POWERX™

Configurable Powered X-frame ambulance trolley

FERNO®

POWERX Overview - Features

Redesigned powered X-frame ambulance trolley for use on vehicles with a tail-lift or ramp

Main development features:

- Improve manoeuvrability
- Minimise components, reduce weight, reduce maintenance
- Maximise shortening capability of trolley
- Minimise injury risk and improve patient outcome
- Flexible configuration design
- Attachable accessories & options according to individual and differing needs
- Backwards compatible with current Ferno 2-part lock and current vehicle designs

POWERX™

Minimised components used

Trolley weight from 78 kg

SWL of 350 kgs (55 stone) in raised position, 400 kgs (62 stone) in lowest

FERNO®

POWERX™

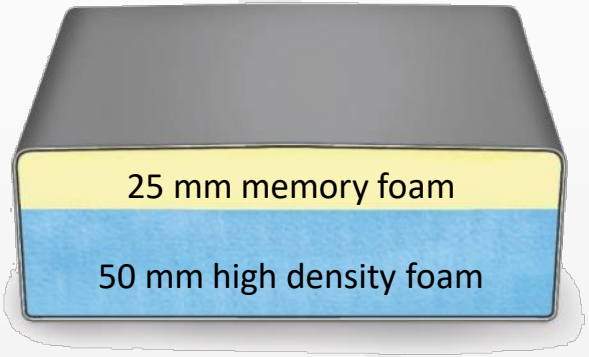
Moulded top bed surface, lightweight but durable

Mattress attached to trolley using AB Velcro – easy to remove to clean

FERNO®

POWERX™

Anti-Bacterial Pressure-Reducing (ABPR) Mattress



- Robust 2-way stretch, 2-side coated material
- Easy to wipe-clean
- PR foam construction for improved tissue viability & patient comfort
- Flat surface for unhindered patient lateral transfer on/off trolley

FERNO®

POWERX™

Biosafe Patient Restraints

- Wipe-clean restraint straps, metal buckles
- Attached to trolley with clip-off / clip-on tangs

2 configurations of restraint
“Above head” and “Over the shoulders”

FERNO®

POWERX™

Headrest easier to remove / attach

FERNO®

POWERX™

New adjustable winged ABPR Headrest

- Improved comfort
- Adjustable to differing patient head shapes and sizes

FERNO®

POWERX™

Trolley stability - sturdy frame design with dual-ram actuator

Recommendation: As with any X-frame trolley patient should be moved when trolley is at lowest height to ensure maximum stability and minimise risk

Smooth powered raise/lower movement, with slow start/stop for patient comfort

POWERX™

Shortening for confined areas – head-end & foot-end telescoping

Will shorten down to 1450mm (1540mm in locked position, with stow-net fitted)

FERNO®

Power control – Concens Controller & Milwaukee 28V battery (5Ah)

- > 110 lift cycles from 1 battery charge at 200 kg patient, > 66 lift cycles at max SWL of 350 kgs
- Auto-sleep mode after 1 min inactivity to preserve battery usage
- Full battery last over 66 hrs in sleep mode
- Short recharge time (< 1hr) and long expected battery life-time (over 5 years)
- Lift counter and battery status on LCD display

POWERX™

Manual override trolley lowering - for complete peace of mind

In unlikely event of no power

POWERX™

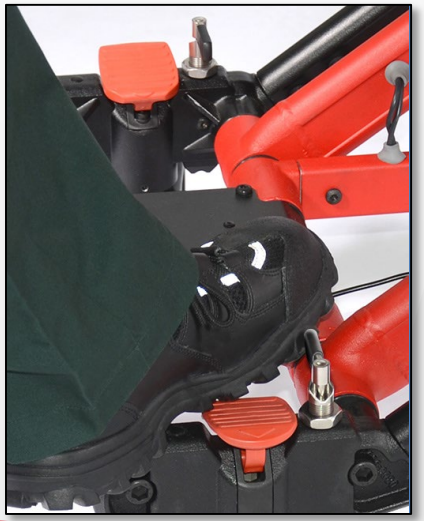
Brakes on all 4 wheels, one anti-static wheel

Easily accessible brake on frame on all 4 corners, independent of actual wheel positions

FERNO®

Foot-operated Directional wheel-lock –
Aids manoeuvring in a straight line and up/down inclines

- Disengaged when facing into trolley
- Engaged when facing outwards (180 degrees)



POWERX™

Bump wheels on all 4 corners – minimise potential damage along corridors

FERNO®

POWERX™

Push-pull handles, push poles & side-manoeuvre handles

– Improved control, minimise injury risk

Push Poles on all 4 corners

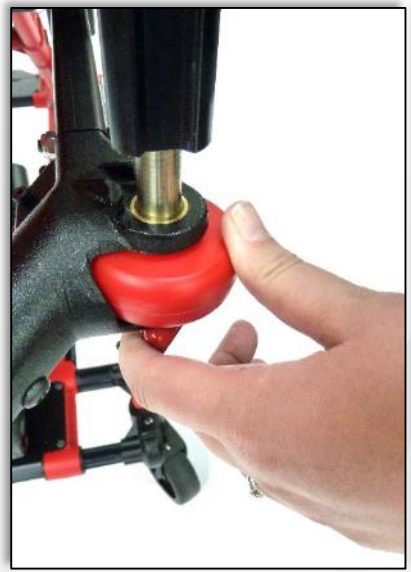
Optional push-pull handle at head-end and/or foot-end

Side manoeuvre handles (option)

FERNO®

Push poles locked, detachable & storable in frame – minimises potential for loss & misuse

Insert push pole until it clips into catch



Release by pulling against the fixing catch and lift out pole

Discreetly stored and locked inside PowerX frame, minimise loss

POWERX™

Winch link for assisted loading into vehicle when using a winch up a ramp

Should be used whenever possible, whether bariatric patient or not, to minimise manual handling risks

POWERX™

Easy-to-operate leg positioning

Trendelenburg

Shock position

Knee contour

Multi-positioning for clinical benefits and improved patient comfort

Gas-strut assisted leg-raise to aid manual handling

FERNO®

POWERX™

Easy-to-operate backrest positioning

Gas-strut assisted to aid manual handling

FERNO®

POWERX™

Reduced-risk lateral transfer from chair-to-trolley due to low trolley height in lowest position

FERNO®

POWERX™

Extensive equipment-carrying options:

- Latching monitor hook on back-rest (also available for iNX)
- O2 cylinder holder (CEN compliant)
- PacRac+ equipment holder
- Head-end document/possessions holder

Monitor hook option

O2 cylinder holder option

PacRac+ equipment holder option

Stow net storage option

FERNO®

POWERX™

Side-rail interface for the easy attachment of accessories

PowerX uses same siderail interface as iNX & Mondial, interchangeability of equipment and accessories

POWERX™

Flexibility of use – configurable according to needs

- Push poles
- Pac-Rac+
- IV Pole
- SX Cotsides
- Side manoeuvre handles

….all attachable via interface rail

Interchangeability of equipment between models of Trolley (PowerX / iNX / Mondial)

POWERX™

iNX

POWERX™

Side-lighting Option

Can be set to constant white LED, flashing white, flashing red, alternate red/white flashing

Lateral-folding cotside

Simple lateral-folding cotsides option

POWERX™

Surface Xtender ratcheting cotside option

Load-bearing, cotside tested to 100 kg, ratcheting to 6 different positions from vertical to near-horizontal, and fold down for lateral transfer

POWERX™

SX ratcheting cotside option – Semi-Bariatric capabilities

SX cotsides can be positioned at different locations on the side-rail interface

Sidepads also available for enhanced tissue viability

Load-bearing when horizontal, tested to 100 kgs

FERNO®

POWERX™

SX ratcheting cotsides – Points of note

- Ensure both SX cotsides are deployed and patient positioned central to trolley – balanced load
- Wherever possible transfer patient on/off trolley with trolley at lowest height
- When lateral transferring patient to bed ensure SX cotsides sides are supported underneath or folded down
- Use manual handling aids such as padslide / transfer board wherever possible

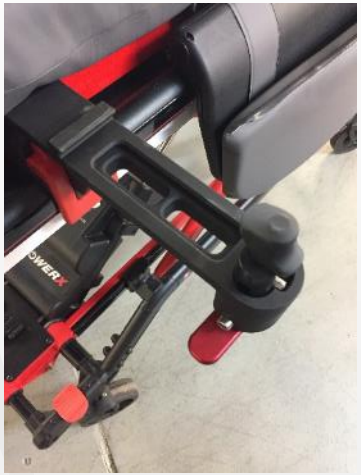
FERNO®

Larger patient surface for Extreme Bariatric capability – Double SX cotsides

Two SX cotsides each side of PowerX (locking of push poles in frame not possible with 2 SX cotsides attached)

Split-Scoop Extended Patient Surface Kit Option – Full length/width bariatric capability

Split-Scoop LPS fixing kit brackets

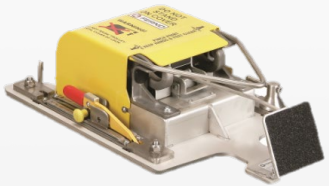


Attach brackets to sides of PowerX on interface rail

Split Scoop fixed either side of Trolley

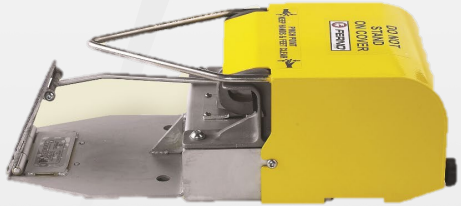
Can also use with inflatable sidepads

Trolley Locks



Vehicle Trolley Locks

- Standard 2-part lock for fixing all Ferno UK trollies to vehicle floor
  - Hard mounted to floor plates
  - NMI track mounted
  - Unwin track mounted
- All configurations 6-direction dynamically crash-tested, CEN compliant
- Side-operated version available for all 3 models of standard 2-part lock, pedal at side of lock



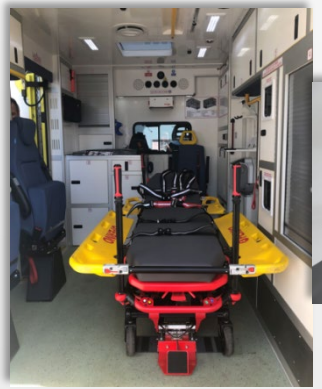
Ferno SlideLock

Easy-to-adjust 2-position ambulance trolley lock system

Ferno SlideLock - Features

- Provides the flexibility of where trolley can be positioned in a vehicle
- Allows a vehicle to be quickly and easily re-configured to accommodate a bariatric trolley, such as Harrier LT-LBS or Megasus with the cotsides extended
- Alter lock position ‘on-the-fly’ to accommodate POWERX with bariatric Split-Scoop surface extender kit attached or with SX cotsides fully deployed horizontal

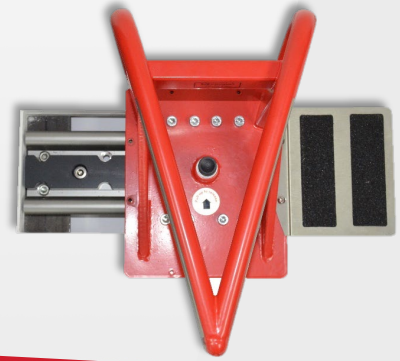



Ferno SlideLock - Overview

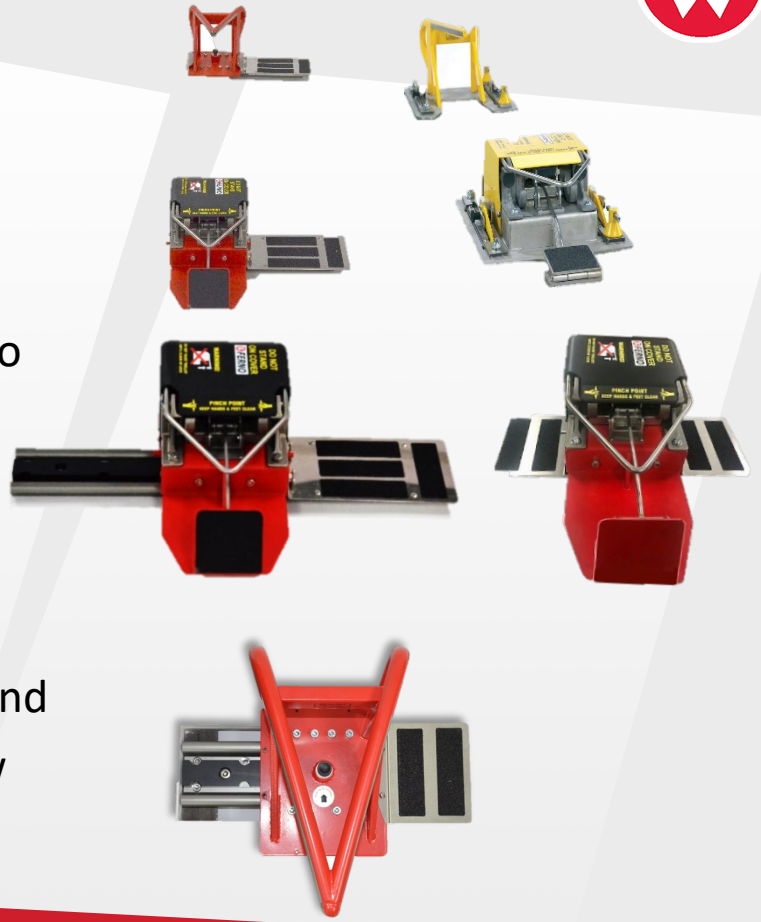
Allows the lock position to be easily repositioned from side to centre (C to B) in a vehicle, in accordance with EN 1789

- Moves sideways along a linear bearing mounted in the vehicle floor
- Easy to move lock between positions by Paramedics/Operators
- Simply move the lock from one position to the other, locks in place
- No need for any tools
- No need to remove lock from floor to move
- No need for vehicle floor tracking
- Enhanced IPC compared to track-mounted locks
- Fully CEN complaint, dynamically crash-tested to BS EN 1789
- Backwards compatible with all UK locks/trollies



Ferno SlideLock - Features

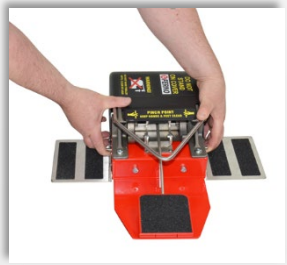
- 5 kg lighter than an NMI 2-part track lock
- Eliminates need for NMI/Unwin floor tracking and associated additional weight
- Available with different linear bearing widths to give different distance between the two trolley positions: 255mm, 150mm or other bespoke distance according to vehicle layout/customer requirements
- Easy to clean – remove top slide cover plates and clean or pressure wash the sealed recess below



Ferno SlideLock - Operation

To move the trolley lock between positions, simply:

1. Lift the plunger located on the head-end section of the lock (Spike)
2. Slide the Spike over to the left (or right), letting go of the plunger once it has started to move
3. Continue to move all the way over to the other side and it will lock in position with a positive ‘click’ sound
4. Do the same with the foot-end section, lifting the levers on both sides of the lock and then slide across to the other locking position, letting go of the levers once it has started moving



Ferno SlideLock - Compatibility

- Compatible with all Ferno trolleys
- Compatible with the Stryker Power Pro TL trolley

CROSS-COMPATIBLE SYSTEM

EN 1789 COMPLIANT CERTIFIED 10g

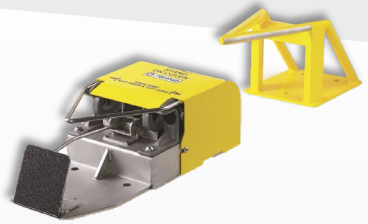
Lightweight 2-Part lock

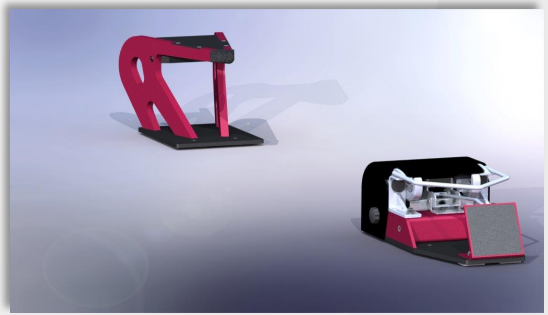
Reduce weight of equipment in vehicle, reduce fuel costs

Ferno Lightweight 2-part lock

Revised design 2-part lock, designed to reduce weight

- 3.5 kgs lighter than Standard yellow 2-part lock
- Fully backwards compatible with Standard 2-part lock
- Will fit all trollies, legacy or current POWERX
- Colour scheme Red/black in line with Ferno IPTS/POWERX branding
- Lightweight lock design to be also implemented on SlideLock





Comparison of various lock weights

	Two Part Locking Device Comparison									
	Two Part Lock			NMI 255mm Track Lock		Unwin 255 Track Lock		Slidelock		
Kgs	Ferno Std	Ferno Lightweight	Stryker	Ferno	Stryker*	Ferno	Stryker	SlideLock 255	SlidelLock 150	Lightweight 255*
Spike	5.30	3.80	7.40	10.30	*12.40*	8.50	N/A	8.50	8.00	*7.00*
Lock	8.00	5.70	7.80	14.10	*13.90*	12.40	N/A	11.00	10.40	*8.70*
Total	**13.00**	**9.50**	**15.20**	**24.40**	***26.60***	**20.90**	**N/A**	**19.50**	**18.40**	***15.70***
Diff	-	-3.50	+2.20		*+2.20*			-4.90	-6.00	*-8.70**
	In addition 7 knurled screws and 7 fixing block plates required at 1.3kg		?							

SlideLock Lite 11 kg lighter than Stryker's NMI tracklock

Uni-Clip Doc

- Interface that attaches (and tested with) all Ferno UK trollies & iNX
- Will also attach to Stryker PowerPro trolley for full inter-operability
- Mimics the locking system in floor of aircraft/helicopter such that equipment can be safely fixed and transported by both air and road
- Transfer incubator, Aerosled and other platforms from aircraft to Ambulance trolley for safe onward journey
- Dynamically crash-tested, CEN compliant
- Comes with 2 sets of attachments, clamps for iNX and POWERX, ratcheting fixing straps for all other trollies
- Optional bridge to attach at one end to bridge gap between helicopter and trolley