# VIPER

## STRETCHER & LOADING SYSTEM



**EN 1789 COMPLIANT CERTIFIED 10 g**

**INTEGRATED INFECTION CONTROL**
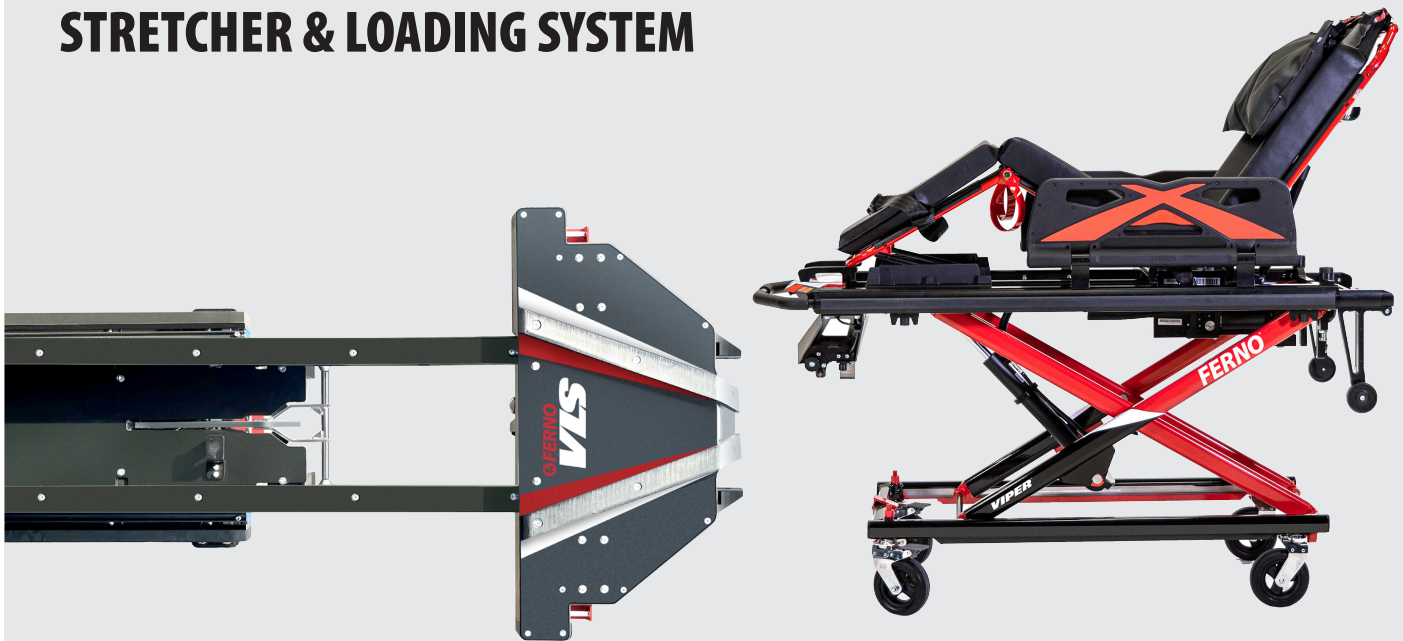
**Sometimes to simplify is the answer - for years the Ambulance Sector has debated "How do we eliminate the need for a Tail-lift, Ramp or complicated electronic Loading System on the back of an Ambulance"?**

**Ferno's VIPER system** utilises a mechanical loading arm which quickly, easily and safely loads/unloads the ambulance stretcher without using what is considered to be unreliable powered in-vehicle systems. But another massive bonus is the weight saving, the Ferno VIPER stretcher & loading system weighs in at under 156 kg up to 30 kg less than an equivalent powered loading system and at least 150 kg lighter than a traditional tail-lift and X-frame trolley vehicle configuration.

Needing no power the VIPER Loading System (VLS) is easier and quicker to operate and requires less servicing, thereby maximising the efficiency of the fleet and contributing towards the reduction in whole life-time costs.

**The VIPER Stretcher** –has a 320 kg (50 stone) unassisted lift capacity, it can be used for all types of patient transfers, including bariatric. Utilising the latest-generation Lithium-ion battery technology with automatic in-vehicle charging, it ensures the stretcher has power every time. But in the unlikely event of no power, the Viper's built-in manual-override capability is extremely quick and easy to operate.

The VIPER stretcher includes ratcheting Surface eXtending (SX) Cotsides, allowing the patient surface to be widened for larger-size patients. Directional wheel locks at the head-end, but actuated at the foot-end, always gives you full control.

The VIPER App (iOS & Android) allows adjustment of loading height (also programmable directly on the stretcher), parameter settings and stretcher operation monitoring for maintenance and servicing.

**The VIPER Loading System (VLS)** – can be used on angled and uneven surfaces, over inclines, even on pavements and sidewalks. Minimal operator intervention or effort is required for loading; just approach the loading arm with the stretcher, the loading-arm head guides the stretcher into position and once locked in place simply press a single button to lower the stretcher onto the loading arm and raise the legs, all in one step, then simply move the stretcher into the vehicle, all requiring the minimum of effort.

**⊕ FERNO®**

# VIPER
## STRETCHER & LOADING SYSTEM

**⊕FERNO**®

**The WHOLE System brings together ALL what the modern Ambulance demands** - a simple, robust, lightweight Stretcher & Loading System that saves time when every second counts, that is easy to maintain & clean, and which contributes massively to reducing the weight and the whole life costs of the Ambulance.

## Features & Benefits

### VIPER Stretcher

- Powered stretcher with unassisted lift capacity of 320 kg (50 stone)
- Stretcher utilises latest-technology integrated Lithium-ion battery which auto-charges in the vehicle
- Battery level indicator shows the stretcher charge at all times
- Manual over-ride function if battery is depleted, can load/unload stretcher even with no power
- Multi-position backrest and leg-positioning, easy to adjust
- All-terrain 15cm rubberised wheels for better handling and shock absorption
- Easy to operate foot-end wheel locks
- Head-end directional wheel-locks, actuated from foot-end
- SX surface extender cotsides, ratchets to 4 different positions including horizontal (load-bearing)
- Stretcher shortens to 1630 mm for easier manoeuvring around corners and in lifts
- Viper Smartphone/Tablet App (iOS & Android) for setting load height, but which can also be set directly on the stretcher

- Stretcher operation data can also be uploaded to Viper App for analysis

### VIPER Loading System (VLS)

- Mechanical loading & fastening system – no power required, no electrics to go wrong
- Mechanical detection when loading in the lock with no need for a wireless connection between stretcher and loading arm/lock
- Quick and easy to load/unload, less than 20 seconds
- Loading system design minimises the manual-handing effort required
- Loading-arm head guides stretcher in position during loading, operator do not need to worry about being exactly aligned when loading
- Can be loaded/unloaded on inclines, at angles and on rough terrain
- Only 2000 mm in length, will fit in the shortest of vehicles
- Not subject to LOLER or other lifting regulations
- Designed for easy installation in vehicle

## Specifications

### VIPER Stretcher

| | | |
|---|---|---|
| LENGTH | | 2000 mm |
| LENGTH Shortened | | 1630 mm |
| WIDTH | | 600 mm |
| Width (with SX cotsides ratcheted horizontal) | | 950 mm |
| MAX HEIGHT | | 1330 mm |
| MIN HEIGHT | | 380 mm |
| *WEIGHT no mattress/restraints | | 82 kg |
| SWL | Unassisted Lift | 320 kg |
| WHEELS DIAMETER | | 15 cm |
| WHEELS WIDTH | | 5 cm |
| BACKREST ARTICULATION | | 0° – 90° |
| LEG PLATFORM ARTICULATION | | 0° – 30° |
| BATTERY CAPACITY | | 37 V, 5 Ah |

*Stretcher weight includes SX cotsides and battery pack, no mattress or restraints that weigh 4.8 kg

### VIPER Loading System (VLS)

| | |
|---|---|
| LENGTH | 2000 mm |
| WIDTH | 570 mm |
| HEIGHT from floor in vehicle (no stretcher loaded) | 260 mm |
| WEIGHT | 69 kg |
| MAX LOAD CAPACITY | 400 kg |
| MAX LOADING HEIGHT (vehicle floor height) | 900 mm |
| Max angle of negative incline for loading | 5° |
| Max angle of positive incline for loading (stretcher angle above loading arm) | 7° |
| Max angle of lateral incline (side) for loading | 6° |

### Compliance

- Viper Stretcher & loading system 10G dynamically crash-tested, certified to EN 1789:2020, CEN compliant
- Compliance to EN 1865:2015
- Compliance to Medical Device Regulation (EU) MDR 17/745
- IP66 rated, both stretcher & loading system can be power-washed

## VIPER variation Part Numbers

| | |
|---|---|
| 3000203 | Viper Monobloc Stretcher with SX cotsides & Viper loading system (VLS) |
| 3000203-UK | As above but with 4 wheel brakes, leg adjustment on LHS of stretcher (for UK) |
| 3000230 | Viper stretcher, as above (no loading system) |
| 3000230-UK | UK spec Viper stretcher, as above (no loading system) |
| 3000231 | VLS loading system (no stretcher) |

**See separate sheet for Viper options & accessories**

# VIPER

## STRETCHER OPTIONS & ACCESSORIES

### Viper Head End Backrest Extension

This alternative backrest option allows the stretcher backrest to be extended to enhance patient comfort and safety for larger or taller patients. Extends overall stretcher length from 2000 mm to 2160 mm.

**Part No: 4000073 (V-KV)** (complete backrest unit, 800 mm 450 mm 25 mm, 3 kg)

### Viper Head End Extension Headrest Pillow

**Part No: 15000000037** Used in conjunction with headrest option V-KV.

### Viper Black Push-Bar

The Push-Bar option permanently mounts to the VIPER stretcher giving an easily accessible point that provides extra manoeuvrability. **Part No: 4000088 (V-PB)**

### Viper Red Ferno Footplate

Alternative available option is a patient platform with built-in footplate. **Part No:** See Viper stretcher configuration list
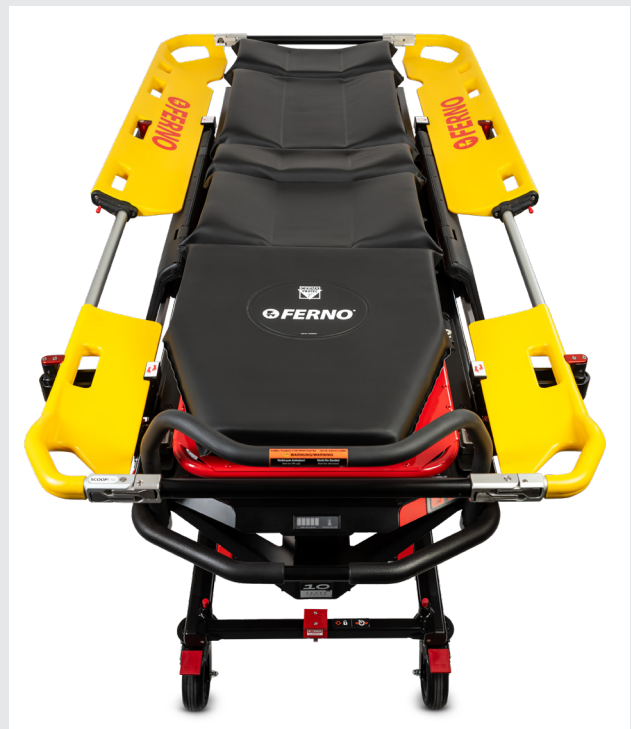
### Viper Push Poles

Keeping with protocols, the Push Pole option allows Viper to be wheeled in a lowered position without compromising the operators' body position. Poles easily detachable from the stretcher when transferring patient on and off the stretcher. **Part No: 3000286 (Push pole holders) 0800-3215(Push poles, each)**

### Viper Split Scoop Surface Extender Kit

Increase the patient surface width on Viper stretcher from 460 mm to a total of 920 mm at the head end and 850 mm at the foot end to accommodate extreme bariatric patients. Mount the two halves of a Scoop EXL on the sides of the Viper stretcher with the Extender kit.
**Part No: 4000107 (V-SX-EXL)** (Requires option of Long Medical rail installed on both sides of stretcher. Kit consists of 6 component parts, 4 brackets, 2 connecting poles. Does not include Scoop EXL). Sidepads (0450-3014) also available to place on top of the Split Scoop when deployed.

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### Viper Three-Stage IV Pole

3-stage telescoping IV pole option. Fixed to the side of Viper Stretcher, foldable for storage.

**Part No:** 4000089 (LAIV-3SV)

### Viper O2 Cylinder Holder

Simple-to-apply cylinder holder option, which can be used during transfer and in-vehicle when travelling. **Part No:** 3000284

### Viper Defib Hook

Latching to safely hold a range of defib models when transferring the patient to/from the vehicle

**Part No:** 3000285

### Viper Lateral Medical Rails

The Viper Medical Rail option allows medical devices to be attached to the side of the stretcher. Available in two different lengths, 1330 & 785 mm. Note that with rails attached on both sides of the stretcher and the SX cotsides lowered, this extends the width of stretcher by 200 mm to 800 mm.

**Part Nos:** **LONG 4000074 (V-NS)** (1330 mm, 25 kg) **SHORT 4000075 (V-NS-S)** (785 mm, 12 kg)

### Universal clamp for Lateral Medical Rail

The universal clamp allows medical devices with the same interface as shown in photo to be securely mounted to the Medical siderail on the side of the stretcher whilst moving outside of the vehicle. **Part No:** 4000108 (UKN)
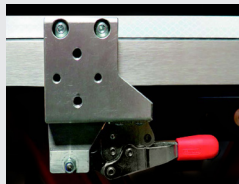
Medical rail height 25 mm, rail thickness 10 mm, rail protrudes 30 mm from stretcher.

### Viper Head-End Corpuls with Patient Box Holding Bracket

Mounted on the backrest frame at the head end of the stretcher, this option allows a Corpuls with Patient Box to be hooked onto the Viper backrest. *Note that this can only be used on a stretcher that has the optional Viper head-end backrest extension,* V-KV.

**Part No:** 4000074 (M273) (200 mm 92 mm 45 mm 340 g Max Load 6.5 kg)

### Viper Mounting Hardware Kit for fixation of PacRac+

Required for mounting Ferno PacRac+ on Viper stretcher (needs to be specified at time of ordering stretcher). Does not include PacRac itself which needs ordering separately (FWPR+V/C) **Part No:** 4000076 (V-BK 274)

### PacRac+® Equipment Table

Allows monitor and other medical devices to be mounted on equipment table fixed to stretcher. Includes iNTRAXX interface **Part No:** 4000077 (FWPR+V)
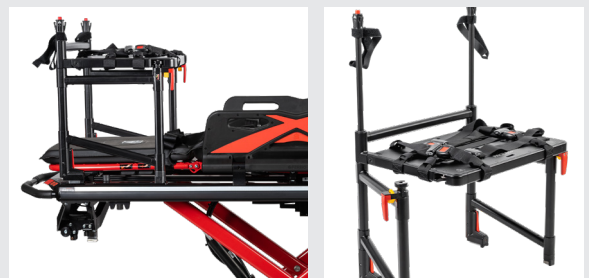
### Viper Equipment Pole System

The equipment pole system securely mounts to the VIPER stretcher side frame and is used to attach any medical device that uses a clamp system. By mounting it on the chassis frame, the total width of the stretcher increases by 45 mm to 645 mm.

**Part No:** V-EPS (Not to be used to manoeuvre stretcher)