



BlackTail Descender 25-0868-001

Rel.29102019Eng



Read this manual
carefully and keep it
for future reference

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 s.r.l.:

Telephone (toll-free in Italy)	800.501.711
Fax	+39 0516861508
E-mail	assistenza@ferno.it

Ferno Customer Service

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

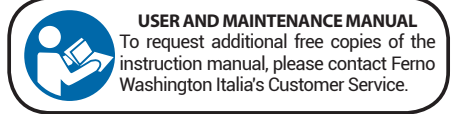
MANUFACTURER

Ferno s.r.l., Via Benedetto Zallone 26
40066 - Pieve di Cento (BO) - ITALY

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Phone	+39 0516860028
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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 s.r.l.Customer Service.



Intellectual property declaration

The information in this manual is the property of Ferno 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 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 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**.



WARNING

It is essential for the safety of the user that if the product is re-sold outside the original country of destination, the reseller shall provide instructions for use, for maintenance, for periodic examination and for repair in the language of the country in which the product is to be used.



WARNING

The connection of the descender device to the anchor point should be arranged so that the descent is not impeded.

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1 - 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.
- In order to avoid infections and/or bacterial contaminations, follow what indicated in sections **Cleaning**.

1.1 Warning

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

 WARNING
<p>The user must follow the manufacturer's instructions for each component of the system.</p> <p>These instructions must be provided to the user of this equipment. Manufacturer's instructions must be followed and kept for proper use and maintenance of this equipment.</p> <p>Alterations or misuse of this product or failure to follow instructions may result in serious injury or death. Permanently retain these instructions and keep a copy with this equipment.</p>

1.2 Important

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

Important

1.3 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.

 WARNING
<p>Before using this equipment, record the product identification information in the Training Record and Maintenance record at the end of this manual.</p>

1.4 Glossary of symbols

The symbols used in this manual and/or the device's labels are defined below.



Read the user manual carefully



Do not wash with high pressure water



Load capacity



Risk of injury

 WARNING
<p>Improper use of the device may cause damage and/or injury. Use the device as described in this manual.</p>

2- OPERATOR TRAINING AND SKILLS

2.1 Skills

Operators who use the device must:

- Have specific experience in patient handling procedures.
- Possess the skills required to assist the patient.

2.2 Training

- Operators are required to:
- Carefully read and understand all information in this manual.
- Attend a suitable training course on the use of the device.
- Practice with the device before using it in real situations with patients.
- Log the training sessions.

Training must be conducted without exposing the trainee to a fall hazard or must be used with backup fall protection. Training should be repeated on a periodic basis.



WARNING

Untrained users may injure themselves, cause damage and/or physical harm. Allow only trained and qualified staff to use the BlackTail device.

Important

Operators must be able to ensure the safety of both themselves and their patients while using the device. They must be able to determine the number of assistants required to handle the patient according to the laws in force.

3- THE DEVICE

3.1 Description

The BlackTail device is designed to connect to a users harness or anchor point to regulate friction for a controlled descent.

This equipment is intended to be used by persons trained in its correct application and use. It is the responsibility of the user to ensure they are familiar with these instructions and are trained in the correct care and use of this equipment. Users must also be aware of the operating characteristics, application limits, and the consequences of improper use. Consideration should be given to the user's age, fitness and physical or mental limitations that could have a detrimental effect on the safe use of this equipment.



To request additional free copies of the instruction manual, please contact Ferno Washington Italia's Customer Service (page 2).



WARNING

When using this equipment and connecting subsystem(s), the employer must have a rescue plan and the means at hand to implement and communicate that plan to users, authorised persons, and rescuers

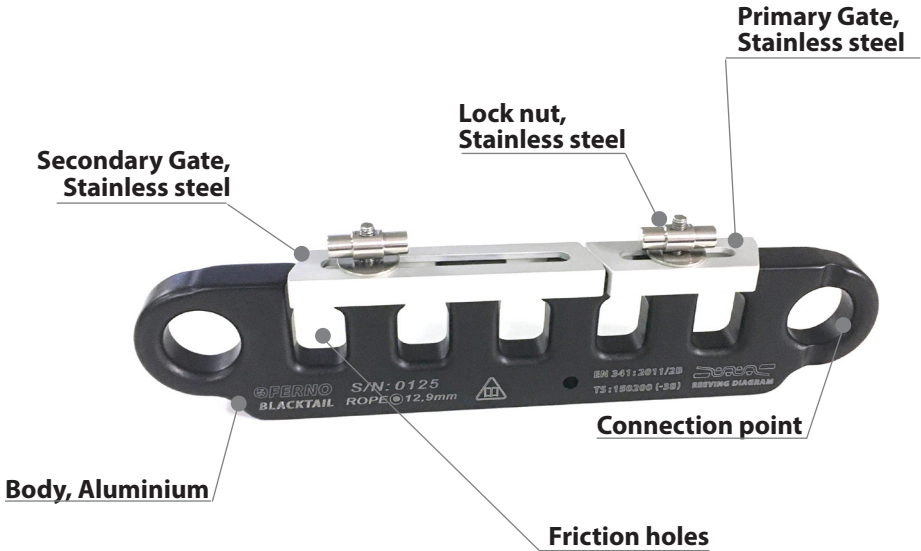
3.2 CE Conformity

The EC conformity of BlackTail was established as per Regulation EN 341 / 2B.

The conformity assessment procedure described in the Regulation EN 341 / 2B was carried out by Dolomiticert Scarl, Z.I. Villanova 7/a, 32013 Longarone (BL) – Italy (Notified body no. 2008)

For further information: www.ferno.it

4- COMPONENTS (BLACKTAIL)



4.1 General Specifications

Ferno reserves the right to change the specifications without notice. For more details, please contact Ferno's Customer Service (page 2). The ability of the BlackTail to slow a descent and for the user to maintain control is dependent on the number of holes reeved, the strength of the user, type, diameter and condition of rope being used. It is responsibility of the user to ensure their have reeved enough holes to maintain a controlled descent.

Specifications		
Lenght	11,8 in	300 mm
Width	1 in	25,5 mm
Height	2,5 in	63,5 mm
Weight	1,8 lbs	0,8 kg

Working Load limit		
Load capacity	441 lbs	200 kg
5 holes reeved	441 kg	200 kg
max lenght of the rope	150 m	
minimum working temperature	-38 °C	



WARNING

In standard and emergency use, operators need to be in a good medical conditions otherwise that could affect the safety of the equipment users.

! WARNING

Never exceed the load capacity of the device as specified in this manual.

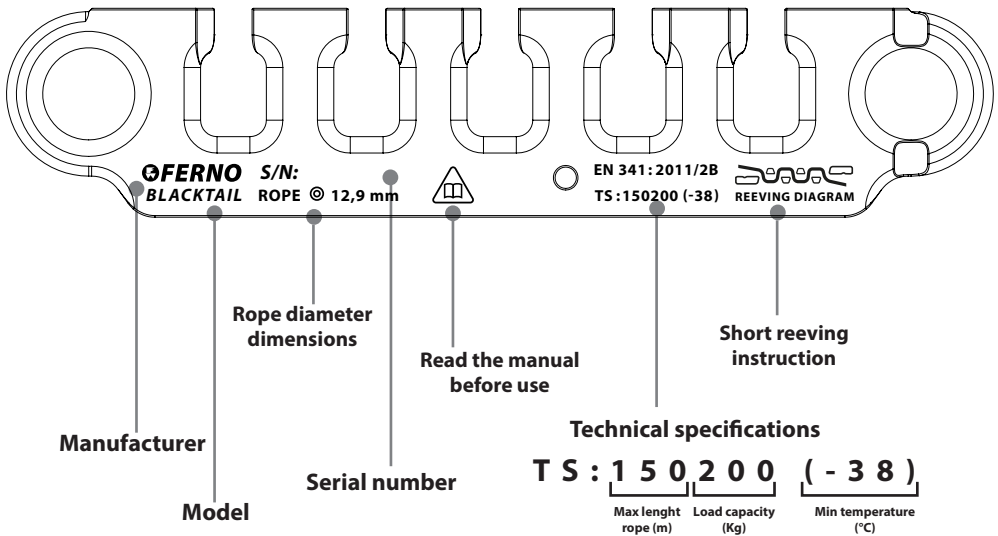
Important

Use of incompatible rope (construction and / or size) will increase the risk of serious injury or death when operating this equipment. The rope lifeline must be protected from contact with sharp or abrasive edges and surface.

! WARNING

Swing falls occur when the anchorage point is not directly above the point where the fall occurs. The force of striking an object can cause serious injury or death.

4.2 Markings



! WARNING

Equipment shall not be used outside its limitations, or for any purpose other than that for which it is intended.

! WARNING

Any dangers that may arise by the use of combinations of items of equipment in which the safe function of any one item is affected by or interferes with the safe function of another.

5 - USING THE BLACK TAIL DESCENDER

5.1 Initial setup

Staff using the BlackTail Descender must have carefully read and understood the information contained in this manual.

Before any operation with the device, ensure that all components are present and that the BlackTail shows no sign of damage or wear, and is fully operational. Refer to chapter 6

Maintenance, page 12.

Plan your work or rescue system before starting your work. Account for all factors that may affect your safety before, during, and after a fall. Use the device in areas with environmental hazard may require additional precautions to prevent injury to the user or damage to the equipment. Hazards may include, but are not limited to; heat chemicals, corrosive environments, high voltage power lines, gases, moving machinery, and sharp edges.



Read the user manual carefully



WARNING

Failure to create a proper connection to the device may cause the equipment to function in an improper manner, resulting in serious injury or death.

5.2 Connection the BlackTail to the harness or anchor point

The harness connection point must be rated for the weight of the user (combined weight of person, clothing, tools, etc). Follow the instructions provided by your harness manufacturer for donning, connection and fall clearance safety procedures and requirements. Connect the carabiner to the connection point at either end of the BlackTail, like in the figure.

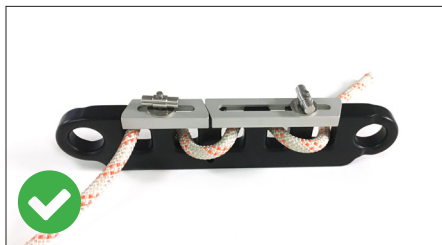
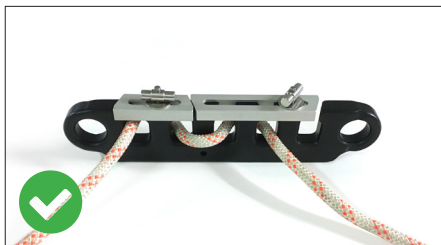


5.3 Inserting the lifeline rope into the BlackTail

Release both gates by loosening both locking nuts.

By siding the gates back and forth, reeve the desired number of friction holes.

It's necessary that the diameter of the lifeline rope must be between 8 mm and 12,5 mm.



In case of heavy load, lock completely the system.

Under no circumstances shall only 1 hole be reeved.

Return the gates to the locked position, covering all friction holes, and fasten by tightening the lock nuts.



Examples of wrong locked position of the gates.

Important

Connections made to any point or with any other equipment other than that specified in this instruction may impede the function of the equipment and may result in serious injury or death.

Important

The descender device may become hot during of after a descent and may damage the line.



WARNING

The descender device is for rescue purposes only.

5.4 Checking the BlackTail

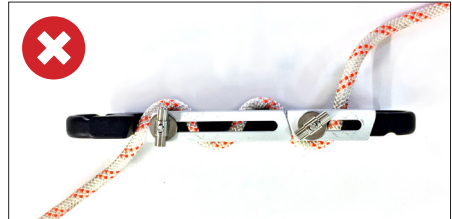
Increase or decrease the amount of friction provided by the device by manipulating the non-loaded or tail end of the rope.

5.5 Soft lock

It may be necessary whilst operating the BlackTail to remove both hands from the device. In this case it is a requirement that a soft lock configuration is applied to the device.

With the non-loaded or tail end of the rope create a loop.

Pass the loop over the top of the BlackTail body and engage the loop on the soft lock detail.



WARNING

The BlackTail descender requires intervention from the user to control and stop descent. It is necessary at all time to hold the non-loaded or tail end of the rope exiting the device to maintain control. Failure to do so may result serious injury or death.



5.6 Compatibility of connectors

Connectors are considered to be compatible with connecting elements when they have been designed to work together in such a way that their size and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 22.2 kN (5000 lbs). Connectors must be compatible with the anchorage or other system components. Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage.

As we specified above, BlackTail is compatible (for example) with the following devices.

Lifting devices according to EN1496, Harness according to EN1497, semistatic ropes EN1891 type A and connectors EN362.

The connectors on top, must have minimum load capacity of 12 kN.

In order to connect the rope on top of the system, execute a double eight knot as you can see below.



WARNING

It is vital always to descend in control, because loss of control may be difficult to recover

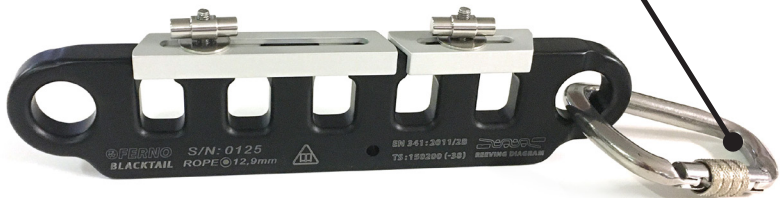
Important

Large throat snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twist or rotates.



MAKING CONNECTION

Use only connectors that are suitable to each application. Ensure all connections are compatible in size, shape and hook strength. Do not use equipment that is not compatible. Ensure all connectors are compatible in size, shape and hook strength.



6 - MAINTENANCE

6.1 Routine and preventive maintenance

The device requires regular maintenance.

BlackTail must be visually and manually inspected by the user before and after each use. It must be inspected by a competent person to verify that the equipment is operating correctly. If the equipment fails an inspection, has seen a force greater than its rated load, and/or has been used in a rescue it must be immediately taken out of service and destroyed to prevent further use.

It is recommended to perform preventive maintenance on the device once a year. The table at the right shows the minimum maintenance schedule. When the device undergoes particularly heavy use, maintenance should preferably be carried out on a more frequent basis by Ferno's technical personnel. Repairs must be performed by Ferno's qualified personnel using original spare parts.

If there are signs of wear and damage, discontinue use of the device and immediately contact Ferno's Technical Support Service.

Minimum maintenance schedule	After each use	Whenever necessary	Every month
Disinfection	•	•	
Cleaning		•	•
Inspection	•	•	•



WARNING

If the device has been subjected to impact forces it must be removed from service and destroyed to prevent further use.

Important

Extreme working conditions (harsh environments, prolonged use, etc.) may require increasing the frequency of inspections; approximately after 10 years, replace the device with a new one.

CHECK-LIST FOR THE ROUTINE INSPECTION OF THE DEVICE

- Inspect the body of the device is free of fractures, cracks, corrosion or excessive wear. Inspect the body is not of distorted.
- Inspect that the gates are free of fractures, cracks, corrosion or excessive wear. Inspect the gate are not bent of distorted.
- Inspect the lock nuts for corrosion and wear. Inspect the lock nuts can not be removed from the bolts.
- Inspect the peening of the bolts is not sharp.
- Inspect marking are present and legible.
- Inspect harness as per the manufacturer's instruction.

The functional life of the BlackTail Descender is determined by work conditions and maintenance. As long as the product passes the inspection criteria described, it may remain in service.

6.2 Disinfection

1. After each use, clean the device with a non-abrasive cloth and disinfectant, or mild detergent, in warm water, then rinse thoroughly.
2. Do not put the device directly in the disinfectant.
3. During disinfection, ensure there are no signs of wear and/or damage.
4. Dry with a cloth. Ensure all the components of the device are completely dry before reusing them.

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

Important

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

6.3 Cleaning

The BlackTail and the rope lifeline should be cleaned separately in clean lukewarm water and allowed to dry away from direct sunlight. Cleaning and drying should be carried out immediately after every use in a marine environment.

Important

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

Clean and store all other system components according to the manufacturer's instructions.



WARNING

Regular periodic examinations are mandatory for the efficiency and durability of the equipment and especially for patient safety.

6.4 Storage

Store in a clean, dry environment. Avoid temperature extremes, corrosive fumes or chemical substances. If the device or rope lifeline come into contact with chemical data sheets and/or the manufacturer.

When the BlackTail or rope lifeline are used in extremely cold weather, be aware if there is a possibility of water/ice coming into contact with the moving parts of the device. Ensure that BlackTail components are free of ice.

Rope lifelines should not be stored in direct sunlight or where they may be affected by any heat source. Storage area humidity should be 60% and temperature should be approximately 24°C (75°F). Ropes should not come into contact with any chemicals and should be removed from service if they come into contact with chemicals outside the PH range of 5.5 - 8.5.

During movement of Black tail, use a protection layer in order to avoid scratches and bumps that can cause damage it and create risks during the use.

7 - TECHNICAL SUPPORT

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 s.r.l.:

Telephone (toll-free in Italy)	800.501.711
Fax	+39 0516861508
E-mail	assistenza@ferno.it



WARNING

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



WARNING

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

8 - 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 s.r.l. shipping document.

Ferno s.r.l. 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.

Collection and maintenance of the device are included in warranty (to be borne by Ferno), while the right to call and the sending of the technician are EXCLUDED by the maintenance at the customer's site.

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 impacts, sliding or rolling friction, parts potentially exposed to oxidation or corrosion (copper or metal alloy contacts, electrical, electronic and 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 Ferno s.r.l. site in

Via Zallone 26 - 40066 Pieve di Cento (BO), or at the Customer's premises if suitable arrangements with Ferno s.r.l. Customer Service have been made.

Technical support at the Customer's premises must be arranged beforehand with the Technical Support Service.

The intervention provides that the right to call and the sending of the technician will be charged.

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 s.r.l.

Ferno s.r.l. is not liable for damages sustained during shipment or due to misuse of the product. 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-authorized persons,
- damage during transport due to improper

packaging of items returned by the user,

- inadequate maintenance,
- failure to use original spare parts.
- failure to observe the operating instructions,
- misuse,
- inappropriate use or handling,
- repairs by non-authorized 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 s.r.l. will not cover the transport costs for sending or returning the product.

Limitation of liability

If a product is found to be defective, Ferno s.r.l. will repair or replace it.

The following cases are not covered by warranty:

- Labels or plates bearing the manufacturer's logo, the serial or registration number, which have been tampered with;
- The product that has undergone modifications, repairs or treatment by personnel not authorized by Ferno s.r.l.;
- The product not used in compliance with the instructions, or used for purposes other than those for which it was designed.

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 s.r.l., contact the Customer Service to request authorisation.

Claims

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

Return authorisation

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

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

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.

Rel.29102019Eng

Ferno s.r.l.

Via Benedetto Zallone 26

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