

User and Maintenance Manual



26-S Self-loading Stretcher



Rel. 241115 English

Ferno Technical Support

Customer Service and Technical Support are important aspects of every Ferno product. Before contacting us, note the serial number of the product and specify it in all written communications. For all queries concerning technical support, contact Ferno Washington Italia s.r.l.:

Telephone (toll-free, Italy only)	800 501 711
Fax	+39 0516861508
Email	info@ferno.it

Ferno Customer Service

For assistance and further information, contact Ferno Washington Italia s.r.l.'s Customer Services:

MANUFACTURER

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WARNING

Photos identified by ""** are for illustrative purposes

only. Please read the instructions carefully. The picture

Limitation of Liability

This manual contains general instructions on the use and maintenance of the product. The instructions do not cover all possible applications and operations. The user is solely responsible for proper and safe use of the product. The safety information is provided as a service to the user and ensures only the minimum required level of safety to prevent injury to operators and patients. Any other safety measure implemented by the user must comply with applicable regulations. Before using the product, it is strongly recommended that staff be trained in its correct usage. Retain this manual for future reference. In case of change of ownership, ensure that the manual remains with the product. Additional free copies can be obtained from Ferno Washington Italia's Customer Services.

Intellectual Property Declaration

The information in this manual is the property of Ferno Washington Italia s.r.l. of Via Benedetto Zallone 26, 40066 Pieve di Cento (BO), Italy.

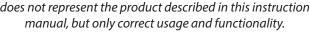
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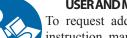
Limited Warranty

The products sold by Ferno are covered by a 24-month warranty against manufacturing defects. For the full terms and conditions of warranty and liability, see the *Warranty* chapter.

Compliance with safety regulations

The self-loading stretcher is designed and manufactured by Ferno Washington Italia S.r.l. in complaince with the safety requirements laid down by Directive 93/42/EEC dated 14/06/93 (class I) regarding medical devices. All the materials used are sized in order to operate properly within the load limits given in the technical specifications, and are resistant to flame, produce no toxic or polluting substances, and are protected to ensure a high resistance to wear and corrosion. The design of the stretcher eliminated sharp edges that may cause accidental injury to the personnel using it.





USER AND MAINTENANCE MANUAL

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SAFETY INFORMATION

Read the user manual carefully. It is an integral part of the product and must always be kept to hand. For your own personal safety and that of your patients, please note the following:

- Prior to each use, perform an inspection ensuring that there are no signs of wear, damage, or malfunction. Refer to the *Inspection* section.

- To prevent infection and / or bacterial contamination, refer to the information in the *Disinfection* and *Cleaning* sections.

Warning

The danger symbols draw attention to potentially dangerous situations that, if ignored, may result in accidents, damage and/or injury.

WARNING

Untrained users may injure themselves, cause damage and/or physical harm. Allow only trained and qualified to use the 26-S stretcher.

The stretcher must be used by at least two trained and qualified operators. The stretcher is for professional use.

Improper use of the stretcher can cause damage and / or injury. Use the stretcher as described in this manual.

Unauthorised modification of the stretcher may cause serious damage, injury and/or unforeseeable operational problems. Do not modify or alter the stretcher in any way.

Any damage to the components of the stretcher or the entire system can alter its performance and safety. Inspect the stretcher frequently, and especially before and after each use. Place the stretcher out of service if it shows signs of wear or damage.

An unassisted patient is at risk of injury. Never leave the patient alone while bound to the stretcher. Always assist the patient throughout all rescue operations.

A patient is not secured by the restraint system may fall and be injured. Use the restraints to secure the patient to the stretcher.

Failure to use the restraints can cause the patient to fall and endanger their safety. Always use the restraints to secure the patient.

Casual assistants may cause damage and/or physical harm, or injure themselves. Do not allow casual helpers to perform stretcher preparation operations. Trained operators should be alert and direct operations involving the stretcher.

Improper maintenance may cause serious accidents, injuries and/ or damage. Perform maintenance as instructed in this user manual.

The use of improper or unauthorised devices may cause accidents, damage and/or injury. Use only devices that have been approved and authorised by Ferno Washington Italia.

🚹 WARNING

Unauthorised repairs, and repairs carried out by people not approved by Ferno Washington Italia, will render all warranties null and void and may compromise the safety of the device. Non-original spare parts and inadequate repairs may cause damage and/or injury. Use only Ferno original parts and contact only Ferno Washington Italia's Customer Support.

Important

Boxes labelled "Important" contain important information on use and/or maintenance of the device.

Important

Blood-borne diseases

To reduce the risk of exposure to infectious diseases that may be transmitted by blood, such as HIV-1 or Hepatitis, carefully follow the instructions on disinfection and cleaning in this manual.

Loading capacity

Respect the loading capacity of the 26-S stretcher. Refer to *General Technical Specifications*.

Compatibility with locking systems

The 26-S stretcher is compatible with the Ferno SLAM locking system for ambulance transport. Ferno recommends using only Ferno clamping systems with Ferno stretchers, and to use Ferno locking systems only with Ferno stretchers. It is recommended to use compatible Ferno locking systems with the stretcher 26-S.

Any other configuration is not compatible with the specifications and instructions in this manual. Any combination of a stretcher or a Ferno locking system with a stretcher or a locking system not produced by Ferno is an improper use of the Ferno product. Ferno Washington Italia is not liable for damages caused to users or third parties arising from improper use of the 26-S stretcher.

The stretcher requires at least

two qualified operators for

correct use

Lubricate

Glossary of Symbols

The symbols used in this manual and / or on the stretcher's labels are defined below. The CE mark is present on the stretcher and in this manual.



Danger: Risk of injury



Unlocked

Crush point

Keep your hands clear



Locked

Do not wash with high pressure water

SWR

Never exceed the load capacity of the 26-S stretcher. Inspect the stretcher if the carrying capacity has been exceeded (see *Inspection* section).

SWR- Strength to Weight Ratio = 5.5

Safety factor = 1.5



Load capacity (in kilos and pounds)



Read the user manual carefully





This product meets European Union Standards

Warning and safety labels

The information and safety labels contain important information that the user needs to know.

Read and follow label instructions. Replace worn or damaged labels immediately. To obtain replacement labels, contact Ferno Washington Italia Customer Services. The labels shown below are attached to the stretcher.

Notes on the height and strength of operators

During the unloading stage of the stretcher, the operator at the foot end of the patient (and any helpers) must support the weight of the stretcher, the patient and the equipment used, in order to allow the legs of the stretcher to open completely and lock themselves into position.

Lifting the stretcher may require more effort for operators of smaller stature, as such operators must raise their arms higher relative to their shoulders. If the ambulance is located on an uneven surface, the operator / operators at the foot of the patient may need to lift the stretcher higher than usual to ensure that the legs open and lock correctly during the unloading stage.

Note: Request additional help to lift the weight of the stretcher, the patient and the equipment used (See the Additional Help section.)

OPERATOR TRAINING AND SKILLS

Skills

Operators who use the stretcher must:

- have specific experience in patient immobilization, handling, and recovery procedures.
- possess the appropriate skills to assist the patient.

Training

Operators are required to:

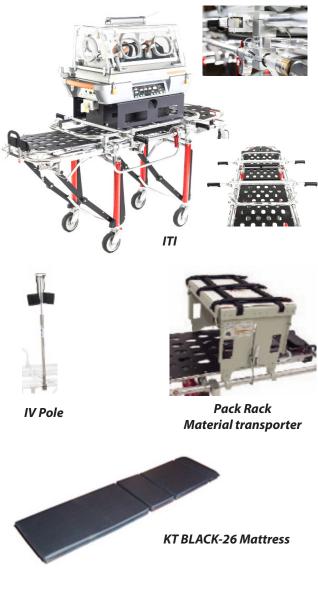
- read and understand all information in this manual.
- attend a suitable training course on the use of the stretcher.
- practice with the stretcher before using it in real situations with patients.
- log the training sessions. Example of a form for logging training sessions.

🚹 WARNING

Untrained users may injure themselves, cause damage and/or physical harm. Allow only trained and qualified staff to use the 26-S stretcher.

Important

Operators must be able to ensure the safety of both themselves and their patients while using the stretcher. They must be able to assess the number of people needed to move the patient according to applicable regulations.



Related Products and Accessories

Codes are subject to change; confirm them during the purchase

Self-loading stretcher	(PR-26)
LBS (Large Body Surface)	(0819991)
LBS Mattress (Foldable)	(06-031-4025C)
ITI (Incubator Transporter Interface	e) (ITI)
IV pole	(513-10E)
Pac-Rac	(0818933)
4-Point Restraints	(0313915)
1-piece restraints	(430-1-N)
2-Piece restraints	(430-2-N)
Mattress	(0374857)
SLAM Lock	(SLAM-26)



THE STRETCHER

Description

The 26-S stretcher (known simply as the "stretcher" in this document) is a device for handling patients in emergency situations and is designed for transporting the patient in an ambulance. It allows you to carry a patient securely thanks to the system of safety restraings (for the restraints, see the Accessories chapter.)

The stretcher should be used only by trained and qualified staff. The stretcher is for professional use by at least two qualified operators. It was designed to reduce the risk of back injuries to healthcare workers. Additional assistance may be required to handle heavy patients and/or when the situation demands it, and should always be provided according to local health protocols.

The stretcher has been designed to be used exclusively with Ferno ambulance locking systems (for available locking systems, see *Accessories*.)

CE Compliance

MEDICAL DEVICES DIRECTIVE

Ferno's products meet the requirements of European Directive 93/42/EEC concerning medical (F devices. The stretcher is a Class I device.

For more information: www.ferno.it



Untrained users may injure themselves, cause damage and/or physical harm. Allow only trained and gualified staff to use the 26-S stretcher.

/ WARNING

Improper use of the stretcher can cause damage and / or injury. Use the 26-S stretcher as described in this manual.

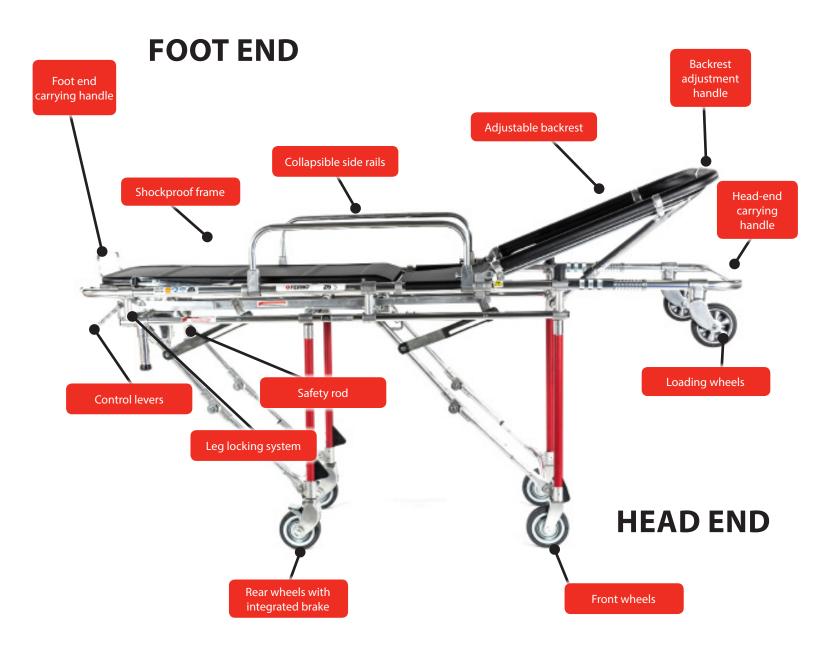
🚺 WARNING

The use of improper and/or unauthorised devices can cause accidents, damage and/or injury. Use only devices that have been approved and authorised by Ferno Washington Italia.

STRETCHER COMPONENTS

- Head-end carrying handle
- Control handles on rear legs
- Loading wheels
- Backrest adjustment lever
- Adjustable back
- Front legs
- Rear legs •
- Front wheels, diameter 100 mm) •
- Collapsible side rails
- Control for mechanical release of rear legs
- Rear wheels, diameter 100 mm with integrated brake . system
- Shock-proof frame .
- Mechanical rear leg release system
- Leg locking system
- Foot-end carrying handle

Components (Stretcher)



SWR

Never exceed the load capacity of the 26-S stretcher. Inspect the stretcher if the carrying capacity has been exceeded (see *Inspection* section).

SWR- Strength to Weight Ratio = 5.5

Safety factor = 1.5



Load capacity (in kilos and pounds)

USER AND MAINTENANCE MANUAL To request additional free copies of the instruction manual, contact Ferno Washington Italia Customer Service.



General technical specifications

Ferno reserves the right to change the specifications without notice. For more details, please contact Ferno's Customer Service.

Specifications			
Loading capacity	400 lbs	181 kg	
Weight**	73 lbs	33 kg	
Patient Height	•		
Maximum Setting	31 in	800 mm	
Minimum Setting	17 in	450 mm	
Length			
Maximum	77.56 in	1920 mm	
Minimum	77 in	1957 mm	
Width			
Total	21.65 in	550 mm	
Wheels			
Diameter	3 in	100 mm	
Width	1.6 in	40 mm	
Materials			
Structure	aluminium		
Panels	ABS		
Wheel bearings	sealed		
Loading height*			
Loading level	24/25 in	610/640 mm	

* The loading height is the distance between the ground and the lower part of the floor-level wheels.

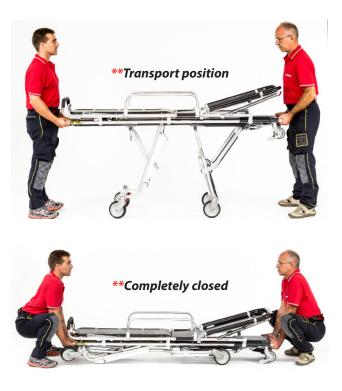
** The weight of the stretcher does not include mattress and restraints.

The load limit includes the weight of the stretcher, the patient, the equipment and, in some situations, and the rescuer. Exceeding this limit may result in harm to the patient and / or the stretcher.

The dimensions are rounded to integers. As a result of product improvements, these specifications are subject to change without notice.

For all other questions, contact customer service (see the "Customer Service" section).

Stretcher positions



Technical specifications

The stretcher is equipped with:

- Leg-locking bar
- Leg-actuating levers
- · Safety rod
- Collapsible side rails
- Adjustable backrest
- Foldable frame
- Anti-shock frame
- Wheel brakes

\Lambda WARNING

Photos identified by "**" are for illustrative purposes only. Please read the instructions carefully. The picture does not represent the product described in this instruction manual, but only correct usage and functionality.

STRETCHER COMPONENTS

Control levers

The two control levers are positioned at the foot end of the stretcher. These operate the mechanism that closes and opens the legs.

From the rescuer's perspective at the feet of the patient, the right-hand lever controls the head-end legs of the stretcher, while the one to the left controls those at the patient's feet. These levers can be operated only after the safety rod on the right side, and below the patient level, of the stretcher has been unlocked.

To change the height of the stretcher, both operators must hold the frame of the stretcher with palms facing up. The operator at the foot end disengages the safety rod and operates both levers at the same time, while pro-actively warning the second operator (see fig. 5).

When loading or unloading the stretcher from the ambulance, the operators use one lever at a time, making sure to use the stretcher as described in this instruction manual

Safety rod

The safety rod is placed under the patient, on the operator's right side.

When locked, the safety rod prevents accidental closure of the legs due to accidental movement of the levers.

The safety rod is locked automatically when the stretcher changes from the "closed" to the "open" position. Keep the safety rod locked in place during all phases that do not specifically require its release (e.g. any movement of the stretcher).

To disengage the safety rod, pull the end towards you when at the foot end of the stretcher.

Carrying handle

The stretcher is equipped with a carrying handle at the foot end (Figure 4.) The operator at the foot end of the stretcher uses the carrying handle to guide and move the stretcher. The patient should be able to see where they are going and the castor wheels should be rotated to face the same direction.

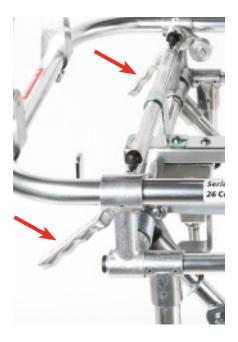






Figure 4 - Carrying handle (foot end)



Wheels

The stretcher is equipped with four large, swivelling wheels, (diameter 100 mm), two front and two rear, that are selfdirecting to facilitate loading into the vehicle. (Figure 7B). The two rear swivel wheels are each equipped with an integrated brake system (see the *System integrated brake* section.) The design protects the wheels from dirt and liquid ingress.

Integrated brake system

The brake prevents accidental movement of the stretcher (Figure 12), while transferring the patient, when the stretcher is not on a flat surface, or during certain medical procedures. The brakes are fitted the rear wheels of the stretcher and easily identifiable by the operator thanks to the red locking lever.

Use the wheel brakes to keep stretcher from moving when it is on an uneven surface, while transferring patients on stretchers, or supports at the same height as the stretcher, and during medical procedures on the patient.

Lock the stretcher when it is in a parking position (stopped); do not use the wheel locks as brakes while moving the stretcher.

Use the collapsible frame to reduce the length of the stretcher when operating in confined spaces, such as in elevators or narrow corridors.

1. Raise the backrest.

2. Support the front part of the frame and operate the locking lever by pulling it toward the front of the stretcher.

3. Lower the folding portion of the frame gently, while keeping it from falling freely. The chassis can be lowered to two positions: an intermediate position, and a fully lowered position. (Figure 7A)

To lock or unlock the rear wheels, proceed as follows:

- **TO LOCK THE WHEELS:** Press down with your foot on the red levers on the rear wheels (Figure 13.)
- **TO RELEASE THE WHEELS:** Lift the red locking levers off the rear wheels with your foot.



Figure 7B: Brake system

Backrest

The stretcher is fitted with a backrest that can be adjusted up to 80° (Figure 7C). The operator can adjust the backrest by raising or lowering the appropriate red release lever.

Before adjusting the backrest:

- Loosen the restraints
- Support the backrest while operating the lever.
- **TO RAISE THE BACKREST:** Push the lever (towards the stretcher body) to release the backrest, then lift it to the desired position. Release the lever and lift the backrest slightly to lock it into position.
- **TO LOWER THE BACKREST:** Press the lever (towards the stretcher body) to release the backrest, then lower it to the desired position. Release the lever and lift the backrest slightly to lock it into position.
- Readjust the restraints.

Side Rails

The stretcher is fitted with collapsible side rails on both sides (Figure 8A.) The operator can raise or lower the side rails using the release pins.

- **TO LOWER THE SIDE RAILS:** Pull the release pin knob (Figure 8B) and rotate the side rails downwards. Release the knob to lock the rails in place.
- **TO RAISE THE SIDE RAILS:** Pull the release pin knob (Figure 8B) and rotate the side rails upwards. Release the knob to lock the rails in place.



Figure 7 - A: Backrest B: unlocking lever action

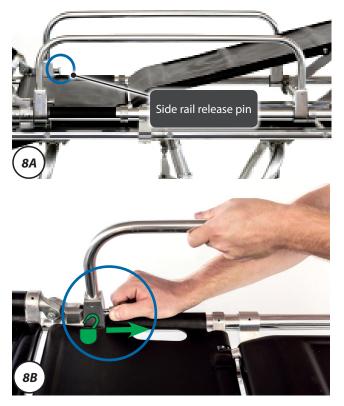


Figure 8 - A: Collapsible side rails B: Release pin for raising or lowering the side rails

Important

Do not use the side rails to lift the stretcher (Figure 9A.) The sides rails are not suitable for lifting the stretcher. **Lift the stretcher holding the main frame** (Figure 9B.)



Figure 9 - A: INCORRECT lifting of the stretcher B: CORRECT lifting of the stretcher, holding the main frame

Anti-shock Frame

The stretcher has an anti-shock frame (Figure 10A.) The frame allows you to place the patient in the Trendelenburg position (legs raised).

Before lifting / lowering the frame:

Grasp the frame and maintain your grip while lifting or lowering the frame.

Raise or lower the frame while always standing at the foot end, at the side.

TO LIFT THE FRAME

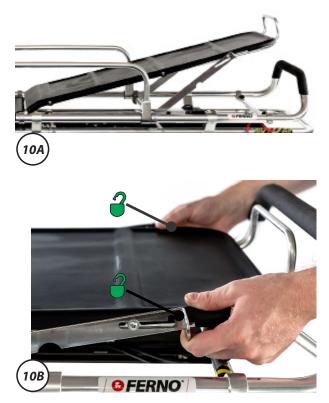
1) Detach or loosen the restraints holding the legs and waist of the patient. Raise the frame to the desired position (Figure 10B), locking it in place. 2) Re-attach and adjust the restraints over the legs and waist of the patient.

TO LOWER THE FRAME:

1) Detach or loosen the restraints holding the legs and waist of the patient. Unlock the support bars by lifting and lowering the frame to the desired position, then locking it into place. Re-attach and adjust the restraints over the legs and waist of the patient.

2) Stay with the frame until it reaches the final position.

3) Adjust the restraints.



**Figure 10 - A: Anti-shock frame B: Raise the anti-shock frame

Leg-locking system

The leg-locking bar is a device that ensures the legs remain in the folded position. This allows trained operators to lock the legs and carry the stretcher in "sedan chair" style over rough terrain or paths with obstacles. Warning: Back injury may occur (Figure 14A)

To operate the leg-locking bar:

1. Place the stretcher in the loading position on the ground, ensuring the mechanisms are aligned.

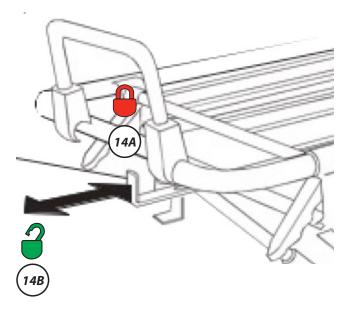
- 2. Pull the bar handle (fig. 14B).
- 3. Check for correct locking.

To operate the leg-locking bar:

Push the bar handle to the bottom to ensure that, while loading patient, the bar is not bent and therefore no longer functional.

Important

Stretcher leg-locking bars with serial numbers below L.666059 Operate in the **reverse** direction to that described in this manual. Use the relevant previous version of the manual, or upgrade the stretcher to the current version: info@ferno.it



WARNING

Do not operate the leg-locking bar when the stretcher is loaded into the ambulance. Verify that the leglocking bar is disengaged before unloading the stretcher from the ambulance

🔥 WARNING

Use of the stretcher in sedan mode may jeopardize safety; always evaluate the use of assistance

USING THE STRETCHER

Before commissioning the stretcher

Staff using the stretcher must have carefully read and understood the information contained in this manual. Before any operation with the stretcher ensure that:

- all components, restraints, and mattress are present.
- That the stretcher shows no signs of damage and wear, and is fully operational. Refer to the *Inspection* section.
- The vehicle is fitted with a Ferno locking system compatible with the 26-S stretcher.

Instructions for Use

- This manual does not provide any medical instructions.
- It is the responsibility of the operators to follow correct procedures and ensure the safety of both the patient and themselves.
- This manual explains the use of the stretcher under ideal conditions and is purely indicative.
- The stretcher should be used only by trained and qualified staff.
- Operators must work together and coordinate properly during all operations.
- Follow procedures while complying with standard protocols for handling the patient in an emergency.
- Lift only the weight that you can safely support. Obtain additional help when working with heavy loads.
- Always observe the instructions and local health protocols.
- Always assist the patient and never leave the patient alone during operations involving the stretcher.
- When changing the height (position) of the stretcher, or while unloading it from the ambulance, make sure the legs are locked before letting go of the main frame.

\Lambda WARNING

The use of improper or unauthorised devices may cause accidents, damage and/or injury. Use only devices that have been approved and authorised by Ferno Washington Italia.

🚯 WARNING

Improper use of the stretcher can cause damage and / or injury. Use the 26-S stretcher as described in this manual.

Never leave the patient alone while bound to the stretcher. Always assist the patient during all operations on a stretcher by two operators.





Read the user manual carefully

Use with a minimum of two qualified operators



Loading capacity

Important

For heavy loads, the two operators, after placing the loading wheels on the floor and pushing the stretcher onto the loading area securely, can move to the foot end and push simultaneously. The same applies to unloading: after having ensured the rear leg is supporting, an operator returns to the central position and controls the full movement of the front leg.

\Lambda WARNING

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Lifting and lowering

Two trained and qualified operators are required for lifting and lowering of the stretcher.

• LIFTING THE TROLLEY

- 1. The operators should make sure they support the weight of the stretcher and the patient while raising and lowering the stretcher.
- 2. **Head-end operator:** move to the foot end of the stretcher. This ensures control of the stretcher; lift by grasping the central tube with palms facing upward.
- 3. **Foot-end operator:** move to the head of the stretcher. This ensures control of the stretcher; lift by grasping the central tube with palms facing upward, without using the control lever.
- 4. **Both operators:** The safety is triggered automatically after the legs complete their movement. Always hold the stretcher once the loading level is reached, and lower the stretcher to the ground after ascertaining that the mechanisms are locked into place.
- 5. **Both operators:** Coordinate with each other to lift the stretcher to the desired height.
- 6. **Both operators:** Make sure you have successfully locked the stretcher at the desired height.

• TO LOWER THE TROLLEY

- 1. Lift the folding front frame, bringing it to the horizontal position and the same to the folded position.
- 2. **Both operators:** Positioned at the head and foot of the stretcher, ensuring total control of the stretcher.
- Grasp the central tube with palms facing upwards and operate the control handles while supporting the weight.
- Push the control handles and lower the stretcher with coordinated movements to the desired height.
- While keeping control of the stretcher, release your grip on the handles, making sure you have successfully locked the stretcher at the desired height.

<u> WARNING</u>

Failure to use the restraints can cause the patient to fall and endanger their safety. Always use safety restraints for the patient made by Ferno Washington Italia.



**Figure 15 - Position of the operators for lifting and lowering the stretcher

Important

Always make sure the stretcher is correctly locked to the desired height when raising or lowering it, and before loosening your grip on the frame.

LOWERING TO THE GROUND BY ONE OPERATOR

When the transport system is empty (**not occupied by a patient**), an operator can lower the stretcher to ground level on their own.

- 1. Fasten all the restraints in order to keep them touching the ground and getting trapped underneath.
- 2. Tilt the stretcher onto the front loading wheels
- 3. Disengage the safety rod
- 4. Grasp the stretcher securely and press the right lever to unlock the front legs
- 5. Lower the stretcher until the rear legs support its weight
- 6. Press the left-hand lever and lower the stretcher gently the to the ground

ONE OPERATOR FOR LOADING AND UNLOADING

If local protocols so provide, the empty transport system can be loaded and unloaded from the ambulance by a qualified operator. Follow the procedures in the *How to load the stretcher* and *How to unload the stretcher* sections.

Loading and unloading

Before proceeding with the loading or unloading of the stretcher, the two operators must always be prepared to support the weight of the stretcher and patient, and also for the possibility of a "back off" phase, and any other connected equipment. Make sure you have applied the restraints and that the patient is correctly secured.

To load or unload the stretcher, proceed as follows:

• TO LOAD THE STRETCHER

Lift the front frame, folding it back into the horizontal position and that it is in the "folded" position. Carry the stretcher to the loading door of the ambulance, ensuring it is perpendicular to the entrance; this manoeuvre must always be performed by two operators guiding the stretcher.

1. **Head-end operator**: Assists the foot-end operator, holding the central tube with palms facing up while aligning with the loading bay. (Figure 16).

2. **Head-end operator:** After verbal contact with his colleague, push the stretcher onto the loading level after ascertaining that the loading wheels are supported beyond the initial ramp.

3. **Foot-end operator**: Operate the safety lever, located below the patient level, to the right.

4. **Foot-end operator**: Press the right-hand lever to lock the front legs (head end). Pushing the weight of the stretcher into the ambulance until the rear legs come into contact with the back of the vehicle. (*We recommend both operators working simultaneously to reduce the possibility of spinal damage*).

5. **Both operators:** Position at the foot end and proceed together with the loading of the stretcher (Figure 17), pushing it up to complete the loading of the stretcher into the ambulance.

6. After loading the stretcher, be sure to lock the stretcher inside the ambulance using the SLAM locking system.

• UNLOADING THE STRETCHER

1. Release the SLAM stretcher locking system

2. **Head end operator**: Stand beside the stretcher to the side, palms facing upwards on the central tube, and assist the foot-end operator.

3. Foot end operator: With both hands, grasp the frame with palms facing upward, and start pulling the stretcher out of the ambulance. Ensure the rear legs open fully and are resting against the ground. (*We recommend unloading one at a time to reduce possibility of spinal damage*).



** Figure 16 - Position of the operators for the loading the stretcher



** Figure 17 -Loading and / or unloading the stretcher



** Figure 18 - Loading and / or unloading the stretcher

Important

The two operators can stand at either side and lift the stretcher step by step, thus sharing the total weight and effort, and will not suffer collateral harm. Bring it up to the loading level. (Use additional helpers when possible)

4. **Head end operator**: check that the front legs have sufficient space to open fully.

5. Each time you unload the stretcher ensure both pairs of legs are fully opened and locked before the wheels leave the loading bay of the ambulance.

6. When both legs are open and locked in the normal transport position, pull the stretcher completely out of the ambulance.

7. **Foot end operator**: Complete the unloading operation while coordinating with the operator at the head end and keeping all four hands on the stretcher.

Transfer

Follow these steps to transfer the patient onto the stretcher:

1. Place the stretcher next to the patient, and adjust its height – (to raise or lower the stretcher, see the *Raising and Lowering* section) – so that it is positioned level with the patient.

2. Lock the rear wheels by pressing down brake lever with the foot. (To lock the rear wheels, see *Integrated brake system*.)

Important

During all transport, loading and unloading operations, when handling heavy patients (minimum 90 kg) additional operators are recommended. This reduces the load on each operator. For additional help, refer to the *Additional help* section.

3. Lower the side rails of the stretcher. (To raise and lower the side rails, see the *Rails* section.)

4. Release the restraints.

5. Transfer the patient onto the stretcher following approved medical procedures.

6. Fasten the restraints to secure the patient and adjust them without constricting the patient.

7. Raise the side rails of the stretcher. (To raise and lower the side rails, see *Rails*

Transport

Before any transport make sure that: the restraints have been applied to the patient, the side rails are raised and locked, and the patient is secured correctly to the stretcher.

Carry the stretcher carefully over uneven surfaces.

If obstacles are encountered, such as the threshold of a door, slightly lift, pull or push the stretcher so that the wheels overcome the obstacle.

Avoid high obstacles, such as stairs. If there is a need to overcome a high obstacle, or in case of difficulty, lift and carry the stretcher by resorting to the *Additional help* section.

Proceed as follows for the transport of the stretcher:

1. Fasten the restraints and adjust them so they do not create discomfort to the patient.

WARNING

Failure to use the restraints can cause the patient to fall and endanger their safety. Always use the safety restraints.

<u> (</u>WARNING

An unassisted patient is at risk of injury. Never leave the patient alone while they are bound to the stretcher. Always be attentive to the patient during all operations with the stretcher.

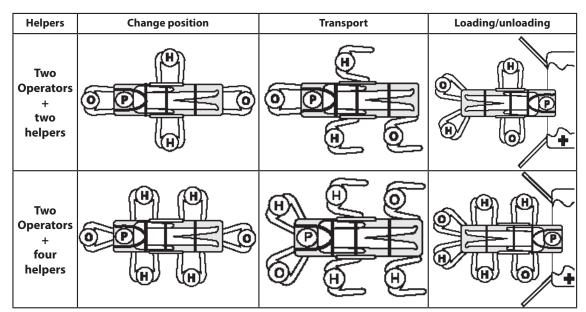
- 2. Make sure the side rails are raised and locked in position.
- 3. Unlock the brake release lever on the rear wheels.
- 4. Foot end operator: grasp the frame of the stretcher, or the carrying handle, and proceed with patient transport.
- 5. **Head end operator**: assist the foot end operator, helping maintain control of the stretcher and checking its path.

Additional assistance

Use of the stretcher requires at least two qualified operators. The operators may need help for a heavy lift (patient and equipment).

- operators must position themselves at the head and foot of the stretcher, maintain control, and manage all additional helpers.
- It may occasionally be required for the helpers at the sides of the stretcher to walk sideways. Follow the local healthcare protocols.

The illustrations below show the positioning of operators and helpers.



Legend: O = operator, H = Helper, P = Patient

Carry the stretcher so that the patient can see where it is going. Ensure the castors are in the correct position to improve security and overcome obstacles.

🚹 WARNING

For unusual transport or on difficult terrain, the stretcher can be transported even at one or two lower height levels, so as to increase its stability.

RESTRAINTS CONFIGURATION

Applying the restraints to the stretcher

The use of the stretcher requires the use of special restraints that are not supplied with the stretcher.

Ferno recommends using the stretcher with three restraints: a four-point restraint for the chest and two restraints for the femurs and feet. (See figures on the previous pages.

Keep the restraints fastened when not in use to prevent them from interfering with the operations of the stretcher.

The following summarizes the methods of use of the restraints.

Check that the restraints are intact and without undamaged.

All restraints listed work well with all Ferno stretchers.

Mount the 4-point restraint (0313915):

1. Raise the backrest of the stretcher and pass the belt below the supporting bar placed in proximity of the ABS plastic slot designed for the purpose on the surface. (Fig. 1.

2. Pass them through the mattress via the pre-spaced eyelets (if the mattress lacks the eyelets, it must be replaced for the



Figure 2

Installing the 2-piece restraints (430-1-N):

1. Unfasten the restraint and split it into two parts

The "femoral" restraint must be positioned exactly under the rail, such that there is 40 cm of extrusion to allow it to be precisely positioned on different types of patients. Wrap the extremities in a shaped loop around the anchor point chosen, always on the central tube of the stretcher (fig. 3.

2. The foot belt must be positioned exactly with the first, near the last fusion of the frame placed next to the control levers and the transport handle. (fig. 4.

Important

Always place the "female" end on the LEFT of the patient (the operator side in the ambulance) to adjust the restraint with patient on board while remaining safely seated.

Tir



Figure 4

Figure 3



USING THE RESTRAINTS

To attach the 4-point restraint to the patient (417):

1. Pass the shoulder restraint over the shoulders of the patient and arrange them until there is no contact. The connections should be centred on the sternum or abdomen.

2. Fasten the belt by passing the metal buckle to "L" joints and insert it into the hook buckle until it locks into position (fig. 1).

3. Always ensure the buckle is fastened

To release the restraint:

1. Press the red release button located in the central part of the buckle.

2. Pull the tab from the joints



It is extremely important to always check the connection of the parts before using the stretcher for either practice or real-life situations.

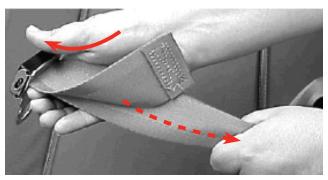
To extend the restraint with the patient on board:

1. Grasp the controller and turn it until it is perpendicular to the belt. Pull in the opposite direction to the anchor point until the belt is of the desired length. (fig. 2)



Figure 1







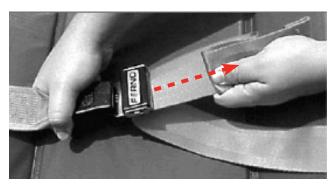


Figure 3

To shorten the restraint:

Hold the sewn ends and pull the belt through the bar until it is the desired length. (fig. 3)



CARRYING MEDICAL EQUIPMENT

When transporting equipment to manage the trauma patient, or other medical devices, they must be fixed properly and securely to the stretcher, to prevent them from becoming projectiles and impairing the conditions of staff and the patient on board the vehicle.

• The immobilization of the device must be carried out following the manufacturer's instructions.

• Request the technical datasheet and dedicated training.



Disinfection and Cleaning

Transport restraints

To disinfect transport restraints use a disinfectant and follow the manufacturer's instructions.

To clean the restraints:

- 1. Immerse them in warm disinfected water
- 2. Rinse thoroughly with clean water

3. Immediately dry the interior mechanisms in air and hang them in a place protected from direct sunlight

Pre-spaced transporting mattress

Use a special disinfectant to disinfect the mattress following the manufacturer's instructions.

To clean the mattress:

- 1. Wash the mattress with warm soapy water and a soft cloth.
- 2. Rinse the mattress with clean water.
- 3. To dry the mattress, use a cloth or drip dry

🚯 WARNING

An unassisted patient is at risk of injury. Never leave the patient alone and always assist the patient during use of the device.

Securing the pre-spaced transport mattress

When fixing of the mattress, use the appropriate Velcro strips on the base

Securing the mattress:

- 1. Remove the protective film from the Velcro.
- 2. Line up the pre-spaced slits with the 4-point restraints.

3. Press the mattress down onto the Velcro strips to make them adhere to the ABS plastic base



Reducer Accessory

This protects safe transport of small patients. (Not sold with restraints)

<u> W</u>ARNING

A patient who is not secured, or is poorly secured to the stretcher, may fall off and sustain injuries. Always secure the patient to the stretcher with a suitable set of restraints.

STRETCHER MAINTENANCE

Routine and preventive maintenance

The stretcher is a medical device requiring regular maintenance, hence you are recommended to comply with the following schedule:

ROUTINE maintenance: the stretcher has to be subjected to a routine maintenance intervention once a year by Ferno skilled technicians.

PREVENTIVE maintenance: preventive maintenance operations are to be carried out by the user, as specified in the table on the right.

If the device undergoes particularly heavy use, maintenance should preferably be carried out on a more frequent basis. If there are signs of wear and damage, discontinue use of the device and immediately contact Ferno's Technical Support Service.

Ferno directly carries out repair/maintenance operations, without the need of dealers, mechanics or external service centres. You are thus invited to be wary of those who present themselves as Ferno's authorised technician. We suggest you to directly contact our SOS service.

Disinfection

1. After each use, clean the surfaces of the stretcher with a non-abrasive surface disinfectant.

2. Do not immerse the stretcher directly in the disinfectant.

3. During disinfection, ensure there are no signs of wear and/or damage.

4. Dry with a cloth. Ensure all the components of the device are completely dry before reusing them.

It is advisable to wear suitable gloves (e.g. household or disposable gloves) during disinfection.

Cleaning

1. Remove the restraints and the mattress.

2. Clean all surfaces of the stretcher with a cloth, warm water and a mild detergent soap.

3. If necessary, remove stains with a stiff bristle brush (not metal), or a light solvent, paying careful attention to the labels.

4. Dry with a cloth.

Do not wash with high pressure water

It is advisable to wear suitable gloves (e.g. household or disposable gloves) during disinfection.

After cleaning, be sure to replace the restraints, mattress and all the other accessories needed for use.

Maintenance intervals	After each use	Whenever necessary	Every month
Disinfection	•	•	
Cleaning		•	•
Inspection	•	•	•
Lubrication		•	

<u> WARNING</u>

Improper maintenance may cause serious accidents, injuries and/or damage. Perform maintenance as instructed in this user manual.

Important

When not in use, store the device in an indoor environment that is dry and protected from direct sunlight.

Important

The use of products containing chlorine, phenols and iodine may harm the product. Do not use products containing these agents for cleaning/disinfection.

Important

After disinfection and cleaning, make sure that the stretcher and its components are fully and completely dry before use.

Important

DO NOT WASH WITH HIGH PRESSURE WATER



Do not use high-pressure water to clean the device.

Inspection

To ensure optimal use of the stretcher, it is important to keep all the components in good condition and to remove all traces dirt, debris and bodily fluids. The stretcher must be inspected before and after each use, and cleaned after each use. When not in use, the stretcher must be stored in a dry indoor environment and should be inspected at least once a month.

Ensure the stretcher is inspected regularly by maintenance personnel. Perform the various checks on this page.

If any signs of wear or damage are found during inspection, discontinue use of the stretcher immediately and contact Ferno's Technical Support Service to request repairs/ maintenance. See the chapter on *Technical Support*.

Lubrication

Clean and disinfect the stretcher before lubricating it. Use appropriate lubricants. Do not lubricate the points labelled "do not lubricate".



Important

If you lubricate components that do not need to be lubricated, this can permit dirt and foreign particles to accumulate, causing damage to the components. Lubricate **only** the points indicated.

LUBRICATION POINTS: TOP SECTION

Use a small amount of lubricant (white lithium grease or WRL-191-S adhesive synthetic lubricant. Lubricate the same points on both sides of the stretcher.

\bigcirc	Backrest belt	Lubricate
	Backrest locking pin	Lubricate
\bigcirc	Collapsible side rail locking pin	Lubricate

TOP SECTION NON-LUBRICATED COMPONENTS

Backrest tube	Do not lubricate
Side rail mounting	Do not lubricate

CHECKLIST FOR STRETCHER INSPECTION

- Are all the components present?
- Are all screws, nuts, bolts, rivets and spring pins correctly and firmly in place?
- Do all parts move correctly and in an appropriate manner?
- Does the stretcher have no worn parts?
- Are the wheels running properly? Is the brake system on the rear wheels working properly?
- Are the loading wheels worn?
- Does each pair of legs close properly?
- Is the anti-shock frame working properly?
- Is the backrest working properly?
- Is the anti-fall protection system working properly?
- Are the leg-locking systems (front and rear) working properly?
- Is the rear leg-locking system loose?
- Are the front and rear leg control handles working correctly?
- Are the restraints and mattress in good condition, with no cuts or frayed edges?
- Are the buckles of the belts undamaged and working properly?
- Has the ambulance been prepared properly to accommodate the transportation system i.e. have you have installed a Ferno locking system?
- Are the installed accessories working properly without interfering with the operation of the stretcher?
- The loading and unloading of the stretcher is fluid and secure?

Important

LUBRICATION POINTS: BOTTOM SECTION

Use a small amount of lubricant (white lithium grease or WRL-191-S adhesive synthetic lubricant. Lubricate the same points on both sides of the stretcher.

ACCESSORIES

Ferno offers a full range of accessories for the emergency medical services (fasteners, uprights, immobilizers, blankets, etc.). Follow the instructions provided with the product. Keep the instructions together with this manual.

When you are using accessories, pay attention to additional factors such as height and width of doors, etc.

For more information, contact Ferno Customer Support or your Ferno distributor.

\Lambda WARNING

The use of improper and/or unauthorised devices can cause accidents, damage and/or injury. Use only devices that have been approved and authorised by Ferno Washington Italia.

TECHNICAL SUPPORT

Technical Support Service

For technical support concerning our products, please contact Ferno Washington Italia's Technical Support Service.

Telephone (toll-free, Italy only)	800 501 711
Phone	+39 05 16860028
Fax	+39 05 16861508
Email	info@ferno.it
Internet	www.ferno.it

For information on using the 26-S stretcher, and to schedule training courses on the correct use of the device, contact Ferno Washington Italia's Customer Service team.

🚹 WARNING

Non-original spare parts and inadequate repairs may cause damage and/or injury. Use only Ferno original parts and contact only Ferno Washington Italia's Customer Support.

\Lambda WARNING

Unauthorised modification of the stretcher may cause serious damage, injury and/or unforeseeable operational problems. Do not modify or alter the stretcher in any way.

WARRANTY

Warranty Terms and Conditions

Ferno's products are guaranteed against manufacturing defects for a period of 24 months from the date on the Ferno Washington Italia s.r.l. shipping document.

Ferno Washington Italia guarantees its replacement parts for a period of 12 months.

During the warranty period, Ferno will repair and/or replace any parts found to have manufacturing defects, excluding the costs of: manual labour, travel, transport, and packaging.

The warranty does not cover consumables or parts prone to wear and tear due to normal use of the product, all parts typically subjected to sliding or rolling friction (bearings, brushes, lubricants, shoes, tracks, etc.), parts potentially exposed to oxidation or corrosion (copper or metal alloy contacts, mechanical equipment) and

external finishes (gelcoats/resin, paint, powder paint, decals, tape, text, etc.) are guaranteed for 90 days.

Repairs are performed by trained technical staff at the Washington Ferno Italia s.r.l. site in Via Zallone 26- 40066 Pieve di Cento (BO), or at the Customer's premises if suitable arrangements with Ferno Washington Italia's Customer Services have been made.

Technical support at the Customer's premises must be arranged beforehand and involves a refund of expenses incurred and documented on request.

For information on the costs of technical support, please contact the relevant office at Ferno Washington Italia s.r.l..

Repairs are guaranteed for 6 months from the date of repair. This warranty applies only when the product is used according to the instructions in the user manual provided. Misuse and negligence invalidates this warranty.

The warranty is valid from the day the product is shipped from Ferno Washington Italia s.r.l., and the shipping rates are not covered by this warranty. Ferno Washington Italia s.r.l. is not liable for damages sustained during shipment or due to misuse of the product.

Products sold by Ferno Washington Italia s.r.l. that do not bear the Ferno trademark are covered by the warranty of the original manufacturer. Ferno Washington Italia s.r.l. does not extend the periods of warranties of other manufacturers; Ferno Washington Italia s.r.l. assumes no responsibility for products manufactured by others.

The warranty is rendered null and void in the case of:

- Failure to observe the instructions on use,

- Misuse,
- Inappropriate use or handling,
- Repairs by non-authorised persons,

- Damage during transport due to improper packaging of items returned by the user,

- Inadequate maintenance,
- Failure to use original spare parts.

In cases not covered by the warranty, Ferno Washington Italia does not bear the transport costs for sending or returning the product.

Limitation of liability

If a product is found to be defective, Ferno Washington Italia s.r.l. will repair and replace it, or, at its own discretion, refund the purchase price. Under no circumstances can Ferno Washington Italia s.r.l. be held liable for more than the sale price of the product. The buyer accepts these conditions for all types of damage. Ferno Washington Italia s.r.l. does not offer other warranties, either express or implied, or any implied warranties of merchantability and fitness for a particular purpose for its own products, or those manufactured by others.

In case of infringement of the limited warranty, any legal actions must be filed within one year from the date on which the infringement was, or should have been, discovered. Ferno Washington Italia s.r.l. reserves the right to terminate the warranty of the products sold:

- If the labels or plates bearing the manufacturer's logo and/ or the serial or registration number are rendered illegible or removed;

- If the product has undergone modifications, repairs or treatment unauthorized by Ferno Washington Italia, and/ or by personnel not authorized by Ferno Washington Italia;

- If the product is not used in compliance with the instructions, or for purposes other than those for which it was designed.

- as indicated in the "Warranty Terms and Conditions" section.

Ferno Washington Italia s.r.l. cannot, in any event, be held liable for direct or indirect damage due to usage that is noncompliant with the instructions in the user manual or the intended purpose of the product.

Warranty claims

Contact Ferno's Customer Service immediately if you receive a product that is suspected to be defective. A representative will assist the customer through the complaints procedure. Before returning a product to Ferno Washington Italia s.r.l., contact Ferno's Customer Service to request authorisation.

Complaints

Any complaints must be communicated to the reseller, or to Ferno Washington Italia s.r.l.'s Customer Service, within 5 days of receipt of the product or of discovery of the alleged defect.

Claims or disputes regarding a single product does not release the buyer from the obligation to collect and pay for other products in the order, unless otherwise agreed with the seller.

Return authorisation

No product will be accepted without the prior approval of Ferno Washington Italia s.r.l..

Products returned for business reasons, or for reasons not relating to lack of conformity of the product, will be accepted only after verification of their condition by Ferno Washington Italia s.r.l. qualified personnel.

	TRAINING RECORD			
Date	Date Instructor Name Training			

MAINTENANCE RECORD			
Date	Type of Maintenance	Maintenance Technician	

Product User and Maintenance Manual, required to operate the product safely, maintain its efficiency and reliability, and ensure the validity of the warranty.

Photos identified by "**" are for illustrative purposes only. Please read the instructions carefully. The picture does not represent the product described in this instruction manual, but only correct usage and functionality.

Rel. 241115 English

Ferno Washington Italia s.r.l.,

Via Benedetto Zallone 26 40066 - Pieve di Cento (BO) - ITALIA Il-free in Italy)

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