

User and maintenance manual



Titan T Basket stretcher and Tirol Kit

Rel.170915 English



Ferno Technical Support

Customer Service and Technical Support are important aspects of each product by Ferno. Before you contact us, please write down 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. at:

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Ferno Customer Service

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

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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 use and maintenance of the product. The instructions do not cover all the 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 local regulations. It is recommended to train staff in proper use of the product before it is used for the first time. Retain this manual for future reference. In case of change of ownership, make sure that the manual remains with the product. Additional free copies can be obtained from Ferno Washington Italia's Customer Service.

Declaration of ownership

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

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Disclaimer

The products sold by Ferno are covered by a 24-month warranty against manufacturing defects. Please refer to the Warranty section for the full terms and conditions of warranty and liability.

WARNING

Rescue procedures involving the use of ropes, harnesses, bridles and other protective equipment require special skills and can be potentially dangerous.

Rescue personnel should not carry out these procedures without the relevant training and instruction.

SAFETY INFORMATION

Warning

Danger signs draw attention to potential dangerous situations that, if ignored, may result in accidents, damage and/or injury.

WARNING

Untrained users may injure themselves and/or cause damage and/or physical harm. Use of the device must be entrusted to trained and qualified personnel only.

Incorrect use of the device can result in damage and/or injury. Use the device as instructed in this manual.

Casual assistants can cause damage and/or physical harm or injure themselves. Always maintain control of the device and monitor and coordinate the assistants.

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

Incorrect attachment of the straps can cause displacement of the patient, resulting in injury and/or damage. The straps should be wrapped around the frame of the device.

A failure to use the straps can cause the patient to fall and endanger their safety. Always use the straps to secure the patient.

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

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

Unauthorised repairs and repairs carried out by people not approved by Ferno W. Italia will render all warranties null and void and could compromise the safety of the device.

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

Important

The boxes labeled "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.

Load capacity of Titan T Toboggan

Observe the load capacity of the device. Refer to the General Technical Specifications,



Load capacity

Inspect the device to check that its load capacity has not been exceeded (see section *Inspection*

WARNING

Incorrect use of the device can result in damage and/or injury. Use the device as instructed in this manual.

TRAINING AND SKILLS OF OPERATORS

Skills

Operators who use the stretcher must:

- have experience in the specific field of handling and transportation of patients.
- possess appropriate skills to assist patients.
- be aware of SAR assistance procedures.

Training

Users are required to:

- read and understand all the information in this manual or possibly contact Ferno Washington Italia's customer service.
- attend a suitable training course on use
- practise using the device before doing so in real situations with patients.
- keep a record of training sessions. An example of a form for recording the training sessions
- Follow a training program prepared by the personnel training manager in charge.

Description

The Ferno Titan-T stretcher (hereafter referred to as simply the "device") was designed to transport a patient in a particular environment.

The device must be used by trained and qualified personnel and for professional use only by a minimum of two qualified operators. More operators may be required depending on local protocols. 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.

CE Conformity

MEDICAL DEVICES DIRECTIVE

Ferno's products meet the requirements of European Directive 93/42/EEC concerning medical devices.



TITAN-T STRETCHER

COMPONENTS OF THE STRETCHER

- The Durathene® mesh can withstand temperatures of between -65 ° C and 93 ° C.
- The tensile strength of the straps is 442 Kg.
- The tensile strength of the buckles of the straps is of 1814 Kg.
- The buckles meet the specifications ANSI Z359.1 and CSA Z259.1

Ferno Washington Italia reserves the right to modify the characteristics of the stretcher without notice.

Initial setup of Titan T

Before using the Titan-T stretcher:

- Apply the straps.
- Inspect the stretcher (see the section on Inspection).
- Accessories included.



Read the user manua with care

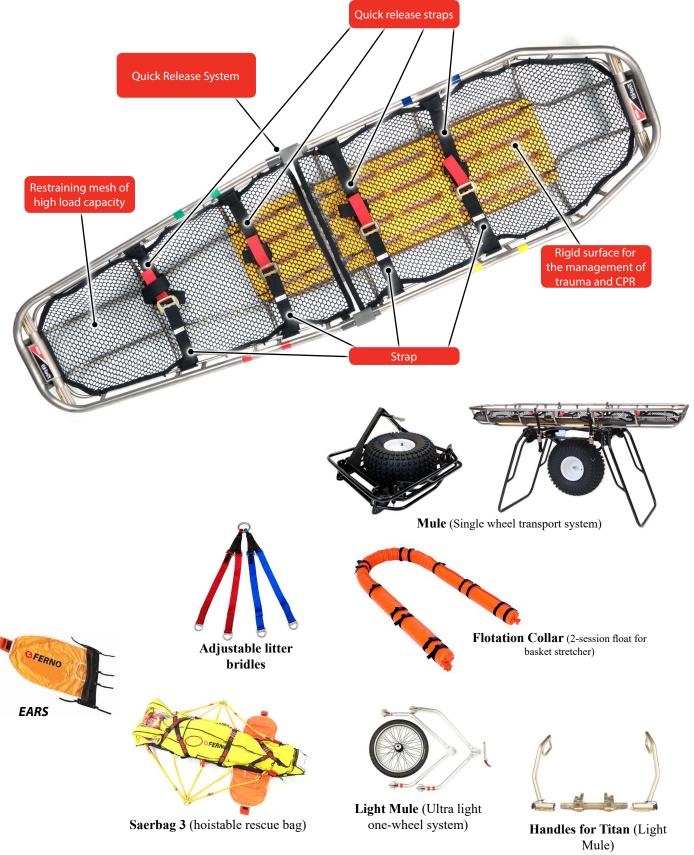


A minimum of two qualified operators are required to use the device.

WARNING

Untrained users may injure themselves and/or cause damage and/or physical harm. Use of the device must be entrusted to trained and qualified personnel only.

Components of the Titan T



General technical specifications

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

Specifications			
Load capacity	2,500 lbs	1,134 kg	
Weight*	13 lbs	6.1 kg	
Width			
Total	22 in	58 mm	
Depth			
Without handles,	83 in	211 mm	
Materials			
Structure	Titanium		
Back/seat panels	HDPI		



Load capacity

With Tirol KIT system

WARNING

Incorrect attachment of the locking mechanisms can cause the displacement of the patient and, as a result, the risk of injury and/or damage. The straps should be wrapped around the panels and the frame of the device.

Other models and accessories

the codes are subject to change, confirm them during purchase

Titan-Ti

(11-0118 and 11-0118SL) 211 X 58 X 18 cm

Titan Ti-Split-Apart

(11-0119 and 11-0119SL) 211 X 60 X 18 cm **Maximum capacity** 11.3 KN (1134 Kg)

Weight of Titan-Ti

(11-0118) 6.1 Kg

Weight of Titan Ti-StratLoad

(11-0118SL) 6.3 Kg

Weight of Titan Ti-Split-Apart

(11-0119) 7.4 Kg

Weight of Titan Ti-Split-Apart StratLoad

(11-0119SL) 7.6 Kg

Light Mule (Ultra light one-wheel system)

(21-0120-021) 5.0 Kg

Handles for Titan (Light Mule)

(21-0120-022 pair) $3.2 \ 3.2 = 6.4 \text{ kg}$

Tirol Kit (Titan Series - Handles Light Mule)

(21-0120-023) 11.4 Kg

Ears

(EARS) 0.24 kg

SS-Shoulder Support (Harness transport)

(21-0120-011)

Titan Protection (Polyethylene protection)

(21-0120-010)

Mule (Single wheel transport system)

(11-2210)

Flotation Collar (2-session float per basket stretcher)

(11-0124)

Saerbag 3 (hoistable rescue bag)

(SAERBAG III-Y - YELLOW)

Adjustable litter bridles

(15-0108) (hard)

15-0109 (soft)

Application of the straps

1. Four straps are provided with the stretcher at the time of purchase. The straps are designed to be integrated with what is normally used to secure the patient in recovery situations at a high angle. They have been designed and made to be suitably resistant and to complete your system of tubular fabric straps, ropes or other. These straps are only to secure the patient to the stretcher and must not be used for lifting or for other purposes.

2. Attach and tighten the straps

- 3. The strap with (three-pin) buckle has a termination loop for attachment to the stretcher and a free end for tightening it. The strap with (two-pin) buckle has a termination loop like the previous one and a tab sewed onto the buckle, to be used for loosening it (fig. 1).
- 4. Insert the three-pin buckle through the opening of the one with two pins (fig. 2).
- 5. Make sure you have pulled the free end of the strap completely through the opening.
- 6. Slightly pull the free end of the strap to settle the three-pin buckle evenly on the two-pin buckle (Fig. 3).
- 7. Tighten the strap by pulling on the free end of the strap.

8. Loosen and open the straps

9. To loosen the straps, pull the red detachment tab towards the buckle (fig. 6). Continue to pull until the strap is as loose as required. To open the straps, loosen them as described above and then tilt the three-pin buckle and pull it out from the two-pin buckle, passing it through the opening (fig. 3).

10. Attach the straps to the stretcher

- 11. The upper edge of the Durathene mesh leaves some points of the lower tube of the stretcher uncovered for easily attaching the straps (fig. 7).
- 12. Choose the most appropriate point for attaching the straps, in relation to the patient to be transported and your fixing system. Attach the straps as follows:
- 13. Open the straps as described in step (8).
- 14. Starting from the outside of the stretcher, pass the loop section of the strap in between the mesh and the tube of the stretcher at the required point of attachment (Fig. 4).
- 15. Pass the buckle through the loop (Fig. 5). Pull the loop to tighten it around the tube of the stretcher.
- 16. Attach the other strap in symmetry with the first, following the same procedure as above.













USE OF THE TITAN-T STRETCHER

Before commissioning the device

The personnel who will use the device must have read and understood the information in this manual.

Before any operation with the stretcher, ensure that:

- all the components and belts are present, and that the stretcher does not bear any signs of damage and wear, and is fully operational. Refer to the section on Inspection.
- follow the instructions in the section on Configuring the device.

Instructions on use

- This manual does not provide any medical instructions.
- It is the responsibility of the users to follow proper procedures to ensure the safety of the patient and that of themselves.
- This manual explains the use of the stretcher in an ideal situation and is purely indicative.
- The device must be used by two or more operators who are trained and qualified.
- The operators need to work together and maintain control of the stretcher at all times.
- Follow the procedures according to standard protocols for handling the patient in an emergency.
- Ferno recommends the presence of a supervisor during use of the stretcher in SAR environments.
- Lift only the weight that you can safely take. Resort to additional assistance in the case of heavy loads (patient and equipment). Refer to the section on Additional assistance.
- Always observe the instructions and local health protocols.
- Always assist the patient and never leave the patient alone during operations involving the stretcher.
- Always use the original straps to secure the patient to the stretcher.
- Remove water, ice, snow or other debris or obstacles from the stairs before using the device.

WARNING

Incorrect use of the device can result in damage and/or injury. Use the device as instructed in this manual.

Configuration

The Titan-T stretcher is available in several models. The instructions on configuration apply to all the models and include the "split" stretchers.

- 1. Make sure that the straps are mounted correctly and in a sufficient number
- 2. Bring the two ends together and attach the "bottom joint" and the various "coupling" points
- 3. Securely tighten the threaded screw system until the safety ball protrudes.

Use of the stretcher with the split (Split-Apart) option

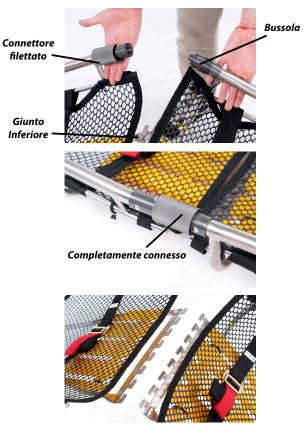
The Titan stretchers with Split-Apart option can be assembled quickly without the need to insert pins, align telescopic tubes, etc. Before assembly, make sure that there is no mud, snow or other on the joints that might prevent or hinder assembly.

- 1 Put the open parts of the stretcher opposite one another, possibly on the ground.
- 2 Lift both sides of the stretcher by about 30°. Slide the two sides towards each other, engaging the teeth of the bottom joint. (Fig.1)
- 3 Push down the two parts of the stretcher, now connected.
- 4 Make sure the upper joints are aligned.
- 5 Screw the bushings on the appropriate threaded connectors. Make sure the bushings are tight and that the threads are fully covered by the same bushings.

To disassemble the stretcher, repeat the same procedure in reverse order.

WARNING

It is very important to always check the connection of the parts before using the stretcher for practice and in real-life situations.



Assembly of the stretcher (Figure 1)

Use of the device in a vertical environment

Rescue operations in a vertical environment or that involve rope manoeuvres may require the use of different combinations of ropes, brake systems, winches, pulleys, harnesses, carabiners and other specialist devices. The professional and safe use of this equipment requires specific vocational training and proper instruction.

When using equipment of this type, check that its allowable load is at least equal to that of the stretcher.

During rescue operations in a vertical environment, the stretcher can be held horizontally, vertically or in other positions. Secure the patient on the stretcher so that the patient cannot slip in any direction or fall off the stretcher.

StratLoad® attachment points

The stretcher has several attachment points (4) for fixing hooks or ropes. This stretcher is also available with the optional patented StratLoad* connection system, which has four attachment points for fixing the harness for vertical lifting.

WARNING

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

WARNING

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 set of straps suited to the situation.



StratLoad suspension rings

MARNING

Use only litter bridles by Ferno Washington Italia

Use of the stretcher in a "safe" environment

The operators must lift and carry the stretcher, accepting any assistance to help them avoid obstacles or difficult terrain.

- Before lifting the stretcher, make sure that the patient is properly secured with the straps. Resort to additional straps and assistance if necessary.
- Ferno recommends that the two operators take opposite sides, with one in front of the other, when carrying the stretcher up and down stairs, and that a third trained operator assists the one at the head of the stretcher. Follow the local protocols for transport. Seek additional assistance if necessary (see the section on Additional assistance).
- 1. **Both operators:** must hold the top tube of the stretcher with the palms facing upwards.
- 2. **Supervisors**: stand behind the operators and, if necessary, guide them during transport.
- 3. **Operators**:work together to lift and transport the stretcher. The supervisor should place his hand on the back of the operator and provide verbal directions.
- 4. **Both operators:** After moving the stretcher, they should put it down on the ground making sure that it remains stable.

Attachment points

On certain terrain, it is advisable to use the attachment points to ensure safe transfer of the stretcher.

Additional assistance

The stretcher must be handled by a minimum of two qualified and trained operators. Ferno recommends that the operators and assistants take opposite sides, with one in front of the other, and that a third trained and qualified operator assists during transfer of the stretcher.

The trained and skilled operators must maintain control of the stretcher, and coordinate properly using visual and verbal contact

⚠ WARNING

Make sure that all the restraint and securing systems (straps) of the device are closed when the patient is seated. If they are open, close them before sitting down the patient.

Loading the stretcher

Loading of the stretcher requires a minimum of two operators. Assistants may be useful or necessary in many situations. Use an even number of assistants and position them in such a way as to keep the stretcher as horizontal as possible. The qualified operators should, however, always remain in control of the stretcher and provide instructions to the assistants.

Sliding the stretcher

It is possible to slide the stretcher on soft surfaces. Avoid rocks, logs, branches, debris, scrap materials, etc. that could tear the mesh or cause discomfort or injury to the patient.

Carrying the Titan-Ti basket stretcher on a trolley or on a stretcher with wheels

Use the straps or the automatic couplings of the systems to secure the Titan-Ti basket stretcher

WARNING

Casual assistants can cause damage and/or physical harm or injure themselves. Always maintain control of the device and monitor and coordinate the assistants.

Control of the stretcher

Make sure that the personnel checks the following:

- All the components are present
- The welds do not bear signs of cracks, fractures or other signs of breaking
- The tubular structure of the stretcher is not dented, cracked or bent
- The Durathene mesh is not ripped or torn and is securely attached to the structure
- The yellow back support is securely fixed to the structure
- The safety warning labels are perfectly visible and legible
- The fabric belt is in good condition, with no cuts or signs of excessive wear
- The buckles of the straps do not bear any obvious signs of damage and work properly

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 stretcher and the mesh with a non-abrasive cloth and disinfectant or mild detergent in warm water, and rinse thoroughly.
- 2. Do not put the device directly in the disinfectant.
- 3. During disinfection, check that there are no signs of wear and/or damage.
- 4. Pat dry with a cloth. Make sure that 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.

Routine and preventive maintenance	After each use	Whenever necessary	Every month
Disinfection	•	•	
Cleaning		•	•
Inspection	•	•	•
Lubrication)		•	·
Adjusting the tightness		•	·

Disinfection/Cleaning the straps

- 1 Remove the straps from the stretcher as instructed.
- 2 Fasten the straps to prevent damage to these or to the washing machine.
- 3 Place the fastened straps in a fabric bag (not supplied), and then in an industrial washing machine.
- 4 Wash at low temperature with detergent and use a gentle cycle. Do not use bleach or other aggressive products.
- 5 Remove the straps from the bag and leave them out to dry. Do not put in a tumble dryer.
- 6 Once dry, release the buckles and reattach the straps to the stretcher as instructed.

Important

If the stretcher is not to be used, store it indoors in a dry place out of direct sunlight.

Important

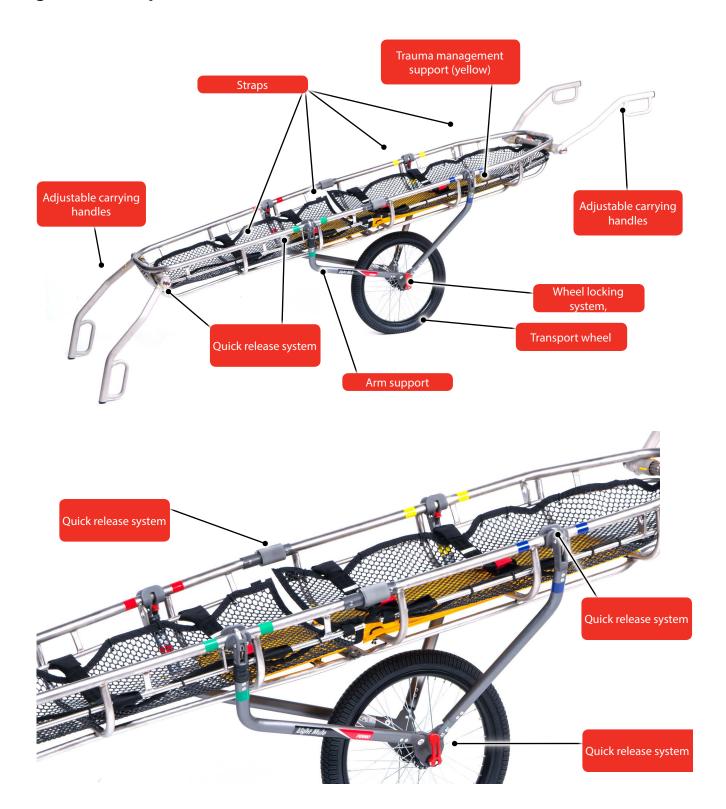
The use of products containing chlorine, phenols and iodine may harm the product. Do not use products containing these agents for cleaning/disinfection.

Important

Before disinfection/cleaning, make sure to remove the straps and seats.

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

Light Mule components - Handles





Light Mule (Ultra light one-wheel system)

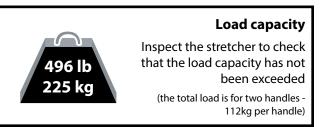


Handles for Titan (Light Mule)

Initial setup of the handles

Before using the Titan-T stretcher with the carrying handles:

- Apply the handle fixing system on the Titan-T stretcher simply using ordinary screws and threadlockers, which will remain fixed even without use of the handles.
- Assemble the handles after making sure the locking system is securely in place by quickly pressing the pin on one side and checking that it is fully locked.
- Inspect the stretcher (see the section on Inspection).
- Double check that all the straps are in place prior to transport





USE OF THE CARRYING HANDLES

Before commissioning the device

The personnel who will use the device must have read and understood the information in this manual.

Before any operation with the stretcher, ensure that:

- all the components and straps are present, and that the stretcher does not bear any signs of damage and wear and is fully operational. Refer to the section on Inspection.
- follow the instructions in the section on Configuring the device.

Instructions on use

- This manual does not provide any medical instructions.
- It is the responsibility of the users to follow proper procedures to ensure the safety of the patient and that of themselves.
- This manual explains the use of the stretcher in an ideal situation and is purely indicative.

- The device must be used by two or more operators who are trained and qualified.
- The operators need to work together and maintain control of the stretcher at all times.
- Follow the procedures according to standard protocols for handling the patient in an emergency.
- Ferno recommends the presence of a supervisor during use of the stretcher in SAR environments.
- Lift only the weight that you can safely take. Resort to additional assistance in the case of heavy loads (patient and equipment). Refer to the section on Additional assistance.
- Always observe the instructions and local health protocols.
- Always assist the patient and never leave the patient alone during operations involving the stretcher.
- Always use the original straps to secure the patient to the stretcher.
- Remove water, ice, snow or other debris or obstacles from the stairs before using the device.

WARNING

Incorrect use of the device can result in damage and/or injury. Use the device as instructed in this manual.

Configuration

handles

The Titan-T carrying handles were designed to improve the ergonomics of the rescue devices and to reduce the cervical lumbar load

- 1. Make sure they are installed properly
- 2. Bring the two ends together and attach the "bottom joint" and the various "coupling" points
- 3. Adjust the position of the handle as required
- 4. Firmly secure the quick release system at the side of each handle.



After mounting the Titan T stretcher with the handle adjustment system, place the stretcher on the ground and, with the assistance of an operator, insert one handle at a time checking that it is fixed.

The position of the handle is adjustable. Adjust the height according to the operator's needs and the operations to be performed or the situation.

HEIGHT ADJUSTMENT OF THE HANDLE

- 1. Press the button on the pin and pull it outwards without removing it completely.
- 2. Pull the handle and position it
- 3. When the handle is at the required height, re-engage the pin and release the button
- 4. Check that the pin and handle are locked by trying to lift or lower it. If the system is inserted correctly, the handle should not move.
- 5. Make sure it is securely locked in place.

⚠ WARNING

It is very important to always check the connection of the parts before using the stretcher for practice and in real-life situations.



Storage with the handles assembled





Pin for fixing the adjustable handles

Parking position for patient management

After mounting the handles: it is possible to set them in the support position, to convert the stretcher into a work and management platform.



Transport harnesses

After mounting the handles: it is possible to put on a set of dedicated straps for handling loads

There are different types of "harnesses" that serve the same purpose but have a different fastening system.



SS-Shoulder Support (transport harness)

Disinfection/Cleaning the straps

- 1 Remove the straps from the stretcher as instructed.
- 2 Fasten the straps to prevent damage to these or to the washing machine.
- 3 Place the fastened straps in a fabric bag (not supplied), and then in an industrial washing machine.
- 4 Wash at low temperature with detergent and use a gentle cycle. Do not use bleach or other bleaching agents.
- 5 Remove the straps from the bag and leave them out to dry. Do not put in a tumble dryer.



Different fixing systems

WARNING

Make sure that all the restraint and securing systems (straps) of the device are closed when the patient is seated. If they are open, close them before sitting down the patient.

Specifications		
Load capacity	496 lbs	225 kg
Weight*	11 lbs	5 kg
Materials		
Structure	Aluminium	

Initial setup of the Light Mule

Before using the Titan-T stretcher with the carrying handles:

- Apply the handle fixing system on the stretcher Titan-T, and this will remain fixed even without use of the handles.
- Assemble the handles making sure that the fixing system is engaged.
- Inspect the stretcher (see the section on Inspection).
- Double check that all the straps are in place prior to transport

Configuration

The Light Mule transport system was designed to make it easier and safer for operators to transport the patient in a SAR environment

- 1. Make sure that all the mechanisms are fitted correctly
- 2. Mount the supports on the upper tube, checking the quick release system
- 3. Fit the transport wheel, checking that the locking pin is fully in place
- 4. Adjust the position of the handle as required



Load capacity

Inspect the device to check that its load capacity has not been exceeded (see the section on *Inspection*).

WARNING

Incorrect use of the device can result in damage and/or injury. Use the device as instructed in this manual.

WARNING

Make sure all the operators are trained and physically able to handle loads.

USE OF THE LIGHT MULE SYSTEM

Before commissioning the device

The personnel who will use the device must have read and understood the information in this manual.

Before any operation with the stretcher, ensure that:

- all the components and straps are present, and that the stretcher does not bear any signs of damage and wear and is fully operational. Refer to the section on Inspection.
- follow the instructions in the section on Configuring the device.

Instructions on use

- This manual does not provide any medical instructions.
- It is the responsibility of the users to follow proper procedures to ensure the safety of the patient and that of themselves.
- This manual explains the use of the stretcher in an ideal situation and is purely indicative.
- The device must be used by two or more operators who are trained and qualified.

Installation of the Light Mule transport system

After mounting the Titan T stretcher with the handle adjustment system, place the stretcher on the ground. Secure the wheel supports on the upper tube of the stretcher and check that the quick release system has engaged correctly.

With the assistance of an operator, lift the stretcher to pass the carrying supports underneath.

A secondoperator positions the wheel and fixes it correctly, tightening the locking pin.

MOUNTING THE WHEEL SUPPORTS

- 1. Place the locking system on the upper tube of the stretcher, at the point of the crossbeam supports.
- 2. Press firmly and check that it engages, first in the direction of the feet and then in that of the head.
- 3. Check that both are engaged and can turn.
- 4. Repeat this procedure on both sides of the stretcher

DISMANTLING THE WHEEL SUPPORTS

- 1. Remove the wheel
- 2. Place the arm supports on the stretcher before disengaging the locking system.
- 3. Hold down the (red triangular) button under the locking system and remove it from the upper tube.

- The operators need to work together and maintain control of the stretcher at all times.
- Follow the procedures according to standard protocols for handling the patient in an emergency.
- Ferno recommends the presence of a supervisor during use of the stretcher in SAR environments.
- Lift only the weight that you can safely take. Resort to additional assistance in the case of heavy loads (patient and equipment). Refer to the section on Additional assistance.
- Always observe the instructions and local health protocols.
- Always assist the patient and never leave the patient alone during operations involving the stretcher.
- Always use the original straps to secure the patient to the stretcher.
- Remove water, ice, snow or other debris or obstacles from the stairs before using the device.

WARNING

Make sure all the operators are trained and physically able to handle loads.





Release button



Quick release system on the upper tube



- 1. Once the support arms have been mounted and checked, an operator can lift the stretcher with or without the aid of the carrying handles to facilitate assembly.
- 2. The supports are positioned under the stretcher
- 3. Insert the wheel making sure that the axle can turn and is positioned on the right side
- 4. Fix the whole in place with the pin, locking this in the correct manner



Lift the stretcher safely



Wheel supports mounted and ready to be passed under the stretcher.



Secure the wheel with the pin



Mount the wheel axle with the threaded insert, using both holes.



After inserting the wheel axle, screw it on to the end of the thread.





At the end of thread, fully tighten the locking lever and, if this does not go on completely, slightly loosen the wheel axle.

Inspection

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

The device must be inspected by the maintenance personnel on a regular basis. 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.

CHECKLIST FOR INSPECTION OF THE TROLLEY AND TRACKS

- Are the straps provided on the device?
- Are the carrying handles stable?
- Are all the locking pins present?

MARNING

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

CHECKLIST FOR INSPECTION OF THE DEVICES

- Are all the components present?
- Does the device show signs of wear?
- Are all the screws, bolts, pins and pins in place and securely mounted?
- Do all the moving parts work properly?
- Do all the locking devices work properly?
- Are the straps properly installed?
- Are the straps in good condition, without tears or frayed edges?
- Are the buckles of the straps undamaged and do they work properly?
- Do the installed accessories work properly without interfering with use of the stretcher?
- Do the handles work properly?

Lubrication of the stretcher

Disinfect and clean the device before applying the lubricant.

There are two identical areas of lubrication at the points of the stretcher.

Lubricate with a drop of SAE 30 oil, and then move the mechanism back and forth several times to work the oil into the guide.

Remove any excess lubricant with neutral detergent.

WARNING

Do not lubricate parts unnecessarily as this can cause dirt and particles to deposit on the lubricated parts and cause damage. Lubricate only the points indicated.



with care



USE OF THE EARS (EMERGENCY ANTI-ROTATION) SYSTEM

Before commissioning the device

The personnel who will use the device must have read and understood the information in this manual.

Before any operation with the stretcher, ensure that:

- all the components and straps are present, and that the stretcher does not bear any signs of damage and wear and is fully operational. Refer to the section on Inspection.
- follow the instructions in the section on Configuring the device.

Mounting the EARS system

The system can be fitted easily on the Titan T stretcher with a set of straps on the upper tube.

MOUNTING THE EARS SYSTEM

- 1. Place the system on the upper tube of the stretcher, at the point of the crossbeam supports.
- 2. Tighten the straps to secure the system on the structure. It must be mounted at the distal end (foot) of the stretcher on the side that best suits the operator (who may be left or right-handed)
- 3. Check that all the straps are tightened properly

Instructions on useThis manual does not pro

- This manual does not provide any medical instructions.
- It is the responsibility of the users to follow proper procedures to ensure the safety of the patient and that of themselves.
- The device must be used by trained and qualified operators.
- Ferno recommends the presence of a supervisor during the use of the garrison in the SAR environments.
- Remove water, ice, snow or other debris or obstacles from the stairs before using the device.



EARS



WARNING

It is very important to always check the connection of the parts before using the stretcher for practice and in real-life situations.



EARS anti-rotation system engaged

Disinfection/Cleaning

- 1 Remove the system from the stretcher
- 2 Fasten the straps to prevent damage to these or to the washing machine.
- 3 Place the fastened straps in a fabric bag (not supplied), and then in an industrial washing machine.
- 4 Wash at low temperature with detergent and use a gentle cycle. Do not use bleach or other bleaching agents.
- 5 Remove the system from the bag and leave it out to dry. Do not put in a tumble dryer.



Stable mounting on the Toboggan stretcher

WARNING

Rescue procedures involving the use of ropes, harnesses, bridles and other protective equipment require special skills and can be potentially dangerous.

Rescue personnel should not carry out these procedures without the relevant training and instruction.

TECHNICAL SUPPORT

Technical Support Service.

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

Telephone (toll-free)	800 501 711
Telephone	(+39) 0516860028
Fax	(+39) 0516861508
E-mail	info@ferno.it
Website	www.ferno.it

For information on use of the Ferno device and to schedule training courses on correct use of the device, contact Ferno Washington Italia's Customer Service.

WARNING

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

WARNING

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

Warranty Conditions

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

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

During the period of validity of the warranty, Ferno will repair and/or replace any parts found to have manufacturing defects, excluding the costs of manual labour or of any 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.), or parts potentially exposed to oxidation or corrosion (contacts in copper or metal alloys, mechanical equipment).

The surface finishes (gelcoat/resin, paint, powder paint, decals, ribbons, writing, etc.) are guaranteed for 90 days.

Repairs are performed by trained technical staff at the site of Washington Ferno Italia s.r.l. in Via Zallone 26- 40066 Pieve di Cento (BO) or at the Customer's premises when arranged with Ferno Washington Italia's Customer Service.

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

For information on the cost of technical support, please contact the relevant office of 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 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,
- Operating errors,
- 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 and returning the product.

WARRANTY

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. In no case can Ferno Washington Italia s.r.l. be held responsible for more than the sales 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.

In the case of infringement of the limited warranty, any legal actions must be filed for 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:

- In the event that the labels or plates bearing the manufacturer's logo and the serial or registration number are rendered illegible or removed;
- In the event that the product has undergone modifications, repairs or treatment not approved by Ferno Washington Italia and by personnel not authorised by Ferno Washington Italy;
- In the event that the product is used not in compliance with the instructions or for purposes other than those for which it was designed.
- As indicated in the "Warranty Conditions".

Ferno Washington Italia s.r.l. cannot, in any event, be held liable for direct or indirect damage due to use not in compliance with the instructions in the user manual and the intended use 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 in 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 seller 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 the 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 commercial reasons or for reasons not relating to lack of conformity of the product will be accepted only after verification of their condition by the qualified personnel of Ferno Washington Italia s.r.l..

	TRAINING RECORD		
Date	Name of Instructor	Type of Training	
	1	<u> </u>	

	MAINTENANCE RECO	RD
Date	Type of Maintenance	Maintenance Technician

User and maintenance manual of the product, required to operate safely, maintain the efficiency and reliability of the product, and ensure the validity of the warranty.

Rel.170915 English

Ferno Washington Italia s.r.l.

Via Benedetto Zallone, 26 40066 - Pieve di Cento (BO) - ITALY

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