

User and maintenance manual



26-B Bariatric self-loading stretcher for handling large patients

Rel. 030316 English (UK)



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 in Italy)	800.501.711
Fax	+39 0516861508
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Ferno Customer Service

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

MANUFACTURER

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WARNING

Pictures identified with ""** are for illustrative purposes only. Read the instructions carefully. This picture does not show the product described in this user manual, but only its correct use and operation.

USER AND MAINTENANCE MANUAL

To request additional free copies of the instruction manual, please contact Ferno Washington Italia's Customer Service.

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 Service.

Intellectual property declaration

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

All patent rights, design rights, construction, reproduction, use and sale relating to any item covered in this manual are the confidential and exclusive property of Ferno Washington Italia s.r.l., except for rights expressly transferred to third parties or not attributable to parties owned by the supplier. It is prohibited to reproduce this manual, either in full or in part, without the prior consent of Ferno Washington Italia s.r.l.

Limited warranty

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

Compliance with safety regulations in force

The self-loading stretcher is designed and manufactured by Ferno Washington Italia s.r.l. in accordance with the safety requirements of Medical Devices Directive 93/42/EEC of 14.06.93 (class I). All materials used, duly sized to work correctly within the load limits appearing in the technical specifications, are flame-resistant, do not release toxic or polluting substances, and are protected to ensure high resistance to wear and corrosion. The stretcher design does not include any sharp edges that could cause accidental injuries to its users.

SAFETY INFORMATION

Read this user manual carefully. It is an integral part of the device and must always be stored close at hand. For your personal safety and for that of patients, please observe the following points:

- Before every use, make sure that there are no signs of wear, damage and/or malfunctioning. Refer to section *Inspection*.
- In order to avoid infections and/or bacterial contaminations, follow the indications in sections *Disinfection* and *Cleaning*.

Warning

The danger symbols draw attention to potentially dangerous situations that, if disregarded, 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 staff to use the 26-B stretcher.

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

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

Unauthorised modifications of the stretcher could cause serious damage, injury and/or unforeseeable operating problems. Do not modify or alter the stretcher in any way.

Any damage to the components of the stretcher or to the entire system may affect its performance and safety. Inspect the stretcher frequently, 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 tied to the stretcher. Assist the patient throughout all rescue operations.

A patient who is not properly secured with the restraint system could fall and suffer injuries. Use safety restraints to secure the patient to the stretcher.

Any improper use of the restraints can cause the patient to fall and endanger their safety. Always use safety restraints to secure the patient.

Occasional assistants may cause damage and/or physical harm, or injure themselves. Do not allow occasional assistants to carry out the preparation of the stretcher. Trained operators must supervise and direct use operations.

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

The use of improper and/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 technicians not authorised by Ferno Washington Italia, will render all warranties null and void and may compromise the safety of the stretcher.

Non-original spare parts and inadequate repairs may cause damage and/or injury. Use only original Ferno parts and refer exclusively to 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 risks of exposure to infectious diseases that may be transmitted by blood, such as HIV-1 or Hepatitis, follow the instructions on disinfection and cleaning in this manual carefully.

Load capacity

Do not exceed the load capacity of the 26-B stretcher. Refer to section *General technical specifications*.

Compatibility with locking systems

The 26-B stretcher is designed to be used with the Ferno SLAM locking system for ambulance transport. Ferno recommends using Ferno stretchers exclusively with Ferno locking systems, and Ferno locking systems exclusively with Ferno stretchers. Use Ferno locking systems compatible with 26P and 26S stretchers only.

Any other configuration is not compatible with the specifications and instructions contained in this manual. Any combination of a Ferno stretcher or locking system with a non-Ferno stretcher or locking system represents improper use of the Ferno product. Ferno Washington Italia shall not be liable for any damage to users or third parties due to improper use of the 26-B stretcher.

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



Crushing point Keep hands away



Read the user manual carefully



The stretcher requires at least two qualified operators for correct use



Do not wash with high pressure water



Unlocked Locked



Do not lubricate





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

SWR- Strength to Weight Ratio = 8 Safety factor = 1.5



Load capacity (in kilos and pounds)

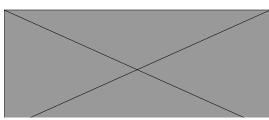


This product meets European Union Standards

Information and safety labels

The information and safety labels contain important information that the user needs to know. Read and follow the label instructions. Replace worn and damaged labels immediately. To obtain replacement labels, contact Ferno Washington Italia's Customer Service. The labels shown below are attached to the stretcher.

Unique device identification notice



Ferno complies with the Unique Device Identification system of the U.S. Food and Drug Administration for the identification of medical devices.

The UDI label contains information in a format that can be read by humans and machines alike. Information about the device is available on-line in the Global Unique Device Identification Database (GUDID). To search for and download information, access the GUDID on the website www.fda.gov.

The label is placed on the cross bar under the anti-shock frame.

Considerations on operators' height and strength

While unloading the stretcher, the foot-end operator (and any assistants) must support the weight of stretcher, patient and any other equipment used, in order to allow the complete opening and locking of the stretcher's legs.

Short operators may find it more difficult to lift the stretcher compared to taller ones, because they could have to raise their arms above their shoulders.

If the ambulance is on an irregular surface, the foot-end operator(s) may need to lift the stretcher higher than usual,

in order for the legs to open and lock properly during unloading operations.

Note: Ask for additional help to lift the weight of stretcher, patient and any other equipment used, refer to section "Additional assistance".

OPERATOR TRAINING AND SKILLS

Skills

Operators who use the stretcher must:

- Have specific experience in patient handling and transport 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. An example of a form for logging the training sessions.

⚠ WARNING

Untrained users may injure themselves, cause damage and/or physical harm. Allow only trained and qualified staff to use the 26-B 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 determine the number of assistants required and to place them suitably to handle the patient according to the laws in force.

Products and accessories

codes may vary, check them during the purchase

Self-loading stretcher (26-P-R)

(ITC)
(513-10E)
(0818933)
(0313915)
(430-1-N)
(430-2-N)
(0374857)
(SLAM-26)









Pack Rack

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THE STRETCHER

Description

The 26-B stretcher (simply referred to as "stretcher" in this manual) is a patient handling device for emergency situations and it was designed for transporting patients by ambulance.

The stretcher was created to handle bariatric (obese) patients and for continuous use, its safety restraint system allows to secure the patient for transport; for more information on restraints, see chapter "Accessories".

The stretcher should be used by duly trained and qualified operators. The stretcher is for professional use by at least 2 qualified operators. It was designed to reduce the risk of back injury for healthcare professionals. Additional assistance may be required to handle heavy patients and/ or when the situation demands it, and should always be provided according to local healthcare regulations.

The stretcher must be used exclusively with Ferno locking systems for ambulances; for more information on locking systems, see chapter "*Accessories*".

COMPONENTS OF THE STRETCHER

- Head-end carrying handle
- Control handles on rear legs
- Loading wheels
- Backrest adjustment lever
- Heavy-load adjustable backrest
- Front legs
- Rear legs
- Front wheels, diameter 150 mm
- Folding side edges with double adjustment
- Mechanical unlocking rod for rear legs
- Rear wheels, diameter 150 mm equipped with braking system made of high-resistance aluminium
- Heavy-load anti-shock frame
- Mechanical unlocking system for rear legs
- Leg locking system
- Foot-end carrying handle
- Folding and reinforced front frame

WARNING

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

WARNING

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

WARNING

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

CE Compliance

MEDICAL DEVICES DIRECTIVE

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

For more information: www.ferno.it



Components (Stretcher)

HEAD END



SWR

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

SWR- Strength to Weight Ratio = 8

Safety factor = 1.5



Load capacity (in kilos and pounds)

USER AND MAINTENANCE MANUAL

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General technical specifications

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

617 lbs	280 kg	
77 lbs	35 kg	
31 in	800 mm	
17 in	450 mm	
77.56 in	1920 mm	
66 in	1670 mm	
21.65 in	550 mm	
3 in	150 mm	
1.6 in	40 mm	
Materials		
aluminium		
perforated aluminium		
sealed		
Loading height*		
24/25 in	610/640 mm	
	77 lbs 31 in 17 in 77.56 in 66 in 21.65 in 3 in 1.6 in alumir perforated a seale	

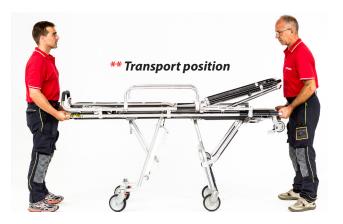
- * The loading height is the distance between the floor and the lower part of the wheels that rest on the vehicle platform.
- ** The stretcher's weight does not include mattress and restraints.

The load limit includes the weight of stretcher, patient, equipment and, in some rescue situations, first-aid operator (RCP). Exceeding this limit may cause damage to the patient and/or the stretcher.

Dimensions are rounded up to the nearest whole number. These specifications could change without prior notice due to product improvements.

For more information, contact the customer service (see section "Customer Service").

Stretcher positions





Technical specifications

The stretcher is equipped with:

- Leg locking bar
- Leg activation levers
- Safety rod
- Folding side edges with double adjustment
- Adjustable pneumatic backrest
- Folding frame with double adjustment
- Anti-shock frame
- Wheel-locking brake

WARNING

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COMPONENTS OF THE STRETCHER

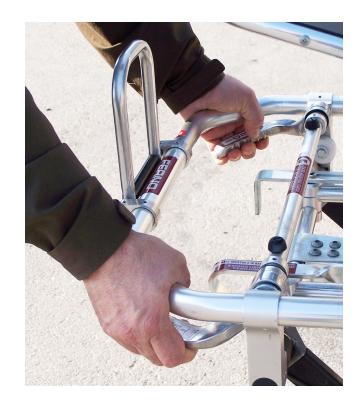
Control levers

The two activation levers are located at the foot end of the stretcher. They control the mechanism allowing the legs to open and close.

Considering the position at the patient's feet, the lever on the right of the foot-end operator controls the "front legs" near the head of the patient, while the lever on the left controls the "rear legs" near the feet of the patient. These levers can only be used after unlocking the safety rod on the right side of the stretcher, under the loading surface.

To adjust the height of the stretcher, both operators have to hold its frame with the palms of their hands facing up. The foot-end operator unlocks the safety rod and activates both levers at the same time, after warning the second operator (see fig. 5).

When the stretcher is loaded or unloaded from the ambulance, operators must activate one lever at a time and follow the instructions in this manual.



Safety rod

The safety rod is located under the patient surface, on the right-hand side of the operator.

When locked, it prevents the legs from closing when the levers are operated accidentally.

The safety rod locks "automatically" when the stretcher goes from "closed" to "open" position. Keep it locked during all operations that do not specifically require its unlocking (any kind of movement).

In order to unlock the rod, push it towards the head end of the stretcher.



Carrying handle

The stretcher is equipped with a carrying handle at its foot end (Figure 4). The foot-end operator can use this handle to guide and move the stretcher, keeping in mind that the patient should always see where they are going; the caster wheels provide another reference to follow the right path.





Wheels

The stretcher is equipped with four full and oversize wheels (diameter 100 mm), two at the front and two at the back, the latter ones pivoting and self-directed to make loading procedures easier. (Figure 7B). The two rear caster wheels are provided with an integrated braking system (section *Integrated braking system*). The wheels' design protects them from dirt and liquids.

Integrated braking system

The brake prevents any accidental movement and shifting of the stretcher (Figure 12) during patient handling, when the stretcher is not on a flat surface or during special medical procedures. There is a brake on each rear wheel of the stretcher, they are easily identified thanks to the red locking lever.

Use the wheel-locking brakes to keep the stretcher steady when it is not on a horizontal surface, when transferring the patient to another stretcher or support with the same height as this stretcher and during medical procedures on the patient.

Folding front frame

Use the folding frame to reduce the length of the stretcher when working in small spaces like elevators or narrow corridors.

- 1. Lift the backrest.
- 2. Support the front part of the frame and activate the locking lever by pulling it towards the front side of the stretcher.
- 3. Lower the folding part of the frame carefully, without dropping it. The frame can be lowered in two positions, intermediate or complete position. (Figure 7A)

Only lock the stretcher when it is not moving; do not use the brakes as braking devices during movements.

In order to lock or unlock the rear wheels:

- TO LOCK THE WHEELS: Push the red locking lever on the rear wheels downwards with the foot (Figure 13).
- **TO UNLOCK THE WHEELS:** Push the red locking lever on the rear wheels upwards with the foot.



Figure 7B: Braking system

Backrest

The stretcher's backrest can be adjusted up to 80° (Figure 7C). The operator can lift or lower the backrest with the specific red unlocking lever.

Before adjusting the backrest:

- o Loosen the safety restraints.
- Support the backrest while operating the unlocking lever.
- TO LIFT THE BACKREST: Press the lever (towards the main frame) to unlock the backrest and lift it as required. Release the lever and lift the backrest slightly to lock it in the desired position.
- TO LOWER THE BACKREST: Press the lever (towards the main frame) to unlock the backrest and lower it as required. Release the lever and lower the backrest slightly to lock it in the desired position.
- Adjust the safety restraints again.



Figure 7 - A: Backrest B: Unlocking lever activation

Side edges

The stretcher is equipped with folding edges on both sides (Figure 8A). The operator can lift or lower the edges using the relevant unlocking pin.

- TO LOWER THE SIDE EDGES: Pull the knob of the unlocking pin (Figure 8B) and turn the edges downwards. Release the knob to lock the edges in position.
- TO LIFT THE SIDE EDGES: Pull the knob of the unlocking pin (Figure 8B) and turn the edges upwards. Release the knob to lock the edges in position.

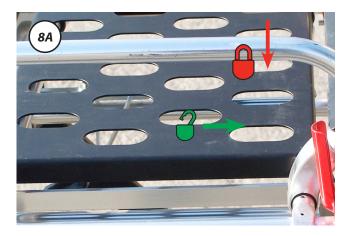
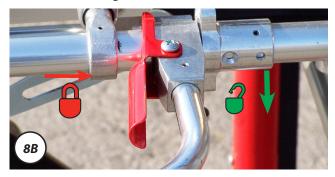


Figure 8A Control lever



8B: Intermediate position (for handling large patients and limbs)

Important

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





** Figure 9 - A: INCORRECT stretcher lifting B: CORRECT stretcher lifting by the main frame

Anti-shock frame

The stretcher features an anti-shock frame (Figure 10A). This frame allows positioning the patient in the Trendelenburg position (raised legs).

Before lifting/lowering the frame:

Grip the frame and hold it while lifting or lowering it.

When lifting or lowering the frame, always stay at the foot end, never at the side.

TO LIFT THE FRAME

1) Unfasten or loosen the restraints securing the legs and hips of the patient. Lift the frame to the desired position (Figure 10B) and lock it. 2) Fasten and adjust the restraints securing the legs and hips of the patient.

TO LOWER THE FRAME:

- 1) Unfasten or loosen the restraints securing the legs and hips of the patient. Unlock the support bars by lifting them, then lower the frame to the desired position and lock it. Fasten and adjust the restraints securing the legs and hips of the patient.
- 2) Support the frame up to its final position.
- 3) Adjust the safety restraints.





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

Leg locking

The leg locking bar is a device that holds the legs in folded position. It allows (trained) operators to lock the legs and lift the stretcher like a "transfer chair" to cross irregular paths or overcome any obstacles. Be careful, this operation may involve risks for the back (Figure 14B).

To activate the leg locking bar:

- 1. Put the stretcher in unloading position "on the floor", making sure that the mechanisms coincide.
- 2. Pull the bar handle (fig. 14A).
- 3. Check the correct locking.

To activate the leg locking bar:

Push the bar handle fully in to prevent it from bending and becoming unusable during patient loading.

WARNING

Patient loading should always be performed with the stretcher on the floor and with the help of all operators. The stretcher should be braked or placed in a stable position.

Do not follow any patient loading method that is not described in this manual.

Important

The two operators can place themselves at the sides of the stretcher and lift it "step by step", in this way they will share the overall weight and avoid collateral damage. Do so until reaching the loading height (ask for assistants when possible).

WARNING

Do not operate the leg locking bar when loading the stretcher on the ambulance. Check that the bar is unlocked before unloading the stretcher from the ambulance.

Important

The leg locking bars of stretchers with serial no. before L.666059 are operated the opposite way as described in this manual. Refer to the manual for previous versions, or update the stretcher to the newest version: info@ferno.it

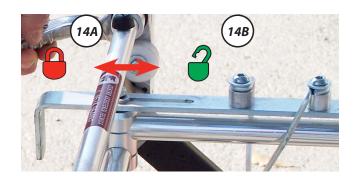




Figure 15 - Leg locking bar

WARNING

Using the stretcher as a litter could endanger safety, always consider the help of assistants.

13

USE OF THE STRETCHER

Before placing the stretcher into service

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 the components, restraints and mattress are present.
- The stretcher does not show any signs of damage or wear, and that it is fully operational. Refer to section "Inspection".
- The vehicle is equipped with a Ferno locking system compatible with 26-B stretchers.

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 by duly trained and qualified operators.
- These operators must work together and coordinate correctly during all operations.
- Follow procedures while complying with standard regulations for moving the patient in an emergency.
- Lift only the weight that you can safely support. Obtain additional assistance for heavy loads.
- Always observe healthcare instructions and regulations.
- Always assist the patient and never leave them alone during the operations with the stretcher.
- When changing the height (position) of the stretcher or unloading it from the ambulance, check that legs are locked before releasing your hold on the main frame.

WARNING

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

/ WARNING

Never leave the patient alone while tied to the stretcher. Assist the patient throughout all operations with the stretcher. Two operators are required.



carefully





Load capacity

Important

For heavy loads, the two operators should position the loading wheels on the vehicle platform, push the stretcher onto the load floor firmly and safely, then place themselves at the foot end and push together. During unloading, after making sure that the rear legs support the weight, one operator goes back at the centre and checks the total stroke of the front legs.

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

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Lifting and lowering

Lifting and lowering operations must be carried out by two duly trained and qualified operators.

• TO LIFT THE STRETCHER

- 1. Operators must ensure they can support the weight of stretcher and patient when lifting and lowering the stretcher.
- 2. **Operator at head end:** stand at the foot end of the stretcher. From there it is possible to control the stretcher; lift it by holding its central bar with the palms facing up.
- 3. **Operator at foot end:** stand at the head end of the stretcher. From there it is possible to control the stretcher; lift it by holding its central bar with the palms facing up, without using the control lever.
- 4. **Both operators:** The "safety catch" triggers automatically when the legs reach the end of their stroke. Keep holding the stretcher and, once the loading height has been reached, put it on the floor and make sure that the mechanisms have locked.
- 5. **Both operators:** In a coordinate movement, lift the stretcher as required.
- 6. **Both operators:** Make sure that the stretcher is properly locked at the desired height.

• TO LOWER THE STRETCHER

- 1. If the folding front frame is in "folded" position, lift it to restore its horizontal position.
- 2. **Both operators:** Stand at the head and foot end of the stretcher in order to control it completely.

Hold the central bar with the palms facing up and activate the control handles while supporting the weight.

Press the control handles and lower the stretcher to the desired height with a coordinate movement.

While keeping the stretcher under control, release the handles and make sure it is properly locked at the desired height.

WARNING

Any improper use of the restraints can cause the patient to fall and endanger their safety. Always use original Ferno Washington Italia's safety restraints to secure the patient.



** Figure 15 - Operators' positions to lift and lower the stretcher

Important

When lifting or lowering the stretcher, always make sure that it is correctly locked at the desired height before loosen your hold on the frame.

LOWERING TO THE GROUND BY ONE OPERATOR

When the transport device is empty (without a patient on it), one operator can lower it to the ground without any help.

- 1. Fasten all restraints to avoid that they touch the floor and end up under the stretcher.
- 2. Tilt the stretcher on its front loading wheels
- 3. Unlock the safety rod
- 4. Firmly grasp the stretcher and press the right lever to unlock the front legs
- 5. Keep holding the stretcher until the rear legs support its weight
- 6. Press the left lever and take the stretcher gently to the ground

ONE OPERATOR FOR LOADING AND UNLOADING

If local protocols provide for it, the empty transport device can be loaded and unloaded from the ambulance by one qualified operator. Follow the procedures in sections "Loading the stretcher" and "Unloading the stretcher".

Loading and unloading

Before loading or unloading procedures, the two operators must be prepared to support the weight of stretcher, patient, and any other connected equipment at any time, and to counter the possible "moving back" phase. Make sure that the safety restraints have been fastened and the patient is properly secured.

To load or unload the stretcher, proceed as follows:

• TO LOAD THE STRETCHER

If the folding front frame is in "folded" position, lift it to restore its horizontal position. Place the stretcher in front of the loading platform of the ambulance, ensuring that it is perpendicular to the entrance; this operation must always be performed by two operators in contact with the stretcher.

- 1. **Operator at head end**: Assist the foot-end operator during the centring on the loading platform by holding the central bar with the palms facing up. (Figure 16).
- 2. **Operator at head end**: Communicate with the other operator and push the stretcher onto the loading platform, making sure that the "loading wheels" are beyond the first ramp.
- 3. **Operator at foot end**: Activate the safety lever located on the right side of the stretcher, under the patient surface.
- 4. **Operator at foot end**: Press the right lever to lock the front legs (head end) and push the stretcher inside the ambulance until the rear legs reach the end of the vehicle (the two operators should carry out the loading together, so as to reduce any spinal distress).
- 5. **Both operators:** Stand at the foot end to load the stretcher together (Figure 17), pushing it completely inside the ambulance.
- 6. Once the stretcher has been loaded, lock it inside the ambulance with the SLAM locking system.

• TO UNLOAD THE STRETCHER

- 1. Unlock the stretcher from the SLAM locking system.
- 2. **Operator at head end**: Stand at the side of the stretcher and hold the central bar with the palms facing up to assist the foot-end operator.
- 3. **Operator at foot end**: Hold the frame with both hands, palms facing up, and start pulling the stretcher out of the ambulance. Make sure that the rear legs open completely and rest on the floor. (the two operators should carry out the unloading together, so as to reduce any spinal distress).
- 4. **Operator at head end**: Check that the front legs have enough space to open completely.



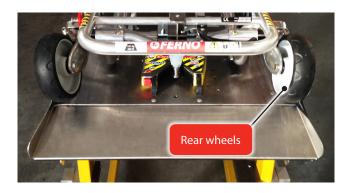
** Figure 16 - Operators' positions to load the stretcher



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



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



** Figure 19 - Position of the rear wheels when the loading is complete

- 5. Every time the stretcher is unloaded, ensure that both leg pairs are completely open and locked before the loading wheels leave the loading platform of the ambulance.
- 6. When both legs are open and locked in their normal transport position, pull the stretcher completely out of the ambulance.
- 7. **Operator at foot end**: To complete the unloading operation, coordinate with the head-end operator while both keep holding the stretcher.

Transfer

In order to transfer the patient on the stretcher, proceed as follows:

- 1. Position the stretcher next to the patient and adjust its height (to lift or lower the stretcher, refer to section "Lifting and lowering") at the same level as the patient.
- 2. Push the locking levers with the foot to lock the rear wheels (to lock the rear wheels, see section "Integrated braking system").

WARNING

Any improper use of the restraints can cause the patient to fall and endanger their safety. Always use the safety restraints.

Important

During any transport, loading and unloading operation with bariatric patients (90 kg min.), the assistance of other trained operators is recommended. This allows reducing the effort. For additional help, refer to section "Additional assistance".

- 3. Lower the side edges of the stretcher (to lift and lower the edges refer to section "Side edges").
- 4. Unfasten the restraints.
- 5. Transfer the patient on the stretcher as approved medical procedures describe.
- 6. Fasten safety restraints to secure the patient and adjust them without creating any constriction.
- 7. Lift the side edges of the stretcher (to lift and lower the edges refer to section "Side edges").

Transport

Before any transport operation, make sure that: safety restraints are fastened, side edges are lifted and locked, and the patient is properly secured to the stretcher.

Move the stretcher carefully, if possible on smooth surfaces.

In case of obstacles, such as a door threshold, lift the stretcher slightly, pull it or push it so that the wheels can get past the hindrance.

Avoid high obstacles, like steps. If a high obstacle must be overcome or in case of difficulty, ask for additional help to lift and carry the stretcher, see section "Additional assistance".

In order to transport the stretcher, proceed as follows:

- 1. Fasten safety restraints and adjust them without creating any constriction for the patient.
- 2. Make sure that the side edges are lifted and locked.
- 3. Unlock the lever of the brakes on rear wheels.

MARNING

An unassisted patient is at risk of injury. Never leave the patient alone while tied/untied to the stretcher. Assist the patient throughout all operations with the stretcher.

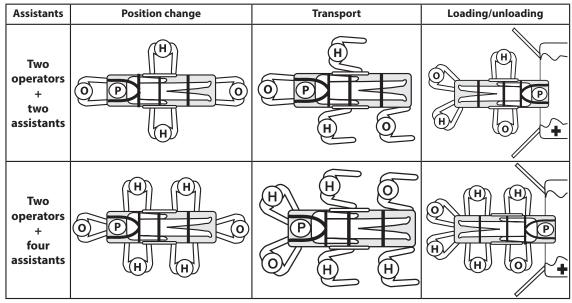
- 4. **Operator at foot end**: hold the stretcher frame or the carrying handle and move the patient.
- 5. **Operator at head end**: assist the foot-end operator in keeping the stretcher under control and check the path.

Additional assistance

The stretcher requires at least two qualified operators for correct use. These operators may need additional help for lifting heavy loads (patient and equipment).

- The operators place themselves at the head and foot end of the stretcher, they control procedures and direct all assistants.
- Sometimes the assistants at the sides of the stretcher may have to walk sideways. Follow local healthcare protocols.

The illustrations below show the positioning of operators and assistants.



Legend: O = Operator, H = Assistant, P = Patient

<u> (</u> WARNING

Patient loading should always be performed with the stretcher on the floor and with the help of all operators. The stretcher should be braked or placed in a stable position.

Do not follow any patient loading method that is not described in this manual.

WARNING

Move the stretcher so as to allow the patient to see where they are going, since the caster wheels are in the correct position to enhance safety and overcome any obstacles.

WARNING

In case of special transports or difficult surfaces, the stretcher's height can also be lowered 1/2 steps, to increase its stability.

CONFIGURATION OF SAFETY RESTRAINTS

Applying the restraints to the stretcher

The stretcher requires special restraints for correct use, which are not supplied as standard.

Ferno recommends applying three restraints: a "four-point" chest restraint and two restraints for legs and feet (see figure in the previous pages).

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

The following paragraphs describe how to use restraints.

Check that all restraints are undamaged and free from imperfections.

All listed restraints are compatible with Ferno stretchers.

Fitting the 4-points restraints (0313915):

- 1. Lift the stretcher's backrest and run the restraints under the supporting crossbar next to the special hole on the ABS surface. (fig. 1).
- 2. Slide them into the pre-spaced holes of the supplied mattress (if the mattress does not have such holes, it must be replaced to ensure proper operation of the restraints). (fig. 2).



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

1. Unfasten the restraint and divide it into two parts.

The "femoral" restraint must be placed exactly under the side edge, ensuring a 40-cm length that will allow to adapt it to different patients. Tie the end of the restraint in a noose around the chosen anchorage point, always on the central bar of the stretcher (fig. 3).

2. The "feet" restraint must be aligned with the first one, near the last welding joint of the frame, next to control levers and carrying handle. (fig. 4).

Important

Always place the "female" end on the left-hand side of the patient (operator side on the ambulance); in this way, it will be possible to adjust the restraint with the patient on board and remain seated in a safe position.



Figure 1



** Figure 4

** Figure 3





Tying the noose

<u> (</u> WARNING

Use Ferno W.I. restraints only.

USE OF THE RESTRAINTS

To fasten the 4-point restraint (0313915):

- 1. Position and arrange the shoulder restraints in contact with the shoulders of the patient. The connections must be centred on their chest or abdomen.
- 2. To fasten the restraint, slide the metal tab in the "L"-shaped connections, then insert and lock it into the buckle (fig. 1).
- 3. Always check that the buckle is properly fastened.

To unfasten the restraint:

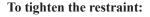
- 1. Push the (red) unlocking button at the centre of the buckle.
- 2. Pull the tab out of the connections



When using this stretcher, both for training and real situations, it is extremely important to check the connections.

To loosen the restraint with the patient on board:

1. Hold the adjuster and turn it until it is perpendicular to the belt. Pull in the opposite direction to the anchorage point until reaching the desired length. (fig. 2)



Hold the sewed end and pull the belt through the sliding tab until reaching the desired length. (fig. 3)









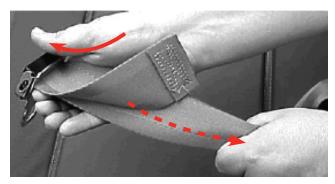


Figure 2

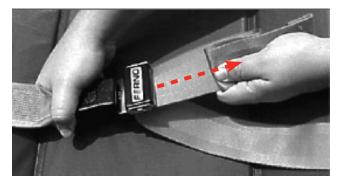


Figure 3

MEDICAL EQUIPMENT FIXING

If equipment for a trauma patient or other medical devices are transported, they must be fixed to the stretcher safely and correctly, in order to prevent them from becoming projectiles and endanger the safety of operators and patient.

- Follow the instructions of the manufacturer to secure this device.
- Request data sheets and proper training.



Disinfection and cleaning

Transport restraints

Disinfect transport restraints with a disinfectant, according to the manufacturer's instructions.

To clean the restraints:

- 1. Soak them in disinfected warm water.
- 2. Rinse with clean water.
- 3. Dry internal mechanisms immediately with an air flow, then hang the restraints away from direct sunlight.

Pre-spaced transport mattress

Disinfect the mattress with a specific disinfectant, according to the manufacturer's instructions.

To clean the mattress:

- 1. Wash it in warm water and soap with a soft cloth.
- 2. Rinse the mattress with clean water.
- 3. Use a cloth or hang the mattress to let it dry.

WARNING

An unassisted patient is at risk of injury. Never leave the patient alone, and always assist the patient when using the device.

Fixing the pre-spaced transport mattress

Use the relevant Velcro straps on the basis to fix the mattress.

To fix the mattress:

- 1. Remove the protective film from the Velcro straps.
- 2. Align the pre-spaced holes with the 4-point restraints.
- 3. Push the mattress to make the Velcro straps adhere to the ABS surfaces.



Reduction accessory

This accessory allows to transport smaller patients safely. (Not included with the restraints)

WARNING

A patient that is not secured or properly secured to the stretcher may fall and suffer injuries. Always secure the patient to the stretcher with a suitable restraint system.

STRETCHER MAINTENANCE

Routine and preventive 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.

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 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 non-abrasive mild detergent.
- 3. If necessary, remove stains with a stiff bristle brush (not metal), or a light solvent, paying 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 cleaning.

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

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

WARNING

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

Important

When not in use, store the stretcher 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 stretcher. Do not use products containing these agents for stretcher cleaning/disinfection.

Important

After disinfection/cleaning, ensure that the stretcher and its components are completely dry before use.

Important

DO NOT WASH WITH HIGH PRESSURE WATER



Do not use high pressure water to clean the stretcher.

Inspection

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

The stretcher should be inspected regularly by maintenance personnel. Perform the various checks shown on this page.

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

Lubrication

Clean and disinfect the stretcher before lubrication. Use specific lubricants. Do not lubricate the points with the "do not lubricate" symbol.





Do not lubricate

Lubricate

Important

Unrequired lubrication may damage components that must not be lubricated, because dirt and foreign particles could build up. Lubricate **only** the points indicated.

LUBRICATION POINTS: UPPER PART

Apply a small amount of lubricant (white lithium grease or synthetic lubricant).

Lubricate the same points on both sides of the stretcher.

8	Backrest hinge	Lubricate
8	Backrest locking pin	Lubricate
8	Folding side edges unlocking pin	Lubricate

COMPONENTS THAT MUST NOT BE LUBRICATED ON THE UPPER PART

Backrest bar	Do not lubricate
Side edges welding	Do not lubricate

CHECKLIST FOR INSPECTION OF THE STRETCHER

- Are all the components present?
- Are all screws, nuts, bolts, rivets and spring pins correctly and firmly positioned?
- Do all mobile parts move normally and correctly?
- Does the stretcher show signs of wear?
- Do the wheels turn correctly? Does the braking system of the rear wheels work properly?
- Do the loading wheels show signs of wear?
- Does every leg pair close correctly?
- Does the anti-shock frame work properly?
- Does the backrest work properly?
- Does the fall-protection system work properly?
- Do the leg locking systems (front and rear) work properly?
- Is the rear leg locking system loosen?
- Do front and rear control handles work correctly?
- Are restraints and mattress in good conditions? Do they show cuts or worn edges?
- Do restraint buckles show visible damage? Do they work correctly?
- Do installed accessories work properly without interfering with the operation of the stretcher?
- Are loading and unloading procedures smooth and safe?

Important

LUBRICATION POINTS: LOWER PART

Apply a small amount of lubricant (white lithium grease or synthetic lubricant). Lubricate the same points on both sides of the stretcher.

ACCESSORIES

Ferno offers many approved accessories for the 26-B stretcher. Always follow the instructions in this user manual.

For more product information, contact Ferno's Customer Service.

MARNING

The use of improper and/or unauthorised devices may 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, contact the Ferno Washington Italia Technical Support Service.

Telephone (toll-free in Italy)	800.501.711
Phone	+39 0516860028
Fax	+39 0516861508
E-mail	info@ferno.it
Website	www.ferno.it

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

WARNING

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

WARNING

Unauthorised modifications of the stretcher could cause serious damage, injury and/or unforeseeable operating 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 spare parts for a period of 12 months.

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

The warranty does not cover consumables or parts subject 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).

The surface finishes (gelcoat/resin, paint, powder paint, decals, tape, inscriptions, 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 Service have been made.

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

For information on the costs of technical support, please contact the relevant department 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 invalidate this warranty.

The warranty is valid from the day the product is shipped from Ferno Washington Italia s.r.l., and the shipping costs 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 operating instructions,
- 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 will not cover 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 our own discretion, refund the purchase price. Under no circumstances can Ferno Washington Italia s.r.l. be held liable for more than the selling 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 saleability or 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 not authorised by Ferno Washington Italia and by staff not authorised 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.
- further to the conditions indicated in section "Warranty Terms and Conditions".

Ferno Washington Italia s.r.l. cannot, in any event, be held liable for direct or indirect damage due to usage that is non-compliant 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 Customer Service to request authorisation.

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

Claims

Any claims 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 shall 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.

	TRAINING RECORD	
Date	Instructor Name	Training Type

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 comply with the terms of the warranty.

Pictures identified with ""** are for illustrative purposes only. Read the instructions carefully. This picture does not show the product described in this user manual, but only its correct use and operation.

Rel. 030316 English (UK)

Ferno Washington Italia s.r.l.

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