

## Power-PRO IT Cot

### Operations Manual

REF 6516




































# Global symbol glossary

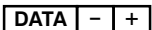
See the Global Symbol Glossary at [ifu.stryker.com](http://ifu.stryker.com) for symbol definitions.

## Symbols

	Refer to instruction manual/booklet
	Consult instructions for use
	General warning
	Caution
	Warning; crushing of hands
	Warning; non-ionizing radiation
	Do not lubricate
	Do not transport incubator or product in raised position
	Transport incubator or product in low position only
	Importer
	Unique device identifier
	Authorized representative in Switzerland
	Catalogue number
	Lot (batch) code
	Serial number

	Quantity
	For US patents see <a href="http://www.stryker.com/patents">www.stryker.com/patents</a>
	Manufacturer
	Date of manufacture
	To indicate that separate collection for batteries is required per the European Union's Batteries and Waste Batteries Regulation (EU) 2023/1542. This symbol may be accompanied by the abbreviated designation of the battery material(s) used.
	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.
	To indicate that separate collection for batteries is required per the European Union's Batteries and Waste Batteries Regulation (EU) 2023/1542. This symbol may be accompanied by the abbreviated designation of the battery material(s) used.  Cd = battery contains more than 0.002% cadmium by mass
	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 ( <a href="http://www.rbrc.org">www.rbrc.org</a> ) to find a nearby collection site or call the phone number shown on the recycling symbol.
	Contains nickel cadmium cells and should be recycled accordingly
	Safe working load
	Medical Equipment Recognized by Underwriters Laboratories LLC With Respect to Electric Shock, Fire, and Mechanical Hazards only in accordance with ANSI/AAMI ES60601-1: 2005 and CAN/CSA-C22.2 No. 60601-1:08.
	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.
	Dangerous voltage
	SMRT power system



IPX0	Non-protected
IPX6	Protection from powerful water jets
	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



# Table of Contents

Warning/Caution/Note Definition .....	3
Summary of safety precautions .....	3
Pinch points .....	6
Introduction .....	7
Product description .....	7
Indications for use .....	7
Expected service life .....	8
Contraindications .....	8
Specifications - Power-PRO .....	8
European REACH .....	9
Specifications - SMRT .....	10
Electrical power requirements .....	10
European battery specifications .....	10
Product illustration - Power-PRO .....	11
Product illustration - SMRT .....	12
Contact information .....	12
Serial number location - Power-PRO .....	13
Serial number location - SMRT .....	13
Date of manufacture .....	13
Setup .....	14
Installation .....	15
Installing the cot fastener .....	15
Installing the in-fastener shut-off .....	15
Selecting the vehicle safety hook .....	16
Vehicle configuration .....	17
Positioning of the vehicle safety hook, front to back .....	18
Positioning of the vehicle safety hook, side to side .....	19
Installing the vehicle safety hook .....	20
Operation .....	22
Setting cot load height with jog function .....	22
Checking the battery power level .....	22
Checking the hour meter and error display .....	23
Operating guidelines .....	23
Proper lifting techniques .....	24
Rolling the cot with a patient .....	24
Raising or lowering the cot .....	25
Raising, lowering, or releasing the cot with power .....	25
Raising or lowering the cot manually with the manual override .....	26
Expediting load with the high speed retract mode .....	26
Loading or unloading a cot with the Power-LOAD option .....	26
Loading a cot into a vehicle with an antler style cot fastener .....	27
Unloading a cot from a vehicle with an antler style cot fastener .....	28
Positioning operators and helpers .....	30
Extending the retractable head section .....	30
Retracting the retractable head section .....	31
Applying or releasing a wheel lock .....	31
Applying or releasing the Steer-Lock option .....	31
Installing the incubator adaptor .....	31
Installing the Airborne infant transport incubator adaptor in the side by side configuration .....	32
Installing the Drager infant transport incubator adaptor .....	33
Installing the Airborne infant transport incubator adaptor in the stackable configuration .....	34
Installing the no adaptor option airsled transport incubator with a sled receptacle .....	35
Securing the airsled to the litter surface .....	36
Transporting the cot with the rigid push bars .....	37
Attaching the base storage net option .....	37

Attaching the head end storage flat option.....	38
Inserting a SMRT Pak .....	38
Removing a SMRT Pak from the cot.....	38
Storing the battery.....	39
Charging the SMRT Pak.....	39
Checking the SMRT Pak power level with the SMRT charger .....	40
Installing the SMRT charger.....	41
Installing the mounting bracket option.....	41
Attaching the charger onto the mounting bracket option .....	42
Powering the charger .....	43
Disconnecting the charger .....	44
Accessories and parts .....	45
Date of manufacture for medical device accessories.....	46
Preventive maintenance .....	47
Lubrication .....	47
Regular inspection and adjustments.....	47
Every month or two hours .....	47
Every three months or six hours.....	48
Every six months or 12 hours .....	48
Every 12 months or 24 hours.....	49
Cleaning and disinfecting with SideKick.....	50
Cleaning.....	51
Suggested cleaners .....	51
Cleaning the charger.....	52
Cleaning the battery .....	52
EMC information .....	53

# 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.

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### **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 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 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.
- Always position the in-fastener shut-off before you place the cot into service.
- Do not attempt to operate the cot when it is loaded into a cot fastener.
- Always use the in-fastener shut-off to disable the electronic functionality only. Do not use the in-fastener shut-off for any other purpose.
- Always adjust the mounting location to maintain the proper position of the vehicle safety hook face when you replace an existing vehicle safety hook with a new style.
- Always have a certified mechanic, familiar with ambulance vehicle construction, install the vehicle safety hook to avoid injury to the patient or operator.
- Always consult the vehicle manufacturer before you install the vehicle safety hook. Make sure that the installation of the vehicle safety hook does not damage or interfere with the brake lines, oxygen lines, fuel lines, fuel tank, or electrical wiring of the vehicle.
- Do not modify the cot or the vehicle safety hook. If the cot safety bar does not connect with the vehicle safety hook in any of these positions (left, center, or right), modify the vehicle.
- Always make sure that the cot safety bar connects with the vehicle safety hook every time before you install the vehicle safety hook.
- Always make sure that the cot safety bar connects with the vehicle safety hook before you remove the cot from the vehicle patient compartment to avoid the risk of injury.
- Always use screws that are long enough to go through the vehicle patient compartment floor, washer, and nut, with at least two full threads in the nut. The socket head cap screw length depends on the thickness of the vehicle floor.
- 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 helpers 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, unload, or change the 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 you place your hands and feet near the base tubes while you raise or lower the cot.
- 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.
- 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.
- 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.
- Do not use the jog function to jog past the set cot load height after the cot safety bar connects with the vehicle safety hook.
- Always use two operators to raise or lower the cot with a patient.
- Always use **Power-LOAD** with the 6086 **Performance-PRO XT**, 6506 **Power-PRO XT**, and 6516 **Power-PRO IT** cots with the **Power-LOAD** option only. In certain situations, you can use **Power-LOAD** as a standard antler for most X-frame cots, but a rail clamp assembly is required for all cots without the **Power-LOAD** option.
- Always make sure that you use a **Power-PRO** date of manufacture cot with the Stryker Model 6390 **Power-LOAD** system to avoid the risk of injury.
- Always support the load of the patient, cot, and accessories after the weight is off of the ground.
- Always use two operators when a cot is occupied.
- Do not load the cot into a vehicle with the head section retracted when using a cot fastener. The cot may tip or not connect with the cot fastener.
- Always use the powered method to load an unoccupied cot with one operator. Do not use the manual method to load an unoccupied cot with one operator.
- Always make sure that two operators are present when a cot is occupied.
- Do not pull or lift on the cot safety bar when you unload the cot.
- Always set the cot transfer wheels safely on the ground when you unload the cot from the vehicle patient compartment to avoid the risk of product damage.
- Do not press the extend (+) button until the safety bar connects with the vehicle safety hook.
- Always lock the head section into place before you operate the cot.
- 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.
- Do not install these incubator adaptors on any other Stryker cot or on any cot from another manufacturer. These incubator adaptors are for use only on the **Power-PRO IT** cot.
- Always make sure that the incubator adaptor is properly installed on the cot and the incubator is securely fastened to the incubator adaptor before use.
- Stryker is not responsible for specification changes to the **Dräger®** (or **Air-Shields®** Series) incubators.
- Do not install the sled receptacle on any other Stryker cot or on any cot from another manufacturer. These sled receptacles are for use only on the **Power-PRO IT** cot.
- Stryker is not responsible for specification or option changes to airsled compatible incubators.
- Do not allow the head end storage flat (if equipped) to interfere with the operation of the retractable head section, safety bar, or vehicle safety hook.
- 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 secured to the surface.
  - 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.
  - 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.
- 

## 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.
- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their expense.
- Always set the cot load height before you place the cot into service.
- 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 you operate the product.
- 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 head end storage flat above the safe working load of 40 lb (18 kg).
- 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.
- 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.

- 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).
  - This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.
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## 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.

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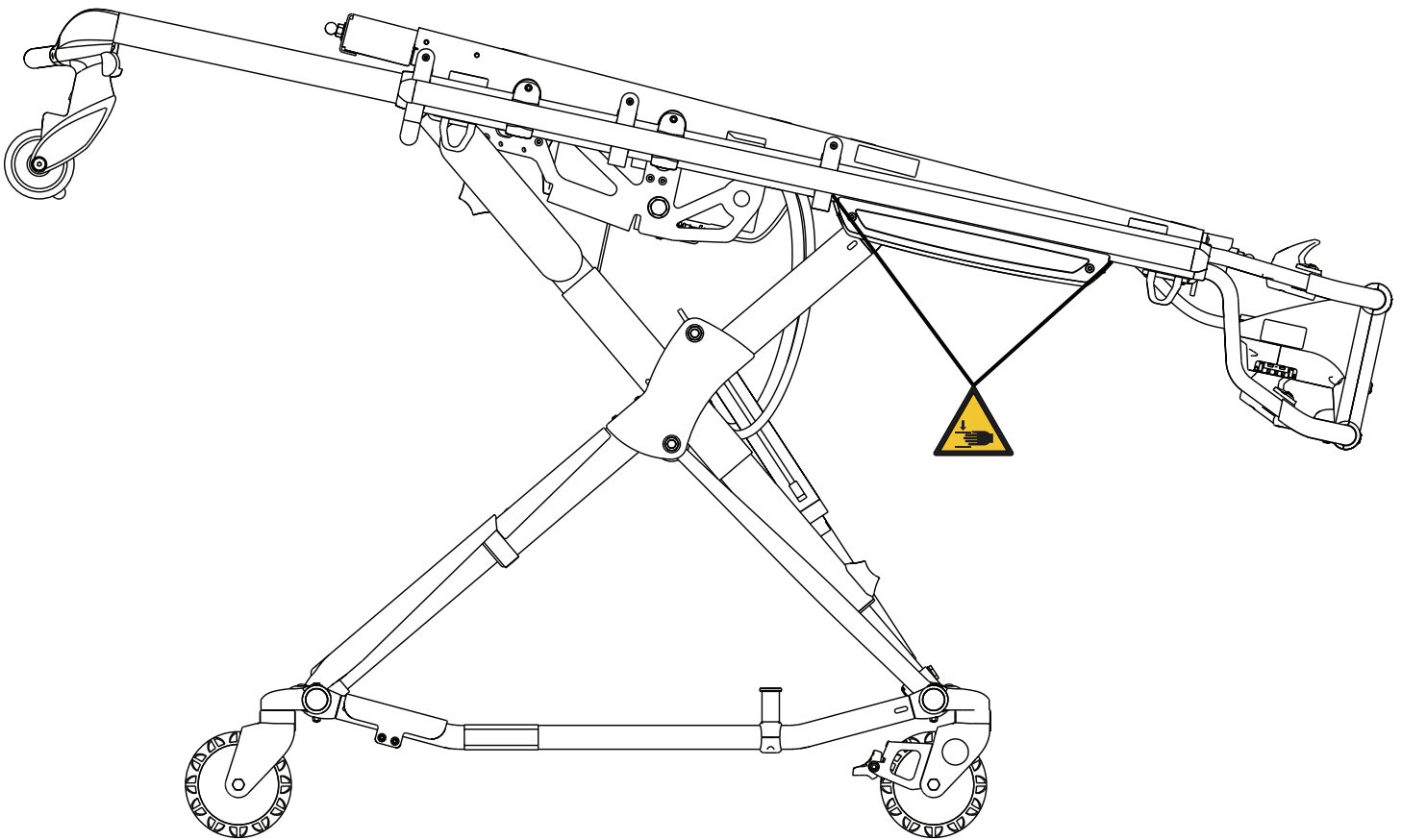


Figure 1 – Pinch points



# 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.

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## 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 6516 **Power-PRO** IT cot is a powered incubator transport ambulance cot. The cot consists of a platform, mounted on a wheeled X-frame, that is 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 has an adjustable load height feature to allow the device to be set to different ambulance deck heights for proper body mechanics during loading and unloading. The NiCd battery-powered hydraulic lift system allows operators to raise and lower the cot using the powered controls, while duplicate foot end controls on the upper and lower lift bars accommodate different operator positions or sizes. 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 a retractable head section for 360-degree mobility in any height position, four platform options for incubator system compatibility, and various optional accessories that assist with transport of the patient.

The **SMRT** 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** IT cot is a powered incubator transport wheeled stretcher, which is intended to support a rigidly affixed incubator system and transport the entire body of a traumatized, ambulatory or non-ambulatory human patient while incubated.

The battery-powered hydraulic lift system, is intended to help reduce the effort required by the operator to raise and lower the cot. The device is designed to provide a level patient surface at transport and working heights, and facilitate the transportation of associated medical equipment (i.e. oxygen bottles, monitors, and/or pumps) in emergency/transport vehicles. This ambulance cot is intended 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 (318 kg) (sum of the patient, incubator and accessory weight) and the intended operators of the device are trained professionals including nurses, doctors, emergency medical service and medical care center personnel, as well as medical first responders. Ambulance cots are intended for transportation purposes.

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

## 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.

## Contraindications

None known.

## Specifications - Power-PRO

	Safe working load  <b>Note</b> - Safe working load indicates the sum of the patient and accessory weight.	700 lb	318 kg
Maximum unassisted lift capacity <sup>1</sup>		500 lb	227 kg
Backrest articulation/shock position		Not applicable	
Overall length/minimum length/width		81 in./63 in./23 in.	206 cm/160 cm/58 cm
Height <sup>2</sup>		Adjustable from 14 in to 41.5 in.	Adjustable from 36 cm to 105 cm
Weight <sup>3</sup>		134 lb	61 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 6370 or 6377 Floor mount type, Model 6371 Wall mount type, Model 6390 <b>Power-LOAD</b> , Model 6392 <b>Performance-LOAD</b>	
Recommended loading height <sup>4</sup>		Up to 36 in.	Up to 91 cm
Single adjustable wheel lock/double adjustable wheel lock		Optional	
Hydraulic oil		Stryker part number 6500-001-293	
Power system			
Battery		24 VDC NiCd - <b>SMRT</b> power system	
Charger		100-240 VAC 1.20 A, 50/60 Hz or 12 VAC 4.16 A - <b>SMRT</b> power system	
Standards (cots and chargers)		IEC 60601-1, CAN/CSA-C22.2 No. 601.1-M90, UL 60601-1, IEC 60601-1-2:2001, KKK-A-1822	

<sup>1</sup> Cot loads over 300 lb (136 kg) may require additional assistance to meet the set cot load height.

<sup>2</sup> Height is measured from the top of the cot, at the center point, to ground level.

<sup>3</sup> Cot is weighed with one battery and without incubator.

<sup>4</sup> Set the cot height to any ambulance deck height that ranges from 26 in. to 36 in. (66 cm to 91 cm).

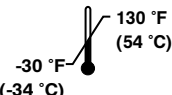
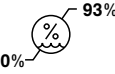
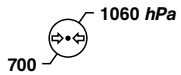
Stryker reserves the right to change specifications without notice.

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

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

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

Stryker hereby declares that this **Power-PRO** is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. Contact Stryker Medical at 3800 E. Centre Ave. Portage, MI 49002 Attn. Regulatory Affairs to obtain a copy of the original declaration of conformity.

Environmental conditions	Operation
Temperature	
Relative humidity	
Atmospheric pressure	

**CAUTION** - This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their expense.

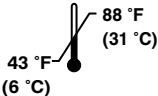
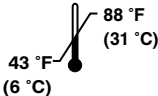
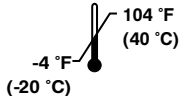
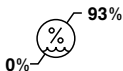

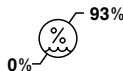
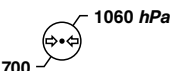
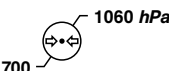
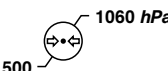
## European REACH

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
Cot comm board	6500-002-100	Octamethylcyclotetrasiloxane
Ni-CAD battery cell	6500-101-129	Cadmium, cadmium hydroxide
12 VDC cable, automotive	6500-201-147	Lead, fatty acids, C16-18, lead salts, diarsenic pentaoxide

## 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			
Relative			
Atmospheric pressure			

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.

## Electrical power requirements

When you configure 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

## European battery specifications

In accordance with the European Community Batteries and Waste Batteries regulation, required battery information is included below.

Description	Number	Quantity	Voltage	Capacity
NiCad battery cell	6500-101-129	2	24 VDC	2300 mAh

## Product illustration - Power-PRO

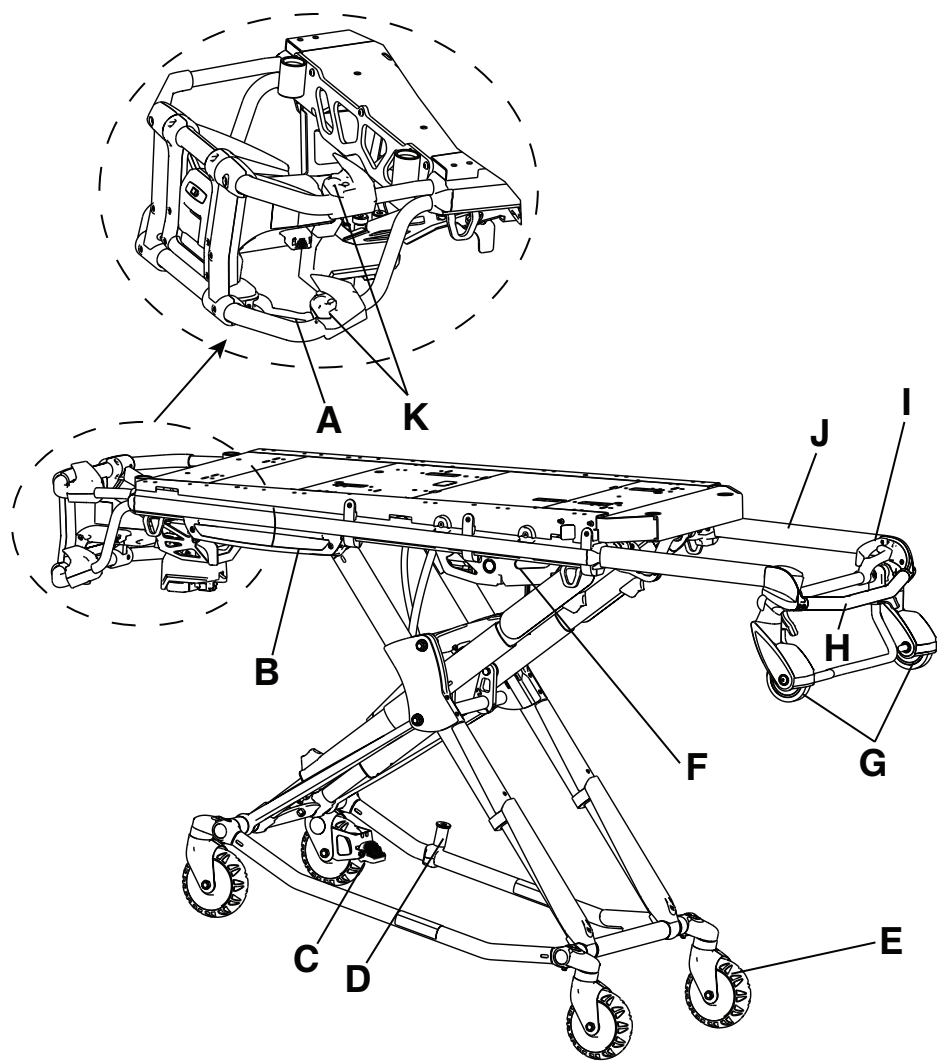


Figure 2 – Power-PRO IT

A	Manual backup release handle	G	Loading wheel
B	Height sensor housing	H	Head section release
C	Wheel lock option	I	Backrest
D	Cot retaining post	J	Retractable head section
E	Transport wheel	K	Height adjustment switch
F	Hydraulic unit		

Product illustration - SMRT

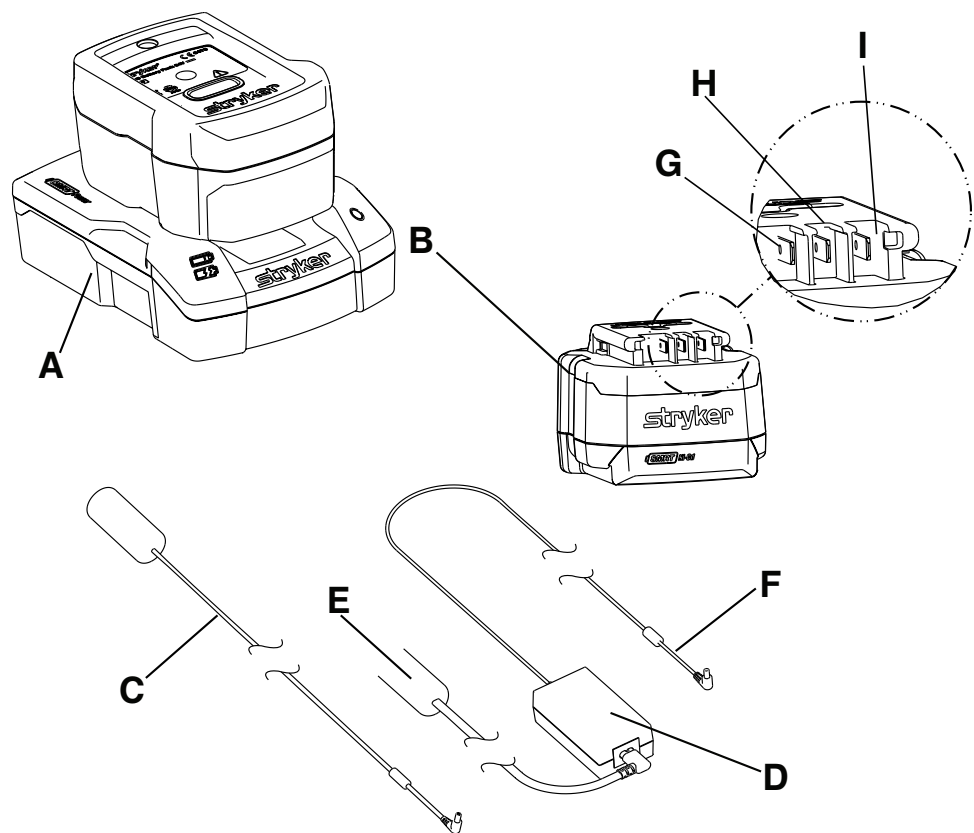


Figure 3 – SMRT Power System

A	SMRT charger	F	Output cord
B	SMRT Pak	G	Data
C	DC cable	H	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

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

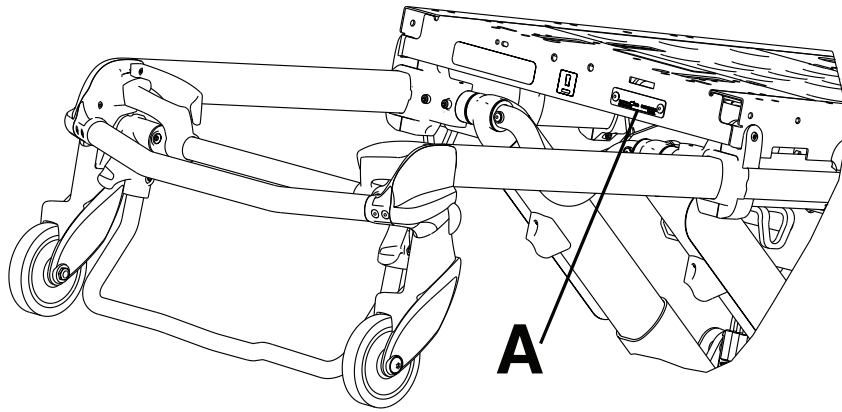


Figure 4 – Serial number location

## 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.

## Date of manufacture

The date of manufacture is the first four digits of the serial number.

YYMM (YY = year and MM = month)

# 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.

---

**WARNING** - 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.

---

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

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

- Smooth rear edge for product loading
- Level floor large enough for the folded product
- Stryker cot fastener system
- Space to install the vehicle safety hook
- In fastener shut-off module installed, if using an antler style cot fastener

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

## Installing the in-fastener shut-off

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.

---

### WARNING

- Always position the in-fastener shut-off before you place the cot into service.
  - Do not attempt to operate the cot when it is loaded into a cot fastener.
  - Always use the in-fastener shut-off to disable the electronic functionality only. Do not use the in-fastener shut-off for any other purpose.
  - 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.
- 

The cot and antler style cot fastener system have an integrated in-fastener shut-off function that disables the cot motor when you secure the cot into the cot fastener. Tighten the bolts to secure the fastener before you install the shut-off bracket. Install the shut-off bracket onto the rail clamp assembly before you place the cot into service.

1. Raise the base and push the cot into the vehicle patient compartment by following the appropriate loading instructions.
2. Secure the extended head section of the cot into the cot fastener antler.
3. Secure the cot post into the fastener rail clamp.
4. Adjust the shut-off bracket along the rail clamp until the diamond (A) on the sensor housing is lined up with the pop rivet head (B) (Figure 5).

**Note** - Align the diamond (A) on the sensor housing cover with the pop rivet head (B) on the in-ambulance shut-off (Figure 5).

5. Using a T27 Torx driver, install the bolts to attach the shut-off bracket to the rail clamp assembly.
6. Press the retract (-) button to make sure that the motor does not turn on while the cot is in the fastener. The cot battery LED indicator will still illuminate. If the motor turns on, readjust the shut-off bracket.

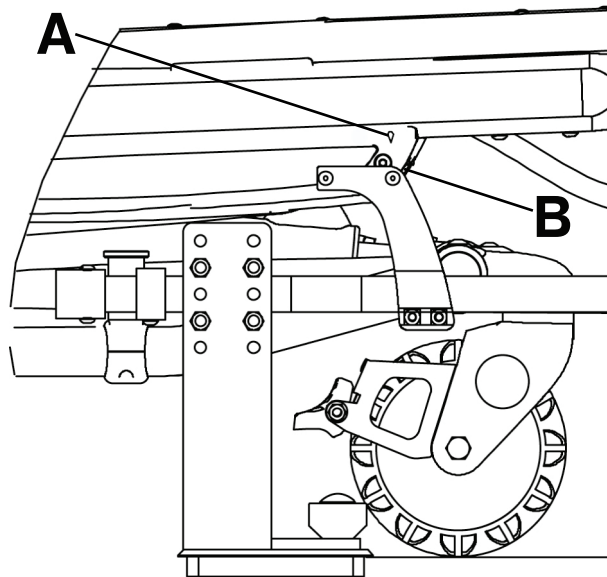


Figure 5 – Adjust shut-off bracket

## Selecting the vehicle safety hook

The vehicle safety hook is a device that ships with the cot. The cot safety bar and vehicle safety hook keep the cot from being accidentally removed from the vehicle and provide increased operator assurance and confidence when loading and unloading.

---

**WARNING** - Always adjust the mounting location to maintain the proper position of the vehicle safety hook face when you replace an existing vehicle safety hook with a new style.

---

**Note** - 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. Crash-rated cot fasteners are shipped and installed with a vehicle safety hook, so no additional hook is needed.

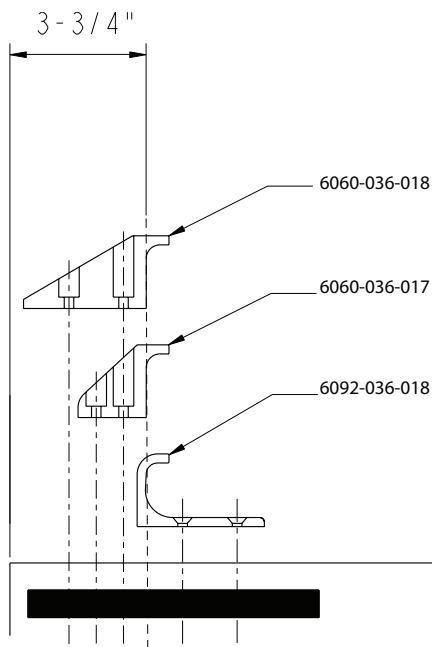
The vehicle safety hook was designed for compatibility and proper operation when loading and unloading the cot from a vehicle that is compliant with Federal Regulation KKK-A-1822. Stryker offers three different types of vehicle safety hooks that are ordered and shipped with your cot. These vehicle safety hook types meet the needs of various emergency vehicle configurations, specifically the length and location of the floor structure support that is located in the rear of the vehicle.

To select which vehicle safety hook is appropriate for your vehicle configuration:

- Consider the location of the floor structure support where there is adequate room to mount the vehicle safety hook.
- Mount the vehicle safety hook into the back of the vehicle. Provide bumper clearance to allow the operators to load and unload the cot from the vehicle.
- Note the differences in vehicle design. Each vehicle safety hook provides a different mounting location option to maintain the appropriate distance between the face of the vehicle safety hook and the edge of the door sill.

Due to the differences in vehicle dimensions and the floor structure support locations, each vehicle safety hook allows for a different mounting location. Select the correct position for your vehicle safety hook installation.

- *Positioning of the vehicle safety hook, front to back* (page 18)
- *Positioning of the vehicle safety hook, side to side* (page 19)



**Figure 6 – Vehicle safety hook types**

## Vehicle configuration

### **WARNING**

- Always have a certified mechanic, familiar with ambulance vehicle construction, install the vehicle safety hook to avoid injury to the patient or operator.
- Always consult the vehicle manufacturer before you install the vehicle safety hook. Make sure that the installation of the vehicle safety hook does not damage or interfere with the brake lines, oxygen lines, fuel lines, fuel tank, or electrical wiring of the vehicle.

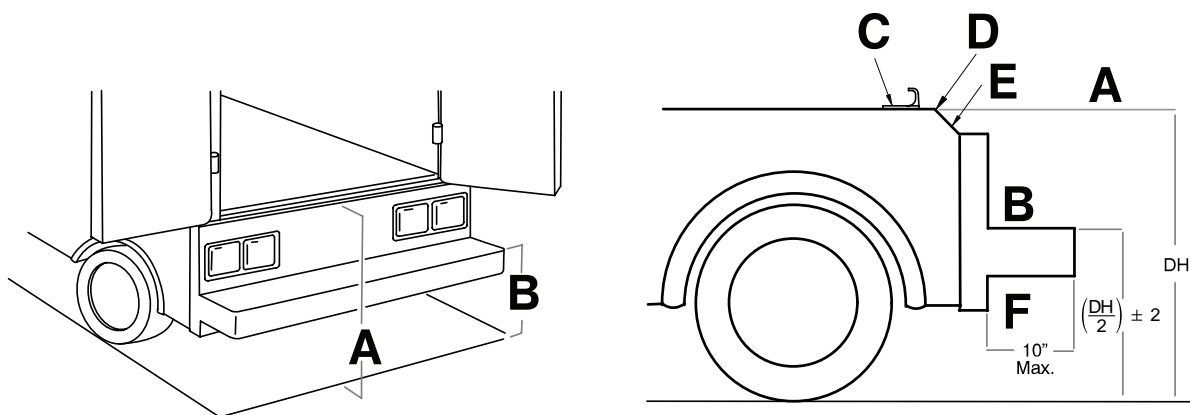
**CAUTION** - Always set the cot load height before you place the cot into service.

The cot is compatible with all vehicle deck heights that meet the Federal Specification for the Star-of-Life Ambulance KKK-A-1822. See specifications for maximum load height.

According to Federal Specification for the Star-of-Life Ambulance KKK-A-1822:

- The rear of the ambulance shall be furnished with a sturdy, full-width, rear bumper, with a step secured to the vehicle's chassis frame.
- The tread of the step shall have a minimum depth of 5 in. (13 cm) and a maximum depth of 10 in. (25 cm).
- If the step protrudes more than 7 in. (18 cm) from the rear of the vehicle, a fold-up step shall be furnished.

According to Federal Specification for the Star-of-Life Ambulance KKK-A-1822, the bumper height of the vehicle shall be installed equidistant  $\pm 2$  in. ( $\pm 5$  cm) from the vehicle floor to the ground level, which is defined as the vehicle deck height. Installation of the vehicle safety hook into any vehicle compliant with this federal specification provides adequate clearance for the cot base to lower to its fully extended position.



**Figure 7 – Deck and bumper height**

A	Deck height (DH)
B	Bumper height
C	Vehicle safety hook
D	Sill edge
E	Sill
F	Bumper depth

## Positioning of the vehicle safety hook, front to back

Before vehicle safety hook installation, check the front to back and side to side positioning when you unload and load the cot.

To check the front to back positioning:

1. Select the appropriate vehicle safety hook. See *Selecting the vehicle safety hook* (page 16).
2. Position the vehicle safety hook at least 3-3/4 in. from the leading edge of the door sill (A) (Figure 8). The recommended distance from the face of the safety hook is no less than 3-3/4 in.
3. Check that you can secure the vehicle safety hook to the mount in the back of the vehicle.
4. Check that you have adequate bumper clearance to allow the cot to be loaded and unloaded from the vehicle.
5. Confirm the side to side placement of the vehicle safety hook. See *Positioning of the vehicle safety hook, side to side* (page 19).

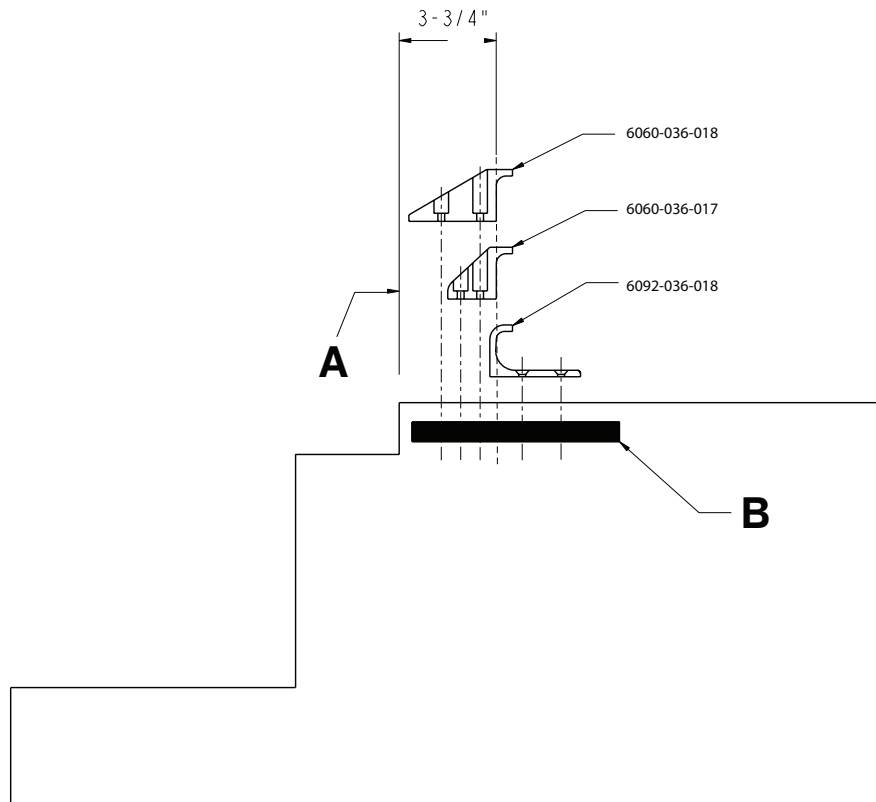


Figure 8 – Vehicle safety hook placement

A	Sill
B	Floor structure support

## Positioning of the vehicle safety hook, side to side

Before vehicle safety hook installation, check the front to back and side to side positioning when you unload and load the cot.

### WARNING

- Do not modify the cot or the vehicle safety hook. If the cot safety bar does not connect with the vehicle safety hook in any of these positions (left, center, or right), modify the vehicle.
- Always make sure that the cot safety bar connects with the vehicle safety hook every time before you install the vehicle safety hook.

To check the side to side positioning:

1. Remove the cot from the cot fastener and unload it from the vehicle.

**Note** - Pay attention to the position of the cot load wheels and the cot safety bar when you remove the cot.

2. Mark the center of the cot safety bar on the vehicle floor.
3. Check that the position marked in step 2 is where the cot safety bar connects with the vehicle safety hook every time when you unload the cot in a variety of positions (such as all the way to the left and all the way to the right).

## Installing the vehicle safety hook

Before vehicle safety hook installation, the certified mechanic should plan for the placement of the vehicle safety hook in the rear of the vehicle patient compartment.

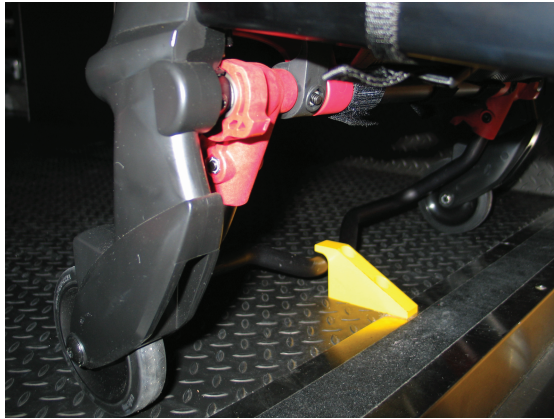
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### WARNING

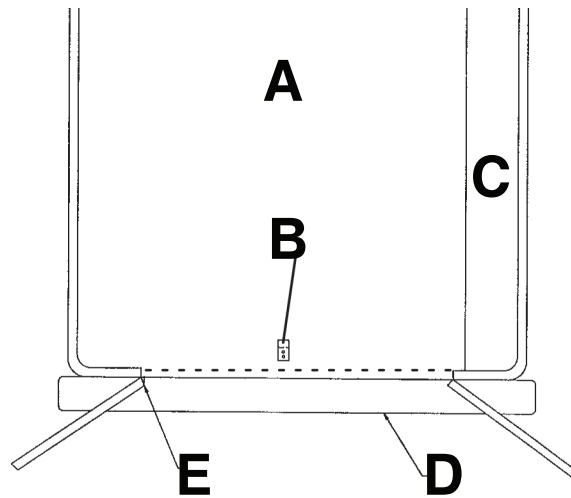
- Always have a certified mechanic, familiar with ambulance vehicle construction, install the vehicle safety hook to avoid injury to the patient or operator.
  - Always consult the vehicle manufacturer before you install the vehicle safety hook. Make sure that the installation of the vehicle safety hook does not damage or interfere with the brake lines, oxygen lines, fuel lines, fuel tank, or electrical wiring of the vehicle.
  - Always make sure that the cot safety bar connects with the vehicle safety hook before you remove the cot from the vehicle patient compartment to avoid the risk of injury.
  - Always use screws that are long enough to go through the vehicle patient compartment floor, washer, and nut, with at least two full threads in the nut. The socket head cap screw length depends on the thickness of the vehicle floor.
- 

### Hardware required (not supplied):

- (2) Grade 5, minimum 1/4"-20 socket head cap screw \* for the short vehicle safety hook or long vehicle safety hook
  - (2) Grade 5, minimum 1/4"-20 flat socket head cap screw \* for the J vehicle safety hook
  - (2) Flat washer
  - (2) Lock washer
  - (2) 1/4"-20 nut
1. Determine the correct vehicle safety hook front to back and side to side positioning, so the cot safety bar connects to the vehicle safety hook every time.
    - *Positioning of the vehicle safety hook, front to back* (page 18)
    - *Positioning of the vehicle safety hook, side to side* (page 19)
  2. Drill the holes for the screws.
  3. Fasten the vehicle safety hook to the vehicle patient compartment floor.
  4. Check that the cot safety bar connects with the vehicle safety hook before you remove the cot from the vehicle patient compartment.



**Figure 9 – Safety bar secured in the vehicle safety hook**



**Figure 10 – Vehicle safety hook placement**

A	Top view of vehicle
B	Vehicle safety hook
C	Squad bench
D	Bumper
E	Door frame

After installation, check that the cot legs lock into the load position without contacting the vehicle bumper.

# Operation

## Setting cot load height with jog function

The adjustable cot load height with jog function allows you to preset the height of the load wheels to meet the ambulance deck height up to 36 in (91 cm). The jog function assists operators when loading on an incline by jogging past the preset load height. You can set the cot load height from 26 in. to 36 in. (66 cm to 91 cm) as measured from the ground to the bottom of the load wheel.

To set the cot load height:

1. Locate the sensor housing on the patient right side of the cot.
2. Using a T27 Torx driver, remove the sensor housing cover by loosening the two screws (one on each end).
3. Adjust the left height sensor only inside the sensor housing (Figure 11):
  - a. Move the sensor toward the head end to increase the set load height or move the sensor toward the foot end to decrease the set load height.
  - b. Press the retract (-) button to lower the cot to its lowest position, then press the extend (+) button to raise the cot to its set load height position.
  - c. Measure the cot height from the bottom of the load wheels to the floor.
- Note** - Add an additional 1/2 in. (1.3 cm) to your deck height measurement to allow for variations in patient weight or with other equipment that may be added to the cot.
- d. Repeat steps 3a and 3b until you reach the desired cot load height.
4. Secure the height sensor cables. All cables should lie flat inside the housing between the sensors.
5. Using a T27 Torx driver, reinstall the two screws (removed in step 2) to replace the sensor housing cover.



Figure 11 – Adjust left sensor height

## 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) to determine the frequency of preventive maintenance. Use the error display (A) for troubleshooting (Figure 12). The error display overrides the hour meter display when an error occurs.

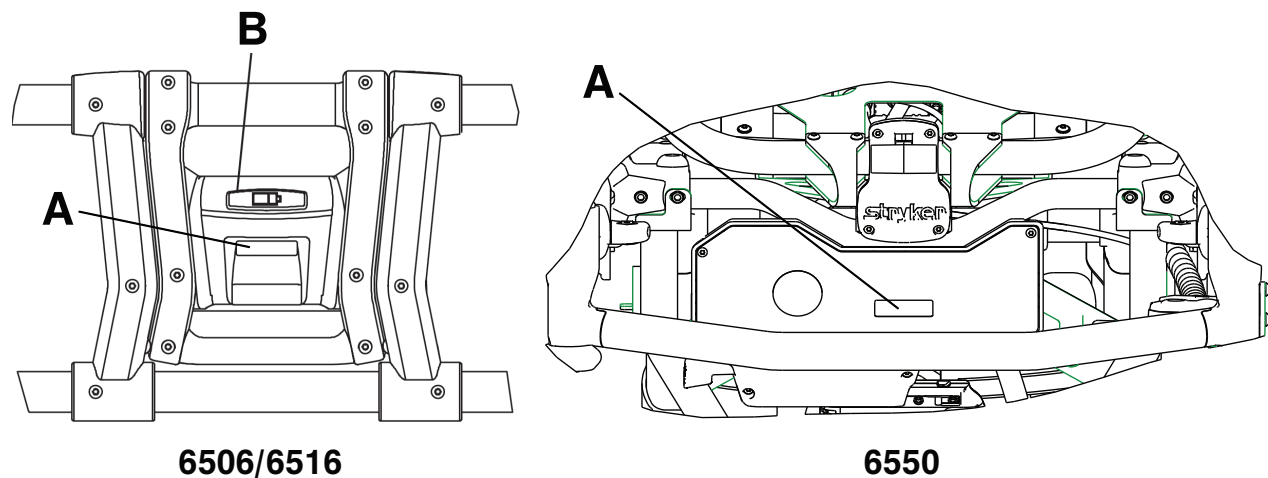


Figure 12 – Checking the hour meter (A), error display (A), and battery status (B)

## 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 helpers 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, unload, or change the 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 you place 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 you operate 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 you move the product to avoid the risk of tipping.
- Always use trained helpers to control the cot, when necessary.

## Proper lifting techniques

When you lift the product and patient, 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

## Rolling the cot with a patient

---

### WARNING

- 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.
  - 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 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. 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 you place 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, unload, or change the cot height position.
- Do not use the jog function to jog past the set cot load height after the cot safety bar connects with the vehicle safety hook.
- 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 13).

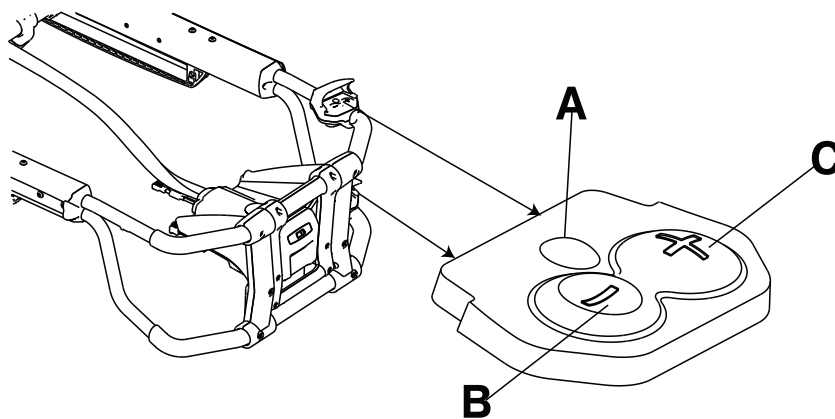


Figure 13 – Cot control switches

Reference	Name	Description
A	Release	Press to unlock the cot (for use with <b>Power-LOAD</b> only)
B	Retract (-)	Press and hold to lower the litter or retract the cot undercarriage
C	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 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 or unloading a cot with the Power-LOAD option

The cot is fully compatible with the Model 6390 **Power-LOAD** system if you ordered the cot with the **Power-LOAD** option or upgraded your cot with the compatibility kit.

### WARNING

- Always use **Power-LOAD** with the 6086 **Performance-PRO XT**, 6506 **Power-PRO XT**, and 6516 **Power-PRO IT** cots with the **Power-LOAD** option only. In certain situations, you can use **Power-LOAD** as a standard antler for most X-frame cots, but a rail clamp assembly is required for all cots without the **Power-LOAD** option.
- Always make sure that you use a **Power-PRO** date of manufacture cot with the Stryker Model 6390 **Power-LOAD** system to avoid the risk of injury.

Cot	Compatibility kit
Model 6506 <b>Power-PRO XT</b>	6506-700-001
Model 6516 <b>Power-PRO IT</b>	6516-700-001
Model 6086 <b>Performance-PRO XT</b>	6086-700-001

For more information about using your **Power-LOAD** compatible cot, see the **Power-LOAD** Operations Manual.

## Loading a cot into a vehicle with an antler style cot fastener

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 support the load of the patient, cot, and accessories after the weight is off of the ground.
  - Always use two operators when a cot is occupied.
  - Always follow proper hand placement on hand grips. Keep all hands clear of the red safety bar pivots when you load, unload, or change the cot height position.
  - Do not load the cot into a vehicle with the head section retracted when using a cot fastener. The cot may tip or not connect with the cot fastener.
- 

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. The higher an operator must lift the cot, the more difficult it may be to hold the weight. The operator must be able to lift the cot high enough for the cot legs to extend when the cot is unloaded. An operator may need help if they are too short or if the patient is too heavy to lift when unloading the cot. If you are a shorter operator, you may need to raise your arms higher to allow the cot legs to extend.

**Note** - You can load an unoccupied cot into a vehicle with one operator.

To load the cot into a vehicle:

1. Extend and lock the retractable head section.
2. Place the cot in a loading position. A loading position is any position where the load wheels meet the vehicle floor height.
3. Lift the vehicle bumper, if equipped, to the raised position.
4. Roll the cot to the open door of the vehicle patient compartment.
5. Push the cot forward until the load wheels are on the vehicle patient compartment floor and the cot safety bar passes the vehicle safety hook.
6. Pull the cot back until the cot safety bar connects to the vehicle safety hook for maximum clearance to lift the base.
7. Make sure that the cot safety bar connects with the vehicle safety hook.
8. Load the cot.

---

**WARNING** - Always use the powered method to load an unoccupied cot with one operator. Do not use the manual method to load an unoccupied cot with one operator.

---

- Powered method - using the cot control switches (*Raising, lowering, or releasing the cot with power* (page 25)):

With both operators at the foot end (recommended method)	With one operator at the foot end and one operator on the side	With one operator (when loading an unoccupied cot)
<ol style="list-style-type: none"><li>a. Both operators: Grasp the cot frame at the foot end.</li><li>b. Operator 1: Press and hold the retract (-) button to retract the cot undercarriage.</li></ol>	<ol style="list-style-type: none"><li>a. Operator 1: Grasp the cot frame at the foot end and press and hold the retract (-) button to retract the cot undercarriage.</li><li>b. Operator 2: Grasp the cot outer rail to stabilize the cot as the cot undercarriage retracts.</li></ol>	Grasp the cot frame at the foot end and press and hold the retract (-) button to retract the cot undercarriage.

- Manual method - using the manual back-up release handle:

- a. Operator 1 (at the foot end):
  - i. Grasp the cot frame at the foot end.
  - ii. Lift the foot end of the cot until you lift the weight off of the cot base.

- iii. Squeeze and hold the manual back-up release handle.
- b. Operator 2 (on the side):
  - i. Grasp the cot outer rail to stabilize the cot as you retract the cot undercarriage.
  - ii. Raise the cot undercarriage until it stops in the highest position.
- 9. Push the cot into the vehicle patient compartment.
- 10. Make sure that the cot is secured in the cot fastener (not included).

**Note** - When you use the manual back-up release handle, do not lift the base rapidly or the movement may appear sluggish. Lift with a slow, constant motion.

## Unloading a cot from a vehicle with an antler style cot fastener

Always unload 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 support the load of the patient, cot, and accessories after the weight is off of the ground.
  - Always make sure that two operators are present when a cot is occupied.
  - Always follow proper hand placement on hand grips. Keep all hands clear of the red safety bar pivots when you load, unload, or change the cot height position.
  - Always make sure that the cot safety bar connects with the vehicle safety hook before you remove the cot from the vehicle patient compartment to avoid the risk of injury.
  - Do not pull or lift on the cot safety bar when you unload the cot.
  - Always set the cot transfer wheels safely on the ground when you unload the cot from the vehicle patient compartment to avoid the risk of product damage.
  - Do not use the jog function to jog past the set cot load height after the cot safety bar connects with the vehicle safety hook.
- 

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. The higher an operator must lift the cot, the more difficult it may be to hold the weight. The operator must be able to lift the cot high enough for the cot legs to extend when the cot is unloaded. An operator may need help if they are too short or if the patient is too heavy to lift when unloading the cot. If you are a shorter operator, you may need to raise your arms higher to allow the cot legs to extend.

**Note** - You can unload an unoccupied cot from a vehicle with one operator.

To unload the cot from a vehicle:

1. Lift the vehicle bumper, if equipped, to the raised position.
2. Remove the cot from the cot fastener.
3. Unload the cot.
  - Manual method - using the manual back-up release handle:

With both operators at the foot end (recommended method)	With one operator at the foot end and one operator on the side	With one operator (when unloading an unoccupied cot)
<p>a. Both operators: Grasp the cot frame at the foot end.</p> <p>b. Operator 1: Pull the manual back-up release handle to extend the cot undercarriage. Pull the cot out of the vehicle patient compartment until the safety bar connects with the vehicle safety hook. Release the manual back-up release handle when the base is fully extended.</p> <p>c. Operator 2: Make sure that the safety bar connects with the vehicle safety hook. Pull the safety bar release lever forward to remove the safety bar from the vehicle safety hook.</p>	<p>a. Operator 1: Grasp the cot frame at the foot end. Pull the manual back-up release handle to extend the cot undercarriage. Pull the cot out of the vehicle patient compartment until the safety bar connects with the vehicle safety hook. Release the manual back-up release handle when the base is fully extended.</p> <p>b. Operator 2: Make sure that the safety bar connects with the vehicle safety hook. Grasp the cot outer rail to stabilize the cot. Pull the safety bar release lever forward to remove the safety bar from the vehicle safety hook.</p>	<p>a. Grasp the cot frame at the foot end.</p> <p>b. Pull the manual back-up release handle to extend the cot undercarriage.</p> <p>c. Pull the cot out of the vehicle patient compartment until the safety bar connects with the vehicle safety hook.</p> <p>d. Release the manual back-up release handle when the base is fully extended.</p> <p>e. Pull the safety bar release lever forward to remove the safety bar from the vehicle safety hook.</p>

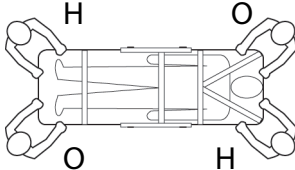
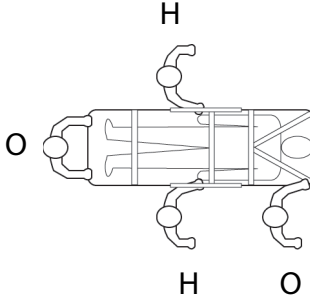
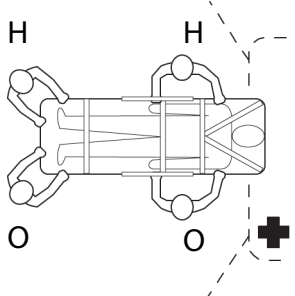
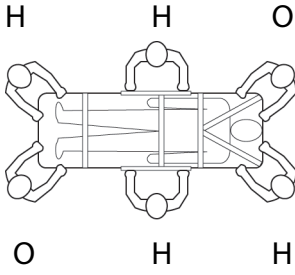
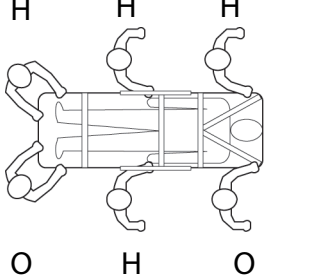
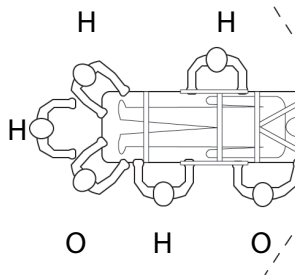
- Powered method - using the cot control switches:

With both operators at the foot end	With one operator at the foot end and one operator on the side	With one operator (when unloading an unoccupied cot)
<p>a. Both operators: Grasp the cot frame at the foot end.</p> <p>b. Both operators: Pull the cot out of the vehicle patient compartment until the safety bar connects with the vehicle safety hook. <b>WARNING - Do not press the extend (+) button until the safety bar connects with the vehicle safety hook.</b></p> <p>c. Operator 2: Make sure that the safety bar connects with the vehicle safety hook.</p> <p>d. Operator 1: Depress the extend (+) button to extend the cot undercarriage.</p> <p>e. Operator 2: Pull the safety bar release lever forward to remove the safety bar from the vehicle safety hook.</p> <p><b>Note</b> - You can use the manual back-up release handle or a combination of the manual back-up release handle, followed by the extend (+) button. If you use the extend (+) button, squeeze and hold the manual back-up release handle before you press and hold the extend (+) button.</p>	<p>a. Operator 1: Grasp the cot frame at the foot end and pull the cot out of the vehicle patient compartment until the safety bar connects with the vehicle safety hook. <b>WARNING - Do not press the extend (+) button until the safety bar connects with the vehicle safety hook.</b></p> <p>b. Operator 2: Grasp the cot outer rail to stabilize the cot.</p> <p>c. Operator 1: Depress the extend (+) button to extend the cot undercarriage.</p> <p>d. Operator 2: Pull the safety bar release lever forward to remove the safety bar from the vehicle safety hook.</p> <p><b>Note</b> - You can use the manual back-up release handle or a combination of the manual back-up release handle, followed by the extend (+) button. If you use the extend (+) button, squeeze and hold the manual back-up release handle before you press and hold the extend (+) button.</p>	<p>a. Grasp the cot frame at the foot end.</p> <p>b. Pull the cot out of the vehicle patient compartment until the safety bar connects with the vehicle safety hook. <b>WARNING - Do not press the extend (+) button until the safety bar connects with the vehicle safety hook.</b></p> <p>c. Depress the extend (+) button to extend the cot undercarriage.</p> <p>d. Pull the safety bar release lever forward to remove the safety bar from the vehicle safety hook.</p>

- Remove the load wheels from the vehicle patient compartment floor.

## Positioning operators and helpers

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

	Changing levels	Rolling	Loading and unloading
Two operators (O) Two helpers (H)			
Two operators (O) Four helpers (H)			

## Extending the retractable head section

Extend the retractable head section before you load the cot into the vehicle patient compartment.

### WARNING

- Always lock the head section into place before you operate the cot.
- Do not load the cot into a vehicle with the head section retracted when using a cot fastener. The cot may tip or not connect with the cot fastener.

To extend the retractable head section:

- Grasp the outer rail with one hand for support and pull the head section release handle. Rotate the head section release handle toward the head end of the cot to release the head section from the locked position.
- Release the head section release handle, then pull the head section away from the litter frame. Lengthen the head section to the extended position.
- Release the head section release handle to lock the head section in the extended position.



## Retracting the retractable head section

Retract the retractable head section to roll the cot in any direction on the load wheels for improved mobility and maneuverability, even in the lowest position.

---

### WARNING

- Always lock the head section into place before you operate the cot.
  - Do not load the cot into a vehicle with the head section retracted when using a cot fastener. The cot may tip or not connect with the cot fastener.
- 

To retract the retractable head section:

1. Grasp the outer rail with one hand for support and release the head section release handle. Rotate the head section release handle toward the head end of the cot to release the head section from the locked position.
2. Release the head section release handle, then push the head section toward the litter frame. Retract the head section to the retracted position.
3. Release the head section release handle to lock the head section in the retracted position.

## 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 **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 **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.

## Installing the incubator adaptor

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### WARNING

- Do not install these incubator adaptors on any other Stryker cot or on any cot from another manufacturer. These incubator adaptors are for use only on the **Power-PRO** IT cot.
  - Always make sure that the incubator adaptor is properly installed on the cot and the incubator is securely fastened to the incubator adaptor before use.
-

## Note

- If the incubator adaptor was ordered with the **Power-PRO** IT cot, the incubator adaptor may have been installed at the factory.
- If the incubator adaptor was purchased as a retrofit kit, follow these instructions for installation.

To install the incubator adaptor:

1. Remove the existing incubator adaptor if there is one already present.
2. Install the new incubator adaptor.
3. Align the incubator adaptor assembly with the mounting holes in the **Power-PRO** IT cot.
4. Install the provided fasteners. Apply a few drops of the provided **Loctite®** to the threads of the fasteners and tighten.

**Table 1 – Incubator adaptor and required tools for installation**

Incubator adaptor	Required tools	Page
<b>Airborne™</b> side-by-side	<ul style="list-style-type: none"><li>• 5/32" Allen wrench</li><li>• 3/16" Allen wrench</li><li>• 1/2" socket and ratchet</li></ul>	<i>Installing the Airborne infant transport incubator adaptor in the side by side configuration (page 32)</i>
<b>Drager®</b>	<ul style="list-style-type: none"><li>• 5/32" Allen wrench</li><li>• 3/16" Allen wrench</li></ul>	<i>Installing the Drager infant transport incubator adaptor (page 33)</i>
<b>Airborne™</b> stackable	<ul style="list-style-type: none"><li>• 1/2" socket and ratchet</li></ul>	<i>Installing the Airborne infant transport incubator adaptor in the stackable configuration (page 34)</i>
No adaptor option (airsled or equivalent configuration)	<ul style="list-style-type: none"><li>• 1/2" socket and ratchet</li></ul>	<i>Installing the no adaptor option airsled transport incubator with a sled receptacle (page 35)</i>

## Installing the Airborne infant transport incubator adaptor in the side by side configuration

### WARNING

- Do not install these incubator adaptors on any other Stryker cot or on any cot from another manufacturer. These incubator adaptors are for use only on the **Power-PRO** IT cot.
- Always make sure that the incubator adaptor is properly installed on the cot and the incubator is securely fastened to the incubator adaptor before use.

Before you install an incubator adaptor on the **Power-PRO** IT cot, read and understand this manual and the manual that was supplied with the incubator adaptor.

To install the incubator adaptor (Figure 14):

1. Push down on the latch tab (A) to release the latch tab (B).
2. Pull down on the latch tab (B) and open each of the latches on the four corners of the incubator.
3. Place the **Airborne™** incubator into the incubator adaptor on the cot. Make sure that you place all four corners of the incubator into the incubator adaptor.
4. Insert each latch into its slot on the incubator adaptor.
5. Push up the latch tab (B) to secure the latches.

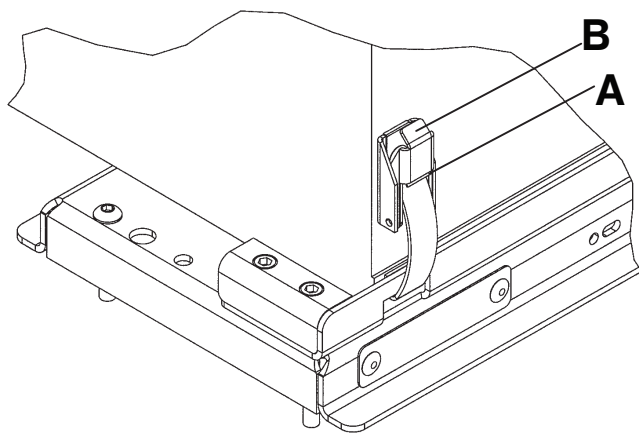


Figure 14 – Airborne™ side-by-side incubator

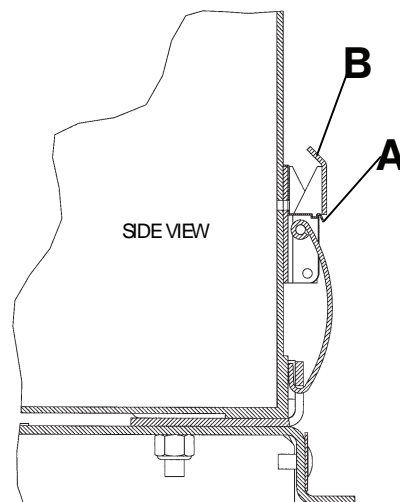


Figure 15 – Latch tabs - side view

## Installing the Drager infant transport incubator adaptor

### WARNING

- Do not install these incubator adaptors on any other Stryker cot or on any cot from another manufacturer. These incubator adaptors are for use only on the **Power-PRO** IT cot.
- Always make sure that the incubator adaptor is properly installed on the cot and the incubator is securely fastened to the incubator adaptor before use.
- Stryker is not responsible for specification changes to the **Drager®** (or **Air-Shields®** Series) incubators.

Before you install an incubator on the **Power-PRO** IT cot, read and understand this manual and the manual that was supplied with the incubator.

To install the incubator adaptor (*Installing the Drager infant transport incubator adaptor* (page 33)):

1. Pull the red latch handle (A) on the incubator adaptor and move it to the right until the slot in the handle catches with the shoulder bolt (B) on the incubator adaptor.
2. Place the incubator on the incubator adaptor. Align the holes in the incubator with the four pins (C) on the incubator adaptor. Only two of the four pins are shown.
3. Move the latch handle (A) to the left to release it. The handle retracts and the latches secure the incubator.
4. Inspect all four locking points. Make sure that the latches are secure and not obstructed by anything, such as hoses or wires.

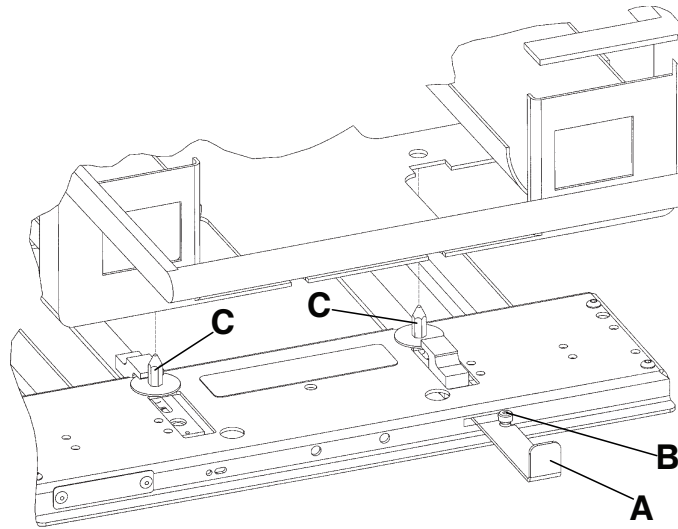


Figure 16 – Drager® incubator

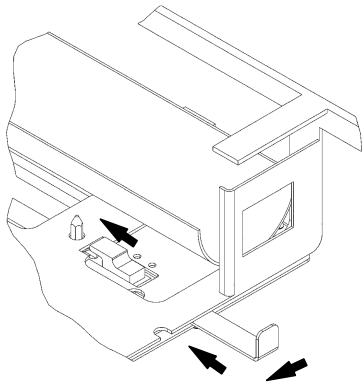


Figure 17 – Unlocked position

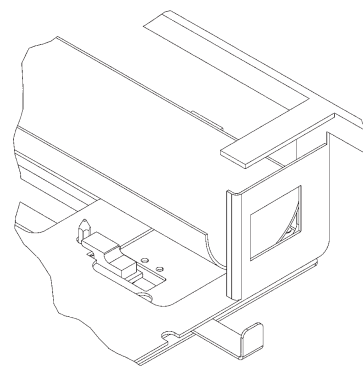


Figure 18 – Locked position

## Installing the Airborne infant transport incubator adaptor in the stackable configuration

### WARNING

- Do not install these incubator adaptors on any other Stryker cot or on any cot from another manufacturer. These incubator adaptors are for use only on the **Power-PRO** IT cot.
- Always make sure that the incubator adaptor is properly installed on the cot and the incubator is securely fastened to the incubator adaptor before use.

Before you install an incubator adaptor on the **Power-PRO** IT cot, read and understand this manual and the manual that was supplied with the incubator adaptor.

To install the incubator adaptor (Figure 19):

1. Using a 1/2" socket and ratchet, remove the four 5/16" hex nuts and washers (A) from the mounting studs (B) on the incubator adaptor. Save the nuts and washers.
2. Locate the mounting holes in the bottom of the oxygen bottle module (C).
3. Install the oxygen bottle holder on the incubator adaptor mounting studs (B) with the bottle openings facing toward the retractable head section. Place all four mounting studs into the mounting holes of the oxygen bottle holder.

4. Using a 1/2" socket and ratchet, install the four 5/16" hex nuts and washers (A) that you removed in step 1. Tighten all four nuts.

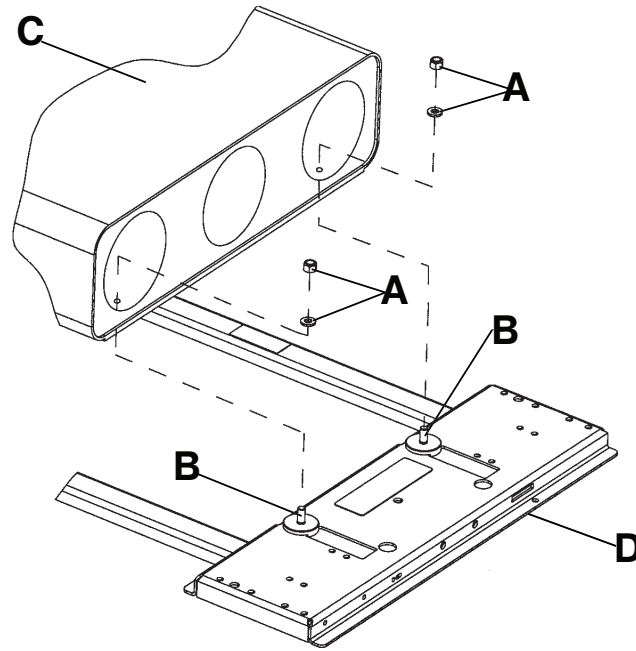


Figure 19 – Airborne stackable

## Installing the no adaptor option airsled transport incubator with a sled receptacle

### WARNING

- Do not install the sled receptacle on any other Stryker cot or on any cot from another manufacturer. These sled receptacles are for use only on the **Power-PRO** IT cot.
- Stryker is not responsible for specification or option changes to airsled compatible incubators.

Before you install a sled receptacle (6516-142-000) on the **Power-PRO** IT cot, read and understand this manual and the manual that was supplied with the sled receptacle. These instructions explain how to install the airsled with the manufacturer's supplied sled receptacle (not included).

To install the sled receptacle (Figure 20):

1. Secure the sled receptacle to the litter frame with the supplied fasteners.
2. Insert the airsled (A) into the sled receptacle (B) with the latching system that is included as part of the airsled.

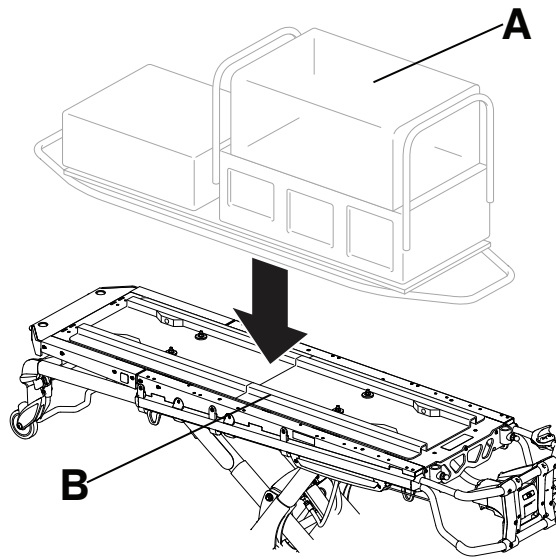


Figure 20 – Airlsled installation

## Securing the airlsled to the litter surface

Before you secure the airlsled to the **Power-PRO** IT cot, read and understand this manual and the manual that was supplied with the airlsled. These instructions explain how to install the airlsled to the litter surface of the **Power-PRO** IT cot with straps.

To secure the airlsled to the litter surface (Figure 21):

1. Attach the straps (A) (not supplied) to the litter to secure the airlsled to the litter surface (B). Do not attach the straps to the rigid push bars.
2. Secure the airlsled to the cot.

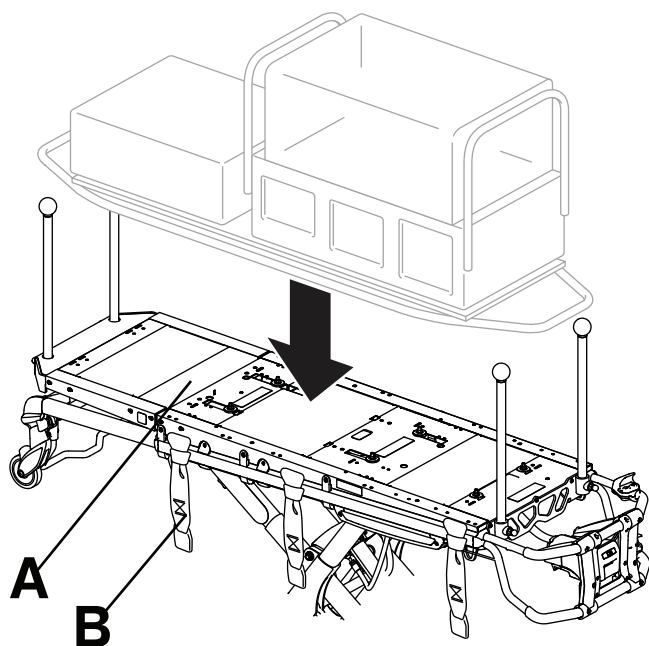


Figure 21 – Secure the airslid

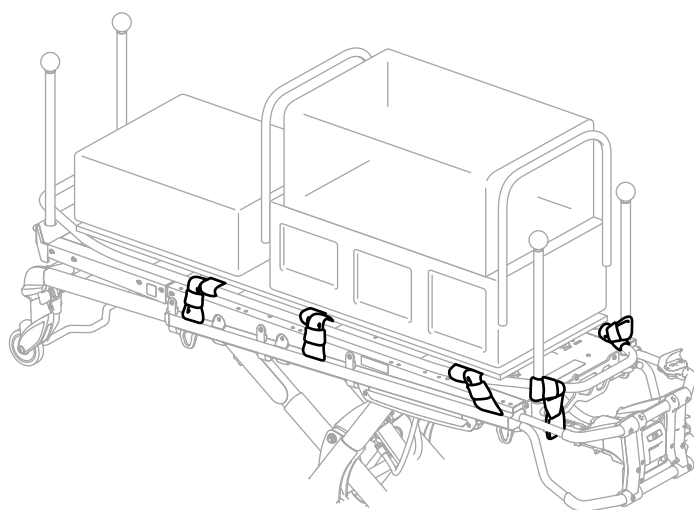


Figure 22 – Confirm that the airslid is secure

## Transporting the cot with the rigid push bars

Use the rigid push bars to enhance emergency mobility through sturdy push points while maintaining solid stability. You can install push bars at both the head end (A) and foot end (B) of the cot.

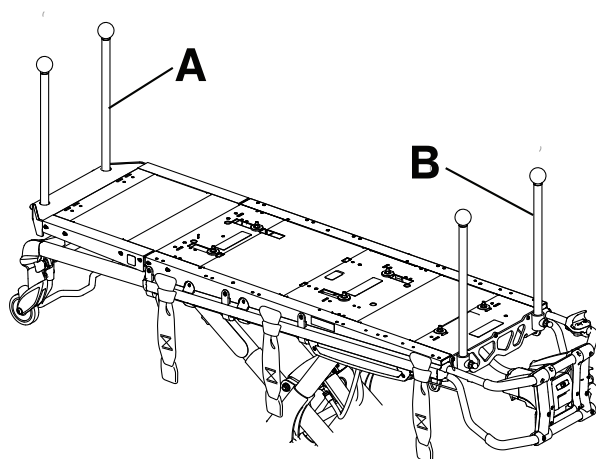


Figure 23 – Rigid push bars

## 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 hook and loop straps around the base tubes.

## Attaching the head end storage flat option

---

**WARNING** - Do not allow the head end storage flat (if equipped) to interfere with the operation of the retractable head section, safety bar, or vehicle safety hook.

---

---

**CAUTION** - Do not load the head end storage flat above the safe working load of 40 lb (18 kg).

---

To attach the head end storage flat (Figure 24):

1. Install the hook and loop straps (A) near the pneumatic cylinder and around the cross tube (C) of the retractable head section.
2. Buckle the restraint straps (B) around the outer rails of the retractable head section.

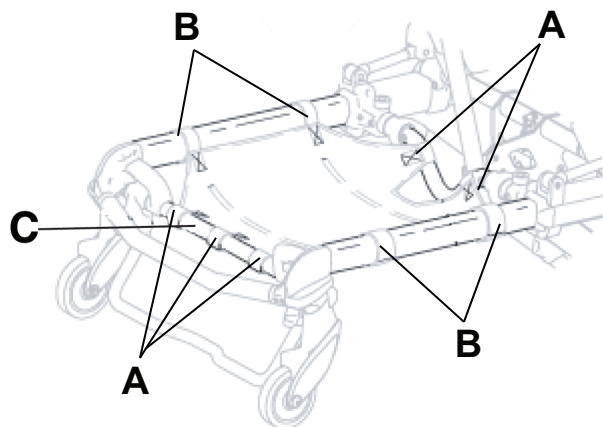


Figure 24 – Head end storage flat

## 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.
-



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**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 25).
2. Slide the released **SMRT** Pak out of the enclosure.

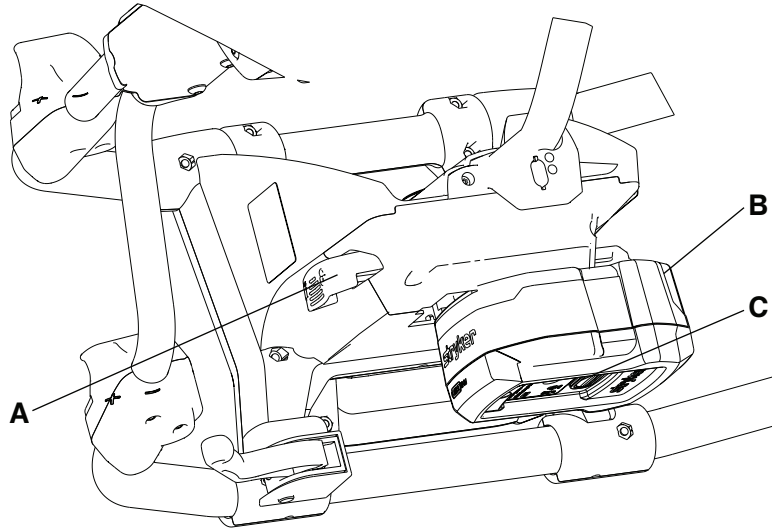


Figure 25 – Releasing the battery

## 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.

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**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 26):

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 26). The optimum charge time is two hours.
  - When the **SMRT** Pak is charged and ready for use, the **SMRT** charger LED indicator (B) will turn to solid green.
2. Press the red release button (A) (Figure 26) 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.

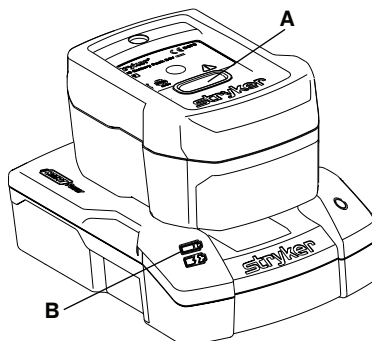


Figure 26 – Charging the SMRT Pak

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

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

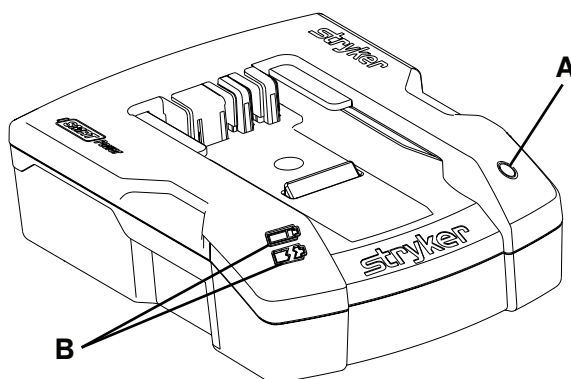


Figure 27 – Checking the SMRT Pak power level

- Power connection: Connect or disconnect the **SMRT** charger from the appropriate power source (*Powering the charger* (page 43)).
- **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)	<b>SMRT</b> charger is charging the <b>SMRT</b> Pak. The optimum charge time is two hours.
Green (solid)	<b>SMRT</b> Pak is charged and ready for use.

SMRT charger LED indicator	Status
Amber (flashing)	<b>SMRT</b> Pak temperature delay. The <b>SMRT</b> charger is waiting for the <b>SMRT</b> 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.

## 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 accessible 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 secured to the surface.
- 

To install the mounting bracket (Figure 28):

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 28).
  - 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 according to the ambulance or station location:

Ambulance location	Station location
<ul style="list-style-type: none"> <li>Secure the bracket to a horizontal structural support surface or shelf using size #10, grade 5 screws minimum (not supplied).</li> <li>Make sure that the selected mounting surface is strong enough to secure the <b>SMRT</b> charger and <b>SMRT</b> Pak during transport.</li> <li>Locate the bracket in an enclosed cabinet and out of patient reach during transport.</li> <li>Allow for easy <b>SMRT</b> Pak installation and removal.</li> <li>Locate the power supply within reach of the power cord.</li> </ul>	<ul style="list-style-type: none"> <li>Secure the bracket to a horizontal or vertical structural support surface using size #10, grade 5 screws minimum (not supplied).</li> <li>For vertical installation, position the mounting bracket so the spring tab is directly below the mounting screws, so the <b>SMRT</b> Pak remains supported by the <b>SMRT</b> charger even if the release button is accidentally pressed.</li> <li>Allow for easy <b>SMRT</b> Pak installation and removal.</li> <li>Locate the power supply within reach of the power cord.</li> </ul>

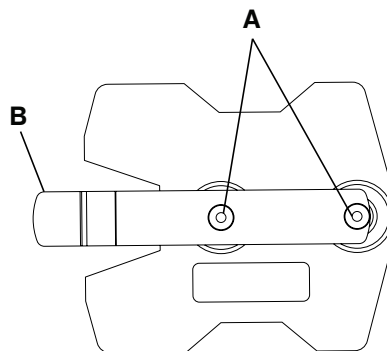


Figure 28 – Mounting bracket

## Attaching the charger onto the mounting bracket option

To attach the **SMRT** charger onto the mounting bracket (Figure 29):

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.

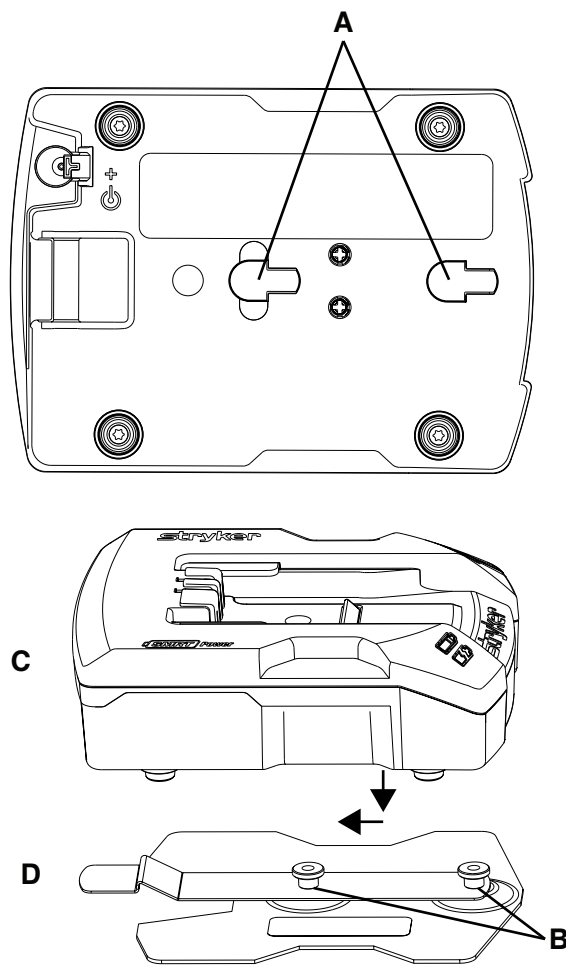


Figure 29 – Attaching the charger

## 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 30):

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.

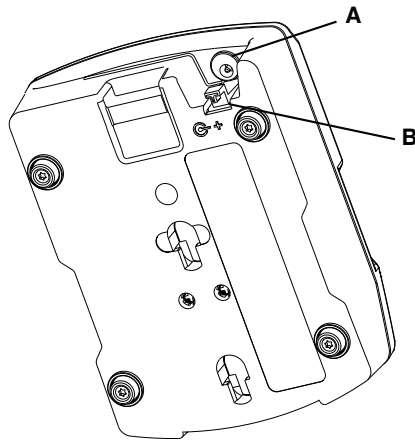


Figure 30 – Powering the charger

## Disconnecting the charger

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**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.

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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
Cable, hall effect sensor	6500-001-160
Control board assembly	6500-102-014
Litter extension	6510-039-000
Rigid push bar, foot end	6516-040-000
Rigid push bar, head end	6516-031-000
Safety hook, J	6092-036-018
Safety hook, long	6060-036-017
Safety hook, short	6060-036-018
Storage flat, head end	6500-128-000
Storage net, base	6500-160-000

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
Bracket adapter	6510-038-000
<b>SMRT</b> charger	6500-201-000
<b>SMRT</b> charger mounting bracket	6500-034-000
<b>SMRT</b> Pak kit, battery pack	6500-700-046
<b>Power components - AC</b>	
Charger power supply	6500-201-148
Power cord, North America	6500-201-149
Power cord, Australia	6500-201-153
Power cord, Europe	6500-201-150
Power cord, United Kingdom	6500-201-151
<b>Power components - DC</b>	
Battery charger, 24VDC, domestic	6500-070-000
Battery charger 12VDC/24VDC, in-ambulance	6500-072-000
12 VDC cable, automotive	6500-201-147
<b>SMRT power kit (includes 1 charger, 2 Paks, and 1 power cord)</b>	
<b>SMRT</b> power kit - 12 VDC, domestic (car charger)	6500-700-040
<b>SMRT</b> power kit - 120 VAC, domestic (wall charger)	6500-700-041

## **Date of manufacture for medical device accessories**

The year of manufacture is the first four digits of the serial number.



# 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 of motor run time, 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
Battery	<b>SMRT</b> 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 of motor run time, 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

## Every six months or 12 hours

Inspect these items every six months or 12 hours of motor run time, whichever comes first.

Item	Inspect
Hydraulics	Hoses and fittings for damage or wear
	Hydraulic velocity fuse - place a weight of approximately 50 lb (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

Item	Inspect
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
Base	No bent, broken, or damaged components
	Cot retaining post is secure. If not, replace the screw
	No excessive damage to X-frame guards
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

## Every 12 months or 24 hours

Inspect these items every 12 months or 24 hours of motor run time, whichever comes first.

Item	Inspect
Settings	Cot and fastener fit and function
	Safety bar connects to the vehicle safety hook
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
Wheels	Check and adjust wheel locks

# Cleaning and disinfecting with SideKick

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

Stryker's preferred 6" x 10" wipes (2060-000-001) 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 with SideKick wipe:

### To clean:

1. Wipe down the external product surface with a fresh, clean wipe to remove all visible soils.
2. Repeat as necessary until the external product surface is visibly clean.
3. Wipe dry with a cloth or allow the external product surface to air dry before you return the product to service.

**Note** - Use as many wipes as necessary.

### To disinfect:

1. Clean first.
2. Wipe down the external product surface with a fresh, clean wipe until wet.
3. Allow the external product surface to remain wet for two minutes at room temperature.
4. Wipe dry with a cloth or allow the external product surface to air dry before you return the product to service.

# Cleaning

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

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## 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 the hook and loop straps after each use. Saturate the hook and loop straps with disinfectant and allow disinfectant to evaporate. Appropriate disinfectant for nylon hook and loop straps 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.

## Note

- 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 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

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### 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.

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### 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 you insert the **SMRT** Pak into a **Power-PRO** cot or **SMRT** charger.

# EMC information

**CAUTION** - This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.

Guidance and manufacturer's declaration - electromagnetic emissions		
<b>Power-PRO</b> is intended for use in the electromagnetic environment specified below. The customer or the user of <b>Power-PRO</b> should assure that it is 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.
RF Emissions CISPR 11	Group 2	<b>Power-PRO</b> with the <b>Power-LOAD</b> compatibility option must emit electromagnetic energy in order to perform its intended function. Nearby electronic equipment may be affected.
RF Emissions CISPR 11	<b>Power-PRO</b> : 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.
	<b>SMRT</b> 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 <b>SMRT</b> 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.

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

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

Rated maximum output power of transmitter  W	Separation distance according to frequency of transmitter  m		
	150 kHz to 80 MHz $D=(1.2) (\sqrt{P})$	80 MHz to 800 MHz $D=(0.18) (\sqrt{P})$	800 MHz to 2.5 GHz $D=(0.35) (\sqrt{P})$
0.01	0.12	0.018	0.035
0.1	0.38	0.57	0.11
1	1.2	0.18	0.35
10	3.8	0.57	1.1
100	12	1.8	3.5

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** is suitable for use in the electromagnetic environment specified below. The customer or the user of **Power-PRO** should assure that it is used in such an environment.

Immunity test	IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge (ESD) IEC 61000-4-2	$\pm 6$ kV contact $\pm 8$ kV air	$\pm 6$ kV contact $\pm 8$ 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%. Applies to: <ul style="list-style-type: none"> <li><b>Power-PRO</b></li> <li><b>SMRT</b> charger (6500-201-010)</li> </ul>
Electrostatic fast Transient/ burst IEC 61000-4-4	$\pm 2$ kV for power supply lines $\pm 1$ kV for input/output lines	$\pm 2$ kV for power supply lines $\pm 1$ kV for input/output lines	Mains power quality should be that of a typical commercial or hospital environment. Applies to: <ul style="list-style-type: none"> <li><b>SMRT</b> charger (6500-201-010)</li> </ul>



Guidance and manufacturer's declaration - electromagnetic immunity			
Surge IEC 61000-4-5	$\pm 8$ kV line(s) to line(s) $\pm 2$ kV line(s) to earth	$\pm 8$ kV line(s) to line(s) $\pm 2$ kV line(s) to earth	Mains power quality should be that of a typical commercial or hospital environment. Applies to: <ul style="list-style-type: none"><li>• <b>SMRT</b> charger (6500-201-010)</li></ul>
Voltage dips, voltage variations and short interruptions on power supply input lines IEC 61000-4-11	$<5\%$ $U_T$ (95% dip in $U_T$ ) for 0.5 cycle $40\%$ $U_T$ (60% dip in $U_T$ ) for 5 cycle $70\%$ $U_T$ (30% dip in $U_T$ ) for 25 cycles $0\%$ $U_T$ for 250 cycles $<5\%$ $U_T$ ( $>95\%$ dip in $U_T$ ) for 5 sec.	$<5\%$ $U_T$ (95% dip in $U_T$ ) for 0.5 cycle $40\%$ $U_T$ (60% dip in $U_T$ ) for 5 cycle $70\%$ $U_T$ (30% dip in $U_T$ ) for 25 cycles $0\%$ $U_T$ for 250 cycles $<5\%$ $U_T$ ( $>95\%$ dip in $U_T$ ) for 5 sec.	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	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment. Applies to: <ul style="list-style-type: none"><li>• <b>Power-PRO</b></li><li>• <b>SMRT</b> charger (6500-201-010)</li></ul>
<b>Note:</b> $U_T$ is the a.c. mains voltage before applications of the test level.			

## Guidance and manufacturer's declaration - electromagnetic immunity

<p>Conducted RF IEC 61000-4-6</p> <p>Radiated RF IEC 61000-4-3</p>	<p>3 Vrms 150kHz to 80MHz</p> <p>20 V/m 80 MHz to 2.5 GHz</p>	<p>3 V</p> <p>20 V/m</p>	<p>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.</p> <p>Recommended separation distance</p> <p><math>D=(1.2) (\sqrt{P})</math></p> <p><math>D=(.18) (\sqrt{P})</math></p> <p>80 MHz to 800 MHz</p> <p><math>D=(0.35) (\sqrt{P})</math></p> <p>800 MHz to 2.5 GHz</p> <p>where <math>P</math> is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and <math>d</math> is the recommended separation distance in meters (m).</p> <p>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></p> <p>Interference may occur in the vicinity of equipment marked with the following symbol:</p> 
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**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.

<sup>a</sup> Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which **Power-PRO** is used exceeds the applicable RF compliance level above, the **Power-PRO** system should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating **Power-PRO**.

<sup>b</sup> Over the frequency range 150 kHz to 80 MHz, field strengths are less than 20 V/m.





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