



Najo®

Backboard Series



Najo® Lite



Najo® RediHold®



Ferno Customer Relations

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

INSTRUCTIONS FOR USE



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

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

The information disclosed in this manual is the property of Ferno. Ferno reserves all intellectual property 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

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.

MD

Medical Device



Ferno-Washington, Inc.
70 Weil Way
Wilmington, OH 45177-9371, U.S.A.
1.937.382.1451

PATENTS
ferno.com/patents

EC REP

FERNO S.r.l.
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UK REP

Ferno (UK) Ltd.
Ferno House, Stubs Beck Lane, Cleckheaton,
West Yorkshire, BD19 4TZ, UK
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Adverse Event Notice

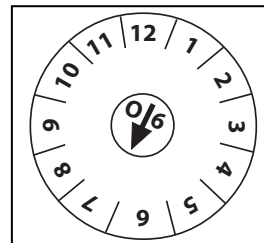
In the event of an adverse event or serious incident related to the use of this device, the end user/operator must report the incident to Ferno at 1-877-733-0911, or via email at tscoordinator@ferno.com. If the incident occurred outside the U.S., report it to Ferno's Authorized Representative for that area.

Disposal

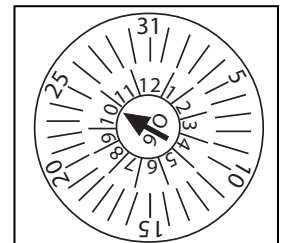
Prior to disposal, clean and disinfect the product according to the Maintenance section of this manual. Recycle or dispose of the product following local protocols and regulations. Do not dispose of the product in municipal waste.

Date of Manufacture

Two date recording styles have been used.



This image shows a wheel indicating the date by the year and month. In the example, the wheel indicates July, 2006.




This image shows a wheel indicating the year, month, and day. In the example, the wheel indicates October 25, 2006.

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. Trained operators must maintain control of the product and direct all helpers.
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 parts, modifications, or items not designed for the product can cause injury. Use only Ferno-approved parts and service. Attach only approved items. 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
	Read the users' manual
	Two trained operators required
	Load Capacity (Safe Working Load in pounds, kilograms, stone)
	Consider instructions for use (ISO 7000)
	Disinfecting
	Cleaning

1.4 Compliance

The Najo® series backboards conform to the essential requirements listed in European EC Directive 93/42/EEC (June, 1993), and to EN 1865:1999 with minimal deformation.

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 Daily Operator Duty

It is good practice for operators to check equipment at the start of each work shift. To check the backboard prior to use, follow the procedures described in this manual and visually inspect it for readiness. See "Inspecting the Backboard" on page 9.

2.3 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.

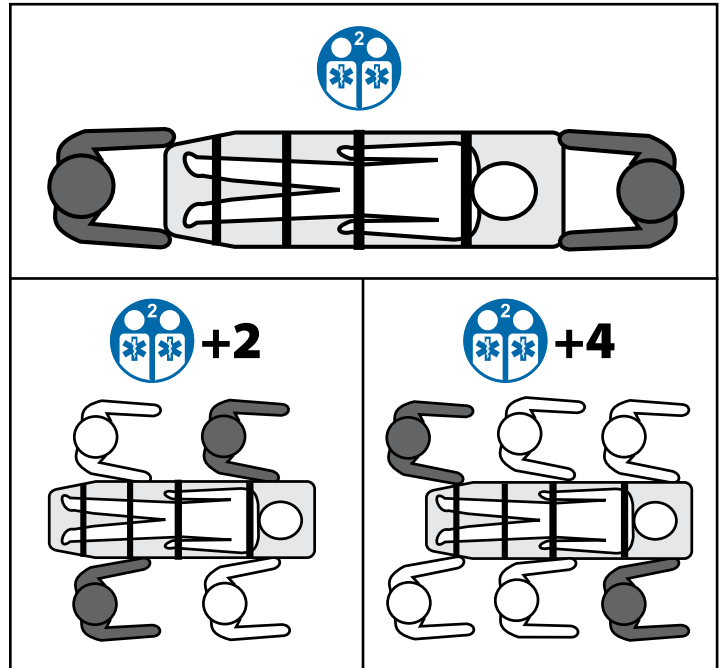
Refer to the chart for suggested placement for operators and helpers.

 **WARNING**

Professional use by trained operators only. Trained operators must maintain control of the product and direct all helpers.



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



3 - ABOUT THE BACKBOARD

3.1 Description

Ferno® Najo® series backboards are emergency hand-carried stretchers designed to provide rigid support for a patient with suspected spine, hip, pelvis, or lower extremity injury.

The backboards are for professional use only, by a minimum of two trained operators. Use additional help for heavy loads (patient plus equipment).

All models are constructed of one-piece, high-density polyethylene with polyurethane foam interior. Najo backboards are X-ray translucent and impervious to body fluids, and have recessed edges to assist with restraint or head immobilizer strap placement. Options include steel speed-clip pins to allow use of speed-clip style restraints, and a choice of orange or yellow color.

3.2 General Specifications

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

Flotation specification is defined as the backboard's capacity to float with a patient of a particular buoyancy. The average person with deflated lungs has a buoyancy of 1.1, meaning the person is 1.1 times more dense than water. The buoyancy rate of 1.2 used in the table below is a calculation estimating a person having deflated lungs and wearing wet clothing.

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



WARNING

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

Specification	Najo Lite	RediHold®
Length	72" (1830 mm)	72" (1830 mm)
Width	16" (410 mm)	16" (410 mm)
Thickness	1.75" (45 mm)	1.75"(45 mm)
Weight	14.5 lb (6.6 kg)	16 lb (7.2 kg)
Load Capacity	450 lb (204 kg)	600 lb (272 kg)
Flotation (at 1.2 buoyancy)	154 lb (69 kg)	136 lb (62 kg)
Tapered Foot End	•	•
Angled Edges to Assist with Log-Rolling	•	•
Recesses to Help Hold Restraints in Place		•
Central Slot for Individual Leg Immobilization	•	

4 - USING THE BACKBOARD

4.1 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.

Operators must:

- Follow standard emergency patient-handling procedures when using the backboard.
- Communicate with one another and use coordinated movements to maintain control of the backboard.
- Stay with the patient at all times.
- Always use patient restraints, following the instructions in the restraint users' manual. Follow local service's protocols and government requirements.
- If speed-clip pins are installed, confirm the restraint speed clips are securely attached to the pins.
- Do not attach speed-clip pins or use the handholds as part of a technical rescue lifting system. Lift and carry the backboard only by hand, grasping the handholds. Place the backboard inside a basket for technical rescue.



WARNING

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

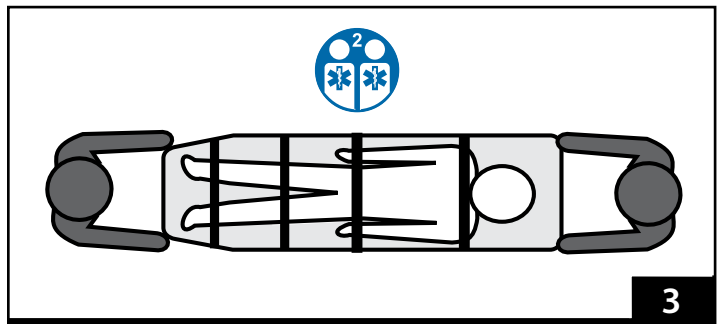
An unattended or unrestrained patient can be injured. Always stay with the patient and use patient restraints.

NOTICE

Do not attach lifting devices such as ropes or bridles to the backboard handholds or pins. Always lift and carry the backboard by hand, grasping the handholds. In a technical-rescue situation, secure the backboard in a transport basket and attach lifting devices to the basket.

4.2 Using the Backboard

1. Follow local your local protocols and emergency patient-handling stabilization guidelines and procedures to move the patient onto the backboard (Figure 1).
2. Secure the patient on the backboard with restraints (Figure 2). Restraints are available separately. See "Parts" on page 10.
3. Confirm that restraints are properly configured and buckles are securely fastened.
4. If using restraints with speed clips, attach the clips securely to the pins.
5. Operating the backboard requires a minimum of two trained operators. Use additional trained helpers as needed to safely lift and carry the backboard and patient (Figure 3). See "Using Additional Help 2" on page 4.
6. If you place the patient and backboard on a cot for transport, secure the patient and backboard to the cot using the cot restraints.
7. If the load capacity is exceeded, inspect the backboard for damage. See "Specifications" on page 5 for load capacity and "Inspecting the Backboard" on page 9.



5 - MAINTENANCE

5.1 Maintenance Schedule

The backboard 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 11. When using maintenance products, follow the manufacturers' directions and read the manufacturers' material safety data sheets.

5.2 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 backboard.

5.3 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.

Remove the restraints from the backboard before cleaning and disinfecting.

5.4 Disinfecting and Cleaning

Remove the restraints from the backboard before cleaning and disinfecting. Refer to the restraint users' manuals to disinfect and clean restraints. 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 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.

Minimum Maintenance	Each Use or Daily		
	As Needed	Monthly	
Daily Operator Duty (page 4)	•		
Disinfecting (this page)	•		
Cleaning (this page)		•	
Inspecting (page 9)		•	

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.

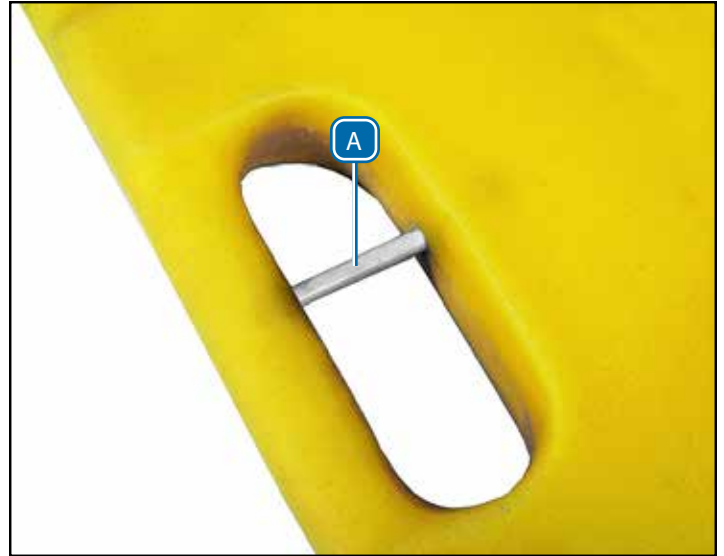
Do not immerse restraint metal buckles, slide bars, and clips in liquids or by washing-machine action. See the restraint users' manuals.

5.5 Inspecting the Backboard

Have your service's equipment maintenance personnel inspect the backboard regularly. Follow the checklist below.

- Is the backboard free of cracks, crevices, and punctures?
- If the backboard is fitted with speed clip pins (A), are all pins solidly installed and free of cracks or damage?
- Are the patient restraints properly installed?
- Is patient-restraint webbing in good condition with no cuts or frayed edges?
- Are patient-restraint buckles free of visible damage and do they operate properly?

If inspection shows damage or excessive wear other than for speed clip pins, remove the backboard from service and destroy to prevent accidental use. Speed clip pins are replaceable. See "Parts" on page 10.



6 - ACCESSORIES, PARTS

6.1 Accessories

Ferno offers accessories approved for use with the backboard. Follow all instructions in accessory users' manuals. Keep the instructions with this manual. Contact Ferno Customer Relations (page 2) or your Ferno distributor for product information.

6.2 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

Part	Description	Qty
090-5802	Speed Clip Pins	18

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.

Accessories		
Model 445 Head Immobilizer	031-3855	
Model 455 HeadHugger Disposable Head Immobilizer (10 ea.)	083-2092	
Model 49 WizLoc Cervical Collar (3 ea.)	082-2074	
Model 770 Fastrap	031-3916	
441 Traction Splints (Adult and Pediatric)	082-2183	
Model 430 (Metal Buckle) Restraint		
Style	Black	Orange
2 pc., 5' (1524 mm)	031-3892	031-3891
2 pc., 7' (2134 mm)	031-3911	031-3912
2 pc., 9' (2743 mm)	031-3305	031-4013
1 pc., 7' (2134 mm)	031-3910	031-3887
1 pc., 9' (2743 mm)	031-3899	031-3889
Model 430P (Plastic Buckle) Restraint		
Style	Black	Orange
2 pc., 5' (1524 mm)	031-3797	031-3917
2 pc., 7' (2134 mm)	031-3801	031-3919
1 pc., 7' (2134 mm)	031-3894	031-4011
Model 439 (Metal Buckle) Restraints, Set of Three		
Style	Black	Orange
1 pc., 7' (2134 mm)	031-3083	031-2660

TRAINING RECORD

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

MAINTENANCE RECORD

Date	Maintenance Performed	By

Aviation

Military

Mortuary

EMS

Rescue

