Ferno CCT-PX Mk2

Critical Care Trolley



* Photo showing CCT-PX configured with various available options

Users' Manual

FERNO/MAN/1126/230-R1/UK
Stock Code 2003-0167

FERNO®

Read this Manual and Retain for Future Reference

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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.

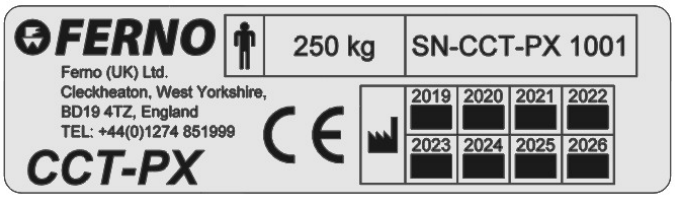
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SERIAL Number _____

CCT-PX trolley serial number is marked on the manufacturer's plate, which includes the SWL, date of manufacture and CE mark. The manufacturer's plate is located on the lower frame of the trolley, below the backrest at the head-end.

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USER MANUALS

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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 trolley can cause injury. Use the trolley only for the purpose described in this manual.

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

Improper operation can cause injury. Operate the trolley only as described in this manual.

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

An unrestrained patient can fall off the trolley and be injured. Use all harness straps to secure the patient on the trolley.

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

Improper maintenance can cause injury. Maintain the trolley only as described in this manual.

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

Modifying the trolley can cause injury and damage. Use the trolley only as designed by Ferno.

Attaching improper items to the trolley can cause injury. Use only Ferno-approved items on the trolley.

1.2 - Dangers

Danger notices indicate an immediate hazardous situation which, if not avoided, will result in injury or death.

⚠ DANGER

Electric shock can cause death or serious injury. INSTALL/USE/OPERATE/MAINTAIN the trolley only as described in this manual.

1.3 - 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. Example:.

⚠ WARNING

Blood-borne Disease Notice

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

1.4 - Cautions

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

Improper lubricants can cause damage. Please refer to service manual for instructions.

Trapping hazards are unavoidable in any design of Trolley due to its folding action. Operate with care.

⚠ WARNING

Do NOT exceed the safe working load of the trolley

1.5 - Trolley and Lock Compatibility

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 full compatibility and interchangeability across your vehicle fleet.

⚠ WARNING

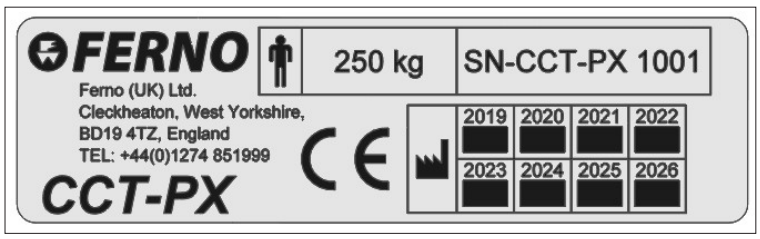
To comply with EN 1789, the patient harness and leg strap(s) MUST be used at all times to hold the patient on the trolley and the trolley MUST be secured in the vehicle with the 2-part locking device.

1 - SAFETY INFORMATION

1.6 - 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

1.7 - 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).

Product meets UK and EU Standards



Pinch Point:
Keep Hands Clear



Safety warning
Monitor hook weight limit

2 - OPERATOR SKILLS AND TRAINING

2.1 - Skills

Operators using CCT-PX trolley need:

- The strength, balance, coordination and common sense to safely operate the trolley
- 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 trolley
- 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 trolley with weight and under simulated conditions
- Trainees should be tested to verify their understanding of trolley operation
- Keep training records. Annual refresher training for all trolley operators is recommended

⚠ WARNING

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

⚠ WARNING

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



3 - ABOUT CCT-PX CRITICAL CARE TROLLEY

3.1 - CCT-PX Specification & Features

The Ferno CCT-PX is a critical care trolley specifically designed for the transfer of critically ill patients, requiring a range of medical devices and equipment to be transported with the patient to monitor and clinically support to the patient throughout the transfer.

The CCT-PX is designed such that all medical equipment is securely fixed to the trolley, ensuring the safety of the both patient and medical staff when travelling in the ambulance.

For use on vehicles with a tail-lift or ramp, CCT-PX is compatible with Ferno's range of in-vehicle 2-part lock systems, ensuring the trolley is safely fixed to the vehicle floor.

Each trolley is bespoke-designed and individually built according to the specific equipment requirements that are required to be transported.

A range of features and options are available on CCT-PX, allowing the trolley to be configured to differing needs, all of which are covered within this user manual.

CCT-PX baseline configuration, as shown on the previous page, includes the following features as standard:

- Fixed frame lower frame body with 3 vertical fixing poles on trolley base for attachment of any medical device utilising a pole-clamp attachment, such as syringe drivers.
- 2 E size cylinder holders as standard, with adapter to allow CD cylinders also to be carried
- Olson 12-gang Power Distribution Unit
- Adjustable winged headrest, PR foam AB material
- Patient platform on trolley incorporating Anti-Bacterial Pressure-Reducing (AB-PR) mattress, providing body support and excellent infection control
- Flat mattress surface ensures unhindered patient lateral transfers
- Utilising a clinically-developed anti-bacterial VELCRO® to fix mattress to trolley, making removal for cleaning easy
- Anti-bacterial moulded plastic parts & frame paint coating
- Black/Orange webbing 'Cross-strap' patient harness straps, quick and easy to deploy (with option of wipe-clean Biosafe)
- Easy-to-operate lift-assisted backrest and leg position platform (Trendelenburg, Shock & Knee Contour)
- Wheel brakes on all 4 wheels, anti-static wheel on one wheel
- Detachable push-poles at foot-end for manoeuvring of trolley, with option of 2 additional push-poles at head-end
- MCF winch-link connection for assisted loading on ramps
- Latching backrest monitor hook

Additional Options and Accessories available:

- Anti-Bacterial, wipe-clean Biosafe 'Cross-strap" patient harness instead of webbing harness
- 2 Push poles at head-end additional to the 2 at foot-end
- Surface eXtending (SX) ratcheting cotsides giving extended-width patient surface, load bearing when horizontal
- Extender Wings to extend length of SX cotsides for increased patient surface area
- Split-Scoop Bariatric Extended Patient Surface kit
- Detachable 3-stage telescoping IV pole
- Head-end document stowage net
- Dedicated CD/Nitric cylinder holder attached to base of trolley
- PacRac+ for holding medical equipment
- Range of medical device brackets, fixed & swivel mount
- Directional wheel locks at head-end



Dimensions	Imperial	Metric
Length		
	77.56 in	1970 mm
Width		
Trolley	22.4 in	570 mm
Surface Xtenders open	36.2 in	920 mm
Split-Scoop extender kit	37.2 in	945 mm
Height		
To underside of mattress	32.5 in	825 mm
Wheels (Diameter)	6 in	150 mm

	Imperial	Metric
Patient Platform Max SWL* *see note below	40 stone	250 kg
Trolley Weight *(excluding mattress + harness)* *Dependant on configuration		78 kg*

- Patient platform total 250kg SWL to include PacRac (10kg) + equipment (25kg), if fitted
- In addition 80kg of medical equipment can be mounted equally spaced on the trolley base
- If foot-end Fixed platform for Balloon Pump is fitted, then 40kg on trolley base and 40kg on foot-end platform
- **Total Mass not to exceed 430 Kg (Patient+Equipment+Trolley)**



MAX PATIENT PLATFORM LOAD LIMIT

4 - CCT-PX TROLLEY FEATURES

4.1 - Attachment of Equipment & Medical devices

The CCT-PX trolley is designed to allow equipment and medical devices to be safely attached to the trolley to ensure everything stays in place in all scenarios, throughout the patient journey. The following pages explains the various features and options.



4.2 - Pole-Clamp Vertical Fixing Poles

At the base of the trolley are vertical poles for attaching medical devices that have a pole-clamp bracket incorporated into their design, such as syringe drivers. Such equipment can be attached simply by holding the device bracket against the pole and then tighten the pole clamp fully. Once tightened recheck that the device is indeed correctly attached.

A number of specialist brackets for a range of medical devices are available from Ferno for attaching equipment via pole clamp.



Vertical poles for attachment of pole clamp devices



Example specialist bracket with pole clamp

4.3 - E Size Cylinder Holders

CCT-PX includes 2 cylinder holder tubes designed to hold E size cylinders, but also include an adapter to allow a CD cylinder to be held in the tube. To store cylinder in a holder tube, simply unfasten the top lid , place the cylinder inside the tube and lock the lid back on.



E size Cylinder holder tubes

4.4 - E Cylinder Holder with CD Adapter

When using the E cylinder holder tubes to hold a CD cylinder, the E-to-CD cylinder adapter kit needs to be first deployed. This consists of a tube foam insert and an alternative top lid adapter ring for holding the CD cylinder in place instead of an E cylinder.

First place the foam insert into the holder tubing and push it down as far as it will go. Then place the CD cylinder in the tube and attach the lid adapter ring, placing the ring over the top of the CD cylinder and then attaching the two wires that are attached to the ring to the sizes of E cylinder to the tube locking clasps, making sure one of the wires is fed through the CD cylinder handle and that the wires are tight. Use the supplied R clips to ensure the wires are securely held in place. The CD adapter kit will need removing if an E cylinder needs to be transported instead of CD cylinder.

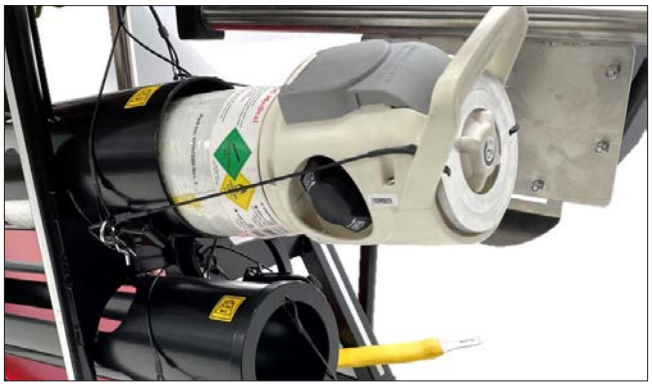


CD cylinder in upper E holder using CD adapter kit



4 - CCT-PX TROLLEY FEATURES

4.4 - E Holder with CD Adapter (cont...)



CD cylinder in E cylinder held in place by top fixing ring and fixing wires attached to side of cylinder tube

4.5 - CD size cylinder holder (Option)

Also available as an option on CCT-PX is a dedicated CD cylinder holder, which can also hold a Nitric cylinder, which is mounted to the baseplate of the trolley.



CD size Cylinder holder mounted to CCT-PX baseplate

To place a CD cylinder in the holder, loosen the 2 rubberised straps, place the cylinder inside the holder.

Then tighten the straps and fix them by pushing the fixing pin through the applicable hole in the strap (same principle as a belt buckle)

It is important that the straps are fully tightened at all times when a cylinder is located in the holder.

To remove the cylinder, loosen the holder straps and then remove the cylinder from the holder.

⚠ WARNING

Ensure that grease never comes in contact with O2 cylinder or cylinder holder due to the potential explosive risk that oil with oxygen under pressure can pose, in the (unlikely) event of an incident and the O2 cylinder getting ruptured.

4.6 - Storage Cabinet (Option)

Also available as an option on CCT-PX is a locking cabinet, mounted onto the end of trolley at foot-end, allowing medical items, documents add personal possessions etc. to be safely stored on the trolley whilst it is being transported. A set of keys is supplied with the cabinet.

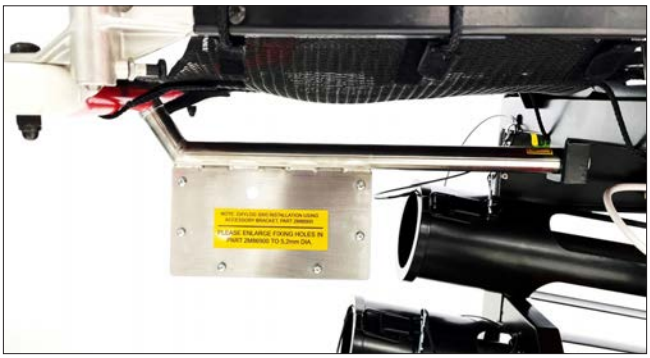


Locking storage cabinet

4 - CCT-PX TROLLEY FEATURES

4.7 - Oxylog 3000+ Bracket Arm (Option)

CCT-PX can be supplied with a metal plate at the head-end of the trolley underneath the patient platform for attaching an Oxylog 3000 or Hamilton T1 mounting bracket for holding a ventilator.



With an Oxylog mounting bracket p/n 2M86900 bolted to this metal plate an Oxylog 3000+ ventilator can be attached to the trolley. To attach, simply push the unit into the mounting bracket until it locks in place. To release, pull down the metal flap under the unit and then pull the unit out.



Oxylog 3000+ bracket mounted on metal backplate



Oxylog 3000+ ventilator

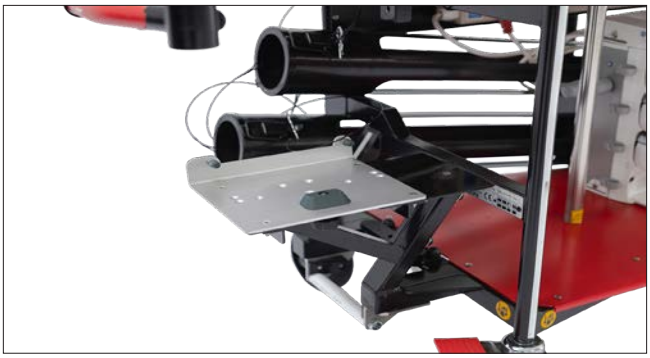


Oxylog ventilator mounting bracket

A mount is also available for attaching Hamilton T1, which bolts to the same metal plate.

4.8 - Hamilton T1 base mount (Option)

CCT-PX can be designed to hold Hamilton T1 bracket using the Hamilton base mount.





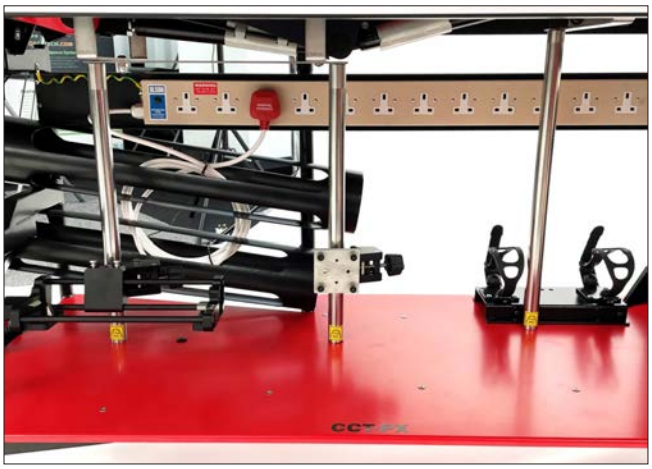
4.9 - Specialist Mounting Brackets

Various other specialist storage brackets are available for a range of medical device and monitor mounts. Refer to the specific device mount for details of operation.

4.10 - Power Sockets for Medical Devices

CCT-PX includes an Olson 12-way Power Distribution Panel for plugging in the various medical devices held on the trolley. The Power distribution board can then be plugged into a 240v power source to supply power to all devices.

The power distribution panel is a Hospital Grade, 13 Amp, unswitched PDU, with a neon power indicator on the panel. This is mounted onto the trolley underneath the patient platform with easy access to plug in all the various medical devices.



Olson 12-way power distribution panel

4.11 - Trolley Siderail Interface

CCT-PX trolley includes an integrated side-rail interface which allows a range of medical accessories and manoeuvring aids to be attached along the full length and on both sides of the trolley.

This gives the trolley the capability to be configured according to the needs of the use of the trolley at any one time, and according to the patient's physical size, condition and clinical needs, giving full flexibility, multiple role and future-proofing of the trolley from a single modular design.

How to attach and operate the various options for clinical capability and aid of manoeuvrability that are available is outlined in the following pages.

The siderail interface on CCT-PX is the same as is used on Ferno's POWERX and iNX ambulance patient transportation trolleys, meaning that all clip-on accessories are interchangeable between models and systems.



4 - CCT-PX TROLLEY FEATURES

4.12 - 3 stage IV Pole (Option)

The 3-stage IV pole attaches to the side-rail of the trolley and is telescopic in 3 stages, allowing it to be positioned and raised/ lowered according to the needs and situation of the patient being transported.

Clip the IV pole under the siderail interface from behind, angling the IV pole slightly away from you, then bringing it forward again, hold it in place and pushing down on the red handle. The IV pole will lock into place.

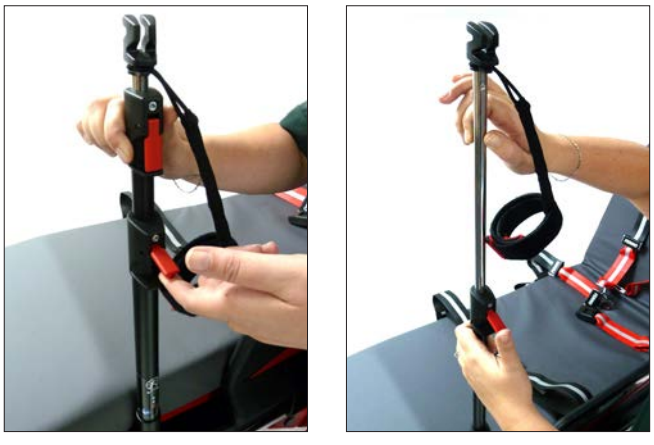
With the IV pole folded for storage, whilst travelling in a vehicle the Velcro strip should be used to attach the end of the IV pole to the trolley side to avoid it lifting up out of place.



Attaching the IV pole to trolley side rail

4.13 - Adjusting the Height of IV Pole

Using the red clamp levers located on each of the IV pole sections, starting from the bottom un-clamp and extend each of the telescoping poles until the correct height is achieved, ensuring that each clamp lever is firmly closed again once the IV pole has been adjusted to the required height.



Adjusting the height of IV pole

For more information on the 3-stage IV Pole please also refer to the 3-stage IV pole User Manual, reference 00271-AU-V01, which is available from Ferno.

4.14 - Balloon Pump fixed platform (Option)

The optional BP fixed platform allows Balloon Pump unit to be stored on the CCT-PX trolley.



The unit is attached to the platform using the supplied straps, one to wrap around the unit and 2 which go up and over the unit to hold it in place on the platform.

4 - CCT-PX TROLLEY FEATURES

4.15 - PacRac Equipment Table (Option)

The optional "PacRac+" gives an alternative method of attaching various medical equipment such as defibrillators, monitors, syringe drivers and IV fluid bags to the trolley. Dynamically tested to 10G, PacRac+ is certified and compliant to EN 1789, allowing the trolley to be transported in the ambulance with medical equipment remaining attached to the PacRac+.

The PacRac+ is attached to the trolley via 2 sets of brackets mounted at the foot-end of the trolley and can b easily attached/ detached as and when required.



Attachment brackets on CCT-PX side-frame

The PacRac+ equipment platform is fixed to the trolley by sliding it onto the fixing points on the sides of the trolley.



To attach the PacRac, place it on the siderail of the trolley in front of the fixing points, then slide the PacRac+ back towards you to clip it in place. An audible click is heard when the PacRac+ has been securely fixed into position. Push the PacRac then away from you to ensure that it has indeed fixed in place.



Sliding the PacRac+ onto the fixing points

4.16 - Attaching Equipment to PacRac+

Medical equipment such as monitors and defibrillators can be permanently mounted to the top of the PacRac+, attached using Ferno's CEN compliant iNTRAXX bracket system, or temporarily strapped using the supplied straps and buckles.



Zoll X-series monitor with iNTRAXX mount to PacRac+



Zoll X-series monitor strapped to PacRac+



Tempus monitor mounted to PacRac+ with iNTRAXX base swivel mount

For more information on the PacRac+, please also refer to the PacRac+ User Manual, reference 00148-AU-V02, which is available from Ferno.

4 - CCT-PX TROLLEY FEATURES

4.17 - Specialist Mount Options for PacRac+

Are number of specialist mounts are available for PacRac+ to allow a range of monitors and medical devices to be base-mounted to the equipment platform, allowing devices to be viewed at all times when moving patients, instead of mounting these devices underneath the trolley.

The various medical device mounts can be supplied either with a swivel-mount SafeMount interface, where the device can be rotated 360 degrees, or using a fixed-mount SafeMount interface. The SafeMount interface can be easily removed from the PacRac by hand as and when required.

The various medical device mounts are bolted to these SafeMount interfaces.





Swivel-mount interface



Fixed-mount interface



Zoll X-series monitor bracket mounted to PacRac+ using a swivel-mount SafeMount interface

4.18 - Storage Pouch for PacRac (Option)

Also available for the PacRac+ equipment platform is a pouch system which attaches to the aside of the PacRac,allowing medical consumables and other small items to be stored in the various pouches. This is simply attached using the incorporated Velcro straps.



4.19 - Lateral transfer a patient with PacRac+ attached

With PacRac+ attached to the trolley, the patient can be transferred on and off the trolley without the need to remove the PacRac+ or any medical devices attached to the PacRac, simply by opening the left or right side of the PacRac whilst transferring the patient. .



Depress the yellow locking clip on the side



Twist the locking handle towards you





Open the side frame towards you

5 - OPERATING THE TROLLEY

5.1 - Adjustment of Backrest

The backrest can be locked in any position, from horizontal to near vertical, dependant on patient clinical needs. Support the backrest frame with both hands at all times when moving the backrest (to avoid risk of sudden movement).



Rear view of backrest

Squeeze the control lever towards the backrest. Raise/Lower the backrest to the desired angle and then release the lever to lock in the desired position. Support the backrest at all times whilst making any adjustments.



Red lever to raise/lower backrest

5.2 - Adjustment of leg position

The CCT-PX has the facility to raise the patient's legs to various positions, including Trendelenburg, shock and knee contour. The leg platform has 2 sets of levers at the foot-end, located underneath the leg platform. The outer levers are to adjust the leg platform elevation, the central lever to adjust the bend angle at the knee position.



Levers to adjust leg position

5.3 - Trendelenburg Position

To adjust the leg position to Trendelenburg, squeeze the outer lever whilst holding the leg platform and raise to the desired height. Once at the correct position release the lever to lock it in place. To return the leg platform to horizontal, hold the leg platform, squeeze the outer lever and push the platform back down, releasing the lever once the desired position is achieved.



Trendelenburg leg position

5.4 - Knee Contour & Shock Position

To adjust the leg position to the various knee contour positions, squeeze the outer lever whilst holding the leg platform. Raise the platform to the desired elevation and release the lever once at the required height. Now using the central lever, adjust the knee bed to the desired angle by squeezing the lever and pushing down on the leg platform. The end section of the leg platform can be positioned at any angle to achieve the required leg position, from horizontal to fully down, and in any position in-between.



Shock leg position



Knee contour position

5.5 - Recumbent Position

To return the leg platform back to horizontal, first set the knee bend back to straight by squeezing the central lever and bringing the end of the platform fully up to straighten, and then release the lever. Then squeezing the outer lever, push down on the leg platform to bring it fully down. Once in lowest position, using centre lever to bend platform fully down so it touches the frame.



5 - OPERATING THE TROLLEY

5.6 - Adjustable Winged Headrest

An adjustable winged headrest is supplied with CCT-PX, providing support to the patient's head. The winged headrest can also be adjusted to shape to different size and shaped heads.





5.7- Attachment/Detachment of Winged Headrest

Simply slot the headrest into the bracket on the top of the backrest and push down until it locks in place. Make sure it is correctly locked in place by trying to pull the headrest back out

The red slide-button located at the base of the headrest on the rear of the backrest allows the removal of the headrest. Slide the button to the right and pull the headrest out.





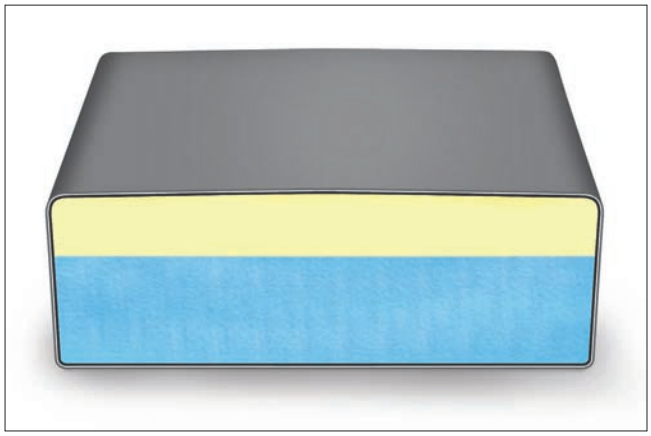
To put the headrest back onto the trolley, simply locate the headrest bar into the slot and push down until it clicks in place. Lift the headrest back up slightly to ensure it is indeed locked in place.



Unlock mechanism

5.8 - AB-PR Patient Mattress

Ferno's AB-PR mattress incorporates a pressure-reducing inner foam, ensuring patient comfort and minimising the risk of pressure sores. With a wipe-clean anti-bacterial cover, infection control is maintained at an advanced level.



AB-PR mattress

The mattress is attached to the trolley top utilising a clinically-developed anti-bacterial AB-VELCRO®, making removal of mattress for cleaning both quick and easy, whilst maintaining infection control standards.



AB-VELCRO® fixing pads on AB-PR mattress

5 - OPERATING THE TROLLEY FEATURES

5.9 - Wheel Brakes

The trolley is fitted with wheel brakes on all 4 wheels to prevent it from moving during patient transfer.

To lock the wheel brake in place apply a downward force onto the brake pedal until it fully locks in place. This will stop the wheel fork from rotating and stop the wheel from moving.





Wheel brake disengaged, pedal raised



Wheel brake engaged, pedal points down

To unlock the wheel lock, push brake pedal back up until it is horizontal again.



5.10 - Anti Static Wheel

To prevent static build-up within the trolley whilst moving, CCT-PX is fitted with one anti-static wheel on one corner. The anti-static wheel is recognisable by its rubberised finish.



Rubberised Anti Static wheel on one corner

5.11 - Directional Wheel Lock (Option)

Directional wheel lock option allows the wheel direction to be locked in line with the trolley, to aid control when moving in a straight line, such as along hospital corridors or when moving up or down an incline, such as a vehicle ramp.

To engage the directional wheel lock, press down on the black plunger. This will lower the wheel-lock pin, which will then engage into the pin-slot located on the top of the wheel fork once the trolley is moved in a forward direction, thereby locking the wheel parallel in line with the trolley.

To disengage the directional wheel lock, Lift the black plunger back up again. This will raise and disengage the pin, thereby allowing the wheel to swivel again.



5 - OPERATING THE TROLLEY FEATURES

5.12 Lateral-Folding Cotsides

Available as a baseline specification are the Lateral cotsides. These are a simple folding cotside which folds parallel to the trolley side, allowing to be folded down when moving patient on or off the trolley, and raised a locked in place when patient is present on the trolley. To lower the cotside, squeeze the lever on the underside of the cotside top bar and push the cotside downwards and towards the foot-end



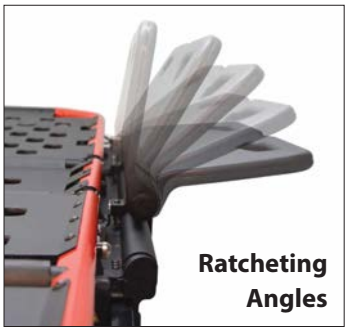


5.13 - Surface eXtending (SX) Cotsides (Option)

As an alternative option to the lateral folding cotsides, SX Surface eXtending cotsides are also available which serve as a standard trolley cotside, but which also ratchet to different angles to accommodate larger patient sizes and which also ratchet to near-horizontal, giving an extended patient surface for larger bariatric patients with even larger physical body mass

The SX cotsides have 3 ratchet positions plus near vertical, near horizontal and fully down, 6 positions in total.

The ratchet position angles from horizontal are 10°, 27.5°, 45°, 62.5° and 80°.



Ratcheting Angles

5.14 - Lowering/Raising SX cotsides

The SX cotsides can be easily moved to the various ratchet angles by use of the red cotside release lever, which is located in the centre of the cotside, directly underneath the red "X" graphic.



SX cotside release lever

Whilst holding the top of cotside, grip and squeeze the red release lever upwards.



Squeeze the release lever

Keeping the release lever held, push the cotside slightly forward, then back towards you until you reach the position required, then move back up slightly to lock the cotside at that ratchet position. A click will be heard when the cotside locks into place.



Moving the SX cotside to the required position

5 - OPERATING THE TROLLEY

5.14 - Lowering/Raising SX Cotsides (cont....)

Alternatively the SX cotside can be moved fully down, and then after releasing the red handle, move the cotside back up to the required position. As the cotside is moved up a click can be heard as it goes past each ratchet position. Once at the required position, and clicked in place, pull the cotside back down again to ensure it is indeed locked in place.



Moving SX cotside whilst depressing lever



Bring SX cotside past horizontal



Release lever and move SX cotside back up to required position

5.15 - SX cotside positioning for lateral transfer of patient on/off trolley

The SX cotsides can be easily moved fully down for transfer of patient on and off the trolley simply by depressing the red release handle and moving the cotside fully down.



Squeeze the release lever



Move the cotside fully down



SX cotside fully down

5 - OPERATING THE TROLLEY

5.16 - SX Cotside Ratcheting Positions



SX cotsides in near-vertical position 1- (10°)



SX cotsides ratchet position 2 - (27.5°)



SX cotsides ratchet position 3 - (45°)

5.16 - SX Cotside Ratcheting Positions



SX cotsides ratchet position 4 - (62.5°)



SX cotsides in near-horizontal position - (80°)



SX cotsides folded fully down

5 - OPERATING THE TROLLEY

5.17 - Using SX Cotsides for Bariatric Transfers

When in the horizontal position, the Surface Xtenders create an extended patient surface to accommodate larger mass patients and are designed to support the extremities of the patient's body.



Load-bearing SX cotsides extended patient surface

Note that when carrying out a lateral transfer to or from the trolley, the SX cotside on the side of the trolley the patient is to be moved must be moved fully down prior to transferring the patient. SX cotsides are load-bearing but are not designed to take the full weight of the patient whilst lateral transfer is being performed.

5.18 - Positioning of SX Cotsides

The Surface Xtender cotsides normal positioning on CCT-PX is such that the head-end side of the cotside is in line with the backrest pivot point.

The SX cotsides can be positioned according to differing requirements but does require a technician to change their position from where they were originally mounted.

For further details on fitting, positioning and operation of the Surface Xtender cotsides, refer to the SX user manual, ref 00334-AU*UK.



SX cotsides standard position



SX cotside furthest towards head-end



SX cotside furthest towards foot-end



2 SX cotsides fitted for greater patient surface

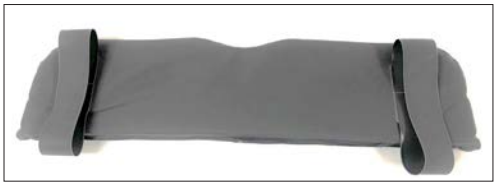
5.19 - Sidepad for SX Surface eXtender Cotsides (Option)

As an extension to the CCT-PX AB-PR mattress when using the SX surface extender cotsides, padded sidepads are available to fit over the SX cotsides to give enhanced tissue viability when utilising the cotsides.

These are held onto the cotsides using the 2 straps that are attached to each sidepad.



Sidepad attached onto SX cotside



Fixing straps on back of SX sidepad

5.20 - SX Cotside extender wings

Also available is option of SX Extender Wings, extending the length of the SX cotsides, giving a larger patient surface area. Available in a set of 2, either 1 or 2 Extender wings can be fitted on each side of the trolley.



SX cotsides with 1 set of Extender Wings fitted

5 - OPERATING THE TROLLEY

5.21 - Head-End Storage Net (Option)

A storage net is available for CCT-PX, which attaches to the trolley frame at the head-end below the backrest, allowing lightweight items such as documents and patient's belongings to be stowed whilst moving a patient outside of the ambulance.

For safety reasons it should not be used for storage of items whilst travelling inside an ambulance. All equipment and articles inside the back of a vehicle must be safely secured on an appropriate crash-tested bracket or in a cupboard to avoid them becoming a projectile in the event of a vehicle crash.



Storage net on head-end trolley frame

For more information on the head-end storage net please also refer to the Storage Net User Manual, reference 234-3590-01, which is available from Ferno.

5.22 - Backrest Defib Monitor Hook

A defib monitor can be hooked to the rear of the backrest whilst moving the trolley outside of the ambulance in scenarios where the patient is not recumbent on the trolley. Simply place the monitor onto the hook and close by pulling the fixing bar down until it clicks in place, ensuring that the fixing pin is located in the fixing pin hole. To remove, pull pin out, lift the fixing bar and remove the monitor.



Zoll X-Series defib held on backrest hook



Hook and fixing bar on backrest
Pull side button to release fixing pin

Note that the backrest hook is not designed to hold equipment whilst moving in a vehicle. It is only intended as a place to temporarily hold the monitor when transferring a patient from scene of incident to vehicle, and then once at destination, from out of the vehicle to hospital admissions. When inside the ambulance, any equipment must be moved off the backrest holder and placed in a CEN complaint crash-tested bracket, such as on the PacRac equipment platform or Ferno's IPTS iNTRAXX wall track and equipment bracket system.





Ferno's IPTS iNTRAXX wall track bracket system

5 - OPERATING THE TROLLEY

5.23 - Push Poles

CCT-PX is supplied with 2 push poles as standard, with the option of an additional 2 more push poles as required. These lock into place on the corners of the trolley and are removed by deploying the push pole detachment mechanism. A release pin is situated behind and below the push pole which when pulled open allows the push pole to be removed.



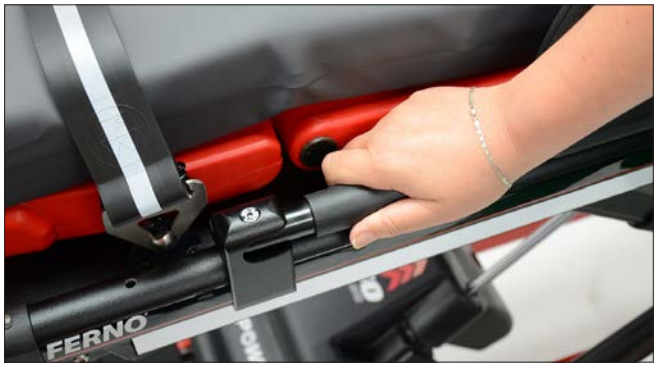
Insert push pole until it locks into place



Release by pulling out the locking pin located behind the push pole holder

5.24 - Manoeuvring Handles (Option)

Available as an option are side-fixing manoeuvring handles, which attach to the side of the trolley. These fold out when required and aid the manoeuvring of the trolley from the side, beneficial for example when navigating over rough terrain..



Side manoeuvring handles attached to side



Pull towards end of trolley to unlock, then pull towards you to unfold



Unfold fully until clicks in place



Side handles ready for use

5 - OPERATING THE TROLLEY

5.25- Split-Scoop Large Patient Surface (Option)

Also available is the Split Scoop kit, which allows a standard Scoop EXL to be attached to the POWERX, the Scoop split in 2 halves with one half attached to each side, giving a full-length extended patient surface for the transportation of larger-size patients. For improved patient comfort and tissue viability the Split-Scoop module can also be used in combination with optional inflatable side pads or foam sidepads.

Split Scoop kit has been dynamically crash tested and certified to EN 1789 when used with Ferno trolleys with a side interface rail, i.e. POWERX, iNX and Mondial. Load tested with 200 kg on each side of trolley with Scoop attached, to ensure same SWL of trolley is maintained when used with or without Split Scoop kit.



5.26 - Attaching Split-Scoop Fixing Kit

The Split Scoop fixing kit consists of 6 components; 2 fixing brackets for head-end, 2 fixing brackets for foot-end and 2 extension fixing poles, all supplied in a carry bag.



Note that the Split Scoop surface extender kit cannot be used on a CCT-PX that has PacRac fixing brackets installed.

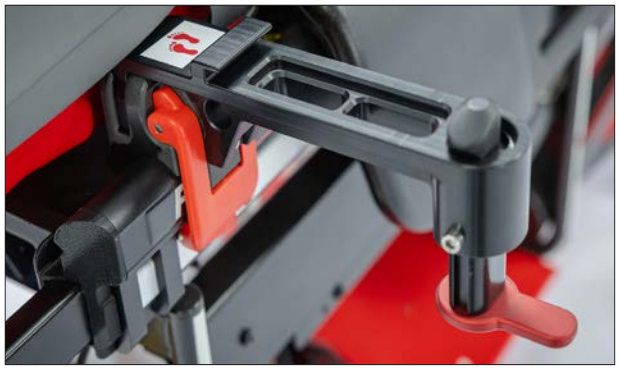
5.26 - Attaching Split-Scoop Fixing Kit (cont....)

To attach the Scoop to the trolley, first ensure that SX cotsides or lateral-folding cotsides are placed in the fully-down position on both sides of the stretcher.



SX cotsides moved to fully-down position

At the foot-end of the trolley, place one of the brackets with the 'foot' label onto the upper profile of the siderail interface that runs along the length of the trolley, slightly angled up at the end nearest to you. In the same way as attaching an IV pole or any other accessory, make sure the metal grip profile of the bracket is behind and underneath the recess that is situated on the rear of the siderail interface. Position the bracket as far towards the foot-end as possible on the siderail, taking care to keep left or right of the end-bracket that is positioned underneath the siderails at each end.



Fixing bracket attached to siderail interface

Once the bracket is correctly located along the siderail interface, make the bracket level as per the photo below and then push the red handle down fully to lock the bracket in place. Ensure that the handle is fully down and clicks in place, then confirm that the bracket is indeed firmly locked by trying to lift and push down on the bracket.





Lock the bracket in place by pressing down on the red locking handle until it clicks

5 - OPERATING THE TROLLEY

5.26 - Attaching Split-Scoop Fixing Kit (cont....)

Repeat the process at the head-end of the trolley with one of the shorter fixing brackets with a 'head' label, then repeat the process both foot-end and head-end on the other side of the trolley such that all 4 brackets are firmly attached.



Next, make sure that the Scoop length has been extended and locked in to the first extension position.

Then split the Scoop EXL into 2 halves by opening the TSL locks at both the head-end and foot-end of the Scoop.

Lay each of the 2 halves of the Scoop over the fixing brackets that are attached to the trolley.

Note the orientation of the Scoop on POWERX should be such that foot-end of the Scoop is at the head-end of the trolley and the head-end of the Scoop at the foot-end of the trolley, as per the below picture. This ensures maximum usable extended patient surface.



One half of Scoop laid on top of fixing brackets

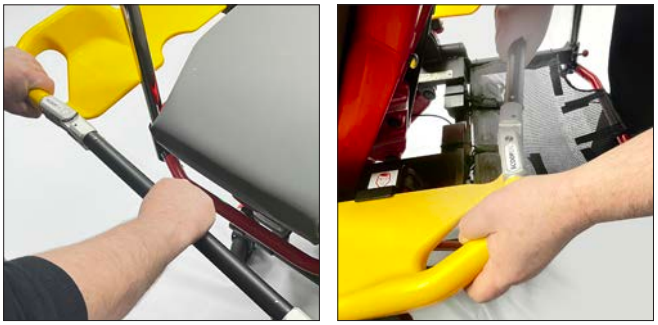
5.26 - Attaching Split-Scoop Fixing Kit (cont...)

The Split-Scoop half-sections should be positioned along the length of the trolley such that the lift-up locking arms on the brackets correctly line up with the hand-hold holes in the sides of the Scoop as shown below and the Scoop fins are underneath the fin holding plates of the brackets (where the head/foot labels are located).



Ensure Scoop hand-hold holes line up with locking arms on fixing brackets at foot-end as per photo above

Once the Scoop is positioned correctly, connect the two halves of the Scoop together at the foot-end using one of the TSL extension fixing poles, which have TSL locks at each end of the pole. Then attach the head-end of the 2 Scoop halves using the second TSL extension fixing pole.



Attaching 2 halves of Scoop together using extension fixing pole

Once the 2 half sections of the Scoop have been attached together, the Scoop then needs to be locked onto the POWERX frame. Under each fixing bracket locking arm there is a red lever.

Ensure that the fins of the Scoop are correctly held into the Scoop fin holders on each of the fixing brackets at the head-end and foot-end and that the locking arms are still sat correctly in the hand-hold holes of the Scoop.



To lock arm lift red lever and twist clockwise

5 - OPERATING THE TROLLEY

5.26 - Attaching Split-Scoop Fixing Kit (cont...)

Starting with the foot-end brackets, start to rotate and raise the lever such that the locking arm starts to protrudes through the hand-hold hole on the Scoop.

Keep twisting the lever until the top of the locking device is holding hard against the Scoop and the lever is fully up.

Repeat this for all 4 fixing brackets, ensuring that each is fully locked in place, visibly checking the position of the levers underneath, which should be fully up. At the head-end of the trolley the locking arms should be holding the outer edge of the Scoop. Double-check that all brackets are indeed locked by trying to lift or move the Scoop up by hand. The Scoop should remain in place.





Recheck to ensure Scoop still positioned such that hand-hold holes are in line with locking arms on foot-end bracket as above photo, to the RHS of the hole, and on right side of the pin if the Scoop is with pins





Ensure Scoop fins are under the holding plates

IMPORTANT BEFORE USING: Re-check all 4 locking levers on the fixing brackets to make sure they are fully down and that the fixing arms are securely locked to the trolley siderail interface.

Recheck the Scoop to ensure it is firmly locked in place.

Raise and lower the trolley to ensure there is no contact with the Scoop or obstruction hindering movement.

Check backrest and leg platform movement to ensure there is no infringement by the Scoop. If there is, move and/or extend the Scoop so that it no longer interferes.

Note: When using the Split-Scoop kit the Scoop sides MUST be supported underneath when moving a patient on/off the trolley to ensure there is no imbalance of trolley and should always be carried out with the trolley in the lowest possible position.

6 - PREPARING TO TRANSPORT A PATIENT

6.1 - Transporting a Patient

Ensure that the following procedures are complied with when transporting a patient:

1. Always check condition and operation of trolley prior to using the trolley. A recommended checklist is supplied.
2. Advise the patient before making adjustments, lifting or loading the trolley.
3. Stay with the patient and control the trolley at all times.
4. Keep the patient restrained and the cotsides up when using the trolley.

For the safety of the patient and for the product to fully comply with BS EN 1789, the patient must be fully restrained at all times using the supplied 4-point chest harness and 2 leg straps or other Ferno- approved alternative patient harness system.

1. Before using the trolley the harness and both leg straps should be checked to ensure they are present, correctly attached and not damaged in any way.
2. Dispose of and replace any straps that are worn, damaged or have been involved in any accident – they may have hidden damage.
3. Unbuckle all straps and lay the straps out of the way before transferring the patient.
4. It is suggested that the straps are adjusted sufficiently long enough prior to buckling up the patient.

6.2 - Transferring a Patient onto Trolley

1. Ensure that the brakes are applied to the trolley.
2. Place the trolley beside the patient and undo the patient straps, moving them away from the area the patient will be lying.
3. Ensure that the backrest is in the required position and leg platform horizontal.
4. Transfer the patient onto the trolley using recognised locally observed manual handling procedures.
5. Ensure that the chest, and leg straps are all correctly fastened and adjusted.
6. Raise the cotside rails.
7. Adjust the backrest and leg platform positions if required.

6.3 - CCT-PX Patient Harness & Straps

The patient harness system on CCT-PX is available in two different configurations.



4-point harness around the shoulders, with cross-chest strap & 2 leg straps



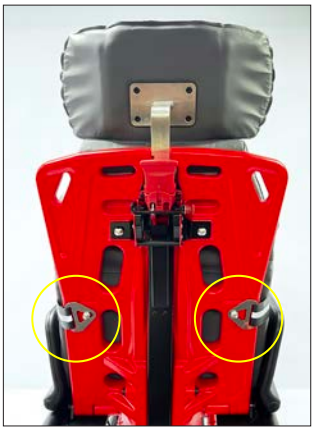
Webbing Cross-Strap harness with single leg strap

Biosafe Cross-Strap harness with single leg strap

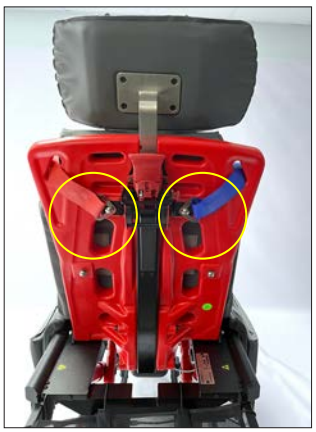


6.4 - Attachment points of 4-point and Cross-strap harnesses

The CCT-PX 4-point harness and Cross Strap harnesses attach to different points on the back of the trolley backrest. 4-point harness fixing straps attach to the lower fixing points, the Cross Strap harness upper part of the strap attaches to the upper fixing points on the back of the backrest, and are fed through the holes in the top of the backrest



4-point harness attachment at back of backrest



Cross-Strap harness attachment at back of backrest

6 - PREPARING TO TRANSPORT A PATIENT

6.5 - Deploying 4-point Harness with chest cross-strap and leg straps

Unbuckle all the harness, chest and leg straps, placing the shoulder straps over the top of the backrest and all other straps out of the way.



Straps unbuckled ready to transfer patient

Once the patient is comfortably positioned on the trolley, bring the 2 shoulder straps over the patient's shoulders and lay them over the patient's chest.



Bring the two waist straps up from each sides and place these on the patient's lap.



Waist straps

Bring the two metal 'L' buckles on the end of each shoulder strap together to make a T shape and then place them through the tang of the patient's right-hand waist strap and then clip into the buckle on the left-side waist strap..



Fastening harness buckle

Next adjust the shoulder straps such that they are firmly held against the patient's shoulders and then adjust the waist straps so they are safely holding the patient in position. The length of the shoulder straps should be adjusted in length such that the waist strap is correctly positioned at the waist point of the patient and not higher or lower.

To loosen a strap, angle the buckle up away from the strap with one hand, then pull the lower strap to feed the strap above through the buckle to the required length.

To tighten a strap, angle the buckle up away from the strap with one hand, then pull the top strap to feed the lower strap through the buckle until at the required length.



Buckle for adjustment of strap on shoulders & waist



Shoulder and waist strap tightened

Once the shoulder and waist straps have been attached and tightened, the cross-chest strap then needs to be attached and tightened

6 - PREPARING TO TRANSPORT A PATIENT

6.5 - Deploying 4-point Harness, chest and leg straps (cont....)

Extend the length of the cross-straps until sufficient length to reach across the patient's upper body/chest, then buckle the 2 straps together and then adjust lengths again to ensure patient is securely but comfortably held in position.



Chest strap fastened

Warning: For safety and CEN compliance the chest strap must always be used and fastened.

Next fasten the 2 legs straps, ensuring they are holding the patient's legs firmly, but not too tightly.



4-point harness, cross-chest strap and 2 leg straps deployed

Tip

Harness System

The harness system utilises a tri-glide system that ensures that the ends of harness do not hang below the trolley, an extra safety feature to reduce the straps from catching and getting dirty

6.6 - Unfastening 4-point Harness, chest and leg straps

To release the harness, first release the chest cross-strap by squeezing the two release clips on the buckle.



Unbuckling the cross-chest straps

To release the 4-point harness, press the release button on the central buckle and all 4 harness straps (2 shoulder and 2 waist) will be released.



Press release button on central buckle to unfasten 4-point harness

Next unfasten the two leg straps. Squeeze the two release clips each side of the buckle and the straps will be released.



Squeeze the two bronze clips to open the leg strap buckles

6 - PREPARING TO TRANSPORT A PATIENT

6.7 - Deploying Cross-Strap Patient Harness system

The Cross-Strap harness system, available for use on CCT-PX as an alternative to the 4-point harness, consists of 2 cross-straps which cross the upper body, combined with a single leg strap. Crash tested and CEN complaint as with all Ferno trolley patient harness systems, the Cross-Strap system for CCT-PX offers quicker deployment with less straps and improved operation when using patient blankets.



POWERX Cross-Strap harness system



Cross-Strap harness unbuckled

Transfer the patient onto the trolley and position the patient with their head on the headrest.

Take one of the Crossover straps (red or blue) and cross it over the patient's body, clipping it into the buckle with corresponding same-coloured strap on the other side of the trolley.





Red Crossover strap attached to buckle with red strap at other side of trolley

Adjustable extension straps are also available for when transporting larger bariatric, which will adjust longer to accommodate even extreme bariatric patients.

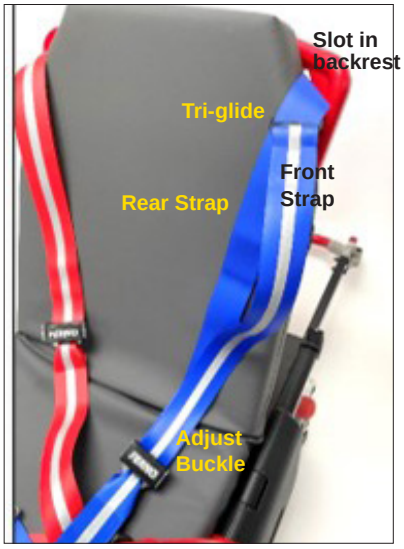




6 - PREPARING TO TRANSPORT A PATIENT

6.7 - Deploying Cross-Strap Harness (cont...)

Repeat the same for the other Crossover strap and then adjust the length of straps using the adjust buckles so the Cross-Strap harness holds the patient in position with no slack in the straps. Feed the rear strap through the adjust buckle to shorten, feed front strap to lengthen. Ensure the metal tri-glide at end of strap is not stuck through slot in top of backrest when adjusting strap length, which may prevent the length from being adjusted





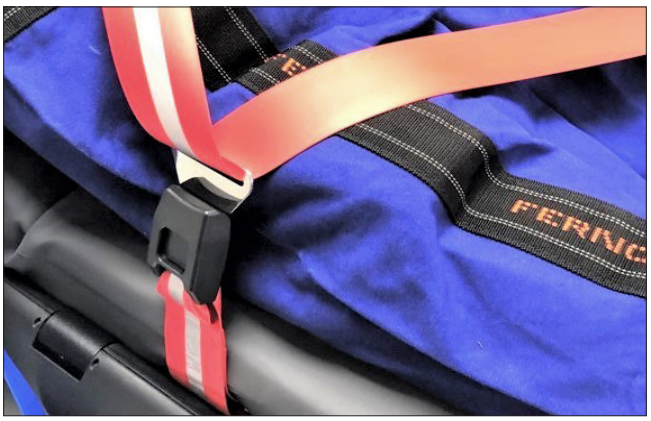
Adjust length of strap to ensure Crossover straps are securely holding the patient

Next attach the leg strap, again ensuring that it is tightened sufficiently.



6.8 - Unfastening Cross-Strap Harness

To unfasten the Cross-Strap harness, unbuckle each strap from the side buckle by pressing the release button on the buckle.



Press release button to release Crossover strap

Next release the leg strap by squeezing the two release levers on the buckle



Squeeze the two clips to open the leg strap buckle

The Cross-Strap harness has been designed such that when there is no patient on the trolley and the Cross-Strap harness is not being used, it does not hang down on the floor when the straps are adjusted to shortest length.



If the strap has been adjusted longer, it can be clipped into the buckle on that side to avoid it hanging down to the floor



6 - PREPARING TO TRANSPORT A PATIENT

6.9 - Cross-Strap Extensions for Larger patients (Option)

Adjustable extension straps are also available for when transporting larger bariatric, which extends the minimum length of the straps and will adjust even longer to accommodate extreme bariatric patients.

These extension straps should be connected onto the side buckles (red extension strap into the side buckle with red strap, blue to blue).



Webbing extension strap



Biosafe extension strap



Biosafe Cross-strap extension attached onto to side buckle to extend length of cross-straps Extension



Webbing Cross-strap extension attached onto to side buckle on one side showing extension functionality

6 - PREPARING TO TRANSPORT A PATIENT

6.10 - Attaching a Child Harness (PediMate / NeoMate)

To attach a child harness such as PediMate, PediMate PLUS or NeoMate to a trolley, the procedure laid out in the relevant user manual supplied with each product should be studied and followed. On POWERX and CCT-PX there are dedicated fixing points for attachment of the certain child harnesses.

PediMate, PediMate PLUS and NeoMate top straps are attached to POWERX/CCT-PX in the same way as with any other trolley, where the top fixing straps are wrapped around the back of the trolley, fastening them together using the buckle at the end of each strap and then fully tightening the straps once the whole harness has been attached and correctly positioned on the trolley.



Attaching PediMate top straps behind the backrest

Unlike traditional tubing-framed trolleys such as Pegasus, the lower straps of the PediMate child harness are attached to the trolley frame utilising incorporated loops attachment points located part way down the trolley



Loop for attaching lower fixing straps of PediMate on trolley with Biosafe cross strap



Dedicated Loop strap on trolley with 4-point harness

6.11 - Attaching a Child Harness on trolley with Cross-Strap harness

Take one of the PediMate lower attachment straps, detach the clasp from the buckle by depressing the button on the buckle, feed the clasp through the loop strap and then reconnect together into the buckle again, ensuring they are firmly attached. Do this on both sides of the trolley.



Once all straps have been attached and correctly positioned , re-tighten each strap making sure that the PediMate remains central to the trolley, in the correct position and firmly attached such that there is no movement.



PediMate PLUS securely attached to trolley

6 - PREPARING TO TRANSPORT A PATIENT

6.12 - Attaching a Child Harness to trolley with 4-Point harness

In the same way as for trolley with Cross-strap harness, on a trolley with 4-point harness the top fixing straps of the child harness are wrapped around the back of the trolley, fastening them together using the buckle and clasp at the end of each strap and then fully tightening the straps once the whole harness has been attached and correctly positioned on the trolley.



Attaching PediMate top straps behind the backrest

The lower straps of the PediMate child harness are attached to the trolley utilising the additional dedicated loop attachment straps positioned half way down the trolley.

The loop straps are attached to the trolley onto a side-fixing stud which is part way down the trolley, positioned on the hinge point between the top of the leg-raise platform section and the seat platform section, as per photo below, just below the adult patient harness waist strap fixing point.



If the loop attachment straps are not already installed on the trolley, take the loop strap with attached tang and place the tang over the fixing stud on the trolley until the stud protrudes through the tang and then pull firmly on the loop until the tang clicks in place. Ensure the tang is indeed attached. Do this also on the other side of the trolley.



Loop strap for attaching lower fixing straps of PediMate, attached to dedicated side-fixing stud using metal tang

Take one of the PediMate lower attachment straps, detach the clasp from the buckle by depressing the button on the buckle, feed the clasp through the loop strap and then reconnect together into the buckle again, ensuring they are firmly attached. Do this on both sides of the trolley.





6 - PREPARING TO TRANSPORT A PATIENT

6.13 - Strap Attachment points (4-point harness)

A summary of the various attachment points on POWERX & CCT-PX with 4-point harness is as per below list:



1. Attachment point for ACR paediatric harness lower fixing strap adapter (where applicable)

2. Attachment point for 4-point harness Waist cross-straps

3. Attachment point for PediMate loop fixing strap for attaching PediMate/NeoMate lower fixing straps to.

4. Attachment point for upper leg/thigh strap

5. Attachment point for lower leg/ankle strap

6.14 - Strap attachment points (Cross-Strap Harness)

A summary of the various attachment points on POWERX & CCT-PX with Cross-strap harness is as per below list:



1. Attachment point for ACR paediatric harness lower fixing straps (where applicable)

2. Attachment point for buckle strap for cross-over strap

3. Attachment point for bottom end of cross-over strap. End of Crossover strap also incorporates loop for attaching PediMate.

4. Not used

5. Attachment point for lower-leg strap (only 1 leg strap used with Cross-Strap harness)

6.15 - Using BabyPod on CCT-PX

Please refer to the BabyPod user manual for the procedure for attaching and using BabyPod on a trolley.

Attachment of BabyPod to CCT-PX is the same procedure as any other trolley, where the 2 fixing straps are fed around and under the belly of the trolley and then re-attached to the buckles on the opposite side of the BabyPod. The BabyPod foot-end fixing strap should be attached to the trolley foot-end red cross-handle.



BabyPod strapped to POWERX

6 - PREPARING TO TRANSPORT A PATIENT

6.16 - Attachment of other 3rd party child harness - Optional fixing kit

Please refer to ACR user manual for the procedure for attaching and using ACR harness system.

POWERX and CCT-PX were not designed or tested for the attachment of third party harnesses. However there is available from Ferno a set of 4 fixing tangs to facilitate attachment of other child harnesses, such as the ACR harness, where the upper fixing straps do not wrap around and attach to each around the back of the backrest like with PediMate, but instead each fixing strap requiring individual fixing points, also the required attachment points of the lower fixing straps being in a different position on the trolley to PediMate.

ACR child harness can be attached to CCT-PX by first attaching one of these fixing tangs to each of the blue fixing straps supplied with the ACR harness, as per below photos. The ACR blue fixing strap is looped through and around the tang, then re-attached to the ACR harness. This should be done for all 4 attachment straps.









Attaching fixing tang to ACR blue fixing strap

6.16 - Attachment of other 3rd party Child harness (cont...)



Once a tang has been attached to all 4 straps, attach each of the fixing straps onto the trolley.

The 2 upper ACR fixing straps should be attached to either set of fixing studs located on the rear of the backrest. Either position can be used, dependant on the size of patient and size of ACR harness being used

The 2 lower ACR fixing straps should be attached to 2 dedicated side-fixing points positioned at the base of the backrest





Attachment of upper ACR fixing straps to either set of fixing studs



Attached to upper studs on backrest



Attached to lower studs on backrest

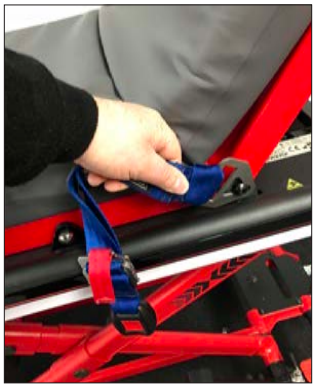
6 - PREPARING TO TRANSPORT A PATIENT

6.16 - Attachment of other 3rd party Child harness (cont...)

To attach the ACR lower fixing straps, use the dedicated fixing stud positioned at each side of the trolley at the base of the backrest. Place the tang over the fixing stud such that the stud is protruding through the tang and then pull the strap until the tang clicks in place.



Attachment of lower ACR fixing straps to fixing stud at base of backrest either side of the trolley





Once all the attachment straps are firmly and correctly attached to the trolley, tighten each strap, ensuring that the ACR is in the correct position, central to the trolley, and tightly attached such that it does not move.



After the ACR has been used, disconnect the tangs from each attachment point on the trolley. Note that the tangs can be kept connected to the ACR fixing straps whilst the harness is not in use and being stored.

7 - PREPARING TO MOVE THE TROLLEY

7.1 - Manoeuvring the Trolley

It is important to ensure there are sufficient operators holding the trolley at all times when moving the trolley to maintain a stable movement throughout and wherever possible with heavier patient weights using more than the minimum recommended 2 operators.

The following steps must be taken when moving a patient or when transferring on and off a vehicle via a tail-lift or ramp.

1. Transporting a patient on the trolley should always be carried out with the cotsides raised and the Cross-Strap harness and leg strap fastened and suitably tightened.
2. The trolley is recommended to be operated by at least two people at all times.
3. Where available, attach winch to the trolley winch-link to aid transfer into vehicle

7.2 - MCF Winch Link Attachment

The winch link connector at the head-end of the trolley aids the loading of a trolley into an ambulance with a ramp. The ambulance must be fitted with a winch mechanism with a MCF specification buckle. To operate, attach to the winch from the ambulance to the winch buckle situated on the trolley base at the head-end of CCT-PX.

Follow the winch manufacturer's instructions and recognised local manual handling protocols to winch the trolley into the vehicle.



7.3 - Loading the Trolley into a Vehicle Fitted with Ramps

1. Make sure that the patient is secure at all times whilst on the trolley.
2. The trolley is loaded with the patients head first towards the front of the ambulance.
3. Position the trolley at the base of the ramps, head end first.
4. If a winch is fitted then this can be attached to the head-end of the trolley to aid loading.
5. The cotsides are intended to provide patient safety and must not be used for lifting or manoeuvring the trolley.
6. With one operator at the head end pulling and one operator at the foot end pushing simultaneously, the trolley can now be advanced into the vehicle.
7. Secure the trolley into the Ferno 2 part-lock for transportation..

7.4 - Unloading the Trolley From a Vehicle Fitted with Ramps

1. Make sure that the patient is disconnected from any vehicle mounted apparatus or instrumentation.
2. Operation by a minimum of two operators at all times.
3. Disengage the trolley from the two part locking device by depressing the foot pedal (manual lock) and roll the trolley to the rear of the ambulance compartment.
4. Use winch wherever possible.
5. Using two operators guide the trolley down the ramp and out of the vehicle.

7.5 - Loading the Trolley into a Vehicle Fitted with a Tail Lift

1. Make sure that the patient is secure at all times whilst on the trolley.
2. The trolley is loaded with the patient's head towards the front of the ambulance.
3. Ensure that there are no trailing straps, blankets etc.
4 Guide the trolley on to the tail lift.
5. Operate the tail lift as per manufacturers' instructions.
6. Once the tail-lift is in the raised position, push the trolley into the vehicle head-end first and secure in the Ferno 2 part lock

7 - PREPARING TO MOVE THE TROLLEY

7.6 - Unloading the Trolley From a Vehicle Fitted with a Tail Lift

1. Make sure that the patient is disconnected from any vehicle mounted apparatus or instrumentation.
2. Operation by a minimum of two operators at all times.
3. Disengage the trolley from the two part locking device by depressing the foot pedal, and roll the trolley to the rear of the ambulance compartment.
4. Guide the trolley onto the tail lift and out of the vehicle.
5. Operate the tail-lift as per the manufactures instructions.
6. Lower the tail-lift to the ground and move trolley forward clear from the tail-lift

7.7 - Fastening Trolley in a Vehicle

CCT-PX is compatible and has been tested with the Ferno range of 2-part locks, including NMI and Unwin track locks and SlideLock, and baseline CCT-PX Trolley has been dynamically crash-tested to EN 1789 and CEN certified.



Head-end lock spike fixing U bracket



Foot-end lock fixing bracket

8.1 -Locking Devices 2-Part Lock

Locking devices available for use with CCT-PX include:

1. Standard floor-mounted Ferno 2-part lock

2. NMI floor-track mounted 2-part lock

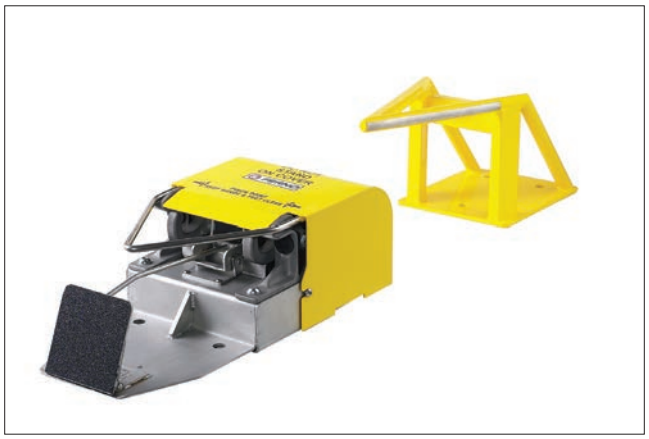
3.Unwin floor-track mounted 2-part lock

4. Ferno SlideLock 2-part lock with adjustable floor positioning

All have been dynamically crash-tested to EN 1789 and CEN certified when used in conjunction with Ferno UK's range of ambulance trolleys, Falcon, Pegasus, Megasus, Harrier, POWERX, and range of baseline CCT and ITU trolleys.

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 the Ferno range of Two-Part locking devices or competitors equivalent locking devices, giving full compatibility and interchangeability across your vehicle fleet.



Ferno Standard 2-part Lock



Ferno 2-part NMI Track lock

9 - MAINTENANCE

9.1 - Maintenance Schedule

The trolley requires regular maintenance. Set up and follow a maintenance schedule. The table at right/below represents minimum intervals for maintenance. 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 FernoCare UK Service Department.

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

9.2 - Cleaning the Trolley

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

Ensure that all equipment is removed from the trolley and that the Olson Power distribution socket is disconnected from mains supply.

Trolley should be hand-wiped using a suitable cleaning solution.

For particularly grimy cases, especially if the trolley has been in storage for a long period, it may be necessary to first clean the trolley with a water-soluble solvent-soaked cloth.

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..

Ensure no liquid enters the power distribution sockets.

9.3 - Disinfecting the Trolley

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. See note regarding disinfectants to use.

1. Remove the mattress, patient harness, straps and any accessories

2. 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/straps prior to storage

4. To disinfect: Apply disinfectant to the trolley, following the disinfectant manufacturer's instructions for application method and concentration

9.4 - Disinfecting & Cleaning Harness

It is recommended to remove the harness, straps and mattress from the trolley before cleaning and disinfecting to ensure they can be cleaned effectively on all surfaces.

Cleaning Webbing straps

1. Immerse webbing straps in a solution of mild soap and water to clean Do not immerse any metal buckles or metal fixation clips in the solution, these should be wiped clean only.

2. Repeatedly dip the webbing in clean water to rinse. Do not immerse any metal buckles or fixation clips. Hang the straps to air-dry. Attach only clean, dry straps back onto to the equipment.

Disinfecting webbing straps

1. Immerse or spray the webbing straps following the selected disinfectant manufacturer's instructions for application method and contact time. Do not immerse any metal buckles or metal fixation clips into disinfectant liquid

2. Spray the metal buckles and fixation clips with disinfectant cleaner spray, following the disinfectant manufacturer's instructions for application method and contact time

3. Hang the straps to air-dry if needed. Attach only dried straps to the equipment

Cleaning Biosafe straps

1. Wipe-clean the straps, buckles and fixing clips with mild soap and water

2. Hang the straps to air-dry. Attach only clean, dry straps back onto to the equipment

Disinfecting Biosafe straps

1. Spray the webbing straps, metal buckles and fixation clips with disinfectant cleaner spray, following the disinfectant manufacturer's instructions for application method, concentration and contact time

2. Hang the straps to air-dry if needed. Attach only dried straps to the equipment

IMPORTANT

Disinfectants and cleaners containing phenol or iodine can cause damage, it is recommended not to use products containing these chemicals.

If using disinfectant that is chlorine-based then ensure the concentration used is no higher than 10,000 ppm.

If higher than 10,000 ppm, it is recommended to use for the manufacturer's minimum recommended effective contact time after which any residue should be wiped off.

Accessories such as push poles, IV poles etc. should be cleaned and disinfected whilst detached from the trolley and the fixing points on the trolley also cleaned and disinfected.

⚠ WARNING

Improper maintenance can cause injury. Maintain the trolley only as described in this manual.

9.5 - Lubrication of 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.

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.



Do Not Lubricate



Lubricate

10 - PARTS AND SERVICE

10.1 UK Support

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

Telephone Main Reception	+44 (0)1274 851999
FernoCare UK Service Department	+44 (0)1274 854511
FernoCare UK Email	services.uk@ferno.com
Web	www.ferno.com/uk

⚠ WARNING

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

10.2 Worldwide

To order Ferno parts, and for professional trolley repair, contact your Ferno distributor. Your distributor is the only agent authorised by Ferno UK to manage, service, and repair Ferno products.

⚠ WARNING

Modifying the Trolley can cause injury and damage. Use the Trolley only as designed by Ferno.

11.1 - Accessories

Ferno offers a full line of accessories and products for use with CCT-PX, many of which are outlined in this user manual. Always follow the instructions packed with accessories. Keep the instructions with this manual. Be aware of any special considerations (loading heights, door widths, etc.) when using accessories.

Contact Ferno UK or your Ferno distributor for further product information.

⚠ WARNING

Attaching improper items to the trolley can cause injury. Use only Ferno-approved items on the trolley.

Accessories available for use with CCT-PX:

- SX cotside pads for enhanced bariatric tissue viability (038288525)
- Detachable headrest (0559-3116)
- Detachable 3-stage telescoping IV pole folding (LAIV3-SCLUK)
- Detachable 3-stage telescoping IV pole non-folding (LAIV3SCL(FIXED))
- Head-end document stowage net (038288499)
- Side-fixing manoeuvring handles (FWESLH)
- PacRac+ medical equipment holder with straps and iNTRAXX profiled top (FWEPR+IT)
- PacRac fixing kit (required when using PacRac+ (0800-3182)
- Split-Scoop Extreme Bariatric extended patient surface kit (009008250
- Inflatable sidepads kit for use with Split-Scoop kit (23271000802)
- Trolley dust cover, elasticated, AB material (836353200/AB)
- Patient protective shield (082-2097)

12 - Inspection Checklist

To ensure consistently safe operation of the trolley 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 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 move smoothly?	☐
- Do the wheel castors and brake operate properly, rotate fully and have adequate tread?	☐
- Are the patient harness and legs straps all present and properly installed?	☐
- Are the patient straps, mattress and harness in good condition with no cuts or frayed edges?	☐
- Are patient strap buckles free of visible damage and do they operate properly?	☐
- 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	☐

13 - SERVICING SCHEDULE

It is recommended in addition to the regular inspection and cleaning interventions that Ferno CCT-PX trolley is serviced at least once every 12 months. Below is a service schedule sheet where servicing dates and activities can be recorded. Ferno UK offers a range of cost-effective servicing programmes, helping to keep your equipment in good condition and keeping whole life time costs to a minimum.

Trolley Model	
Serial Number	
Date placed in operation	

Date of service	Remedial work carried out / Comments	Name