

UNI-ClipDoc





FERNO/MAN/0721/220-R2/UK Stock Code 2003-0150





Ferno UK Customer Services

Customer Service and product support are important aspects of each Ferno product. Please have the product serial number available when calling, and include it in all written communications.

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Disclaimer

This manual contains general instructions for the use, operation and care of this product. The instructions are not all-inclusive. Safe and proper use of this product is solely at the discretion of the user. Safety information is included as a service to the user. All other safety measures taken by the user should be within and under consideration of applicable regulations and local protocol. Training on the proper use of this product must be provided before using this product in an actual situation.

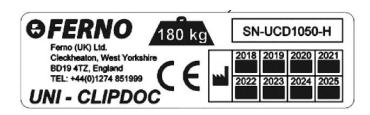
Retain this manual for future reference. Include it with the product in the event of transfer to new users. Additional free copies are available upon request from Customer Relations.

Proprietary Notice

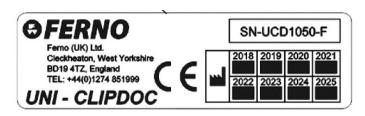
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Limited Warranty Statement

The products sold by Ferno are covered by a limited warranty, which is printed on all Ferno invoices. The complete terms and conditions of the limited warranty, and the limitations of liability and disclaimers, are also available upon request by calling Ferno on +44 (0) 1274 851999 or +44 (0) 1274 854511



SERIAL Number plate 1 _____



SERIAL Number plate 2 _____

UNI-ClipDoc serial number(s) are marked on the manufacturer's plates, which also includes the SWL in raised and lowered position, date of manufacture and CE mark. The manufacturer's plate on the side sections of each part.



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USER MANUALS

To request additional user manuals, contact Ferno Service Department, your Ferno distributor, or visit www.ferno.co.uk.

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1 - SAFETY INFORMATION

1.1 - Warnings

Warning notices indicate a potentially hazardous situation which, if not avoided, could result in injury or death.

WARNING

Improper use of the UNI-ClipDoc can cause injury. Use the UNI-ClipDoc only for the purpose described in this manual.

Untrained operators can cause injury or be injured. Permit only trained personnel to operate the UNI-ClipDoc.

Improper operation can cause injury. Operate the UNI-ClipDoc only as described in this manual.

An unattended patient can be injured. Stay with the patient at all times.

Helpers can cause injury or be injured. Maintain control of the UNI-ClipDoc, operate the controls and direct all helpers.

Improper maintenance can cause injury. Maintain the UNI-ClipDoc only as described in this manual.

Improper parts and service can cause injury. Use only Ferno parts and Ferno-approved service on the UNI-ClipDoc.

Modifying the UNI-ClipDoc can cause injury and damage. Use the UNI-ClipDoc only as designed by Ferno.

1.2 - Important Notices

Important notices emphasise important usage or maintenance information. Failure to follow Important notices could result in damage to the product or property damage.

Blood-borne Disease Notice

To reduce the risk of exposure to blood borne diseases such as HIV-1 and hepatitis when using this product, follow the disinfecting and cleaning instructions in this manual.

1.3 - Cautions

Bleach, phenols and iodine can cause damage. Do not apply products containing these chemicals to the product.

Trapping hazards are unavoidable in the design of UNI-ClipDoc due to its folding action. Operate with care.

WARNING

Do NOT exceed the safe working loads of any Trolley used with the UNI-ClipDoc.

1.4 - Trolley and Lock Compatibility in conjunction with UNI-ClipDoc

UNI-ClipDoc has been dynamically crash-tested and certified to BS EN 1789 when it is attached to a trolley using the supplied cross bars, using one of the 2 types supplied, using the ratchet-strap cross bars to attach to a trolley with tubular top-rail or using the clamp cross bars to attach to the Ferno siderail interface on trolleys such as PowerX and iNX.

Ferno's range of Ambulance trolleys have been tested and certified in conjunction with Ferno's range of ambulance floor locks.

Combining different manufacturers' products into a "mixed-component" trolley/fastener system can increase the user's risk of injury and damage if not checked first for compatibility.

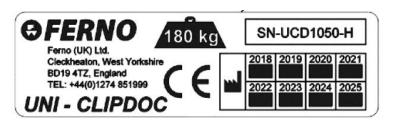
However, Ferno trolleys are designed to be compatible with either the Ferno range of Two-part locking devices or competitors equivalent locking devices, giving you full compatibility and interchangeability across your fleet.

1 - SAFETY INFORMATION

1.5 - Safety and Instruction Labels

Safety and instruction labels place important information from the user manual on the trolley.

Read and follow label instructions. Replace worn or damaged labels immediately. New labels are available from your distributor.



Manufacturer's plate



1.6 - Symbol Glossary

The symbols defined below are used on the trolley and/or in this user manual. Ferno uses symbols recognised by the International Standards Organisation (ISO).



Pinch Point: Keep Hands Clear





HEAD-END FOOT-END

2 - OPERATOR SKILLS AND TRAINING

2.1 - Skills

Operators using UNI-ClipDoc need:

- The strength, balance, coordination and common sense to safely operate the equipment
- The ability to select the proper equipment and procedures for the circumstances
- The ability to read, understand and follow the procedures as described in this manual
- To have full training on the proper operation of the equipment
- To have a working knowledge of manual handling procedures

2.2 - Training

Operator trainees need to:

- Have followed a training plan
- Read and understand the instructions in this manual
- Practice using the fully-equipped equipment with weight and under simulated conditions
- Trainees should be tested to verify their understanding of UNI-ClipDoc operation
- Keep training records. Annual refresher training for all operators is recommended

WARNING

Untrained operators can cause injury or be injured.
Permit only trained personnel to operate the
UNI-ClipDoc

⚠ WARNING

Improper use of the UNI-ClipDoc can cause injury.
Use the UNI-ClipDoc only for the purpose described in this manual.

3 - ABOUT THE UNI-CLIPDOC

3.1 - Product Overview

UNI-ClipDoc is an interface designed to allow patient-carrying equipment such as incubators and patient platforms like the LifePort AeroSled TS to be transferred from a helicopter or aircraft onto an ambulance trolley, providing a secure system to hold the patient on the trolley, to then directly transfer into an Ambulance for the remainder of the journey, thereby providing a safe and seamless transport of patients by air and by road.

UNI-ClipDoc consists of two plates which attach together to form a platform which can be attached to any of Ferno's range of ambulance trolleys. The platform emulates the locking mechanism on the floor of the air ambulance, thereby allowing any patient platform that is used in an aircraft to be also locked onto the top of an ambulance trolley.

The product is supplied with 2 different sets of "cross-member" fixing brackets, the first set incorporating a ratchet mechanism, allowing the UNI-ClipDoc to be attached to trolleys that have a top-frame to attach to, such as Ferno's Pegasus, Megasus and Harrier and Stryker's PowerPro TL.

The second fixing bracket set incorporates a clamping mechanism which allows the UNI-ClipDoc to be clamped to the integral siderail interface on both PowerX and iNX trolleys, providing a safe and quick method of attachment and detachment.

Assembly and attachment of the UNI-ClipDoc using the supplied two sets of brackets is explained in detail later in this manual.

Procedure for attachment of the incubator or patient platform to the UNI-ClipDoc follows the similar method of attaching to the aircraft floor. Details of the platform locking mechanism are explained in more detail.

All components are supplied in storage bags with carry handles, allowing for easy storage, moving and access of the product as and when required.

3.2 - Auxiliary Bridging plate (Optional)

Also available as an option for UNI-ClipDoc is a bridging plate, to bridge the gap between aircraft floor and trolley where the trolley cannot be brought directly up to the aircraft, facilitating transfer directly from aircraft floor to UNI-ClipDoc without the need to lift the patient platform. The bridging pate is available in different lengths according to the gap that needs to be bridged.

Instructions on using the optional bridging plate are included in a separate instruction sheet supplied with the bridging plate itself as this may differ according to requirements.







4.0 - GENERAL PRODUCT INFORMATION

4.1 Product Specification

Overall length: 1955 mm

Overall width (Max. over clamp bars): 585 mm

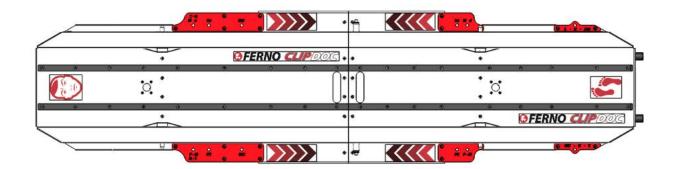
Overall depth (Max. over clamp bars): 205 mm

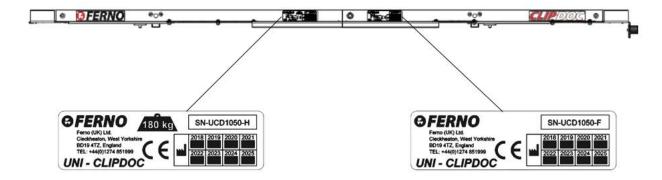
Overall weight (full kit including carry bags): 32.3 kg (not including optional bridging plate)

Load capacity Refer to SWL of trolley

4.2 Serial number location

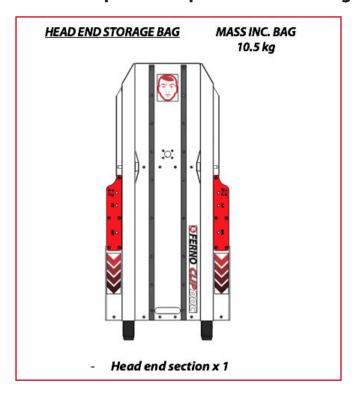
Serial number of the product is shown on the manufacturer's label, which is present on both sections of the UNI-ClipDoc, as per the below diagram.

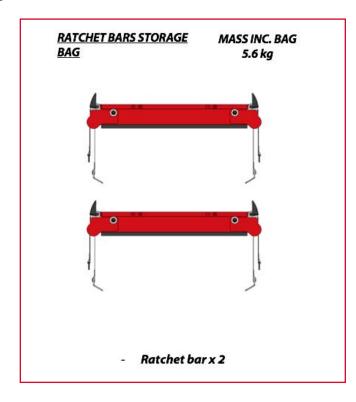


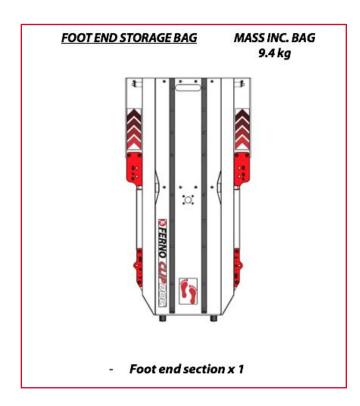


4.0 - GENERAL PRODUCT INFORMATION

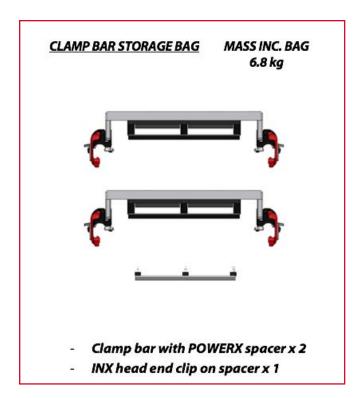
4.3 UNI-ClipDoc Components and Storage







It is important that the various Uni Clip Doc components are all stored according to the instructions above to avoid parts going missing or getting mixed up with other UNI-ClipDoc units.



Each UNI-ClipDoc half-section has its own storage bag. The serial number of each section is also displayed on the outside of the bag. The two types of fixing bars (clamp and ratcheting) are stored in separate bags with the name of the fixing-bars displayed on the side.

5.0 - OPERATION OF UNI-CLIPDOC

5.1 Daily pre-checks

- Prior to using ensure to check the overall condition of the unit for any signs of damage / missing parts
- Check for correct operation of the emergency release pins
- Check for correct operation of the clamp fixing-bars and look for any signs of damage / wear
- Check for correct operation of the ratcheting fixing bars and look for any signs of damage / wear
- Check the condition of the straps. Replace if any damage is found
- Check for loose / missing hardware. Tighten/replace where necessary

5.2 Assembly of UNI-ClipDoc

UNI-ClipDoc can be split into two sections to aid storage and transport when not in use. Assembly / dis-assembly of the UNI-ClipDoc requires two operators and does not require the use of any tools. The UNI-ClipDoc should be assembled on a smooth, level surface and debris gloves should be worn to avoid any possible operator injury.

- Remove the two halves of the UNI-ClipDoc from their storage bags and check all items are present and in good condition before proceeding. Each section is marked to denote head-end and foot-end.
- Stand the foot-end section of the unit upright on the rubber feet
- Whilst the first operator holds the foot-end section upright, the second operator can then lift the head-end section up and insert the black spigots into the sockets on the footend section.
- Keeping fingers clear, push down on the head-end section to ensure the pegs are fully inserted and no gap exists between the two sections.
- Insert the spring loaded locking pins (one on each side)





TO PREPARE THE AMBULANCE TROLLEY FOR INSTALLATION OF THE UNI-CLIP DOC:

- APPLY THE BRAKES TO PREVENT THE TROLLEY FROM MOVING DURING INSTALLATION
- REMOVE THE PATIENT HARNESS AND LEG RESTRAINTS
- REMOVE THE MATTRESS
- FOLD THE COTSIDES/ SURFACE EXTENDERS INTO THE VERTICAL DOWN POSITION
- LOWER THE BACK REST AND LEG RAISE PANELS INTO THE FULLY FLAT POSITIONS
- REMOVE ANY OTHER ACCESSORIES WHICH MAY INTERFERE WITH CORRECT OPERATION OF THE UNI-CLIP DOC

5.3 Installing the fixing-bars

First determine the type of fixing-bar required depending on the model of trolley to be used for transport. Using the installation drawing and the position labels on the UNI-ClipDoc itself, determine the correct positions where the fixing -bars should be attached to the UNI-ClipDoc, which is dependant on the trolley type being used.

The abbreviated trolley names etched onto the UNI-ClipDoc are as follows:

P = FERNO PEGASUS

M = FERNO MEGASUS

H = FERNO HARRIER / HARRIER LT

PX = FERNO POWERX

INX = FERNO INX

S = STRYKER POWER PRO

Both variants of fixing bar attach to the UNI-ClipDoc in the same manner, using two thumbscrews per fixing-bar

Tighten the thumbscrews by hand only. Do not use tools to tighten the thumbscrews

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5.4 Installation using clamp fixing-bars

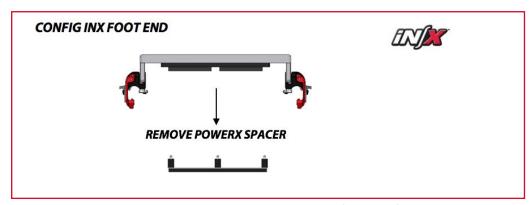
The clamp fixing-bars are used when attaching the UNI-ClipDoc to Ferno PowerX or iNX trolleys. The clamp fixing-bars have three different configurations. The correct configurations required for installation on the various trolleys are shown below.



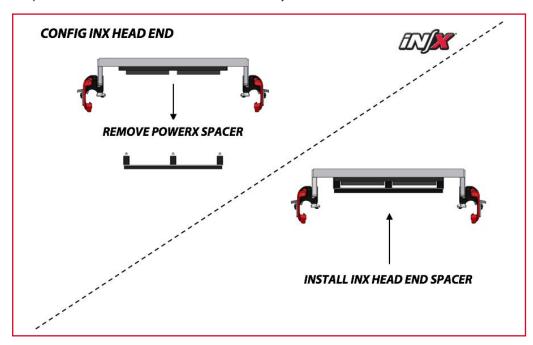
When installing on the PowerX trolley, the clip-on spacer marked "PowerX" should be installed on both the head-end and foot-end fixing-bars.

To install the clip-on spacers, align the three pegs with the sockets and push down into place.

To remove the clip-on spacers, simply pull up to release the three pegs from the sockets.



When installing on an INX trolley, remove all clip-on spacers from one fixing-bar and install at the foot-end. For the head-end fixing bar, remove the PowerX spacer and install the clip-on spacer marked INX head-end and position this bar at the head-end of the trolley.



5.4 Installation using clamp fixing-bars (cont....

Once the cross bars are in the correct configuration, they can be attached to the Uni-ClipDoc in the appropriate positions for the trolley being used (see section 5.3).

To unlock the clamps, lift the sliding lock plates up as pictured below. Offer the Uni-Clip doc up to the trolley and position centrally across the length and width.

Push down on the Uni-ClipDoc to locate the clamps on the side rail of the trolley.

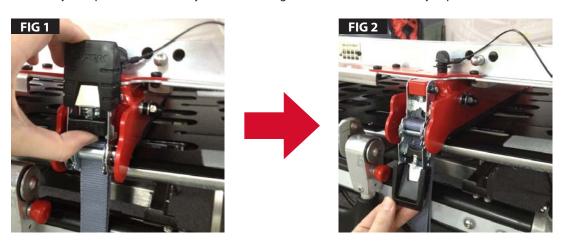
Close all four clamps, push down on the sliding lock plates until they click into the locked position.

The Uni-ClipDoc is now ready for use.

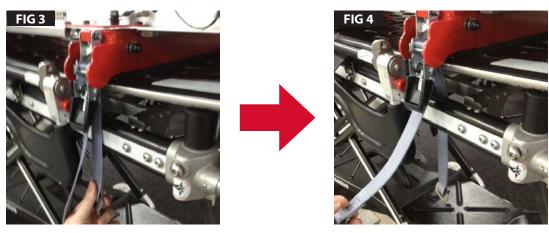


5.5 Installation using the ratcheting fixing-bars

With the ratcheting fixing-bars installed in the appropriate positions, offer the UNI-ClipDoc up to the trolley and position it centrally across the length and width of the trolley top.



Unlock the ratchet mechanism by lifting the lever marked "Release" and rotate the ratchet lever down fully.



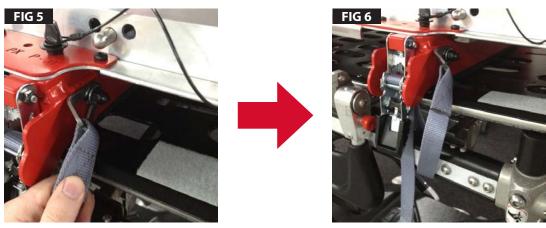
Pull on the tang- end of the strap to release tension from the ratchet and provide enough slack to allow feeding of the strap around the trolley siderail.

Feed the end of the strap with the tang attached around the back of the trolley side rail, underneath and then back up the front of the siderail.

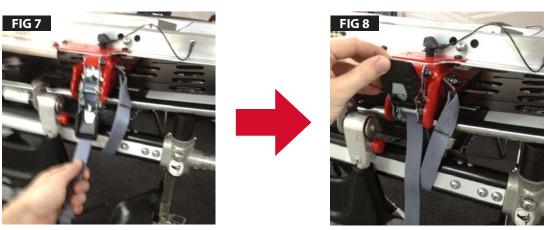
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5.5 Installation using the ratcheting fixing-bars (cont...)

NOTE: THE STRAP MUST BE FED AROUND THE MAIN SIDE RAIL ONLY. DO NOT WRAP THE STRAP AROUND ANY OTHER PART OF THE TROLLEY



Hook the tang onto one of the two fixing points on the UNI-ClipDoc fixing-bar.



Pull on the loose end of the strap to take up the slack.

NOTE: TO PREVENT MALFUNCTION OF THE RATCHET MECHANISM ENSURE THE SLACK IS PULLED OUT OF THE STRAP AS SHOWN IN FIG 7 BEFORE RATCHETING THE LEVER.

Begin ratcheting the lever to tighten the strap. Do not tighten fully at this stage.

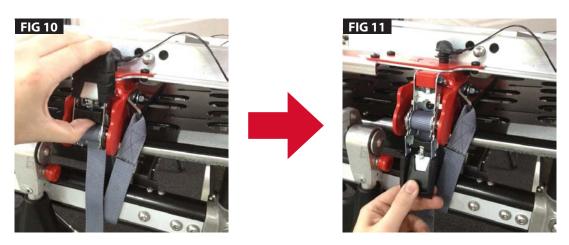
Repeat the above on all four ratchet straps.

When all ratchet straps are moderately tight, go around and fully tighten all four ratchets to complete the installation.

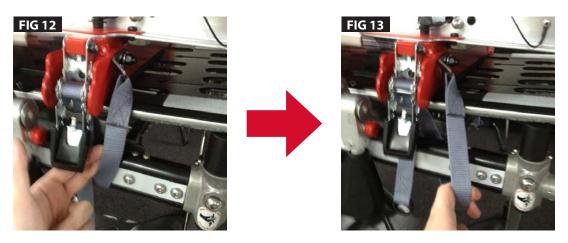


NOTE: ENSURE ALL FOUR RATCHET HANDLES ARE IN THE VERTICAL, LOCKED, POSITION BEFORE USE The Uni-ClipDoc is now ready for use.

5.6 Removal of fixing-bars



Unlock the ratchet mechanism by lifting the lever marked release and rotate the ratchet lever down fully.



Take hold of the strap just below the tang (as shown above) and pull firmly to release the tension.

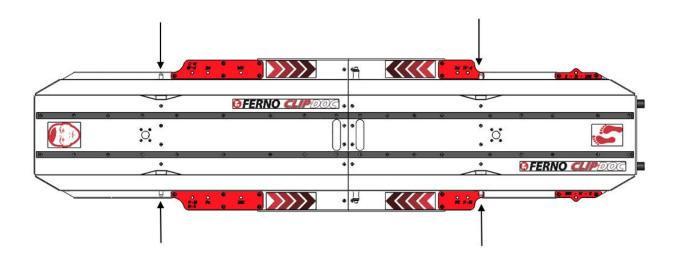


The tang can then be removed from the fixing point. The strap can be left hanging freely as the Uni-ClipDoc is lifted clear of the trolley. Remember to return the ratchet handle to the locked position to prevent damage during storage.

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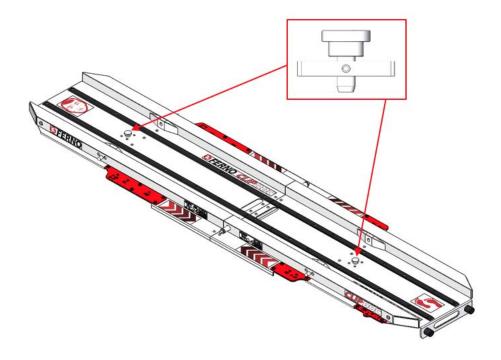
5.7 Emergency pin release

The UNI-ClipDoc features an emergency pin release system to be used if the locking pins on the incubator / AeroSled are damaged in an accident or get stuck in the locked position. To release stuck locking pins, apply force / use a blunt object to drive the four spring loaded release pins as shown below. These in turn will force the jammed pins of the Incubator / Aero Sled clear of the location blocks so the unit can be removed from the UNI-ClipDoc.



5.8 Manual stop pins (if fitted)

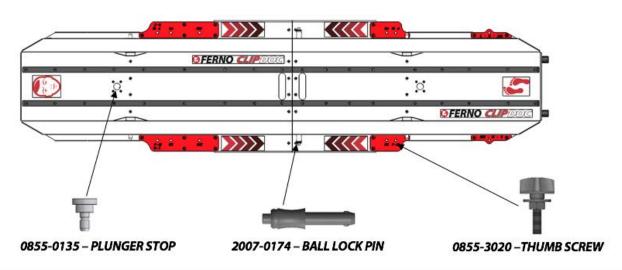
As a safety precaution when transporting an incubator, the UNI-ClipDoc features two safety pins which clip in to the unit, one at each end of the incubator. These act as a fail-safe and prevent the incubator sliding out should the pins in the incubator fail to locate into the pin blocks. These pins simply push in to install and pull out to remove.

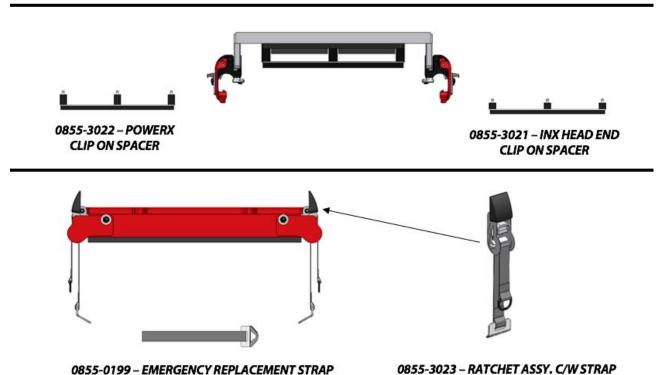


6.0 - SPARE PARTS, SERVICE

6.1 Spare Parts

Below are the Part Numbers and names of parts available to maintain your UNI-ClipDoc





6.2 UK Support Numbers

In the United Kingdom to order parts or for professional repair, contact Ferno UK - the only agent authorised by Ferno UK to manage, service, and repair Ferno products.

+44 (0)1274 851999
+44 (0)1274 854511
services@ferno.co.uk
www.ferno.co.uk

WARNING

Improper parts and service can cause injury. Use only Ferno parts and Ferno-approved service on the UNI-ClipDoc.

7 - MAINTENANCE

7.1 - Maintenance Schedule

The Uni-ClipDoc and Ambulance trolley used both require regular preventative maintenance. Set up and follow a maintenance schedule. The table at right/below represents minimum intervals for maintenance.

It is suggested that the Ambulance trolley and UNI-ClipDoc used for a transportation is visually inspected after every completed patient transfer.

Keep maintenance records. A sample maintenance record sheet is provided at the end of this manual.

When using maintenance products, follow the manufacturers' directions and read the manufacturers' material safety data sheets. You can purchase a recommended disinfectant from your Ferno distributor or Ferno UK Service Department.

7.2 - Disinfection of UNI-ClipDOC

Clean the unit and component parts regularly using warm water and a mild soap or detergent.

Do not use high pressure washers

Wipe all surfaces with disinfectant. Follow the disinfectant manufacturer's instructions for application method and contact time. Ferno recommends you inspect the equipment for damage as you clean or disinfect it.

7.3 - Cleaning the Ambulance Trolley

Regular cleaning helps reduce the risk of transmitting disease and enables equipment to function at its optimum.

Steam cleaning or power washing of the trolley with a suitable cleaning additive is the most effective method of cleaning. Although sealed to IPX6 rating, avoid spraying directly onto the electrical components. When using a steam cleaner or jet wash, ensure to operate at a safe working distance and with the cleaning nozzle at all times positioned at least 8inch / 20cm from the surface being cleaned, using water at a temperature no more than 60°C / 140°F.

Wipe all surfaces with disinfectant. Follow the disinfectant manufacturer's instructions for application method and contact time. Ferno recommends you inspect the trolley for damage as you clean and disinfect it.

- 1. Remove the mattress, restraints and any accessories.
- Hand clean all surfaces of the trolley with warm water and a mild detergent.
- 3. Rinse with warm, clear water. Dry the trolley with a towel and allow it to air-dry thoroughly, replacing the mattress and harness/restraints prior to storage.

Once cleaned, dry the trolley with a soft towel, paying particular attention to swivel and sliding joints. If a compressed air hose is available, you may find that compressed air jets are more effective in drying the hard-to-reach places.

7.4 - Reattachment of Mattress and Restraints after using UNI-ClipDoc

Ensure that the mattress and trolley patient restraints are placed back on the trolley after each patient transfer using UNI-ClipDoc has been completed. Take extra care to ensure that the restraint straps are correctly re-attached to the trolley.

WARNING

Improper maintenance can cause injury. Maintain the trolley and UNI-ClipDoc only as described in this manual.

Minimum Maintenance Intervals	Each Use	As Needed	Each Month
Disinfecting	•		
Cleaning		•	
Inspecting	•		•
Lubricating (trolley)		•	

IMPORTANT

Disinfectants and cleaners containing bleach, phenolic, or iodine can cause damage. Do not use products containing these chemicals.

7.5 - Lubrication of Trolley parts

Disinfect and clean the trolley before applying lubricant. Use the lubricants designated below to lubricate the trolley. Do not lubricate points marked with the "do not lubricate" symbol.







Lubricate

Your Ferno Trolley will work efficiently and safely only when it is lubricated. You MUST lubricate all moving and sliding parts after every inspection or preventative maintenance programme, or if there is inadequate lubrication for the moving parts to operate easily and quietly.

In general terms, almost all sliding and moving parts may be lubricated with light duty grease. A penetrating fluid lubrication is used on some sliding parts of the trolley. However, when a penetrating fluid lubricant is used, all excess **MUST** be wiped away, to prevent any build-up of dust or grime which can clog up working parts and impede movement.

IMPORTANT

Lubricating parts that should not be lubricated allows dirt and foreign particles to collect on those parts, resulting in damage. Lubricate **only** the numbered reference points shown.

7 - MAINTENANCE

7.6 - Inspecting the Trolley and UNI-ClipDoc before use

To ensure consistently safe operation of the trolley and UNI-ClipDoc interface and to monitor wear and tear, prior to each use, ensure the trolley is thoroughly checked in compliance with the following checklist.

INSPECTION CHECKLIST	TICK
Are all components present?	
Is the trolley and UNI-ClipDoc generally free of excessive wear?	
Are all screws, nuts, bolts and rivets securely in place?	
Do all moving parts operate smoothly and properly?	
Does the trolley raise and lower properly into position with UNI-ClipDoc attached?	
Does the trolley move smoothly?	
Do the wheel castors and brake operate properly, rotate fully and have adequate tread?	
For powered trolleys check that the battery is fitted to the trolley and that it is fully charged at the beginning of each shift	
Press the button located on the battery and check the red LED's light up test the battery and ensure it is ready to use.	
Confirm the operation of the trolley by using the up/down control buttons on the foot-end main frame	
Check that the trolley cotsides raise, lower and lock in position.	
Check that the ambulance has a properly installed, approved locking device and that the trolley locks in securely.	
Check the operation of the push/pull handles and push poles	