disinfectants (page 12).

Keep maintenance records. Use the convenient form on page 13.

4.6 Disinfecting the Splint

Wipe all surfaces with disinfectant (*Bloodborne Disease Notice*, page 4). Follow the disinfectant manufacturer's directions for use. As you wipe it down, check the splint for obvious damage and excessive wear. Rinse all surfaces with warm water. Towel dry the splint.

4.7 Cleaning the Splint

Remove the leg straps and ankle wrap and place them in a mesh laundry bag. Machine wash them on cold/cold using the delicate cycle and a mild detergent. Allow them to air dry.

Clean metal surfaces of the splint with warm water and a mild detergent. Use a stiff-bristled brush if necessary. Rinse the detergent off with warm water. Towel dry the splint or allow it to air dry.

4.8 Inspecting the Splint

Have your service technician or an EMSAR® service technician follow the instructions in *Using the Splint* and check the following:

- ☐ Are all components present and in good condition?
- ☐ Are all nuts, bolts, and knobs securely in place?
- ☐ Are the leg straps in good condition (free of fraying and cuts)?
- ☐ Do the leg straps fasten and unfasten properly?
- ☐ Does the traction system work properly?
- ☐ Does the heel stand fold and unfold properly?
- ☐ Do the lock collars work properly?

If the splint does not pass the inspection, keep the splint out of service and see *Parts and Service* (page 11). When the splint has passed the inspection, return it to service.

SECTION 5 - PARTS AND SERVICE

5.1 Parts

To order parts, contact Ferno Customer Service (page 13).

Model 443 (Ped.)	Description
039-0207	Thigh Pad
039-0219	Hip Restraint
039-0220	Leg Strap 4
039-0221	Leg Strap 3
039-0222	Leg Strap 2
039-0223	Leg Strap 1
039-0213	Ratchet Strap
090-3527	Traction-release Ring (Pin & Spring)
090-3528	Traction Knob (Knob and Shaft)
090-352	Ratchet Reel
039-0224	Carrying Case
039-0215	Ankle Wrap

Model 444 (Adult)	Description
039-0207	Thigh Pad
039-0208	Hip Restraint
039-0209	Leg Strap 4
039-0210	Leg Strap 3
039-0211	Leg Strap 2
039-0212	Leg Strap 1
039-0213	Ratchet Strap
090-3527	Traction-release Ring (Pin & Spring)
090-3528	Traction Knob (Knob and Shaft)
090-3529	Ratchet Reel
039-0216	Carrying Case
039-0215	Ankle Wrap

WARNING

Using improper parts and service can cause serious injury. Use only Ferno-approved parts and service.

5.2 Service

EMSAR® is the only agent authorized by Ferno to manage, service, and repair Ferno products.

EMSAR factory-trained technicians use Ferno-approved parts and repair procedures.

EMSAR has a franchise location serving you. Phone or fax for details.



1-800-73-EMSAR (Phone)
937-383-1051 (Fax)

SECTION 6 - LIMITED WARRANTY

6.1 Limited Warranty Summary

Ferno-Washington, Inc. (Ferno), warrants the products we manufacture to be free from defects in material and workmanship for one year except as follows:

- (A) External finishes (gelcoat, decals, paint, etc.) are warranted for 90 days.
- (B) Soft goods (webbing, vinyl, fabric, foam, etc.) are warranted for 90 days.
- (C) Repairs and services are warranted for 90 days or until the end of the time period(s) above, whichever comes last.

This limited warranty applies when you use and care for the product properly. If the product is not used and cared for properly, the warranty is void. The warranty period begins the day the product is shipped from Ferno or the day you receive it if you have proof of the delivery date. Shipping charges are not covered by the limited warranty. We are not liable for shipping damages or damages sustained through using the product.

6.2 Limited Warranty Obligation

If a product or part is proven to be defective, Ferno will repair or replace it. At our option, we will refund the product's purchase price. The purchaser accepts these terms in lieu of all damages.

This is a summary of the limited warranty. The actual terms and conditions of the limited warranty, and the limitations of liability and disclaimers, are available upon request by calling 800-733-3766 or 937-382-1451.

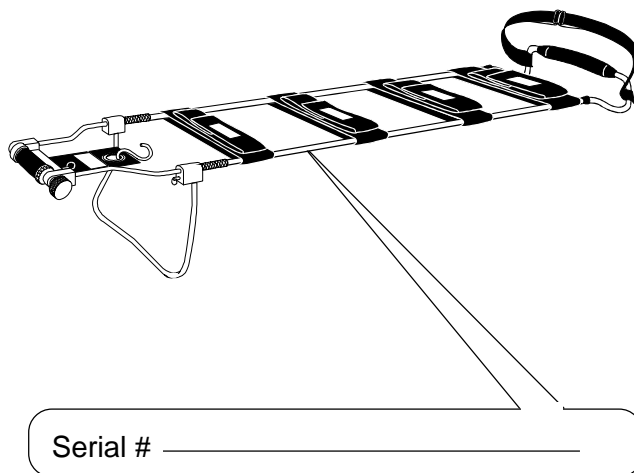
SECTION 7 - CUSTOMER SERVICE

Customer service and support are important aspects of each Ferno product.

For assistance, contact Ferno Customer Service:

Ferno-Washington, Inc.
Attn: Ferno Customer Service
70 Weil Way
Wilmington, Ohio 45177-9371

Telephone 800.733.3766
 937.382.1451
Fax 937.382.1191



TRAINING RECORD

Date	Name	Description

MAINTENANCE RECORD

Date	Description	By

NOTES

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