# stryker

# Power-PRO™ TL Cot

### **Operations Manual**

**REF** 6550



# Symbols

	Refer to instruction manual/booklet	
i	Consult instructions for use	
CE	CE mark	
EC REP	Authorized representative in the European Community	
MD	European medical device	
	General warning	
$\triangle$	Caution	
	Warning; crushing of hands	
((;))	Warning; non-ionizing radiation	
	No pushing	
$\otimes$	Do not lubricate	
REF	Catalogue number	
LOT	Lot (batch) code	
SN	Serial number	
US Patents	For US Patents see www.stryker.com/patents	
	Manufacturer	
	Date of manufacture	
	Importer	
ß	Mass of equipment with safe working load	
	Safe working load	

<b>*</b>	Type B applied part
<u> </u>	Type BF applied part
	Medical Equipment Classified by Underwriters Laboratories Inc. With Respect to Electric Shock, Fire, and Mechanical Hazards Only in Accordance with ANSI/AAMI ES60601-1:2012 and CAN/ CSA-C22.2 No. 60601-1:14.
	Direct current
~	Alternating current
	Class II electrical equipment: equipment in which protection against electric shock does not rely on basic insulation only, but in which additional safety precautions such as double insulation or reinforced insulation are provided, there being no provision for protective earthing or reliance upon installation conditions.
Â	Dangerous voltage
[SMRT]™ Power	SMRT power system
+	Extend
	Retract
IPX0	Non-protected
IPX6	Protection from powerful water jets
X	In accordance with European Directive 2012/19/EU on Waste Electrical and Electronic Equipment (WEEE) as amended, this symbol indicates that the product should be collected separately for recycling. Do not dispose of as unsorted municipal waste. Contact local distributor for disposal information. Ensure infected equipment is decontaminated prior to recycling.
Cd	WEEE Directive (2012/96/EC). Contains cadmium.
THE CYCE A	The Rechargeable Battery Recycling Corporation (RBRC) is a non-profit, public service organization that promotes the recycling of portable rechargeable batteries. Batteries must be delivered to a battery collection site. Visit the RBRC website (www.rbrc.org) to find a nearby collection site or call the phone number shown on the recycling symbol.
RECY NI-Cd	Contains nickel cadmium cells and should be recycled accordingly
DATA – +	Battery terminal identification (data line, negative, and positive)
KRX 23/44	Ni-Cd cell identification per IEC 61951-1:2003

2300 mAh (1.2A/2h)	Battery capacity, typical charge, and duration
$\bigotimes$	Do not clean with bleach
Ý	Shoulder restraint
<b>İ</b>	Double buckle waist restraint
•	Single buckle waist restraint
•	Thigh restraint
, in the second	Ankle restraint

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Every month or two hours	
Every three months or six hours.	
Every six months or 12 hours Every 12 months or 24 hours	
•	
EMC information	

# Warning/Caution/Note Definition

The words WARNING, CAUTION, and NOTE carry special meanings and should be carefully reviewed.

#### WARNING

Alerts the reader about a situation which, if not avoided, could result in death or serious injury. It may also describe potential serious adverse reactions and safety hazards.

#### CAUTION

Alerts the reader of a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or damage to the product or other property. This includes special care necessary for the safe and effective use of the device and the care necessary to avoid damage to a device that may occur as a result of use or misuse.

Note - Provides special information to make maintenance easier or important instructions clearer.

# Summary of safety precautions

Always read and strictly follow the warnings and cautions listed on this page. Service only by qualified personnel.

#### WARNING

- Always keep your hands clear of the red safety bar pivots when you load, unload, or change the height position of the cot.
- · Always use both hands when transporting the cot.
- Always install the cot fastener by qualified personnel only. Improper installation could result in injury to the patient or operator.
- Always make sure that all cots meet the installation specifications for the Stryker cot fastener system.
- Always adjust the rail clamp assembly to match the cot retaining post position for the cot manufacturer and model number.
- · Do not remove the battery when the cot is active.
- Always operate the product only when all persons are clear of the mechanisms. Entanglement in powered product mechanisms can cause serious injury.
- · Always inspect SMRT Paks for damage before every use.
- · Do not allow untrained assistants to assist in the operation of the product.
- Always follow proper hand placement on hand grips. Keep all hands clear of the red safety bar pivots when you load or unload the cot or change cot height position.
- Do not ride on the base of the cot.
- Do not transport the cot sideways to avoid the risk of tipping. Always transport the cot in a lowered position, head end or foot end first to minimize the risk of tipping.
- Always keep hands, fingers, and feet away from moving parts. Use caution when placing your hands and feet near the base tubes while you raise or lower the cot.
- Always install the in-fastener shut-off system in any emergency vehicle that will be used with this cot and an antler style cot fastener.
- Always conduct patient monitoring when the cot is idle. If you hydraulically raise or lower the product you may temporarily affect electronic patient monitoring equipment.
- Always use all restraint straps to secure the patient on the product. An unrestrained patient may fall from the product and be injured.
- Do not leave a patient unattended. Hold the product while a patient is on the product.
- Do not apply a wheel lock when a patient is on the product or when you move the product to avoid the risk of tipping.
- Do not use siderails as a patient restraint device.
- Always transport the cot at a lower height to reduce the risk of a cot tip. If possible, obtain additional assistance or take an alternate route.
- Always avoid high obstacles, such as curbing, steps, or rough terrain to avoid the risk of the product tipping over.
- Always use two operators to raise or lower the cot with a patient.

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- Always make sure that the cot is not able to roll back off of the lift before you use the tail lift with a cot and patient. Make sure that the lift gate stop is maintained and functioning.
- Always lock the head section into place before you operate the cot.
- Do not attempt to load the cot into the vehicle patient compartment with the head section retracted. Loading the cot with the head section retracted may cause the product to tip or not connect to the vehicle cot fastener.
- Do not install or apply a wheel lock on a product with worn wheels that are less than 6 in. diameter.
- Do not leave a patient or occupant unattended. Hold the product while a patient or occupant is on the product.
- Always use all restraint straps to secure the patient on the cot. An unrestrained patient may fall from the cot.
- Do not attach restraint straps to the base tubes or cross tubes.
- Always locate the buckle away from obstructions or accessories on the cot to avoid the risk of accidental release of **Pedi-Mate**® infant restraint system and injury to the infant.
- Do not attach the defibrillator platform on a Model 6086 Performance-PRO XT cot with the Power-LOAD option to avoid the risk of a cot tip.
- Always lock the push bars into the mounts to prevent the push bars from coming out during use.
- Do not lift the product with the push bars.
- Always store the push bars in the base storage pouch when not in use.
- Do not attempt to open the battery pack for any reason, to avoid the risk of electric shock. If the battery pack case is cracked or damaged, do not insert it into the charger. Return damaged battery packs to a service center for recycling.
- Always avoid direct contact with a wet battery or battery enclosures. Contact may cause injury to the patient or operator.
- Do not insert a cracked or damaged SMRT Pak into the SMRT charger. Return damaged SMRT Paks to a service center for recycling.
- Always have a certified mechanic, familiar with ambulance vehicle construction, install the mounting bracket option and the SMRT charger.
- Always mount the **SMRT** charger to the mounting bracket option in an enclosed cabinet and out of patient reach during transport to comply with established crash test standards.
- Always make sure that the mounting bracket option is securely attached to the surface.
- Always use any appropriate personal protective equipment while power washing to avoid inhaling contagion. Power washing equipment may aerate contamination.
- Always wear insulated rubber gloves, in addition to personal protective equipment, when cleaning the SMRT Pak to reduce the risk of injury.
- Always disconnect the SMRT charger from the wall outlet before cleaning to avoid the risk of electrical hazards.
- Do not spray fluid directly onto the **SMRT** charger.
- Do not power wash the SMRT charger.
- Do not use solvents, lubricants, or other chemicals to clean the SMRT charger unless otherwise directed.
- Do not immerse the SMRT charger in water or allow water to collect on top of the SMRT charger to avoid the risk of electric shock.
- · Always use only non-conductive materials to wipe the SMRT Pak.
- Always avoid excessive water exposure to the SMRT Pak terminals.
- Always refer to the disinfectant's Material Safety Data Sheet (MSDS) to verify the pH range. Disinfectants with pH levels higher than 10.5 may cause the SMRT Pak housing material to crack.
- Do not directly handle or make contact with the SMRT Pak terminals while cleaning to avoid the risk of injury.
- Do not immerse the SMRT Pak in liquid to reduce the risk of electric shock.
- Do not use solvents, lubricants, or other chemicals to clean the SMRT Pak unless otherwise directed.
- Always relieve pressure before you disconnect hydraulic or other lines. Escaping fluid under pressure can penetrate the skin and cause serious injury. Tighten all connections before you apply pressure. If an accident occurs, see a doctor immediately.
- · Do not use bare hands to check for hydraulic leaks.

#### CAUTION

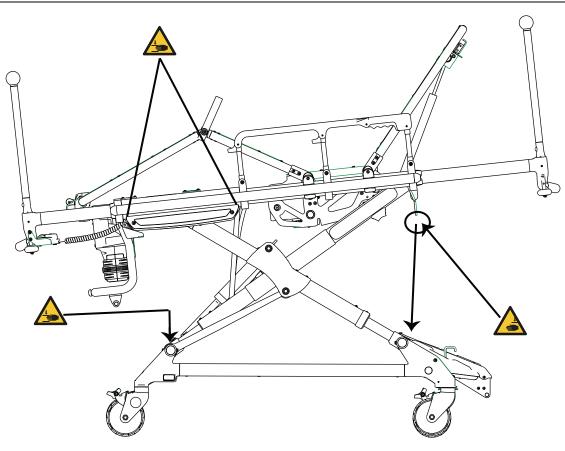
- Improper usage of the product can cause injury to the patient or operator. Operate the product only as described in this manual.
- Do not modify the product or any components of the product. Modifying the product can cause unpredictable operation resulting in injury to patient or operator. Modifying the product also voids its warranty.

- Do not use the product with incompatible restraints.
- Always charge the battery before you place the product into service. An uncharged or depleted battery may cause poor product performance.
- Always clear any obstacles that may interfere and cause injury to the operator or patient before operating the product.
- Always lower the cot to the lowest position to make sure that the cot connects to the cot fastener.
- Do not attempt to change the product height while the cot is connected to the cot fastener.
- Do not sit or stand on the siderails (XPS option).
- Do not use the siderails (XPS option) as a patient transfer device or surface (for example, to slide a patient from the cot to another surface).
- Do not position patients with full weight on the siderails (XPS option).
- Do not use the siderails (XPS option) as a push/pull device or to steer the product.
- Do not entangle the restraint straps in the base frame when you raise or lower the cot.
- Always secure the defibrillator platform to the product when you use the defibrillator platform.
- Always use and adjust the straps that are provided with the defibrillator platform to secure the defibrillator.
- Always change the attachment location or adjust the straps for your specific defibrillator size or shape.
- Do not load the defibrillator platform above the safe working load of 30 lb (13.6 kg).
- Do not load the equipment hook above the safe working load of 35 lb (15.8 kg).
- · Always remove all accessories or equipment from the equipment hook when in the vehicle.
- Do not load the IV pole above the safe working load of 25 lb (11.3 kg).
- Do not load the oxygen bottle holder above the safe working load of 1.1 stones (6.8 kg) (15 lb).
- · Do not use two oxygen bottle holders at the same time.
- Do not load the base storage net above the safe working load of 20 lb (9 kg).
- Always be careful when you retract the base to avoid damaging items that are stored in the base storage net.
- Do not load the backrest storage pouch above the safe working load of 20 lb (9 kg).
- Do not allow the storage pouch to interfere with the operation of the retractable head section.
- Do not store items under the mattress. Items under the mattress may interfere with product operation.
- Always remove the battery if the cot is not going to be used for an extended period of time (more than 24 hours).
- Always place the electrical **SMRT** charger power cord where it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- Do not touch the SMRT Pak receptacle terminals with metal objects.
- Always grasp and pull the plug, not the cord, when you disconnect the SMRT charger to avoid the risk of damage to the electrical plug and cord.
- Do not apply lubricants to the surfaces of the restraints.
- Do not steam clean or ultrasonically clean the product.
- Do not exceed 180 °F (82 °C) as the maximum water temperature.
- Do not exceed 1500 psi (103.4 bar) as the maximum water pressure. If you use a hand held wand to wash the product, keep the pressure nozzle at a minimum of 24 in. (61 cm) from the product.
- Always allow to air dry.
- · Always remove the battery before you wash the cot.
- Do not clean, service, or perform maintenance while the product is in use.
- Do not steam clean or ultrasonically clean the SMRT Pak.
- Do not exceed 240 °F (115 °C) as the maximum air dry temperature (cart washers).
- · Always use authorized parts to avoid the risk of product damage.
- Always check hoses and lines regularly to avoid damage to the cot. Check and tighten loose connections. Hydraulic lines, hoses, and connections can fail or loosen due to physical damage, kinks, age, and environment exposure.
- Do not tip the cot onto its load wheels and actuate the product as this will allow air to enter the hydraulic system.
- Do not lubricate the bearings in the X-frame as it will degrade the performance of the cot and may void its warranty.
- The use of accessories, transducers, and cables, other than those specified or provided by the manufacturer, could result in increased electromagnetic emissions or decreased electromagnetic immunity and result in improper operation.

- The emissions characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). If it is used in a residential environment, for which CISPR 11 class B is normally required, this equipment might not offer adequate protection to radio frequency communication services. The user might need to take mitigation measures, such as relocating or reorienting the equipment.
- Portable RF communications equipment, including peripherals such as antenna cables and external antennas, should be used no closer than 12 inches (30 cm) to any part of Power-PRO and SMRT charger, including cables specified by the manufacturer.
- Avoid stacking or placing other equipment adjacent to Power-PRO and SMRT charger to prevent improper operation of the products. If such use is necessary, carefully observe Power-PRO and SMRT charger and the other equipment to make sure that they are operating properly.

#### **Pinch points**

**WARNING** - Always keep your hands clear of the red safety bar pivots when you load, unload, or change the height position of the cot.





#### **Mechanical stability**

WARNING - Always use both hands when transporting the cot.

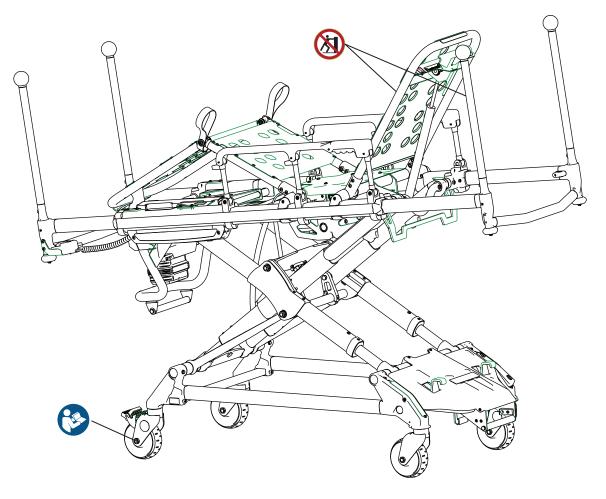


Figure 2 – Mechanical stability

Note - If the cot is on a plane steeper than five degrees, place the cot in the lowest position.

# Introduction

This manual assists you with the operation or maintenance of your Stryker product. Read this manual before operating or maintaining this product. Set methods and procedures to educate and train your staff on the safe operation or maintenance of this product.

#### CAUTION

- Improper usage of the product can cause injury to the patient or operator. Operate the product only as described in this
  manual.
- Do not modify the product or any components of the product. Modifying the product can cause unpredictable operation resulting in injury to patient or operator. Modifying the product also voids its warranty.

#### Note

- This manual is a permanent part of the product and should remain with the product even if the product is sold.
- Stryker continually seeks advancements in product design and quality. This manual contains the most current product information available at the time of printing. There may be minor discrepancies between your product and this manual. If you have any questions, contact Stryker Customer Service or Technical Support at 1-800-327-0770.

# **Product description**

The Stryker Model 6550 **Power-PRO**<sup>™</sup> TL cot is a powered ambulance cot that consists of a platform mounted on a wheeled X-frame designed to support and transport a maximum weight of 700 lb (318 kg) in pre-hospital and hospital environments.

The device is collapsible for use in emergency vehicles and the NiCd battery-powered hydraulic lift system allows operators to raise and lower the cot using the powered controls. The cot is equipped with a manual back-up release handle to allow the operation of cot functions in the event of power loss. The device is equipped with the following: retractable head and foot sections to reduce foot print and allow the cot to maximize maneuverability in tight spaces, siderails, patient securement straps, an adjustable pneumatic backrest and various optional accessories that assist with transport of the patient. Maximum patient comfort is attainable with the three different litter positions of shock, flat leg, and optional knee Gatch positioning.

The **SMRT**<sup>™</sup> power system consists of a **SMRT** charger and a **SMRT** Pak. The **SMRT** Pak powers the hydraulic lift system of the Stryker powered ambulance cots.

# Indications for use

The Stryker **Power-PRO** TL is a powered wheeled stretcher that is intended to support and transport the entire body of a traumatized, ambulatory or non-ambulatory human patient (includes infants and adults).

The battery-powered hydraulic lift system helps to reduce the effort required by the operator to raise and lower the cot. The device is made to support patients in a supine (horizontal) or sitting position and to facilitate the transportation of associated medical equipment (such as oxygen bottles, monitors, or pumps) in emergency or transport vehicles. This ambulance cot is to be used in pre-hospital and hospital environments, in emergency and non-emergency applications. It is rated to a maximum capacity of 700 lb (sum of the patient, mattress and accessory weight) and the intended operators of the device are trained professionals, including emergency medical service and medical care center personnel, as well as medical first responders.

**Power-PRO** TL is not intended for extended stay or use as a hospital bed or in devices that modify air pressure, such as hyperbaric chambers.

# **Clinical benefits**

Cot: patient transport

Fastener: support cot for transport

# Contraindications

None known.

# **Expected service life**

**Power-PRO** has a seven year expected service life under normal use conditions and with appropriate periodic maintenance.

The **SMRT** charger has a seven year expected service life under normal use conditions and with appropriate periodic maintenance.

The SMRT Pak battery has a two year expected service life under normal use conditions.

# Disposal/recycle

Always follow the current local recommendations and/or regulations governing environmental protection and the risks associated with recycling or disposing of the equipment at the end of its useful life.

# **Specifications - Power-PRO**

	<b>Note</b> - Safe working load indicates the sum of the patient, mattress, and accessory weight.	700 lb	318 kg
Maximum unassisted lift capa	icity	700 lb	318 kg
Backrest articulation/shock po 6506-012-003)	osition (standard Fowler -	0° to 73°/+15°	
Backrest articulation/shock po 6506-012-004)	osition (1865 Fowler option -	0° to 75°/+15°	
Overall length		81 in.	206 cm
Standard length/minimum len	gth/width	76.5 in./55 in./23 in.	194.3 cm/139.7 cm/58 cm
Height <sup>1</sup>		Adjustable from 14 in. to 41.5 in.	Adjustable from 36 cm to 106 cm
Weight <sup>2</sup>		145 lb	66 kg
Caster diameter/width		6 in./2 in.	15 cm/5 cm
Minimum operators required for loading/ unloading an occupied cot		2	
Minimum operators required for loading/ unloading an unoccupied cot		1	
Recommended fastener systems		Model 6385, 6386, 6387, 6388, or 6389	
Double wheel lock/four wheel lock		Standard/optional	
Hydraulic oil		Stryker part number 6500-001-293	

Power system		
Battery	24 VDC NiCd - SMRT power system	
Charger	100-240 VAC 1.20 A, 50/60 Hz or 12 VAC 4.16 A - <b>SMRT</b> power system	
Cot duty cycle	10% (33 sec. on/5 min. off)	
Standards (cots and chargers)	ANSI/AAMI ES60601-1:2012, CAN/CSA-C22.2 No. 60601- 1:14, KKK-A-1822 For standards that require specific options, see <i>Standards</i> <i>with required options</i> (page 11)	

<sup>1</sup> Height measured from bottom of mattress at seat section to ground level.

<sup>2</sup> Cot is weighed with one battery and without mattress and restraints.

Stryker reserves the right to change specifications without notice.

Power-PRO TL is designed to conform to the Federal Specification for the Star-of-Life Ambulance (KKK-A-1822).

**Power-PRO** TL is designed to be compatible with some competitive cot fastener systems.

Patents pending.

The yellow and black color scheme is a proprietary trademark of Stryker Corporation.

Labels may be unreadable from a viewing distance greater than 12 inches.

Environmental conditions	Operation
Temperature	-30 °F (-34 °C)
Relative humidity	0% <sup>-</sup> 93%
Atmospheric pressure	700 - 1060 hPa

#### European REACH

In accordance with the European REACH regulation and other environmental regulatory requirements, the components that contain declarable substances are listed.

Description	Number	Substance of very high concern (SVHC) chemical name
Mattress, knee Gatch bolster	r 6550-001-084 (2H-benzotriazol2-yl)-4, 6-di-te pentylphenol	
Mattress, knee Gatch bolster, XPS	6500-003-130	(2H-benzotriazol2-yl)-4, 6-di-tert- pentylphenol
Mattress, knee Gatch bolster, grey	6506-003-130	(2H-benzotriazol2-yl)-4, 6-di-tert- pentylphenol
Ni-CAD battery cell	6500-101-129	Cadmium, cadmium hydroxide

Description	Number	Substance of very high concern (SVHC) chemical name
Pole assembly, two-stage	6070-210-070	Lead
Pole assembly, three-stage	6070-215-070	Lead

# Standards with required options

To be compliant with the standards, you must install the following required options on your cot.

	Option selection		
Standard	Restraint package	Mattress	Option
BS EN 1789:2007+A2:2014 crash-test standards with the use of a crash-rated fastener	EMS restraint package (6060-160-010), X-restraint package (6500-001-430), or XPR restraint package (650600030010) <b>Note</b> - The X-restraint package and XPR restraint package are compatible with the XPS mattress (6500-003-130/6506-003- 130) only.	Knee Gatch bolster mattress (6550-001-084) or XPS mattress (6500-003- 130/6506-003-130) (depending on cot siderail)	
BS EN 1865-3:2012 +A1:2015			XPS option (6506-040-000)
BS EN 1865-2:2010 +A1:2015			1865 Fowler option (6506- 012-004)

# Schnitzler Pediatric Restraint System compatibility

**CAUTION** - Do not use the product with incompatible restraints.

XPS mattress (6500-003-130 or 6506-003-130)	Schnitzler Pediatric Restraint System (0058-384-000) with serial number less than 720 XPSNPR- 2123	Schnitzler Pediatric Restraint System (0058-384-000) with serial number equal to or greater than 720 XPSNPR-2123
Mattress with lot code less than 18001001	Compatible	Compatible
Mattress with lot code equal to or greater than 18001001	Not compatible	Compatible

The Schnitzler Pediatric Restraint System (0058-385-000) is compatible for use with the standard mattress on Model 6100 M-1 Roll-In System, Model 6506 Power-PRO XT Cot, and Model 6550 Power-PRO TL Cot.

# **Specifications - SMRT**

	SMRT charger	SMRT Pak	AC power supply
Electrical input	13.9 VDC 4.16 A Not applicable		100-240 VAC
			1-2 A 50/60 Hz
Electrical output	Open circuit 40 VDC 1.20 A	24 VDC NiCd	12 VDC 4-6 A
Height	2.375 in. (60.325 mm)	3.25 in. (82.55 mm)	Varies
Width	5.125 in. (130.175 mm)	4 in. (101.6 mm)	Varies
Length	7 in. (177.8 mm)	5.75 in. (146.05 mm)	Varies
Weight	1.3 lb (.59 kg)	3.8 lb (1.7 kg)	Varies
Enclosure protection	IPX0	IPX6	IPX0
Equipment type	Not applicable	Not applicable	Class II
Approvals	ANSI/AAMI ES 60601-1: 2012, CAN/CSA-C22.2 No. 60601-1:14	Not applicable Not applicable	

Environmental conditions	Operation	Charging	Storage and transportation
Temperature	43 °F (31 °C) (6 °C)	43 °F (31 °C) (6 °C)	-4 °F (40 °C) (-20 °C)
Relative	0%	30%- 75%	0% 93%
Atmospheric pressure	700 - 1060 hPa	700 - 1060 hPa	500 - 1060 hPa

Specifications are approximate and may vary from unit to unit or as a result of power supply fluctuations.

Stryker reserves the right to change specifications without notice.

# Product illustration - Power-PRO

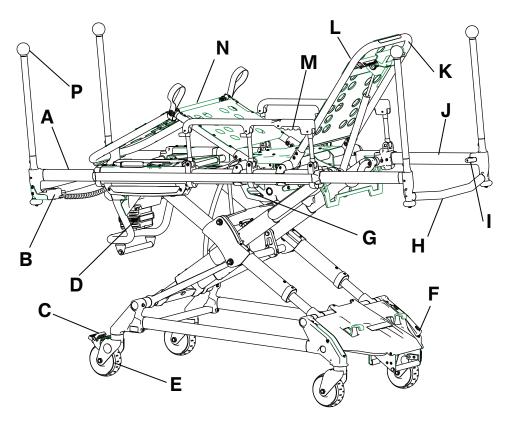


Figure 3 – Power-PRO TL

А	Retractable foot section	I	Battery
В	Height adjustment switch	J	Retractable head section
С	Wheel lock	К	Backrest adjustment handle
D	Battery	L	Backrest
E	Load wheels	М	Siderail release handle
F	Steer-Lock	N	Gatch/leg rest
G	Hydraulic unit	Р	Push bars (optional)
Ц	Head section release handle		•

H Head section release handle

# **Product illustration - SMRT**

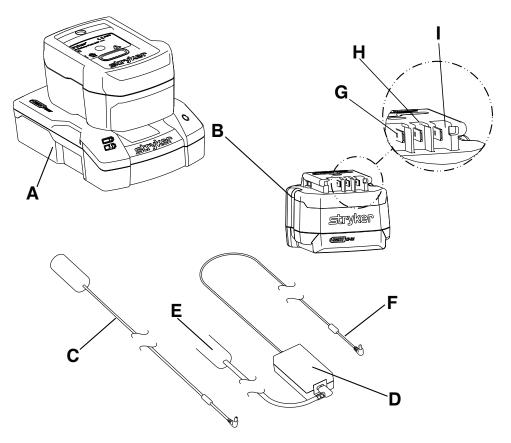


Figure 4 – SMRT power system

А	SMRT charger	F	Output cord
В	SMRT Pak	G	Data
С	DC cable	Н	Power (-)
D	AC power supply	I	Power (+)
E	AC power cord		

# **Contact information**

Contact Stryker Customer Service or Technical Support at: 1-800-327-0770.

Stryker Medical 3800 E. Centre Avenue Portage, MI 49002 USA

**Note** - The user and/or the patient should report any serious product-related incident to both the manufacturer and the Competent authority of the European Member State where the user and/or patient is established.

To view your operations or maintenance manual online, see https://techweb.stryker.com/.

Have the serial number (A) of your Stryker product available when calling Stryker Customer Service or Technical Support. Include the serial number in all written communication.

# Serial number location - Power-PRO

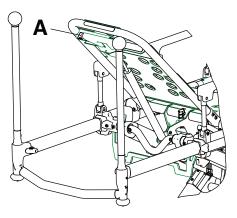


Figure 5 – Serial number location

# Serial number location - SMRT

The serial number for the SMRT charger is located on the bottom of the unit. The lot number for the SMRT Pak is located on the top of the SMRT Pak above the red release button.

# Setup

During setup, unpack the cartons and check all items for proper operation. Make sure that the product operates before you place it into service.

Remove all the shipping and packaging materials from the product before use.

The patient compartment of the vehicle where the product will be used, must have a:

- · Level floor large enough for the folded product
- Stryker cot fastener system

**Note** - Loose items or debris on the patient compartment floor can interfere with the operation of the product fastener. Keep the patient compartment floor clear.

Unpack the SMRT Paks and SMRT charger. Charge the SMRT Pak before use.

When necessary, modify the vehicle to fit the cot. Do not modify the cot.

# Installation

# Installing the cot fastener

The Stryker cot fastener systems are compatible only with cots that conform to the installation specifications.

#### WARNING

- Always install the cot fastener by qualified personnel only. Improper installation could result in injury to the patient or operator.
- Always make sure that all cots meet the installation specifications for the Stryker cot fastener system.
- Always adjust the rail clamp assembly to match the cot retaining post position for the cot manufacturer and model number.

These instructions are intended for cots with antler style cot fastener systems. For crash-rated cot fasteners, see the appropriate Operations Manual for installation instructions.

# Operation

# Checking the battery power level

Use the cot battery LED indicator to check the **SMRT** Pak power level. A charged **SMRT** Pak, in working condition, provides up to 25 calls with a 250 pound patient (actual results may vary). The 24 VDC **Power-PRO** system and the **SMRT** Pak is rated for 2.4 amp-hours of electric energy.

WARNING - Do not remove the battery when the cot is active.

**CAUTION** - Always charge the battery before you place the product into service. An uncharged or depleted battery may cause poor product performance.

To check the battery power level, press the retract (-) button on the cot control switch to activate the cot battery LED indicator. The cot battery LED indicator is located at the foot end control enclosure (shown as a battery symbol).

• The LED is solid green when the battery has a full charge or has an adequate battery power charge.

**Note** - For best results, use the **SMRT** Pak until the cot battery LED indicator changes from solid green to flashing amber.

· The LED flashes amber when you need to charge or replace the battery

**Note** - The cot battery LED indicator does not have to flash amber before you remove and replace the **SMRT** Pak, however, this is considered to be a best practice. You can remove and recharge the **SMRT** Pak at any time.

• The LED is a solid amber to indicate a battery error.

#### Note

- · Only use Stryker approved batteries.
- If equipped, the powered cot fastener automatically charges the SMRT Pak battery. Automatic charging occurs when
  you lock the cot into the powered cot fastener (no cable or connectors required). The cot battery LED indicator flashes
  green for a moment to signify that it is charging.
- Automatic charging will only occur with SMRT Pak batteries.

# Checking the hour meter and error display

The hour meter indicates the amount of time (HHH.H hours) that the hydraulics were in use. The error display provides error code information for troubleshooting.

Use the hour meter (A) (Figure 6) to determine the frequency of preventive maintenance. Use the error display (A) for troubleshooting. The error display overrides the hour meter display when an error occurs.

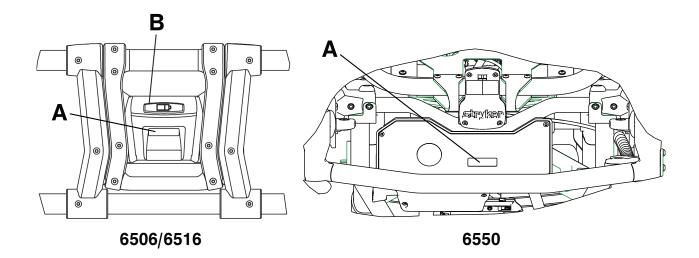


Figure 6 – Checking the hour meter (A), error display (A), and battery status (B)

### **Operating guidelines**

#### WARNING

- Always operate the product only when all persons are clear of the mechanisms. Entanglement in powered product mechanisms can cause serious injury.
- Always inspect SMRT Paks for damage before every use.
- · Do not allow untrained assistants to assist in the operation of the product.
- Always follow proper hand placement on hand grips. Keep all hands clear of the red safety bar pivots when you load or unload the cot or change cot height position.
- Do not ride on the base of the cot.
- Do not transport the cot sideways to avoid the risk of tipping. Always transport the cot in a lowered position, head end or foot end first to minimize the risk of tipping.
- Always keep hands, fingers, and feet away from moving parts. Use caution when placing your hands and feet near the base tubes while you raise or lower the cot.
- Always install the in-fastener shut-off system in any emergency vehicle that will be used with this cot and an antler style cot fastener.
- Always conduct patient monitoring when the cot is idle. If you hydraulically raise or lower the product you may temporarily affect electronic patient monitoring equipment.

**CAUTION** - Always clear any obstacles that may interfere and cause injury to the operator or patient before operating the product.

- Operate the product only as described in this manual.
- · Read all labels and instructions on the product before use.
- · Practice changing height positions and loading the cot until you fully understand the operation of the product.
- Inspect the SMRT Pak housing and terminal area for any cracks or damage before first and every use.
- Always load or unload an occupied cot with a minimum of two trained operators. Two operators must be present when a
  cot is occupied. Stryker recommends that both operators are at the foot end to reduce the load on each operator. One or
  two operators can lift from the foot end of the cot.
- Do not adjust, roll, or load the cot into a vehicle without advising the patient. Stay with the patient and control the product at all times.
- You can transport the cot in any position. Stryker recommends that the operators transport the patient in the lowest comfortable position to maneuver the cot.
- Only use the wheel locks during patient transfer or without a patient on the product.

- Do not apply a wheel lock when an occupant is on the product or when moving the product to avoid the risk of tipping.
- Use properly trained helpers to control the cot, when necessary.

# **Proper lifting techniques**

When you lift the product and occupant, follow these proper lifting techniques to avoid the risk of injury:

- Keep your hands close to your body
- Keep your back straight
- · Coordinate all movement with your partner
- · Lift with your legs
- Avoid twisting

# Transferring the patient to the cot

#### WARNING

- Always use all restraint straps to secure the patient on the product. An unrestrained patient may fall from the product and be injured.
- Do not leave a patient unattended. Hold the product while a patient is on the product.
- · Do not apply a wheel lock when a patient is on the product or when you move the product to avoid the risk of tipping.
- Do not use siderails as a patient restraint device.

To transfer the patient to the product:

- 1. Roll the product to the patient (Rolling the cot with a patient (page 19)).
- 2. Place the product beside the patient and raise or lower the product to the level of the patient.
- 3. Lower the siderails and open the restraint straps.
- 4. Transfer the patient to the product. Follow accepted EMS procedures.
- 5. Secure the patient to the product with all of the restraint straps.
- 6. Raise the siderails and adjust the backrest and footrest as necessary.

# Rolling the cot with a patient

#### WARNING

- Always transport the cot at a lower height to reduce the risk of a cot tip. If possible, obtain additional assistance or take an alternate route.
- Always avoid high obstacles, such as curbing, steps, or rough terrain to avoid the risk of the product tipping over.

To roll the cot with a patient:

- 1. Position one operator at the foot end and one operator at the head end of the cot.
- 2. Make sure that the litter is perpendicular when you approach door sills or other low obstacles.
- 3. Lift each set of wheels over the door sill or obstacle separately.

# Raising or lowering the cot

You can raise or lower an unoccupied cot with one operator. If a patient is on the cot, a minimum of two trained operators (one located at each end of the cot) are required to raise or lower the cot.

#### WARNING

- Always keep hands, fingers, and feet away from moving parts. Use caution when placing your hands and feet near the base tubes while you raise or lower the cot.
- Always follow proper hand placement on hand grips. Keep all hands clear of the red safety bar pivots when you load or unload the cot or change cot height position.
- Always use two operators to raise or lower the cot with a patient.

To raise or lower the cot:

- 1. Operator 1 (foot end): Grasp the cot frame and press the:
  - Extend (+) button to raise the cot to the desired height
  - · Retract (-) button to lower the cot to the desired height
- 2. Operator 2 (head end): Maintain a firm grip on the outer rail until the cot is at the desired height.

**Note** - If you press the extend (+) button on the cot control switch after the cot reaches the set cot load height, the motor will remain halted until you release the button. After you release the button, press the extend (+) button again to jog the cot height up higher.

### Raising, lowering, or releasing the cot with power

There are two identical cot control switches located on the **Power-PRO** cots. Press the button on either of these switches to raise (extend) the cot, lower (retract) the cot, or release the cot from **Power-LOAD**, if applicable (Figure 7).

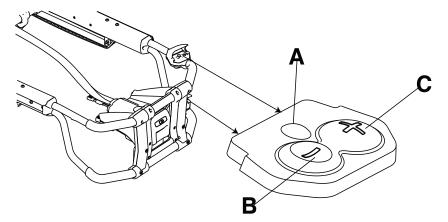


Figure 7 - Cot control switches

Reference	Name	Description
A	Release	Press to unlock the cot (for use with <b>Power-LOAD</b> only)
В	Retract (-)	Press and hold to lower the litter or retract the cot undercarriage
С	Extend (+)	Press and hold to raise the litter or extend the cot undercarriage

# Raising or lowering the cot manually with the manual override

In the event of loss of electrical function, you can use the cot manual override. This allows manual operation of the product until the restoration of the electrical, powered functions. Use the red manual back-up release handle to raise or lower the cot.

The manual back-up release handle is located is along the patient left side of the lower lift bar at the foot end of the cot.

To raise or lower the cot with the manual back-up release handle:

- 1. Both operators: Lift the cot during the raise or lower operation to support the weight of the cot at each end.
- 2. Operator 1 (foot end):
  - a. Pull the manual back-up release handle toward the lift bar.
  - b. While pulling the manual back-up release handle, raise or lower the cot to the desired position.
  - c. Release the handle to lock the cot into position

#### Note

- Both operators must lift the cot weight off of the wheels to use the manual extend or retract while a patient is on the cot.
- Activation of the manual back-up release handle may cause the cot to lower at a slow rate if less than 50 lb (23 kg) are on the cot.
- Hydraulic fluid will become more viscous when the cot is used for extended periods in cold temperatures. When using
  the manual back-up release function to extend the base, while unloading in cold weather conditions, hold the manual
  back-up release handle for approximately one second after the cot wheels touch the ground to minimize sagging of the
  litter as you remove the cot from the vehicle patient compartment.

# Expediting load with the high speed retract mode

When you press the retract (-) button, the cot will enter the high speed retract mode when the cot wheels are not supporting the weight of the cot and patient.

The high-speed retract mode expedites loading of the cot into a vehicle. The undercarriage retracts toward the highest position once the weight of the cot and patient is no longer supported by the wheels. Press the retract (-) button to actuate the control switch.

# Loading the cot to the cot fastener

#### CAUTION

- · Always lower the cot to the lowest position to make sure that the cot connects to the cot fastener.
- Do not attempt to change the product height while the cot is connected to the cot fastener.

To load the cot to the cot fastener:

- 1. Depress the cot pedal and lower the cot. Press the retract (-) button until the product stops moving down to lower the cot.
- 2. Guide the cot into both the head end and foot end of the cot fastener until the cot locks into place (Figure 8).
- 3. Make sure that the cot is secure at both the head end and foot end before you release your grip on the cot (Figure 9).



Figure 8 – Cot in both the head end and foot end of the cot fastener



Figure 9 – Cot fastened

# Removing the cot from the cot fastener

To remove the cot from the cot fastener:

- 1. Press down on the foot pedal (Figure 10).
- 2. Roll the cot out of the vehicle patient compartment.



Figure 10 – Press down on the foot pedal

# Loading the cot with a tail lift

Always load an occupied cot with a minimum of two trained operators. Two operators must be present when a cot is occupied. Operators must be able to lift the total weight of the patient, cot, and any items on the cot.

#### WARNING

- Always make sure that the cot is not able to roll back off of the lift before you use the tail lift with a cot and patient. Make sure that the lift gate stop is maintained and functioning.
- Always follow proper hand placement on hand grips. Keep all hands clear of the red safety bar pivots when you load or unload the cot or change cot height position.

#### CAUTION

• Always lower the cot to the lowest position to make sure that the cot connects to the cot fastener.

• Do not attempt to change the product height while the cot is connected to the cot fastener.

To load the cot:

- 1. Press the retract (-) button to move the cot to its lowest position for greater stability.
- 2. Push the cot forward onto the tail lift, head end first (Figure 11). Make sure that the wheels are in the proper location on the tail lift to allow the safety stop to rotate into place and prevent the cot from rolling backward.
- 3. Before you raise the tail lift, make sure that there is adequate distance between the cot and the rear of the ambulance. Make sure that there is nothing hanging from the cot.
- 4. As one operator raises the tail lift, the second operator should maintain a firm grip on the cot frame to provide greater stability.
- 5. Both operators should guide the cot into the vehicle patient compartment and into the vehicle cot fastener (not included) (Figure 12).



Figure 11 – Cot on the tail lift



Figure 12 – Both operators guide the cot into the vehicle patient compartment

# Unloading the cot with a tail lift

#### WARNING

- Always make sure that the cot is not able to roll back off of the lift before you use the tail lift with a cot and patient. Make sure that the lift gate stop is maintained and functioning.
- Always follow proper hand placement on hand grips. Keep all hands clear of the red safety bar pivots when you load or unload the cot or change cot height position.

#### CAUTION

- Always lower the cot to the lowest position to make sure that the cot connects to the cot fastener.
- Do not attempt to change the product height while the cot is connected to the cot fastener.

#### To unload the cot:

- 1. Make sure that the lift gate stop is in position to prevent the cot from rolling off of the tail lift.
- 2. Raise the tail lift to the vehicle patient compartment floor level.
- 3. Remove the cot from the vehicle cot fastener.
- 4. Both operators should grasp the cot frame and roll the cot into the tail lift. Remove the cot from the vehicle patient compartment and make sure that the cot wheels are in the proper position to allow the lift to lower freely.
- 5. Lower the tail lift to the ground. Make sure that the tail lift is fully lowered and stopped before you remove the tail lift gate stop and allow the cot to be rolled off of the tail lift.

# Loading the cot with a ramp

Always load an occupied cot with a minimum of two trained operators. Two operators must be present when a cot is occupied. Operators must be able to lift the total weight of the patient, cot, and any items on the cot.

**WARNING** - Always follow proper hand placement on hand grips. Keep all hands clear of the red safety bar pivots when you load or unload the cot or change cot height position.

#### CAUTION

- · Always lower the cot to the lowest position to make sure that the cot connects to the cot fastener.
- Do not attempt to change the product height while the cot is connected to the cot fastener.

To load the cot:

- 1. Make sure that the patient is secure at all times when on the cot.
- 2. Before you push up the cot up the ramp, press the retract (-) button to move the cot to its lowest position for greater stability (Figure 13). Make sure that there is nothing hanging from the cot.
- 3. Using the optional push bars, both operators should push or pull the cot up the ramp, head end first (Figure 14). Both operators should guide the cot up the center of the ramp.
- 4. Both operators should guide the cot into the vehicle patient compartment and connect the cot to the vehicle cot fastener (not included).



Figure 13 – Cot in the lowest position



Figure 14 – Guide the cot up the center of the ramp

### Loading and unloading a cot with the optional oxygen bottle holder

To load and unload the cot with the optional oxygen bottle holder:

- 1. Attach the winch cable to the winch attachment rod (A) (Figure 15).
- 2. Make sure that the ramp is at least 8.5 ft.
- 3. Make sure that the ramp can support the weight of the cot, patient, and equipment.

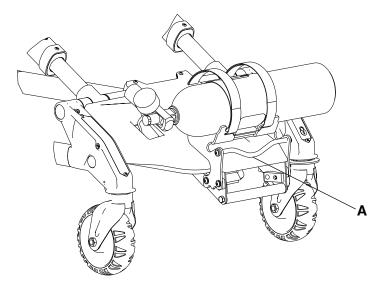


Figure 15 – Winch attachment rod

**Note** - With the cot in the lowest position, you can use the optional oxygen bottle holder to load patients weighing up to 50 stones (318 kg) (700 lb).

### Positioning operators and helpers

**WARNING** - Always keep your hands clear of the red safety bar pivots when you load, unload, or change the height position of the cot.

	Changing levels	Rolling
Two operators (O) Two helpers (H)		
Two operators (O) Four helpers (H)	H H O F F F F F F F F F F F F F F F F F F F	H O H H H C C C C C C C C

# Raising or lowering the backrest

To raise the backrest, squeeze the backrest adjustment handle to move the backrest to the desired height.

To lower the backrest, squeeze the backrest adjustment handle while you push down on the backrest to the desired height.

# Raising or lowering the siderails

Always lower the siderails when you transfer a patient to the cot or from the cot.

#### **WARNING** - Do not use siderails as a patient restraint device.

To raise the siderails, lift up on the siderail until the latch clicks and the siderail locks into place. Always keep the siderails in the raised position unless you are transferring the patient.

To lower the siderails, squeeze the siderail release handle to release the siderail latch. Guide the siderail down toward the foot end of the cot until the siderail lays flat. Always lower the siderails when you transfer a patient to or from the cot.

# Raising or lowering the siderails (XPS option)

You can order your cot with the expandable patient surface (XPS) option or upgrade your cot to add the XPS option.

WARNING - Do not use siderails as a patient restraint device.

#### CAUTION

- Do not sit or stand on the siderails (XPS option).
- Do not use the siderails (XPS option) as a patient transfer device or surface (for example, to slide a patient from the cot to another surface).
- Do not position patients with full weight on the siderails (XPS option).
- Do not use the siderails (XPS option) as a push/pull device or to steer the product.

Siderails (XPS option) attach to the cot and are always available for your use. The siderails (XPS option) adjust according to patient size and lock into seven positions. The siderails also adjust to fit through standard doorways or elevators.

To raise the siderails, lift up on the siderail until it locks into the desired position.

To lower the siderails, lift up to relieve the weight, then pull the red lever. Always lower the siderails when you transfer a patient to or from the cot.

The XPS option is not a primary patient support surface. It includes a wider mattress and is intended to enhance patient comfort.

# Extending the retractable head section or foot section

The head section telescopes from an extended position to a retracted position within the litter frame.

#### WARNING

- · Always lock the head section into place before you operate the cot.
- Do not attempt to load the cot into the vehicle patient compartment with the head section retracted. Loading the cot with
  the head section retracted may cause the product to tip or not connect to the vehicle cot fastener.

To extend the head section or foot section:

- 1. Squeeze the red release levers (A) on each side of the frame as you pull the head or foot section out of its retracted position (Figure 16).
- 2. Make sure that the head section or foot section locks into position.

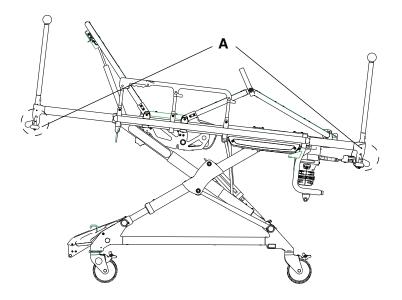


Figure 16 – Extend the head section or foot section

# Retracting the retractable head section or foot section

The head section telescopes from an extended position to a retracted position within the litter frame.

#### WARNING

- Always lock the head section into place before you operate the cot.
- Do not attempt to load the cot into the vehicle patient compartment with the head section retracted. Loading the cot with the head section retracted may cause the product to tip or not connect to the vehicle cot fastener.

To retract the head section or foot section:

- 1. Squeeze the red release levers (A) on each side of the frame as you push the head or foot section out of its extended position (Figure 17).
- 2. Make sure that the head section or foot section locks into position.

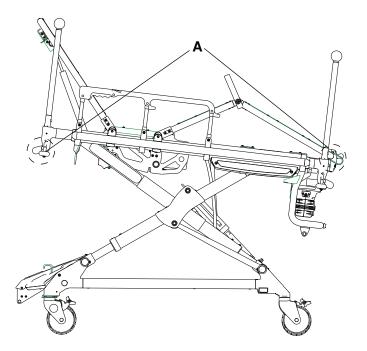


Figure 17 – Retract the head section or foot section

# Raising or lowering the knee Gatch option

To raise the knee Gatch:

- 1. Lift either of the red lifting loops (A) until the knee Gatch is in the highest position (Figure 18).
- 2. Lower the knee Gatch to secure the support bracket to the locking mechanism.
- 3. Make sure that the locking mechanism is secure before you release the lifting loop.

To lower the knee Gatch, lift either of the red lifting loops (A) to relieve pressure on the locking mechanism, and while holding the loop, push on the red footrest release handle (B) until the support bracket is released. Lower the knee Gatch until it lays flat.

To raise the knee Gatch in trend, lift the footrest frame (C) as high as possible until the frame locks into place. The support bracket automatically connects when you release the frame.

To lower the knee Gatch in trend, lift the footrest frame (C), and while holding the frame, lift up on the red footrest release handle (B) until the frame releases the support bracket. Lower the footrest until it lays flat.

**Note** - The foot end oxygen bottle holder option (6500-240-000) is not compatible with the knee Gatch option (6500-082-000).

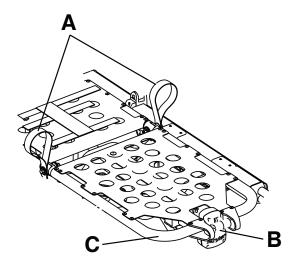


Figure 18 – Gatch

# Applying or releasing a wheel lock

#### WARNING

- Do not apply a wheel lock when a patient is on the product or when you move the product to avoid the risk of tipping.
- Do not install or apply a wheel lock on a product with worn wheels that are less than 6 in. diameter.
- Do not leave a patient or occupant unattended. Hold the product while a patient or occupant is on the product.

To apply a wheel lock, press down on the pedal until it stops and is resting against the surface of the wheel.

To release a wheel lock, press down on the top of the pedal with your foot or lift up on the pedal with your toe. The top of the pedal will rest against the caster frame when you release the wheel lock.

**Note** - Wheel locks help prevent the product from rolling while unattended. Wheel locks may not provide sufficient resistance on all surfaces or under loads.

# Applying or releasing the Steer-Lock option

To apply the Steer-Lock:

- 1. From the cot foot end, press the red (lock) side of the foot pedal or from the cot head end, press down on either red pedal.
- 2. Rotate the cot until at least one head end caster locks.

To release the Steer-Lock:

• From the cot foot end, press the green (unlock) side of the foot pedal or from the cot head end, lift up on either red pedal at the head end.

# Securing the patient with the restraint straps

#### WARNING

- Always use all restraint straps to secure the patient on the cot. An unrestrained patient may fall from the cot.
- · Do not attach restraint straps to the base tubes or cross tubes.

CAUTION - Do not entangle the restraint straps in the base frame when you raise or lower the cot.

Note - Restraint straps are a Type BF applied part.

Secure restraint straps to the cot in the required attachment locations (Figure 19). Restraint strap attachment locations should provide strong anchorage and proper restraint position. Do not allow restraint straps to interfere with equipment or accessories. Buckle the restraint straps across the patient's shoulders, waist, and legs. Buckle restraint straps when the cot is not in use.

To attach the patient restraint straps to the cot litter frame, feed the loop end of each strap through the litter frame at each of the designated locations (Figure 19) and then feed the buckle or latch plate back through the loop end of the strap. The arrows indicate alternate attachment areas.

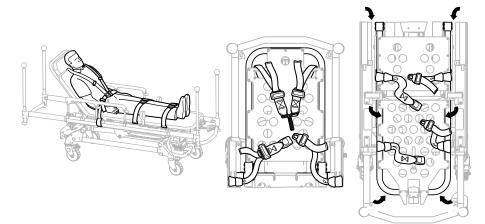


Figure 19 – Restraint strap attachment points

#### Adding a restraint strap extension

Add a restraint strap extension (6082-160-050) for extra length when you buckle the lap belt around larger patients.



Figure 20 - Restraint strap extension

# Securing a patient with the X-restraint/XPR restraint straps

Secure restraint straps to the cot in the required attachment locations: shoulders, waist, thighs, and ankles.

#### WARNING

- Always use all restraint straps to secure the patient on the cot. An unrestrained patient may fall from the cot.
- Do not attach restraint straps to the base tubes or cross tubes.

#### CAUTION - Do not entangle the restraint straps in the base frame when you raise or lower the cot.

#### Note

- The X-restraint/XPR (6500-001-430/650600030010) restraint straps are only compatible with the wider Gatch bolster mattress (6500-003-130/6506-003-130).
- Restraint straps are a Type BF applied part.

Restraint strap attachment locations should provide strong anchorage and proper restraint position (Figure 21). Do not allow restraint straps to interfere with equipment or accessories. Buckle the restraints across the shoulders, waist, thighs, and ankles. Buckle all restraint straps when the cot is not in use.

- 1. Attaching the X-restraint/XPR shoulder restraints (page 31)
- 2. Attaching the X-restraint/XPR waist restraints (page 32)
- 3. Attaching the X-restraint/XPR thigh restraints (page 32)
- 4. Attaching the X-restraint/XPR ankle restraints (page 32)



Figure 21 - Restraint strap attachment locations

### Attaching the X-restraint/XPR shoulder restraints

To attach the X-restraint/XPR shoulder restraints:

- 1. Wrap the restraint around the cot frame.
- 2. Pull the restraint buckle through the loop, toward the head end of the cot.
- 3. Feed the buckle under the XPS System.
- 4. For the Model 6506 Power-PRO XT cot and Model 6086 Performance-PRO XT cot, pull the restraint tight and toward the back of the backrest.
- 5. For the Model 6550 Power-PRO TL cot, pull the restraint under the cross tube and toward the back of the backrest.
- 6. Feed the buckle through the opening in the backrest.
- 7. Connect the patient right shoulder buckle to the patient left waist buckle.
- 8. Remove any slack from the restraint strap loop.



Figure 22 – Shoulder restraints

## Attaching the X-restraint/XPR waist restraints

To attach the X-restraint/XPR waist restraints:

- 1. Wrap the restraint around the cot frame.
- 2. Pull the restraint buckles through the loop, toward the head end of the cot.
- 3. Feed the buckle under the XPS System.
- 4. Pull the buckles tight. One restraint should angle toward the head end and one should lay straight across the cot.
- 5. Connect the patient right buckle to the patient left buckle.
- 6. Remove any slack from the restraint strap loop.



Figure 23 – Waist restraints

## Attaching the X-restraint/XPR thigh restraints

To attach the X-restraint/XPR thigh restraints:

- 1. Wrap the restraint around the cot litter.
- 2. Pull the restraint buckle through the loop, toward the head end of the cot.
- 3. Pull the restraint tight.
- 4. Connect the patient right buckle to the patient left buckle.
- 5. Remove any slack from the restraint strap loop.



Figure 24 – Thigh restraints

## Attaching the X-restraint/XPR ankle restraints

For Model 6506 **Power-PRO** XT cots, Model 6086 **Performance-PRO** XT, and Model 6550 **Power-PRO** TL cots built or upgraded after July 3, 2015 with the Gatch option or any trend only.

To attach the X-restraint/XPR ankle restraints:

- 1. Wrap the restraint around the cot frame. Wrap around both foot end lift bars.
- 2. Pull the restraint buckle through the loop, toward the head end of the cot.

- 3. Pull the buckle tight.
- 4. Connect the patient right buckle to the patient left buckle.
- 5. Remove any slack from the restraint strap loop.



#### Figure 25 – Ankle restraints

## Securing the patient with the Pedi-Mate® infant restraint system

**WARNING** - Always locate the buckle away from obstructions or accessories on the cot to avoid the risk of accidental release of **Pedi-Mate**® infant restraint system and injury to the infant.

To secure the patient with the Pedi-Mate® infant restraint system:

- 1. Remove any restraints from the cot.
- 2. Raise the cot backrest to the full upright position.
- 3. Position the Pedi-Mate® pad flat on the cot backrest with the black backrest straps facing out.
- 4. Wrap the straps around the cot backrest and insert the ends of the straps through the brackets.
- 5. Fasten the buckle.
- 6. Pull on the end of the adjustable backrest strap to tighten.
- 7. Insert the mainframe straps between the product frame and the mattress.
- 8. Insert the buckle behind the litter cross brace and bring it up in front of the litter cross brace.
- 9. Fasten the buckle around the litter cross brace. Leave slack in the strap for final adjustment.
- 10. Tighten all straps.

**Note** - For more information about the **Pedi-Mate**® infant restraint system, see the manufacturer's instructions for use, operation, and care. Safe and proper use of the **Pedi-Mate**® infant restraint system is at the discretion of the user. Set methods and procedures to educate and train your staff on the safe operation or maintenance of this product. These are general instructions only. Keep these instructions for future reference. These instructions are a permanent part of the product and should remain with the product even if the product is sold.

Pedi-Mate® is a registered trademark of Ferno Washington, Inc.

## Attaching the defibrillator platform

**WARNING** - Do not attach the defibrillator platform on a Model 6086 **Performance-PRO** XT cot with the **Power-LOAD** option to avoid the risk of a cot tip.

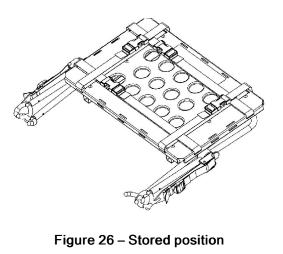
#### CAUTION

- Always secure the defibrillator platform to the product when you use the defibrillator platform.
- · Always use and adjust the straps that are provided with the defibrillator platform to secure the defibrillator.
- Always change the attachment location or adjust the straps for your specific defibrillator size or shape.
- Do not load the defibrillator platform above the safe working load of 30 lb (13.6 kg).

To attach the defibrillator platform:

1. Place the defibrillator platform in the stored position (Figure 26).

2. Open and expand the defibrillator platform legs (Figure 27).



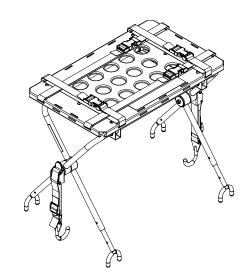
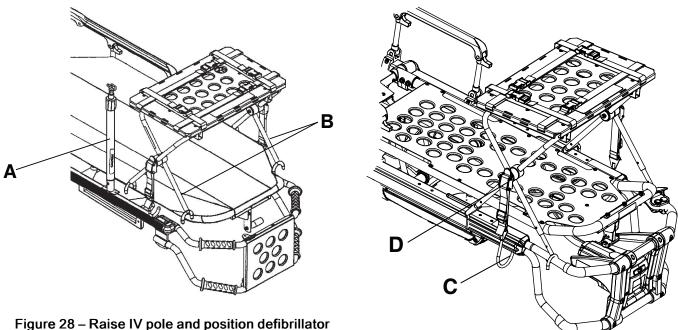


Figure 27 – Open defibrillator platform legs

- 3. If the product is equipped with an IV pole, raise the IV pole (A) to the up position (Figure 28).
- 4. Place the defibrillator platform on the product frame.
- 5. Position the inside legs (B) of the defibrillator platform toward the head end of the product (Figure 28).
- 6. Place the latch hook (C) under the litter frame or foot end fastener and push the tab (D) up until it locks into place on one side with an audible click (Figure 29). Repeat on the other side. For **Power-LOAD** compatible cots, if equipped, you must lengthen and attach the straps to the foot end fastener (Figure 30).



tray (Model 6506 shown)

Figure 29 – Latch hook placement (Model 6506 shown)

- 7. Make sure that the defibrillator platform is secured to the product.
- 8. Place the defibrillator on the defibrillator platform.

9. Secure the straps (E) to hold the defibrillator on the defibrillator platform (Figure 31).

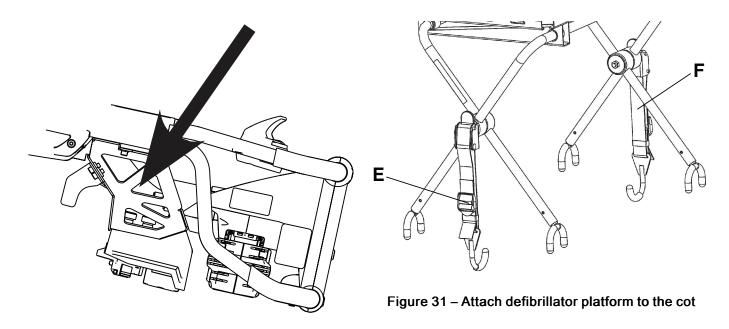


Figure 30 – Tab (Model 6506 shown)

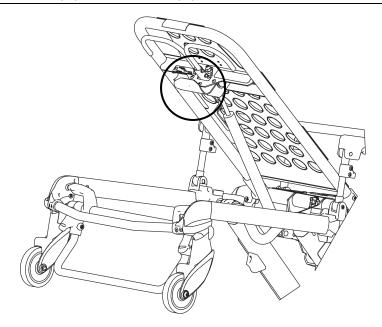
**Note** - If the defibrillator platform is not attached to the product after you connect both latch hooks, unlatch the tab. To adjust, loosen or tighten the strap and then push the tab up until it locks into place with an audible click.

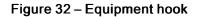
## Hanging equipment from the equipment hook

Use the equipment hook to hang additional accessories or equipment, such as defibrillators and monitors.

#### CAUTION

- Do not load the equipment hook above the safe working load of 35 lb (15.8 kg).
- · Always remove all accessories or equipment from the equipment hook when in the vehicle.





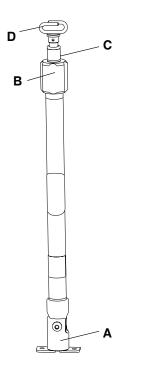
## Positioning the two-stage IV pole

#### CAUTION - Do not load the IV pole above the safe working load of 25 lb (11.3 kg).

To position the IV pole (Figure 33):

- 1. Lift and pivot the IV pole from the storage position and push down until the IV pole locks into the receptacle (A).
- 2. To raise the height of the pole, turn the locking collar (B) counterclockwise and pull up on the telescoping portion (C) of the pole to raise it to the desired height.
- 3. Turn the locking collar (B) clockwise to lock the telescoping portion in place.
- 4. Hang the IV bags on the IV hook (D).
- 5. Turn the locking collars (B) counterclockwise and slide section (C) into the bottom tube.
- 6. Turn the locking collars (B) clockwise to tighten.
- 7. Lift up and pivot the pole down into the storage position (Figure 34).

Note - The dual two-stage IV poles (6500-312-000 or 6550-312-000) are not compatible with either the patient right (6500-310-000 or 6550-310-000) or the patient left (6500-311-000 or 6550-311-000) two-stage IV pole options.



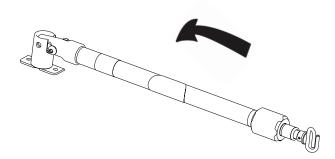


Figure 34 – IV pole storage position

Figure 33 – IV pole raised position

## Positioning the three-stage IV pole option

#### CAUTION - Do not load the IV pole above the safe working load of 25 lb (11.3 kg).

To position the IV pole (Figure 35):

- 1. Lift and pivot the IV pole from the storage position and push down until the IV pole locks into the receptacle (A).
- 2. To raise the height of the pole, turn the locking collar (B) counterclockwise and pull up on the telescoping portion (C) of the pole to raise it to the desired height.
- 3. Turn the locking collar (B) clockwise to lock the telescoping portion in place.
- 4. For a higher IV pole, pull up on section (D) until the spring clip (E) connects.
- 5. Hang the IV bags on the IV hook (F).
- 6. To lower the IV pole, push in on the spring clip (E) and slide section (D) down into section (C). Turn the locking collar (B) counterclockwise and slide section (C) into the bottom tube.
- 7. Turn the locking collar (B) clockwise to tighten.
- 8. Lift up and pivot the pole down into the storage position.

**Note** - The dual three-stage IV poles (6500-317-000 or 6550-317-000) are not compatible with either the patient right (6500-315-000 or 6550-315-000) or the patient left (6500-316-000 or 6550-316-000) three-stage IV pole options.

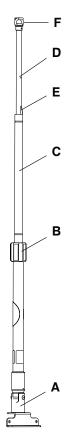


Figure 35 – IV pole raised position

## Attaching an oxygen bottle to the oxygen bottle holder

#### CAUTION

- Do not load the oxygen bottle holder above the safe working load of 1.1 stones (6.8 kg) (15 lb).
- Do not use two oxygen bottle holders at the same time.

To attach an oxygen bottle to the oxygen bottle holder (Figure 36):

- 1. Center the oxygen bottle holder on the cradled surface of item (A).
- 2. Tighten both straps (B) around the oxygen bottle.
- 3. Secure the slack on the straps and buckle both straps.

**Note** - Do not use the oxygen bottle holder to hold an oxygen bottle holder when the transport vehicle is in motion. Always place the oxygen bottle holder in an appropriate storage location when the transport vehicle is in motion.

**Note** - Inspect the straps and clips for wear between use. Replace the strap if it no longer holds the oxygen bottle.

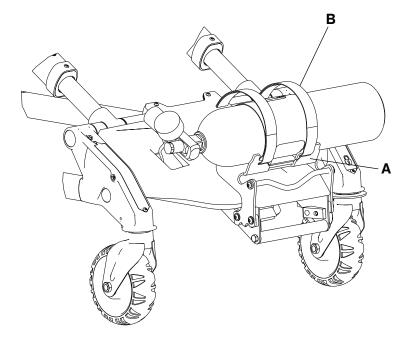


Figure 36 – Oxygen bottle attachment

## Attaching the push bars option

The optional push bars allow you to maneuver the product at any height position.

#### WARNING

- Always lock the push bars into the mounts to prevent the push bars from coming out during use.
- Do not lift the product with the push bars.

To attach the push bars:

- 1. Insert each push bar into one of the four corner sockets.
- 2. Push down on each push to lock it into the socket.



Figure 37 – Push bar attached

## Removing and storing the push bars in the push bar storage pouch

WARNING - Always store the push bars in the base storage pouch when not in use.

To remove the push bars:

- 1. Press the red release button and lift each bar out of its corner socket.
- 2. Place the removed push bars into the base storage pouch that is located on the base frame (Figure 38).

To attach the base storage pouch, connect the corresponding buckles to secure the pouch to the cot frame (Figure 39).

Make sure that the pouch and its contents do not interfere with the cot operation before you raise the cot, lower the cot, or transport the cot.



Figure 38 – Removing the push bars



Figure 39 – Attach the push bar storage pouch

## Attaching the base storage net option

### CAUTION

- Do not load the base storage net above the safe working load of 20 lb (9 kg).
- Always be careful when you retract the base to avoid damaging items that are stored in the base storage net.

To attach the base storage net, wrap the Velcro® straps around the base tubes.

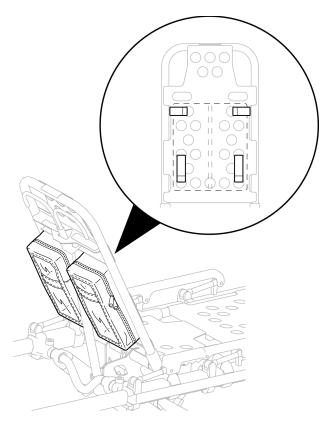
## Attaching the backrest storage pouch

### CAUTION

- Do not load the backrest storage pouch above the safe working load of 20 lb (9 kg).
- Do not allow the storage pouch to interfere with the operation of the retractable head section.

To attach the backrest storage pouch (Figure 40):

- 1. Insert each strap through a hole in the backrest skin.
- 2. Mount the pouch flat against the backrest.
- 3. Secure the backrest storage pouch to the cot with the Velcro® straps.



#### Figure 40 – Backrest storage pouch

## Attaching the mattress

Two mattress options are available for use with this product. Use the Gatch bolster mattress (6550-001-084) or flat mattress (6550-001-295) with the standard siderail. Use the wider Gatch bolster mattress (6500-003-130/6506-003-130) with the optional expandable patient surface (XPS).

#### **CAUTION** - Do not store items under the mattress. Items under the mattress may interfere with product operation.

To attach the mattress to the cot:

- 1. Align the Velcro® on the back of the mattress with the Velcro® on the cot litter.
- 2. Attach the strap at the foot end of the mattress through the two holes in the foot end skin on the cot litter.
- 3. Pull the strap through the buckle and attach the **Velcro**® to secure the strap.

- The Gatch bolster mattress (6550-001-084) and the flat mattress (6550-001-295) are not compatible with the XPS siderail option (6550-031-000).
- The optional Gatch bolster mattress for XPS (6500-003-130/6506-003-130) is not compatible with the standard siderail (6550-034-000).
- The mattress is a Type BF applied part.

## Inserting a SMRT Pak

The SMRT Pak is designed to be compatible with the Power-PRO XT, Power-PRO IT, and Power-PRO TL cots.

To maximize available battery power, only use SMRT Paks that have been charged within the last 48 hours.

To insert the SMRT Pak:

- 1. Align the tabs in the battery enclosure.
- 2. Push the SMRT Pak into the enclosure until the latch clicks into place.

The **SMRT** Pak can remain on the **Power-PRO** cot between service calls for up to one week or until the cot battery LED indicator flashes amber.

## Removing a SMRT Pak from the cot

After the SMRT Pak has been discharged, remove the SMRT Pak from the Power-PRO cot and replace it with a charged SMRT Pak.

Running the **SMRT** Pak repeatedly, without rest periods, can increase the temperature within the cells and reduce life. For example, lifting a heavy patient up and down several times in rapid succession can reduce the **SMRT** Pak life.

#### WARNING

- · Do not remove the battery when the cot is active.
- Do not attempt to open the battery pack for any reason, to avoid the risk of electric shock. If the battery pack case is cracked or damaged, do not insert it into the charger. Return damaged battery packs to a service center for recycling.
- Always avoid direct contact with a wet battery or battery enclosures. Contact may cause injury to the patient or operator.

**CAUTION** - Always remove the battery if the cot is not going to be used for an extended period of time (more than 24 hours).

To remove the SMRT Pak from the cot:

- 1. Press the red one hand release button (C) or press the battery release button (A) to release the SMRT Pak (B) from the cot (Figure 41).
- 2. Slide the released SMRT Pak out of the enclosure.

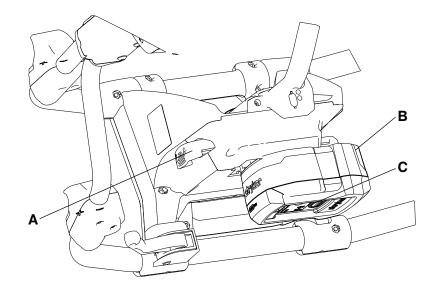


Figure 41 – Releasing the battery

## Storing the battery

For the longevity, performance, and safety of this equipment, use the original packaging materials when you store or transport this equipment.

All batteries lose charge during storage or periods of inactivity. A **SMRT** Pak can lose up to 30 percent of its charge within 48 hours after you remove it from the **SMRT** charger. Use and fully charge stored **SMRT** Paks every three months to maintain top performance.

## Charging the SMRT Pak

The SMRT Pak is intended for use with the SMRT charger only.

WARNING - Do not insert a cracked or damaged SMRT Pak into the SMRT charger. Return damaged SMRT Paks to a service center for recycling.

#### Note

- For extended storage, store the SMRT Pak on the SMRT charger to trickle charge. The SMRT charger keeps the SMRT Pak charged and ready for use.
- Store the SMRT Pak at room temperature within the allowable temperature charge range of 43 °F to 88 °F (6 °C to 31 °C). Charging the SMRT Pak outside of this recommended temperature range reduces SMRT Pak life and extends charge time.

To charge the SMRT Pak (Figure 42):

1. Insert a clean, dry SMRT Pak into the SMRT charger. Make sure that the SMRT Pak is locked into the SMRT charger.

Note

- The SMRT charger LED indicator (B) will flash green while charging (Figure 42). The optimum charge time is two hours.
- When the SMRT Pak is charged and ready for use, the SMRT charger LED indicator (B) turns to solid green.
- 2. Press the red release button (A) (Figure 42) and slide the SMRT Pak to release the charged and ready SMRT Pak from the SMRT charger.

The SMRT charger manages charging regardless of the SMRT Pak charge state.

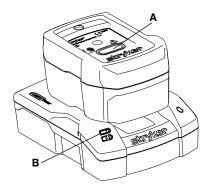


Figure 42 – Charging the SMRT Pak

## Checking the SMRT Pak power level with the SMRT charger

Use the SMRT charger LED indicators to check the SMRT Pak power level.

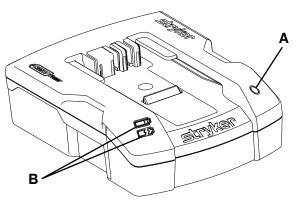


Figure 43 – Checking the SMRT Pak power level

- Power connection: Connect or disconnect the SMRT charger from the appropriate power source (*Powering the charger* (page 47)).
- SMRT charger power LED (A): If the green LED is illuminated, then the SMRT charger has power.
- SMRT charger LED indicators (B): Green and amber charger LED indicators provide SMRT Pak status information. The LEDs may be in a steady or flashing status based on the condition of the SMRT charger or SMRT Pak.

SMRT charger LED indicator	Status
Green (flashing)	SMRT charger is charging the SMRT Pak. The optimum charge time is two hours.
Green (solid)	SMRT Pak is charged and ready for use
Amber (flashing)	SMRT Pak temperature delay. The SMRT charger is waiting for the SMRT Pak to reach an allowable temperature range of 43 °F to 88 °F (6 °C to 31 °C).
Amber (solid)	<b>SMRT</b> Pak error. See the troubleshooting section of your maintenance manual.

## **Electrical power installation requirements**

When configuring the electrical power source for **SMRT** charger installation, follow these electrical power requirements for reliable and effective operation.

Power type	Operational voltage range	Frequency	Maximum current draw	Standby current draw	Low voltage shutoff
AC	100 to 240 VAC	50/60 Hz	1.20 A	0.05 A	N/A
DC	12.5 to 16 VDC	N/A	4.16 A	0.20 A	10 VDC

## Installing the SMRT charger

When installing the SMRT charger, place the SMRT charger in an environmentally controlled location that is:

- · Free of excessive dust and moisture
- Kept within a constant temperature range. An allowable temperature range is 43 °F to 88 °F (6 °C to 31 °C). The optimal temperature range is 65 °F to 75 °F (18 °C to 24 °C).
- · Readily accessed for use

Locate and maintain the power supply and power cords to minimize the risk of damage and inadvertent disconnections.

## Installing the mounting bracket option

#### WARNING

- Always have a certified mechanic, familiar with ambulance vehicle construction, install the mounting bracket option and the SMRT charger.
- Always mount the SMRT charger to the mounting bracket option in an enclosed cabinet and out of patient reach during transport to comply with established crash test standards.
- Always make sure that the mounting bracket option is securely attached to the surface.

To install the mounting bracket (Figure 44):

- 1. Use the **SMRT** charger mounting bracket as a template to mark the location of the mounting holes (A) at the area where you will install the mounting bracket.
- 2. Position the mounting bracket, making sure that the:
  - a. Spring tab (B) is located at the rear of the SMRT charger.

**Note** - When mounting the bracket to a vertical surface, the spring tab should be horizontal with the spring tab point to the left (Figure 44).

- b. Power cord easily plugs into the rear of the SMRT charger.
- c. SMRT charger slides from front to back to connect to the bracket after mounting.
- d. Bracket is installed correctly for the ambulance or station location:

Ambulance location	Station location	
<ul> <li>Secure the bracket to a horizontal structural support surface or shelf using size #10, grade 5 screws minimum (not supplied).</li> </ul>	<ul> <li>Secure the bracket to a horizontal or vertical structural support surface using size #10, grade 5 screws minimum (not supplied).</li> </ul>	
<ul> <li>Make sure that the selected mounting surface is strong enough to securely hold the SMRT charger and SMRT Pak during transport.</li> </ul>	• For vertical installation, position the mounting bracket so the spring tab is directly below the mounting screws, so the SMRT Pak remains supported by the SMRT	
Locate the bracket in an enclosed cabinet and out of patient reach during transport.	<ul><li>charger even if the release button is accidently pressed.</li><li>Allow for easy SMRT Pak installation and removal.</li></ul>	
Allow for easy SMRT Pak installation and removal.	• Locate the power supply within reach of the power cord.	
• Locate the power supply within reach of the power cord.		

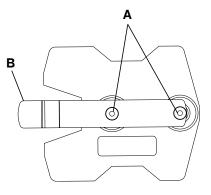


Figure 44 – Mounting bracket

## Attaching the charger onto the mounting bracket option

To attach the SMRT charger onto the mounting bracket (Figure 45):

- 1. Align the rear keyway slots (A) onto the bracket fasteners (B).
- 2. Slide the SMRT charger (C) in until it locks into the mounting bracket (D) to secure the charger to the bracket.

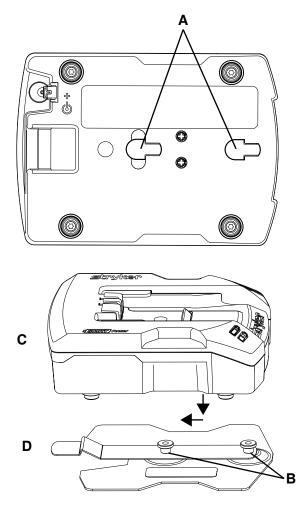


Figure 45 – Attaching the charger

## Powering the charger

#### CAUTION

- Always place the electrical **SMRT** charger power cord where it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- Do not touch the SMRT Pak receptacle terminals with metal objects.

To power the SMRT charger (Figure 46):

- 1. Locate the power connection (A) on the back of the SMRT charger.
- 2. Push the power cord retention tab (B) in to insert the power cord outlet connector into the **SMRT** charger power connection.
- 3. Plug the power adaptor end of the power cord into the power source.

It is a best practice to use a clean, uninterruptible power source. The **SMRT** charger continuously illuminates a solid green power LED when it is connected to a power supply.

Use only Stryker-approved parts to power the SMRT charger.

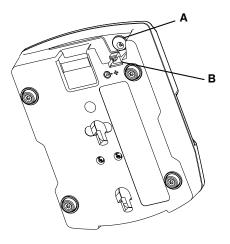


Figure 46 – Powering the charger

## Disconnecting the charger

**CAUTION** - Always grasp and pull the plug, not the cord, when you disconnect the **SMRT** charger to avoid the risk of damage to the electrical plug and cord.

To disconnect the SMRT charger, unplug the power cord from the AC or DC power source.

# Accessories and parts

These accessories may be available for use with your product. Confirm availability for your configuration or region. Call Stryker Customer Service: 1-800-327-0770.

Name	Number
Backrest pouch	6500-130-000
Belt extension	6082-160-050
Defibrillator platform	6550-170-000
Equipment hook	6500-147-000
Gas cylinder, backrest	1010-031-077
Head extension with pillow	6100-044-000
IV pole, two-stage, right	6550-310-000
IV pole, two-stage, left	6550-311-000
IV pole, two-stage, dual	6550-312-000
IV pole, three-stage, right	6550-315-000
IV pole, three-stage, left	6550-316-000
IV pole, three-stage, dual	6550-317-000
Mattress, knee Gatch bolster	6550-001-084
Mattress, flat knee Gatch	6550-001-295
Mattress, knee Gatch bolster, XPS	6500-003-130
Mattress, knee Gatch bolster, grey, XPS	6506-003-130
Oxygen bottle holder	6550-102-020
Oxygen bottle holder, removable	6080-140-000
Oxygen bottle holder, strap	6550-002-004
Restraint bracket option	6091-300-010
Restraint package, EMS, domestic	6060-160-010
Restraint package, X-restraint	6500-001-430
Restraint package, XPR	650600030010
Siderail, standard	6550-034-000
Siderail, XPS option	6550-031-000
Storage net, base	6500-160-000
Storage pouch, backrest	6500-130-000
Wheel lock	6086-200-010

Use only Stryker-approved parts. Other parts may result in increased electromagnetic emissions or decreased electromagnetic immunity of the system. Do not modify parts. Failure to comply may result in injury.

Name	Number	
SMRT charger	6500-201-000	
SMRT charger mounting bracket	6500-034-000	
SMRT Pak kit, battery pack	6500-700-046	
Power components - AC		
Charger power supply	6500-201-148	
Power cord, North America	6500-201-149	
Power cord, Europe	6500-201-150	
Power cord, United Kingdom	6500-201-151	
Power cord, Australia	6500-201-153	
Power components - DC		
12 VDC cable, automotive	6500-201-147	
12-24V cable, DIN plug	6500-201-152	
SMRT power kit (includes 1 charger, 2 Paks, and 1 power cord)		
SMRT power kit - 12 VDC, domestic (car charger)	6500-700-040	
SMRT power kit - 120 VAC, domestic (wall charger)	6500-700-041	
SMRT power kit - 240 VAC, United Kingdom, international	6500-700-043	
SMRT power kit - 240 VAC, Europe, international	6500-700-044	
SMRT power kit - 240 VAC, Australia, international	6500-700-045	

Contact your Stryker sales representative for a complete list of additional parts.

# Cleaning and disinfecting with wipes

For United States only. Confirm availability for your configuration or region. Call Stryker Customer Service: 1-800-327-0770.

Stryker's preferred wipes (2060-000-001 6" x 10" or 2060-000-002 9" x 12") include the following active ingredients:

- n-Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium chloride 0.154%
- n-Alkyl (68% C12, 32% C14) dimethyl ethylbenzyl ammonium chloride 0.154%
- Isopropanol 21.000%

Non-active ingredient: Ethylene Glycol Monobutyl Ether - < 3%

Note - For safety information, read the product label.

To clean or disinfect the external product surface:

1. To clean, wipe external surfaces with a fresh, clean wipe to remove all visible soils. Repeat as necessary until the product is clean.

- Use as many wipes as necessary.
- Complete step 1 before you disinfect.
- 2. To disinfect, wipe external surfaces with a fresh, clean wipe until wet. Allow the external surface to remain wet for two minutes at room temperature.
- 3. Allow the product to dry before you return it to service.

# Cleaning and disinfecting the XPR restraint straps

Confirm availability for your configuration or region. Call Stryker Customer Service: 1-800-327-0770.

Suggested cleaners include:

• ≤ 70% isopropyl alcohol; or

A cleaner with the following active ingredients (or equivalent):

- Ammonium salts ≤ 0.31%
- Isopropyl alcohol  $\leq 21.000\%$
- Ethylene glycol monobutyl ether ≤ 3.000% (non-active ingredient)

**Note** - Failure to use the prescribed cleaners may cause premature degradation and void the product's warranty. For example, do not clean with bleach, **HDQ Neutral**®, or accelerated hydrogen peroxide. If you have questions or concerns, please reach out to Stryker Customer Service (1-800-327-0770).

Recommended cleaning method:

- 1. Follow the cleaning solution manufacturer's dilution recommendations exactly.
- 2. To clean, wipe external surfaces to remove all visible soils. Repeat as necessary until the product is clean.

**Note** - Move the extension buckle to clean the entire restraint strap. Make sure that the restraint surface is dry before you move the extension buckle. Do not move the extension buckle over a surface that is wet with cleaner.

- 3. To disinfect, wipe external surfaces until wet.
- 4. Make sure that the product does not stay wet longer than the chemical manufacturer's guidelines for proper disinfecting.
- 5. Check functionality before you return the product to service.
  - Immersing restraint strap metal buckles can cause buckle corrosion and is not recommended. Rinse with clean water and allow to air dry to reduce chance of corrosion. Replace restraints if metal buckles are corroded.
  - Direct skin contact with visibly soiled, permeable material may increase the risk of infection.
  - Laundering the restraint straps is not recommended.

CAUTION - Do not apply lubricants to the surfaces of the restraints.

- XPR restraint straps have a three month expected service life when using the suggested cleaners shown above.
- Failure to follow the above directions when using these types of cleaners may void this product's warranty.
- Always wipe the product with clean water and dry after cleaning. Some cleaning products are corrosive in nature and
  may cause damage to the product. Failure to properly rinse and dry the product leaves a corrosive residue on the
  surface of the product and may cause premature degradation of critical components.

# Cleaning

**WARNING** - Always use any appropriate personal protective equipment while power washing to avoid inhaling contagion. Power washing equipment may aerate contamination.

#### CAUTION

- · Do not steam clean or ultrasonically clean the product.
- Do not exceed 180 °F (82 °C) as the maximum water temperature.
- Do not exceed 1500 psi (103.4 bar) as the maximum water pressure. If you use a hand held wand to wash the product, keep the pressure nozzle at a minimum of 24 in. (61 cm) from the product.
- Always allow to air dry.
- · Always remove the battery before you wash the cot.
- · Do not clean, service, or perform maintenance while the product is in use.

The product is power washable. The product may show some signs of oxidation or discoloration from continuous washing. No degradation of the product's performance will occur from power washing as long as you follow the proper procedures.

- Follow the cleaning solution manufacturer's dilution recommendations exactly.
- The preferred method Stryker Medical recommends for power washing the product is with the standard hospital surgical cart washer or hand held wand unit.
- Clean the cot once a month.
- Clean Velcro® after each use. Saturate Velcro® with disinfectant and allow disinfectant to evaporate. Appropriate disinfectant for nylon Velcro® should be determined by the service.
- Immersing restraint strap metal buckles can cause buckle corrosion and is not recommended. Rinse with clean water and allow to air dry to reduce chance of corrosion. Replace restraints if metal buckles are corroded.
- Direct skin contact with visibly soiled, permeable material may increase the risk of infection.

## Suggested cleaners

In general, when used in concentrations recommended by the manufacturer, either phenolic type or quaternary (excluding **Virex**® TB) type disinfectants can be used. Iodophor type disinfectants are not recommended for use because staining may occur.

Suggested cleaners include:

- · Quaternary cleaners (active ingredient ammonium chloride) that contain less than 3% glycol ether
- Phenolic cleaners (active ingredient o-phenylphenol)
- Chlorinated bleach solution (5.25% less than 1 part bleach to 100 parts water)
- ≤ 21% isopropanol alcohol

Avoid oversaturation. Do not allow the product to stay wet longer than the chemical manufacturer's guidelines for proper disinfecting.

- Failure to follow the above directions when using these types of cleaners may void this product's warranty.
- Always wipe the product with clean water and dry after cleaning. Some cleaning products are corrosive in nature and may cause damage to the product. Failure to properly rinse and dry the product leaves a corrosive residue on the surface of the product and may cause premature corrosion of critical components.

## Cleaning the charger

#### WARNING

- Always wear insulated rubber gloves, in addition to personal protective equipment, when cleaning the SMRT Pak to reduce the risk of injury.
- Always disconnect the SMRT charger from the wall outlet before cleaning to avoid the risk of electrical hazards.
- Do not spray fluid directly onto the SMRT charger.
- Do not power wash the SMRT charger.
- Do not use solvents, lubricants, or other chemicals to clean the SMRT charger unless otherwise directed.
- Do not immerse the SMRT charger in water or allow water to collect on top of the SMRT charger to avoid the risk of electric shock.

To clean the SMRT charger:

- 1. Disconnect the **SMRT** charger from the wall outlet to avoid electrical hazards during cleaning.
- 2. Wipe surfaces of the SMRT charger with a soft cloth dampened with a non-abrasive, hospital disinfectant.
- 3. Wipe with a cloth moistened with clean water to remove any cleaning chemicals or residue.
- 4. Dry thoroughly before placing the SMRT charger back into service.

## Cleaning the battery

The **SMRT** Pak is designed to be power washable. The preferred method for power washing the **SMRT** Pak is with the standard hospital surgical cart washer or hand held wand unit.

#### WARNING

- Always use any appropriate personal protective equipment while power washing to avoid inhaling contagion. Power washing equipment may aerate contamination.
- Always wear insulated rubber gloves, in addition to personal protective equipment, when cleaning the SMRT Pak to
  reduce the risk of injury.
- · Always use only non-conductive materials to wipe the SMRT Pak.
- Always avoid excessive water exposure to the SMRT Pak terminals.
- Always refer to the disinfectant's Material Safety Data Sheet (MSDS) to verify the pH range. Disinfectants with pH levels higher than 10.5 may cause the SMRT Pak housing material to crack.
- Do not directly handle or make contact with the SMRT Pak terminals while cleaning to avoid the risk of injury.
- Do not immerse the SMRT Pak in liquid to reduce the risk of electric shock.
- Do not use solvents, lubricants, or other chemicals to clean the SMRT Pak unless otherwise directed.

#### CAUTION

- Do not steam clean or ultrasonically clean the SMRT Pak.
- Do not exceed 180 °F (82 °C) as the maximum water temperature.
- Do not exceed 240 °F (115 °C) as the maximum air dry temperature (cart washers).
- Do not exceed 1500 psi (103.4 bar) as the maximum water pressure. If you use a hand held wand to wash the product, keep the pressure nozzle at a minimum of 24 in. (61 cm) from the product.

To clean the SMRT Pak:

- 1. Remove the SMRT Pak from the Power-PRO cot or SMRT charger.
- 2. Inspect the SMRT Pak housing and terminal area for any cracks or damage.
- 3. Clean the SMRT Pak with a hospital grade disinfectant with a pH range of 6.5 to 10.5.
- 4. Rinse the **SMRT** Pak thoroughly with clean water to remove any cleaning chemical or residue. Position the **SMRT** Pak to avoid water from pooling near the terminals.
- 5. Dry the SMRT Pak thoroughly before insert the SMRT Pak into a Power-PRO cot or SMRT charger.

# Preventive maintenance

#### WARNING

- Always relieve pressure before you disconnect hydraulic or other lines. Escaping fluid under pressure can penetrate the skin and cause serious injury. Tighten all connections before you apply pressure. If an accident occurs, see a doctor immediately.
- Do not use bare hands to check for hydraulic leaks.

#### CAUTION

- · Always use authorized parts to avoid the risk of product damage.
- Always check hoses and lines regularly to avoid damage to the cot. Check and tighten loose connections. Hydraulic lines, hoses, and connections can fail or loosen due to physical damage, kinks, age, and environment exposure.
- Do not tip the cot onto its load wheels and actuate the product as this will allow air to enter the hydraulic system.

Establish and follow a maintenance schedule and keep records of the maintenance activity. Remove product from service before you perform the preventive maintenance inspection. You may need to perform preventive maintenance checks more often based on your level of product usage. Service only by qualified personnel.

When using maintenance products, follow the directions of the manufacturer and reference all material safety data sheets (MSDS).

## Lubrication

**CAUTION** - Do not lubricate the bearings in the X-frame as it will degrade the performance of the cot and may void its warranty.

The cot has been designed to operate without the need for lubrication.

## Regular inspection and adjustments

The following schedule is a general guide to maintenance. Factors such as weather, terrain, geographical location, and individual usage will alter the required maintenance schedule. If you are unsure how to perform these checks, contact your Stryker service technician. If you are in doubt as to what intervals to follow to maintain your product, consult your Stryker service technician. Check each routine and replace worn parts if necessary.

## Every month or two hours

Inspect these items every month or two hours, whichever comes first.

Item	Inspect	
Settings	In-fastener shutoff configuration	
Cylinder	Extend cylinder rod. Wipe the cylinder rod with a soft cloth and household cleaner.	
Cables and wires	No hanging wires from routings or connections	
Manual backup release handle	Manual backup release handle functions	
Litter	Frame and litter	
Base	Frame and base	
Wheels	All wheels are secure, roll, and swivel	
Head section	Safety bar operates. Pull toward the head section to make sure that the safety bar swings and rotates freely and pulls back to the home position	

Item	Inspect
Restraint	Restraints function with no excessive wear (such as a bent or broken receiver or latch plate or torn or frayed webbing)
Battery	SMRT Pak housing and terminal area for cracks or damage before first and every use
Charger	<b>SMRT</b> charger and parts for cuts in the cord, bent pins or contacts, or cracks in the housing before first and every use

## Every three months or six hours

Inspect these items every three months or six hours, whichever comes first.

Item	Inspect
Cylinder	All fasteners are secure
	No hydraulic fluid (red) leaks
	Loose fittings - tighten, if needed
Hydraulics	Motor mount fasteners are secure
	No hydraulic fluid leaks
	No leaks from reservoir
Cables and wires	No damage or pinching of wiring harness, cable, or lines
	No damaged connectors
Manual backup release handle	Base extends and retracts when you pull the manual backup release handle
	Cot does not lower when you pull the manual backup release handle with 100 lb (45 kg) or more on the cot
Litter	All fasteners are secure
	Backrest cylinder operates
	Adjust pneumatic cylinder for full range of motion, if required
Base	All fasteners are secure
X-frame	X-frame expands and retracts
Head section	All fasteners are secure
	Head section extends and locks
Accessories and parts (optional)	All accessories and parts operate (such as IV pole, restraint extender, push bars, and oxygen bottle holder)

## Every six months or 12 hours

Inspect these items every six months or 12 hours, whichever comes first.

Item	Inspect
Hydraulics	Hoses and fittings for damage or wear
	Hydraulic velocity fuse - place a weight of approximately 50 Ib (23 kg) on the cot, raise the cot, lift the cot with two operators, pull the manual backup release handle, rapidly set the cot down, and make sure that the cot does not drop
Electronic controls	Extend cot to raised position, measure and check load height
	Jog function operates
	High speed retract works
Switches	No damage or wear to either switch
	Both switches operate
Litter	No bent, broken, or damaged components
	No damage or tears on cot grips
	Siderails operate and latch
	Foot rest operates
Mattress	No cracks or tears
Base	No bent, broken, or damaged components
Wheels	Free of debris
Head section	No bent, broken, or damaged components
	Grip bar has no excessive damage or tears
	Load wheels are secure and roll
Kickstand (optional)	Lubricate the kickstand spring and internal spring housing (optional) using <b>Tri-Flow</b> ® lubrication.

## Every 12 months or 24 hours

Inspect these items every 12 months or 24 hours, whichever comes first.

Item	Inspect	
Settings	Cot and fastener fit and function	
Cylinder	Cylinder is adjusted - lock nut is tight and the cot stops moving when it hits the dead stops	
Manual backup release handle	Returns to the stowed position	
Litter	All welds are intact, not cracked, or broken	
	Warning labels present, legible	
Base	All welds are intact, not cracked, or broken	

Item	Inspect
Wheels	Check and adjust wheel locks
Retractable head section oxygen bottle holder (optional)	Straps and clips for wear
Defibrillator platform (optional)	Straps not frayed or torn
	Latch hooks are intact and secure

# **EMC** information

## CAUTION

- The use of accessories, transducers, and cables, other than those specified or provided by the manufacturer, could result in increased electromagnetic emissions or decreased electromagnetic immunity and result in improper operation.
- The emissions characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). If it is used in a residential environment, for which CISPR 11 class B is normally required, this equipment might not offer adequate protection to radio frequency communication services. The user might need to take mitigation measures, such as relocating or reorienting the equipment.

#### Guidance and manufacturer's declaration - electromagnetic emissions

**Power-PRO** and **SMRT** charger are intended for use in the electromagnetic environment specified below. The customer or the user of **Power-PRO** and **SMRT** charger should assure that they are used in such an environment.

Emissions test	Compliance	Electromagnetic environment
RF Emissions CISPR 11	Group 1	<b>Power-PRO</b> and <b>SMRT</b> charger use RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
	Power-PRO: Class A	<b>Power-PRO</b> is suitable for use in all establishments other than domestic and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
RF Emissions CISPR 11	SMRT charger (6500-201- 010): Class B	The <b>SMRT</b> charger is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	<b>Power-PRO</b> : N/A SMRT charger (6500-201- 010): Class A	The <b>SMRT</b> charger is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Voltage Fluctuations Flicker Emissions IEC 61000-3-3	<b>Power-PRO</b> : N/A <b>SMRT</b> charger (6500-201- 010): complies	The <b>SMRT</b> charger is suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.

#### CAUTION

- Portable RF communications equipment, including peripherals such as antenna cables and external antennas, should be used no closer than 12 inches (30 cm) to any part of Power-PRO and SMRT charger, including cables specified by the manufacturer.
- Avoid stacking or placing other equipment adjacent to Power-PRO and SMRT charger to prevent improper operation of the products. If such use is necessary, carefully observe Power-PRO and SMRT charger and the other equipment to make sure that they are operating properly.

#### Recommended separations distances between portable and mobile RF communications equipment and Power-PRO and SMRT charger

**Power-PRO** and **SMRT** charger are intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of **Power-PRO** and **SMRT** charger can help prevent electromagnetic interferences by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and **Power-PRO** and **SMRT** charger as recommended below, according to the maximum output power of the communications equipment.

	Separation distance according to frequency of transmitter m		
Rated maximum output power of transmitter			
W	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2.7 GHz
	D=(1.2) (√ <i>P</i> )	D=(0.35) (√ <i>P</i> )	D=(0.70) (√ <i>P</i> )
0.01	0.12	0.04	0.07
0.1	0.38	0.11	0.22
1	1.20	0.35	0.70
10	3.79	1.11	2.21
100	12	3.50	7

For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. Note 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

Guidance and manufacturer's declaration - electromagnetic immunity

**Power-PRO** and **SMRT** charger are suitable for use in the electromagnetic environment specified below. The customer or the user of **Power-PRO** and **SMRT** charger should assure that they are used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge (ESD) IEC 61000-4-2	<u>+</u> 8 kV contact <u>+</u> 15 kV air	<u>+</u> 8 kV contact <u>+</u> 15 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrostatic fast Transient/ burst IEC 61000-4-4	<u>+</u> 2 kV for power supply lines <u>+</u> 1 kV for input/output lines	Power-PRO: N/A SMRT Charger (6500-201- 010): <u>+</u> 2kV for power supply lines +1 kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment.

Guidance and manufacturer's declaration - electromagnetic immunity					
Surge IEC 61000-4-5	<u>+</u> 1 kV line(s) to line(s) <u>+</u> 2 kV line(s) to earth	Power-PRO: N/A           SMRT Charger (6500-201- 010):           ±1 kV line(s) to line(s)           ±2 kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment.		
Voltage dips, voltage variations and short interruptions on power supply input lines IEC 61000-4-11	0% U <sub>T</sub> for 0.5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270°, and 315° 0% U <sub>T</sub> for 1 cycle 70% U <sub>T</sub> (30% dip in UT) for 25 cycles 0% U <sub>T</sub> for 250 cycles	Power-PRO: N/A SMRT charger (6500-201- 010): 0% U <sub>T</sub> for 0.5 cycle at 0°, 45°, 90°, 135°, 180°, 225°, 270°, and 315° 0% U <sub>T</sub> for 1 cycle 70% U <sub>T</sub> (30% dip in UT) for 25 cycles 0% U <sub>T</sub> for 250 cycles	Mains power quality should be that of a typical commercial or hospital environment. If the user of the <b>SMRT</b> charger requires continued operation during power main interruptions, it is recommended that the device be powered from an uninterrupted power supply or a battery.		
Power frequency (50/60Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.		
Electrical transient conduction along supply lines ISO 7637-2	per ISO 7637-2	<b>Power-PRO</b> : N/A <b>SMRT</b> Charger (6500-201- 010): per ISO 7637-2	N/A		

Note:  $U_T$  is the a.c. mains voltage before applications of the test level.

Guidance and manufacturer's declaration - electromagnetic immunity				
Conducted RF IEC 61000-4-6 Radiated RF IEC 61000-4-3	3 Vrms 6 Vrms in ISM and amateur radio bands 150kHz to 80MHz 10 V/m 80 MHz to 2.7 GHz	3 V 6 Vrms in ISM and amateur radio bands 10 V/m	Portable and mobile RF communications equipment should be used no closer to any part of <b>Power-PRO</b> or <b>SMRT</b> charger, including cables, than the recommended separation distance calculated from the equation appropriate for the frequency of the transmitter. Recommended separation distance $D=(1.2) (\sqrt{P})$ $D=(.35) (\sqrt{P})$ 80 MHz to 800 MHz $D=(0.70) (\sqrt{P})$ 800 MHz to 2.7 GHz where <i>P</i> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <i>d</i> is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site <sup>a</sup> should be less than the compliance level in each frequency range. <sup>b</sup> Interference may occur in the vicinity of equipment marked with the following symbol:	

Note 1: At 80 MHz and 800 MHz, the higher frequency range applies.

**Note 2:** These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

**Note 3:** The ISM (industrial, scientific and medical) bands between 0.15 MHz and 80 MHz are 6.765 MHz to 6.795 MHz; 13.553 MHz to 13.567 MHz; 26.957 MHz to 27.283 MHz; and 40.66 MHz to 40.70 MHz. The amateur radio bands between 0.15 MHz and 80 MHz are 1.8 MHz to 2.0 MHz, 3.5 MHz to 4.0 MHz, 5.3 MHz to 5.4 MHz, 7 MHz to 7.3 MHz, 10.1 MHz to 10.15 MHz, 14 MHz to 14.2 MHz, 18.07 MHz to 18.17 MHz, 21.0 MHz to 21.4 MHz, 24.89 MHz to 24.99 MHz, 28.0 MHz to 29.7 MHz and 50.0 MHz to 54.0 MHz.

# stryker



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