





















Power-LOAD® Cot Fastener System










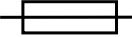
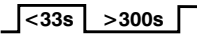



Operations Manual

REF 6390



Symbols

	Refer to instruction manual/booklet
	Consult instructions for use
	CE mark
	Authorized representative in the European Community
	European medical device
	General warning
	Caution
	Warning; crushing of hands
	Warning; non-ionizing radiation
	Catalogue number
	Lot (batch) code
	Serial number
	For US Patents see www.stryker.com/patents
	Manufacturer
	Date of manufacture
	Safe working load
	Dangerous voltage
	Medical Equipment Recognized by Underwriters Laboratories LLC With Respect to Electric Shock, Fire, and Mechanical Hazards only in accordance with ANSI/AAMI ES60601-1:2012 and CAN/CSA-C22.2 No. 60601-1:14.
	Direct current
	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

	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.
	The Rechargeable Battery Recycling Corporation (RBRC) is a non-profit, public service organization that promotes the recycling of portable rechargeable batteries. Batteries must be delivered to a battery collection site. Visit the RBRC website (www.rbrc.org) to find a nearby collection site or call the phone number shown on the recycling symbol.
IPX6	Protection from powerful water jets
	This device complies with Part 18 of the FCC Rules
	Two person lift
	This way up
	Fragile, handle with care
	Keep dry
	Stacking limit by number
	12 VDC battery powered
	Fuse
	Battery duty cycle (loading): 10.0% (less than 33 seconds on, more than 300 seconds off)
	Battery duty cycle (charging): 100%
U.S.A.	English text below this symbol is intended for USA audiences only.
<div> TRA Registered No: ER35122/14 Dealer No: DA35173/14 </div>	Registered in United Arab Emirates by the Telecommunications Regulatory Authority
	Product complies with applicable EMC standards in Australia/New Zealand
 TA-2013/2350 APPROVED	Approved by independent communications authority of South Africa



	Box manufacturer's certificate - this packaging box has minimum edge crush test value of 82 lb/in.
	Box manufacturer's certificate - this packaging box has minimum edge crush test value of 51 lb/in.

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Warning/Caution/Note Definition

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

WARNING

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

CAUTION

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

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

Summary of safety precautions

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

WARNING

- Do not operate **Power-LOAD** with a voltage that is inconsistent with the rating on the product.
- Do not operate **Power-LOAD** above its duty cycle to avoid the risk of equipment damage or smoke hazard.
- Do not connect **Power-LOAD** to a 24 VDC vehicle circuit. Always connect **Power-LOAD** to a 12.8 VDC-15.6 VDC vehicle circuit that is on a 15A fuse/breaker to prevent power hazards.
- **Power-LOAD** operates at 13.56 MHz when you use **Power-LOAD** controls with a powered cot (**Power-PRO XT** or **Power-PRO IT**) that could interfere with other equipment that operate at this frequency band.
- The use of accessories, transducers, and cables, other than those specified, with the exception of transducers and cables that are sold by Stryker as replacement parts for internal components, may result in increased emissions or decreased immunity of the **Power-LOAD** system.
- Do not use the **Power-LOAD** system and the **Power-PRO** cot adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, observe the **Power-LOAD** system to confirm normal operation in the configuration where it will be used.
- **Power-LOAD** operates primarily at these frequencies: 70 - 85 kHz for inductive charging and 13.56 MHz \pm 7 kHz, Amplitude Modulated (OOK), ERP: -82.37 dBm. The inductive charging can operate between these frequencies: 70 - 125 kHz. Other equipment may interfere with the **Power-LOAD** system, even if that other equipment complies with CISPR emission requirements.
- Always adjust the cot load wheel height to match the vehicle deck height as specified in the Operations Manual for your cot model.
- Always use a rail clamp assembly for all cots without the **Power-LOAD** option. **Power-LOAD** is compatible with the **Performance-PRO XT**, **Power-PRO XT**, and **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.
- Always use a **Power-LOAD** compatible cot with the Stryker Model 6390 **Power-LOAD** system. Injury may result if a non-compatible cot is used in the Stryker Model 6390 **Power-LOAD** system.
- Always install the cot fastener system as described in this manual. Improper installation can result in injury. Make sure that, at a minimum, your configuration is tested to meet the National Truck Equipment Association/Ambulance Manufacturer's Division Standard 004, Litter Retention System Static Test (AMD-004).
- Take special precautions regarding electromagnetic compatibility (EMC) when you use medical electrical equipment. Install and place the cot fastener system into service according to the EMC information in this manual. Portable and mobile RF communications equipment can affect the function of the cot fastener system.
- Always use two installers when you lift and position the transfer and trolley assembly to avoid the risk of injury.
- Always keep hands, fingers, and feet away from moving parts.
- Always wear appropriate eye protection while you operate a saw. Secure the item that you are cutting and be aware of the area around your cutting location.
- Always allow for bumper clearance. Inadequate bumper clearance could result in patient or operator injury.

- Always seal all gaps to the exterior of the vehicle to prevent exhaust fumes from entering the vehicle patient compartment.
 - Always connect **Power-LOAD** to a 15 A fuse/resettable breaker that is installed in the vehicle to prevent electrical hazards. Stryker recommends that you install the fuse/resettable breaker in the fuse box.
 - Do not connect **Power-LOAD** to a 24V DC vehicle circuit.
 - Always make sure of **Power-LOAD** functionality before use. Failure may result in patient or operator injury.
 - Always use caution when you move around in the vehicle patient compartment to avoid tripping on **Power-LOAD**.
 - Always use caution when you operate **Power-LOAD** in adverse weather conditions (for example, rain, ice, snow).
 - Always operate the cot or **Power-LOAD** only when all persons are clear of the mechanisms. Entanglement in powered cot or **Power-LOAD** mechanisms can cause serious injury.
 - Always practice loading and unloading the cot with **Power-LOAD** until operation of the product is fully understood. Improper use can cause injury.
 - Do not allow untrained personnel to assist in the operation of **Power-LOAD**. Untrained technicians/personnel can cause injury to the patient or themselves.
 - Do not drive the vehicle with the trolley in the mid position. This position does not lock and is not intended for driving.
 - Always use both hands when you handle the cot. **Power-LOAD** is only an assisting device. Evaluate each situation to determine how to distribute and lift the weight that you are transporting.
 - Always use enough operators to handle the forces that are required to load or unload when you handle weights over 400 lb (181 kg). To increase safety, operators should load or unload on flat surfaces. For 36 in. (91 cm) vehicle deck heights, you may need to manually unload.
 - Always keep hands and extremities clear of the **Power-LOAD** trolley lifting arms and the cot base during powered loading and unloading.
 - Do not remove the battery when the cot is active.
 - Always operate the **Power-LOAD** system and accessories only as described in the manuals. Improper usage of the **Power-LOAD** system or any accessory can cause injury to the patient or operator. Usage of this product in any other way becomes the complete responsibility of the owner or user.
 - Always support the weight at the foot end of the cot for manual operations.
 - Always make sure that you are ready to support the entire weight of the cot when you load and unload. Without power, the lifting arms will not raise the cot.
 - Always return damaged batteries to a service center for recycling. Do not dispose of as unsorted municipal waste. Refer to your local distributor for return and/or collection systems available in your country.
 - Always unplug the shoreline (if applicable), disconnect the vehicle battery, press the main power button to turn the product off, and then place the trolley into the loading position before you service **Power-LOAD**.
 - Do not remove the battery when **Power-LOAD** is in operation.
 - Do not press the main power button to turn the product off during normal use as it will prevent battery charging.
 - Do not allow the rail clamp to overlap the red adjustment limit label on the rail tube. To prevent the rail jaws from releasing the cot frame, the space between the rail clamp and the rail stationary jaw must never exceed 1 in. (2.5 cm).
 - Do not use hand or fingers to press the release button when the rail jaws are open. The rail clamp fastener closes with a strong spring action.
 - Always load or unload an occupied cot into a vehicle with a minimum of two trained operators.
 - Always load the **Power-LOAD** compatible cot into the vehicle patient compartment before all occupants.
 - Always be ready to support the entire weight of the cot and patient if the lifting arms do not raise the cot when you unload a cot from the vehicle patient compartment. As the cot is unlocked for removal from the vehicle patient compartment, the **Power-LOAD** lifting arms will slightly raise the cot.
 - Always make sure that the cot base is extended before you press any buttons on the **Power-LOAD** control panel when you unload the cot.
 - Always be ready to support the entire weight of the cot and patient when you unload a cot from the vehicle patient compartment while **Power-LOAD** is experiencing a power loss or system error.
 - Always load the cot before you allow patients to enter the vehicle patient compartment.
 - Always press the main power button to turn the unit off before service or cleaning.
 - Always use any appropriate personal protective equipment while power washing to avoid inhaling contagion. Power washing equipment may aerate contamination.
-

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. In the event of interference, please relocate or reorient the **Power-LOAD** system or interfering product.
 - Always relocate or reorient the **Power-LOAD** system or interfering product in the event of interference. This device complies with Part 18 of the FCC Rules.
 - Do not use portable RF communications equipment (including peripherals such as antenna cables and external antennas) no closer than 30 cm (12 in.) to any part of the **Power-LOAD** system, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment may result.
 - The emissions characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). 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 (for which CISPR 11 class B is normally required) is likely to cause harmful interference, in which case the user will be required to correct the interference at their expense. In the event of interference, please relocate or reorient the **Power-LOAD** system or interfering product.
 - Do not break the cot inductive charge housing when you install the transfer assembly.
 - Always make sure that the wires rest inside of the floor plate pocket and are not pinched by the anchor assembly when you install the anchor assembly.
 - The manual overrides allow the **Power-LOAD** system to move freely.
 - Always charge the battery before you place the product into service. An uncharged or depleted battery may cause poor product performance.
 - Do not slam the cot into the trolley when you load the cot to avoid the risk of equipment damage.
 - Do not push the cot into the vehicle patient compartment until the cot base is fully retracted.
 - Do not push the cot into the vehicle patient compartment until you fully retract the cot base.
 - Do not let go of the manual release until the cot locks into position at the foot end. If you let go too early, then the cot base may prevent the cot from locking into **Power-LOAD**.
 - Do not spray directly underneath the trolley up in to the trolley mechanism. Water could gain ingress into the trolley housing and may accelerate corrosion or degrade operation.
 - Do not clean, service, or perform maintenance while the product is in use.
-

Pinch points

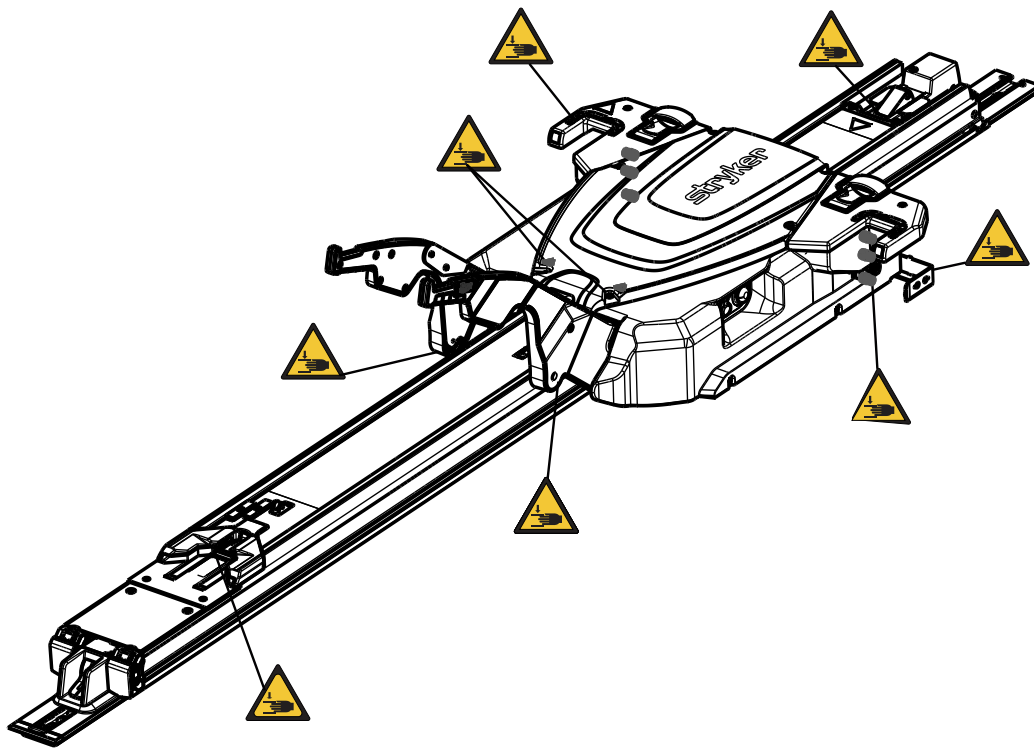


Figure 1 – Pinch points

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.

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 6390 **Power-LOAD®** power-loading cot fastener system is designed to lift, lower, or steer compatible ambulance cots into and out of an emergency ground transport vehicle. When the cot is securely attached to the system, a battery powered hydraulic system assists the operators in loading and unloading a cot. The system also secures the compatible ambulance cot within the vehicle for patient transportation purposes. When the cot is secured in the transport position, **Power-LOAD** inductively charges compatible Model 6506 **Power-PRO™ XT** and 6516 **Power-PRO™ IT** ambulance cots. In the event of power loss, the system remains functional for securing the cot within the vehicle.

Indications for use

Power-LOAD is intended to assist with loading and unloading of a compatible wheeled stretcher (ambulance cot) to and from a transport vehicle and to secure the ambulance cot during transport. The device has a maximum safe working load of 870 lb (395 kg), which includes the weight of the ambulance cot, patient, and equipment attached to the cot (such as oxygen bottles, monitors, and pumps). The intended users of the device are trained professionals, including emergency medical service and medical care center personnel, as well as medical first responders, service technicians and installers.

Clinical benefits

Cot: patient transport

Fastener: support cot for transport

Cot and fastener system: support and transport patients

Contraindications

None known.


Expected service life

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

Disposal/recycle

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

Specifications

	Safe working load	870 lb	395 kg
	Note - Safe working load indicates the sum of the cot, patient, mattress, and accessory weight.		
Maximum lift capacity (patient and accessories)		700 lb	318 kg
Overall length		95 in.	241 cm
Minimum length		89.5 in.	228 cm
Width		24.5 in.	62 cm
Weight			
	Floor plate assembly	16.5 lb	7.5 kg
	Anchor assembly	23 lb	10.5 kg
	Transfer assembly	67 lb	30.5 kg
	Trolley assembly	105 lb	48 kg
Minimum operators required for loading/unloading an occupied cot		2	
Minimum operators required for loading/unloading an unoccupied cot		1	
Recommended loading height		22 in. to 36 in.	56 cm to 91 cm
Hydraulic oil		Mobil Mercon ® V Blend ATF Oil (6500-001-293) See the Mobil Mercon ® V Blend ATF oil material safety data sheet (MSDS) for safety information.	
Electrical requirements		12.8 VDC-15.6 VDC, 15A fuse/breaker, 2 conductor 10 AWG cable	
Battery duty cycle, charging		100%	
Battery duty cycle, loading		10% (33 sec on/5 min off)	
Battery		12 VDC, 5 Ah lead acid battery (6390-001-468)	

Fuse	LITTELFUSE 0496060.ZXD-UL
Standards	ANSI/AAMI ES60601-1:2012, CAN/CSA-C22.2 No. 60601-1:14, KKK-A-1822F, IEC 60601-1-12:2014 For standards that require specific options, see <i>Standards with required options</i> (page 10).

Stryker reserves the right to change specifications without notice.

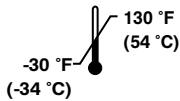
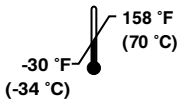
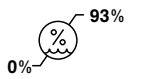
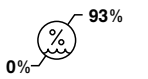
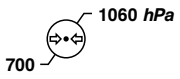
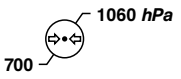
The yellow and black color scheme is a proprietary trademark of Stryker Corporation.

Hereby, Stryker declares that the radio equipment type short range device is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <http://techweb.med.strykercorp.com/EMS/EU%20Declaration%20of%20Conformity/index.html>.

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

WARNING

- Do not operate **Power-LOAD** with a voltage that is inconsistent with the rating on the product.
- Do not operate **Power-LOAD** above its duty cycle to avoid the risk of equipment damage or smoke hazard.
- Do not connect **Power-LOAD** to a 24 VDC vehicle circuit. Always connect **Power-LOAD** to a 12.8 VDC-15.6 VDC vehicle circuit that is on a 15A fuse/breaker to prevent power hazards.
- Power-LOAD** operates at 13.56 MHz when you use **Power-LOAD** controls with a powered cot (**Power-PRO XT** or **Power-PRO IT**) that could interfere with other equipment that operate at this frequency band.
- The use of accessories, transducers, and cables, other than those specified, with the exception of transducers and cables that are sold by Stryker as replacement parts for internal components, may result in increased emissions or decreased immunity of the **Power-LOAD** system.
- Do not use the **Power-LOAD** system and the **Power-PRO** cot adjacent to or stacked with other equipment. If adjacent or stacked use is necessary, observe the **Power-LOAD** system to confirm normal operation in the configuration where it will be used.
- Power-LOAD** operates primarily at these frequencies: 70 - 85 kHz for inductive charging and 13.56 MHz \pm 7 kHz, Amplitude Modulated (OOK), ERP: -82.37 dBm. The inductive charging can operate between these frequencies: 70 - 125 kHz. Other equipment may interfere with the **Power-LOAD** system, even if that other equipment complies with CISPR emission requirements.

Environmental conditions	Operation	Storage and transportation
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. In the event of interference, please relocate or reorient the **Power-LOAD** system or interfering product.
- Always relocate or reorient the **Power-LOAD** system or interfering product in the event of interference. This device complies with Part 18 of the FCC Rules.

- Do not use portable RF communications equipment (including peripherals such as antenna cables and external antennas) no closer than 30 cm (12 in.) to any part of the **Power-LOAD** system, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment may result.
- The emissions characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). 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 (for which CISPR 11 class B is normally required) is likely to cause harmful interference, in which case the user will be required to correct the interference at their expense. In the event of interference, please relocate or reorient the **Power-LOAD** system or interfering product.

Description	Number	Substance of very high concern (SVHC) chemical name
Power-LOAD	6390-000-000	Lead
Battery, 12V	6390-001-468	Lead
Control board assembly	6390-101-014	Lead

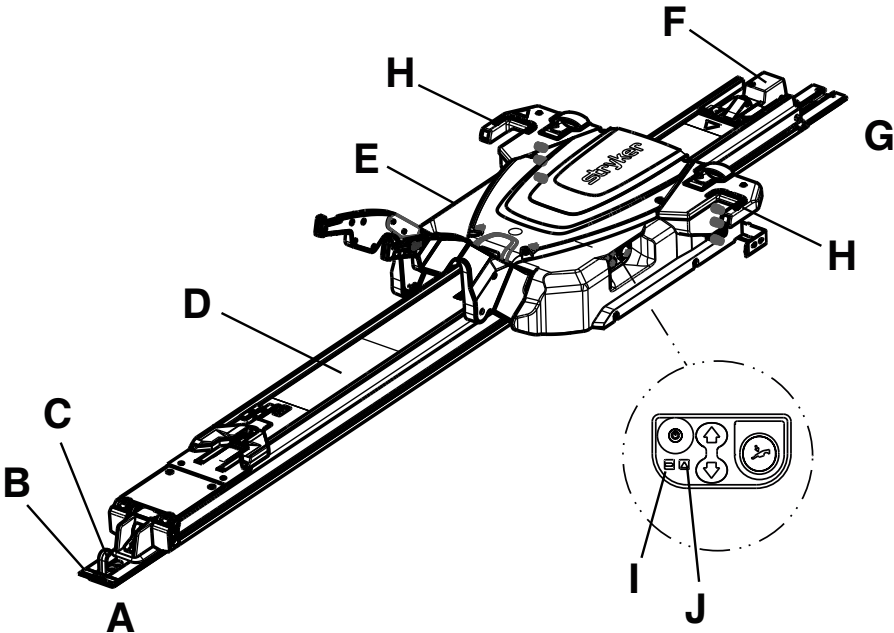
Standards with required options

To be compliant with the standards, you must use **Power-LOAD** with the following compatible cots. See the Operations Manual for your cot model for more information.

Note - Compatible cot is loaded into **Power-LOAD** in powered mode for crash testing.

Standard	Power-LOAD compatible cot model
SAE J3027 and AS/NZS-4535	6500, 6506
BS EN 1789	6500, 6506, 6085, 6086

Product illustration



A	Foot end
B	Floor plate
C	Safety hook
D	Transfer assembly
E	Trolley assembly

F	Anchor assembly
G	Head end
H	LED indicator, head end
I	Battery LED
J	Error LED

Contact information

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

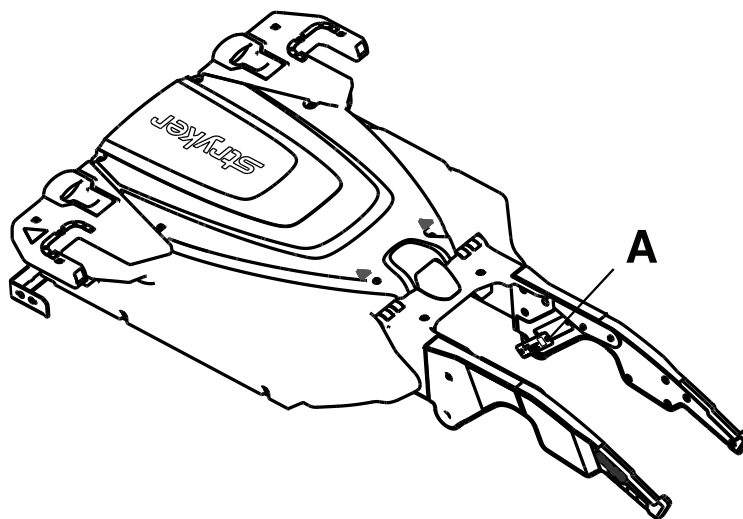
Stryker Medical
3800 E. Centre Avenue
Portage, MI 49002
USA

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

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

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

Serial number location



Date of manufacture

The year of manufacture is the first 2 digits of the serial number.

Setup

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

WARNING - Always adjust the cot load wheel height to match the vehicle deck height as specified in the Operations Manual for your cot model.

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

The condition of **Power-LOAD** is the responsibility of the user. Have a qualified service person use the following list and the operation guide instructions to check **Power-LOAD** functionality.

1. Raise the lifting arms and manually push the **Power-LOAD** trolley into the head end of the transfer assembly to charge the battery. Charge the battery for a minimum of two hours before you place **Power-LOAD** into service for its first use.

Note - The battery power LED flashes green while charging.

2. Confirm that the installation checklist is complete.
3. Repeat the installation checklist if the installation checklist was completed by a third-party installer. Do not place the product into service if you cannot complete the installation checklist.

The condition of the **Power-LOAD** compatible cot is also the responsibility of the user. Make sure that the product works properly before you place it in service. See the cot Operations Manual for the setup requirements for your cot model.

Cot compatibility

The Stryker Model 6390 **Power-LOAD** system is compatible with cots with the **Power-LOAD** compatible option only.

WARNING

- Always use a rail clamp assembly for all cots without the **Power-LOAD** option. **Power-LOAD** is compatible with the **Performance-PRO XT**, **Power-PRO XT**, and **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.
 - Always use a **Power-LOAD** compatible cot with the Stryker Model 6390 **Power-LOAD** system. Injury may result if a non-compatible cot is used in the Stryker Model 6390 **Power-LOAD** system.
-

Cots that currently meet these specifications include:

- Model 6085 **Performance-PRO XT** with the **Power-LOAD** compatibility kit (6085-700-010)
- Model 6086 **Performance-PRO XT** with the **Power-LOAD** option or compatibility kit (6086-700-001)
- Model 6500 **Power-PRO XT** with the **Power-LOAD** compatibility kit (6500-700-049)
- Model 6506 **Power-PRO XT** with the **Power-LOAD** option or compatibility kit (6506-700-001)
- Model 6510 **Power-PRO IT** with the **Power-LOAD** compatibility kit (6510-700-001)
- Model 6516 **Power-PRO IT** with the **Power-LOAD** option or compatibility kit (6516-700-001)

Installation

Quality system regulation

WARNING

- Always install the cot fastener system as described in this manual. Improper installation can result in injury. Make sure that, at a minimum, your configuration is tested to meet the National Truck Equipment Association/Ambulance Manufacturer's Division Standard 004, Litter Retention System Static Test (AMD-004).
 - Take special precautions regarding electromagnetic compatibility (EMC) when you use medical electrical equipment. Install and place the cot fastener system into service according to the EMC information in this manual. Portable and mobile RF communications equipment can affect the function of the cot fastener system.
-

The U.S. Food and Drug Administration (FDA) Code of Federal Regulations (CFR) Title 21 provides guidance regarding the installation of devices, such as the cot fastener system. To comply with these federal regulations, each device must be verified to have been properly installed by trained* individuals by following the inspection criteria in the installation checklist. This document must be maintained for a minimum of seven years for each serial number/installation.

*The installation facility must maintain their own training records showing that the installer was qualified.

21 CFR 820.170 installation

(a) Each manufacturer of a device requiring installation shall establish and maintain adequate installation and inspection instructions, and where appropriate test procedures. Instructions and procedures shall include directions for ensuring proper installation so that the device will perform as intended after installation. The manufacturer shall distribute the instructions and procedures with the device or otherwise make them available to the persons installing the device.

(b) The person installing the device shall make sure that the installation, inspection, and any required testing are performed in accordance with the manufacturer's instructions and procedures and shall document the inspection and any test results to demonstrate proper installation.

Power-LOAD assembly installation components checklist

Make sure that you have all the required components to install the **Power-LOAD** system. For installation instructions, see *Installing Power-LOAD* (page 14).

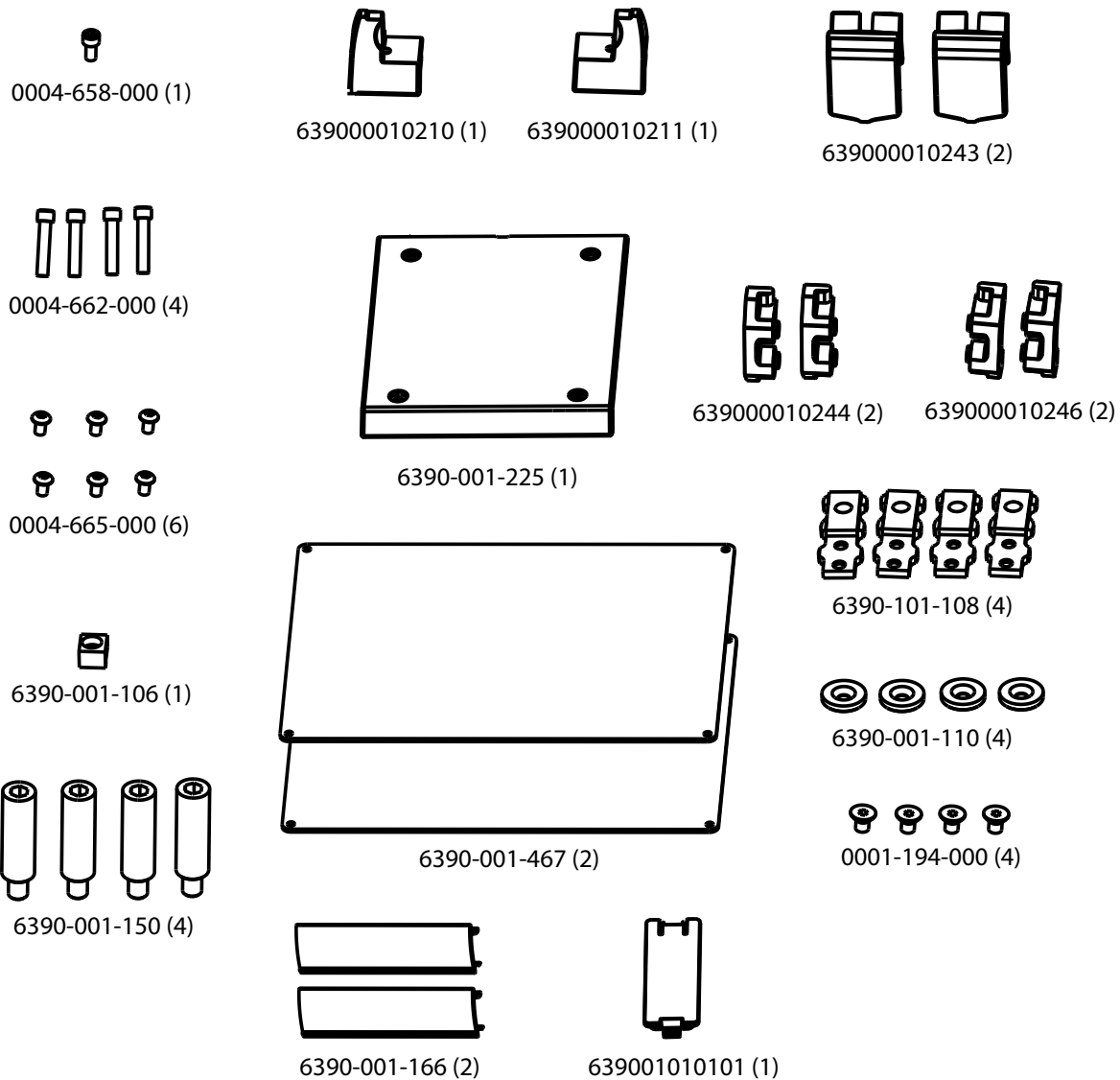


Figure 2 – Power-LOAD assembly installation kit components 6390-001-054

Installing the floor plate

Install the Stryker universal floor plate in your vehicle patient compartment before you install your cot fastener system. See the Stryker Global Floor Plate Installation Manual (6390-009-020) for instructions.

Installing Power-LOAD

WARNING

- Always use two installers when you lift and position the transfer and trolley assembly to avoid the risk of injury.
- Always keep hands, fingers, and feet away from moving parts.
- Always wear appropriate eye protection while you operate a saw. Secure the item that you are cutting and be aware of the area around your cutting location.

CAUTION - Do not break the cot inductive charge housing when you install the transfer assembly.

Power-LOAD assembly kit components (6390-001-054)

(1) Socket head cap screw (0004-658-000)	(4) Socket head cap screw (0004-662-000)	(6) Button head cap screw (0004-665-000)
(4) Anchor mounting post (6390-001-150)	(1) Trolley magnet activator (6390-001-106)	(1) Transfer trim, head end, right (639000010211)
(1) Transfer trim, head end, left (639000010210)	(2) Dead stop bumper (639000010243)	(1) Transfer wear pad, foot end (6390-001-225)
(2) Dead stop block, threaded (639000010246)	(2) Dead stop block, thru hole (639000010244)	(4) Flat head cap screw (0001-194-000)
(4) Floor plate attachment bracket (6390-101-108)	(4) Sub anchor attachment bracket (6390-001-110)	(2) Floor plate cover, short (6390-001-166)
(1) Anchor inductive primary cover (639001010101)		

Additional parts used (not included)

Electrical tape

Tools required:

5/32" hex wrench	Measuring tape	Saw
Flat blade screwdriver	3/8" hex wrench	3/16" hex wrench
T25 Torx driver	1/2" drive torque wrench (ft-lb) > 60 ft-lb	

Procedure:

1. Lift the vehicle bumper to the raised position, if equipped.
2. Measure from the end of the floor plate to the end of the bumper to determine how far you can move the anchor toward the head end (Figure 3).

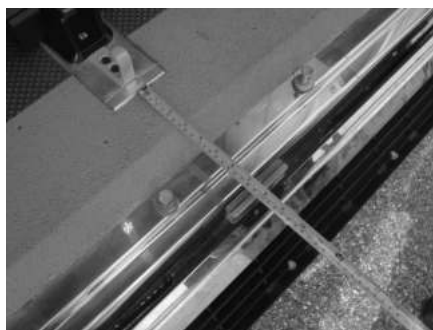


Figure 3 – Measure for anchor installation

Note - If the distance measured is less than 18 in. (46 cm), you can shift **Power-LOAD** closer to the head end of the vehicle patient compartment by a maximum of 18 in. (46 cm) and the measured distance.

WARNING - Always allow for bumper clearance. Inadequate bumper clearance could result in patient or operator injury.

3. Locate the first floor plate attachment bracket (6390-101-108) (Figure 4) location (near the foot end). This location provides the most wheel clearance.
 - To shift the cot closer to the head end of the vehicle patient compartment, select another floor plate attachment location.
 - Make sure that the location is not further from the first location than the value calculated in step 2. Leave enough room for the cot base to clear the vehicle bumper.
 - Flip the bracket (Figure 5) to move the mounting location an additional 2 in. (5 cm) toward the head end.
 - Figure 4 shows the location for the most wheel clearance from the bumper. Figure 5 shows the location for the least wheel clearance from the bumper and represents an 8 in. (20.3 cm) shift in from the first location. Select the location that provides the appropriate wheel clearance for your set up. In Figure 4 and Figure 5 below, (A) represents the head end of the vehicle patient compartment and (B) represents the foot end.

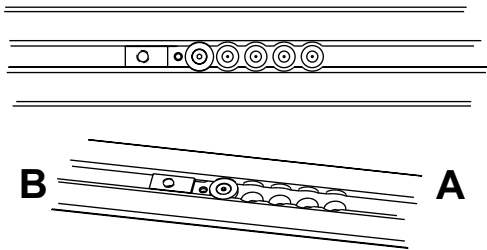


Figure 4 – Most wheel clearance

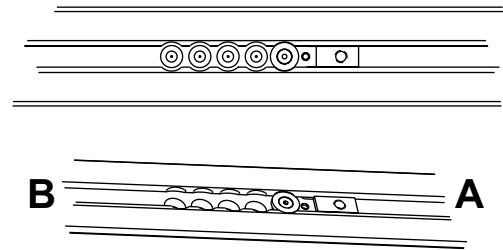


Figure 5 – Flipping the bracket

4. Using a 5/32" hex wrench, install a flat head cap screw (0001-194-000) to the sub anchor attachment bracket retainer (6390-001-110) to secure the floor plate attachment bracket (6390-101-108).
 5. Repeat step 3 and 4 for the three other locations in the floor plate assembly.
- Note** - The position of these three floor plate attachment brackets must match the location that was selected in step 3.
6. Route the anchor-to-vehicle cable (639000010135) into the bottom of the anchor and out through the window on the side of the anchor (Figure 6).
 7. Position the anchor over the mounting holes. Route any excess wire back through the electrical rubber grommet.

WARNING - Always seal all gaps to the exterior of the vehicle to prevent exhaust fumes from entering the vehicle patient compartment.

Note - Apply silicone sealant to the electrical rubber grommet to completely seal the electrical pass through.

8. Carefully place the anchor assembly (C) on top of the floor plate assembly (D) (Figure 6), and lay the excess wire into the floor plate pocket. Align the four holes with the floor plate attachment brackets.

CAUTION - Always make sure that the wires rest inside of the floor plate pocket and are not pinched by the anchor assembly when you install the anchor assembly.

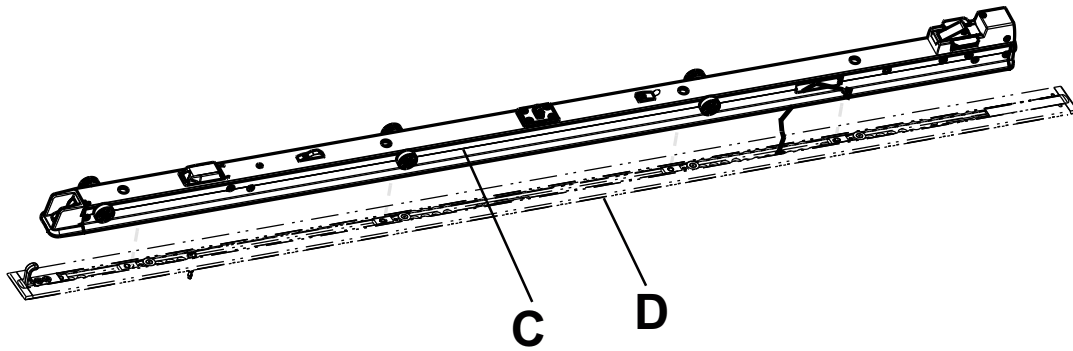


Figure 6 – Anchor assembly and floor plate assembly

9. Measure the exposed pocket at the head end and the foot end of the floor plate to customize the floor plate covers.
10. Using a saw, cut the two floor plate covers (6390-001-166) (E) to fit the measured length on both ends (Figure 7). The floor plate cover does not fit over the floor plate attachment bracket.

Note - If you assemble the anchor over the foot end or head end of the floor plate, then no floor plate cover is needed on that end.

11. Using a rubber hammer, snap each floor plate cover into the floor plate (hook side (F) first).

Note - To unsnap the floor plate cover, use a flat blade screwdriver on the side of the cover with a raised edge.

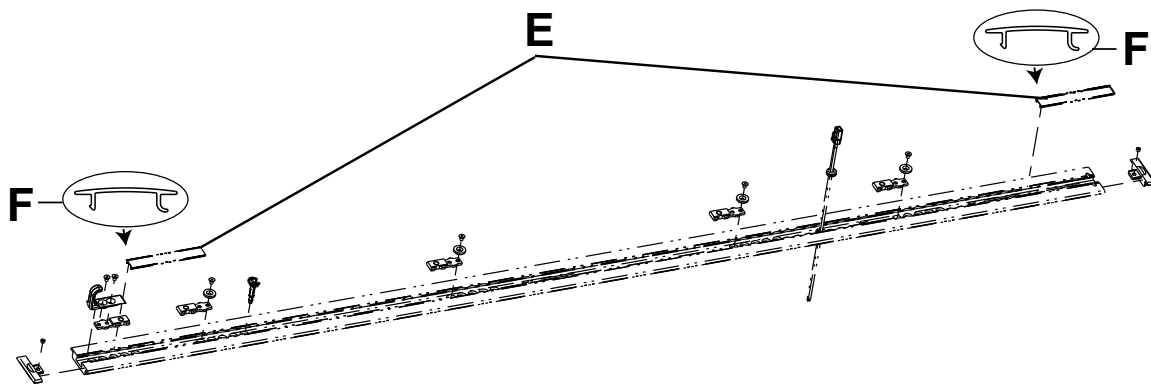


Figure 7 – Cut floor plate covers

12. Make sure that the anchor seals (G) are installed into the grooves of the anchor assembly (Figure 8). If the anchor seals are not installed, push them back into the grooves of the anchor assembly.

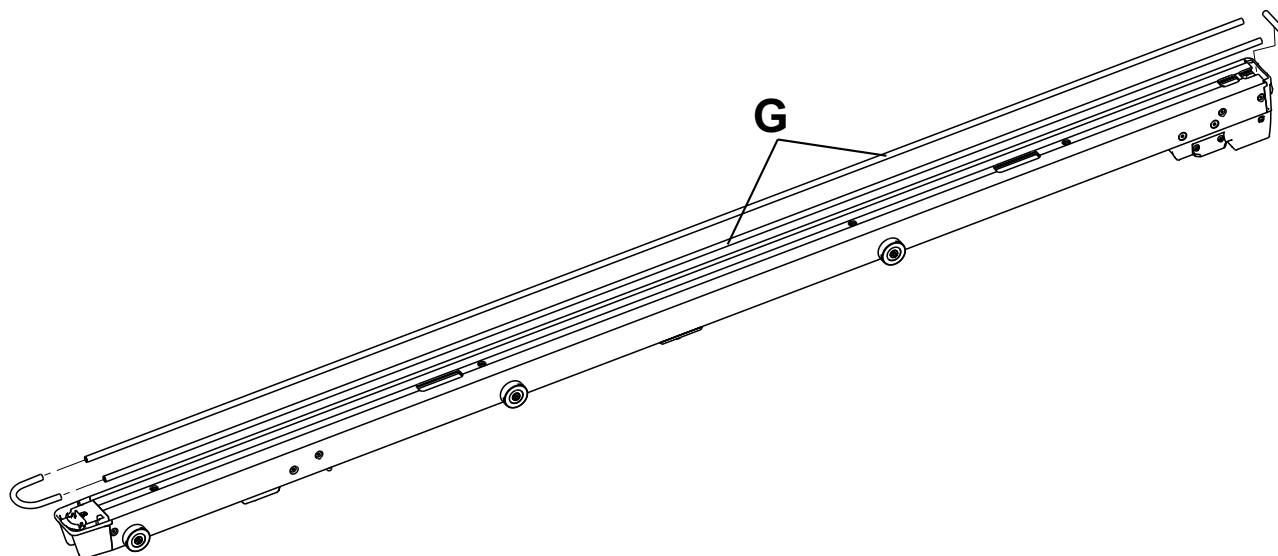


Figure 8 – Anchor seals

13. Using a 3/8" hex wrench, install the four supplied anchor mounting posts (6390-001-150) (H) into the four holes in the anchor assembly (Figure 9).

Note

- Do not fully tighten the posts until all four posts are aligned and started.
- Do not pinch any wires when you install the post closest to the head end of the anchor.

14. Using a torque wrench, tighten each post to 60±10 ft-lb

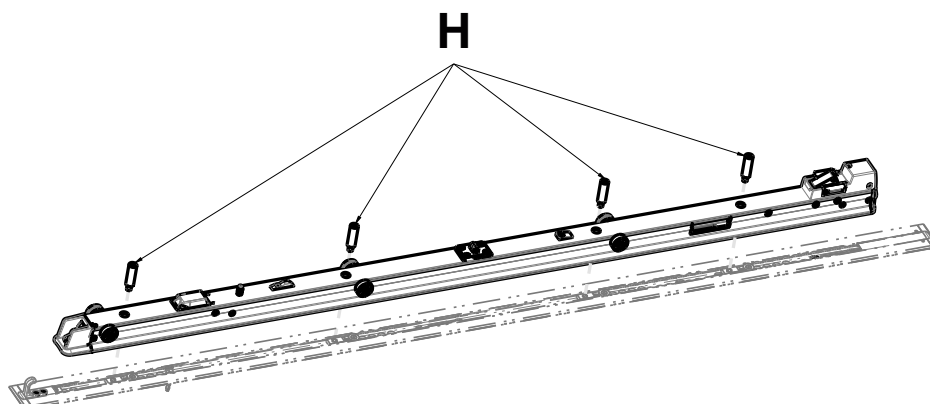


Figure 9 – Install anchor mounting posts

15. On the side of the anchor, connect the anchor-to-vehicle cable to the connector on the anchor assembly.

16. Push the connectors back into the anchor assembly.

17. Position the transfer assembly (I), so the open end faces the anchor assembly (J) (Figure 10).

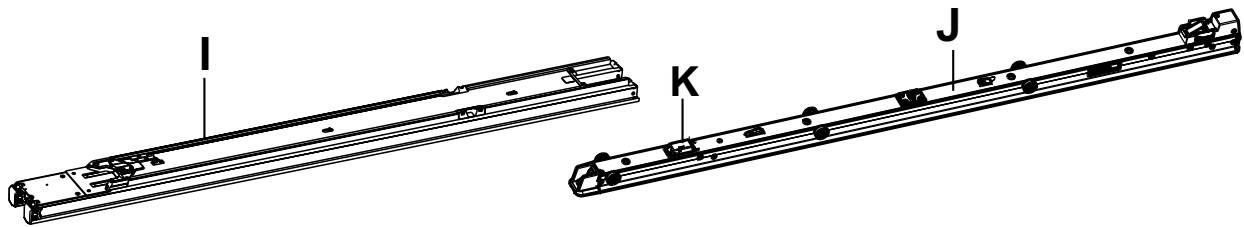


Figure 10 – Install transfer assembly

18. Installer 1 (foot end) lifts the transfer assembly and slides the transfer lock triggers (L) (Figure 12) toward the foot end of the transfer to release the transfer locks. Installer 2 (head end) slides and centers the open end of the transfer assembly over the rollers in the anchor assembly.

- When you install the transfer assembly, slowly slide the transfer assembly. Do not break the cot inductive charge housing (K) (Figure 10).
- Keep the transfer lock triggers pulled toward the foot end until the transfer is seated on the anchor (Figure 12).
- You may notice slight resistance when you roll over the second set of rollers; push past the resistance to the position shown in Figure 12.

19. Position the anchor inductive primary cover (639001010101) over the opening so the U-hook faces the foot end of the anchor (Figure 11).

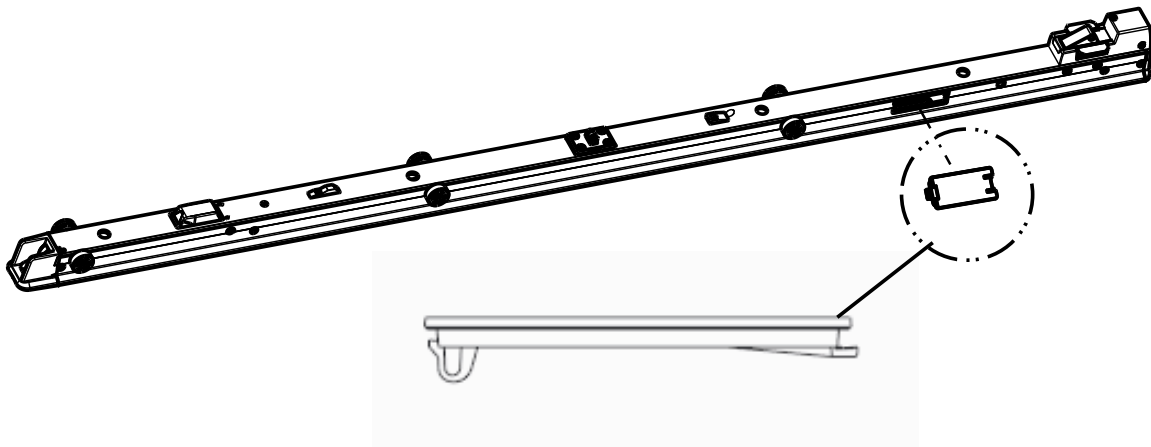


Figure 11 – Anchor inductive primary cover

Note - Do not let the connectors (installed on step 16) push against the anchor inductive primary cover.

20. Using a flat blade screwdriver, press the U-hook into the anchor until you hear it click into place (Figure 11).
21. Using a 5/32" hex wrench, install the supplied socket head cap screw (0004-658-000) (O) to secure the supplied trolley magnet activator (6390-001-106) (P) (Figure 12).
22. Using a T25 Torx driver, install four supplied button head cap screws (0004-665-000) (M) to attach the supplied foot end transfer wear pad (6390-001-225) (N) to the transfer assembly (Figure 12).
23. Slide the transfer lock triggers (closest to the foot end) (L) (Figure 12) toward the foot end of the transfer assembly to unlock.

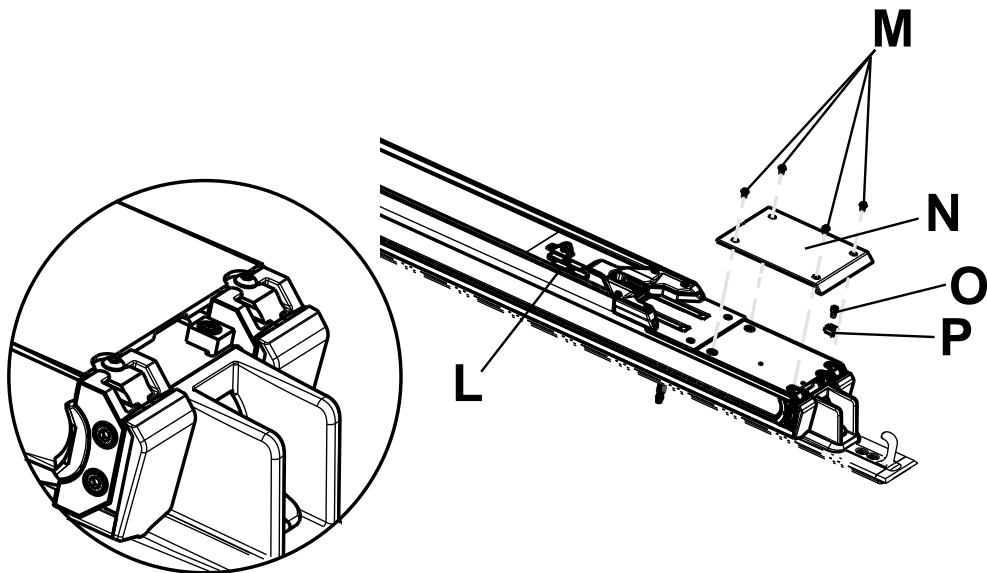


Figure 12 – Attach the foot end transfer wear pad

24. Move the transfer assembly into its mid position (Q) (Figure 13).

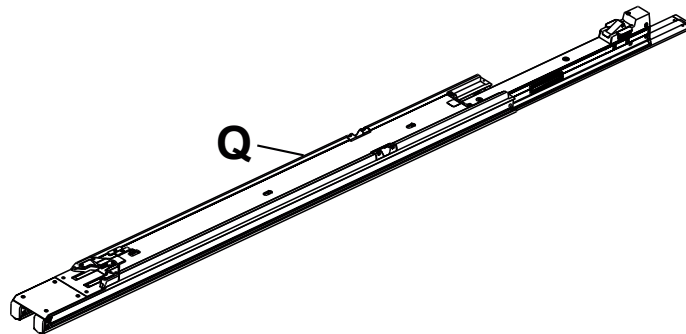


Figure 13 – Position the transfer assembly

25. Carefully lift the trolley assembly by its arm and wing. Do not lift the trolley by the manual cot release handles. Lift only where indicated. Installer 1, position hands at R1 and R2. Installer 2, position hands at S1 and S2 (Figure 14).

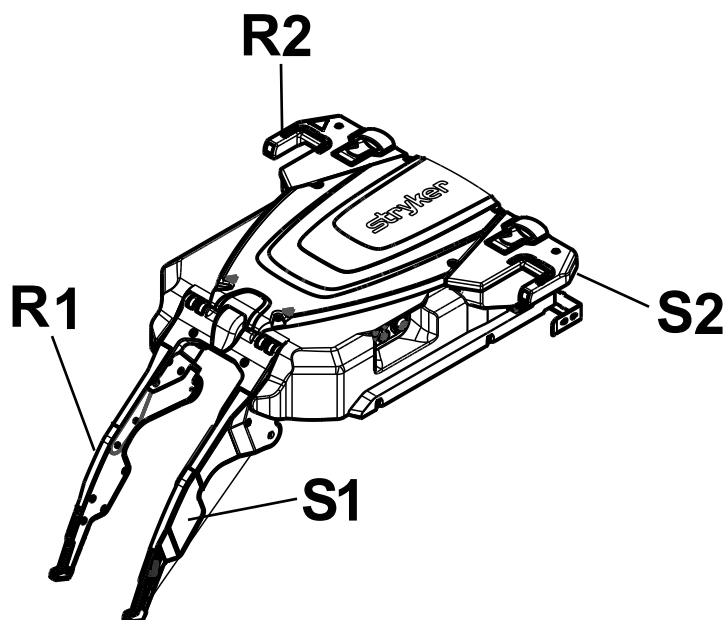


Figure 14 – Trolley assembly

26. Position the trolley assembly (T) between the transfer assembly (U) and head end of the anchor assembly (V) on the floor (Figure 15).
27. Installer 1 (foot end): Slide the rollers of the trolley assembly into the side channel of the transfer assembly.
28. Installer 2 (head end): Lift the trolley assembly to align the second set of rollers and slide the rollers until the trolley is near the middle of the transfer.

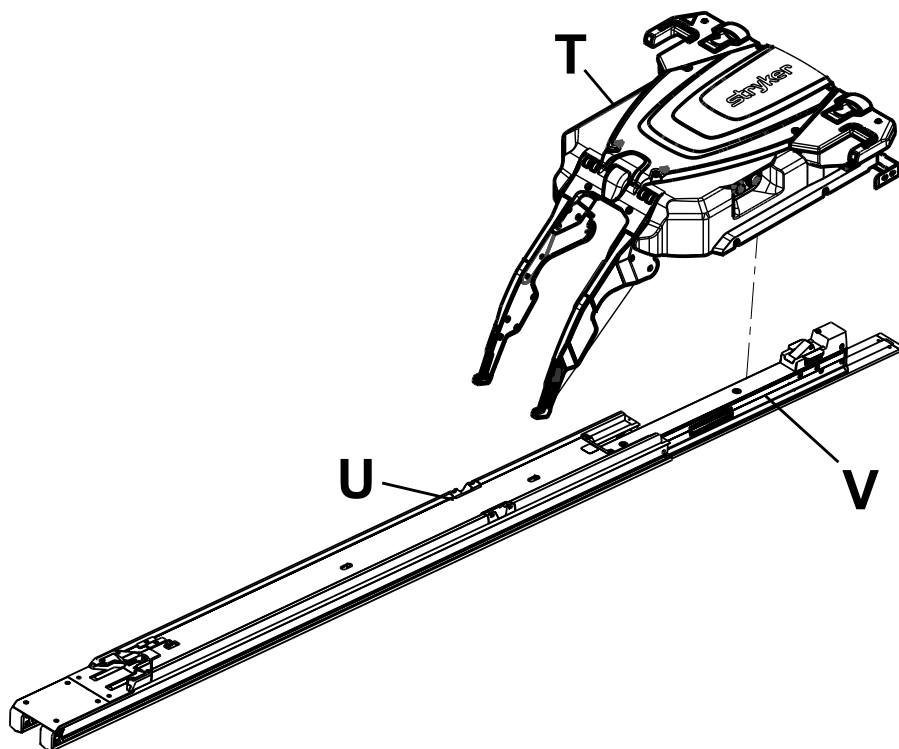


Figure 15 – Position the trolley assembly

29. Carefully push the transfer assembly forward toward the head end until it locks into position.

30. Assemble the bumper block. Align the supplied inner dead stop block (639000010246) (with threaded holes) (Y) with the supplied dead stop bumper (639000010243) (X) (Figure 16).

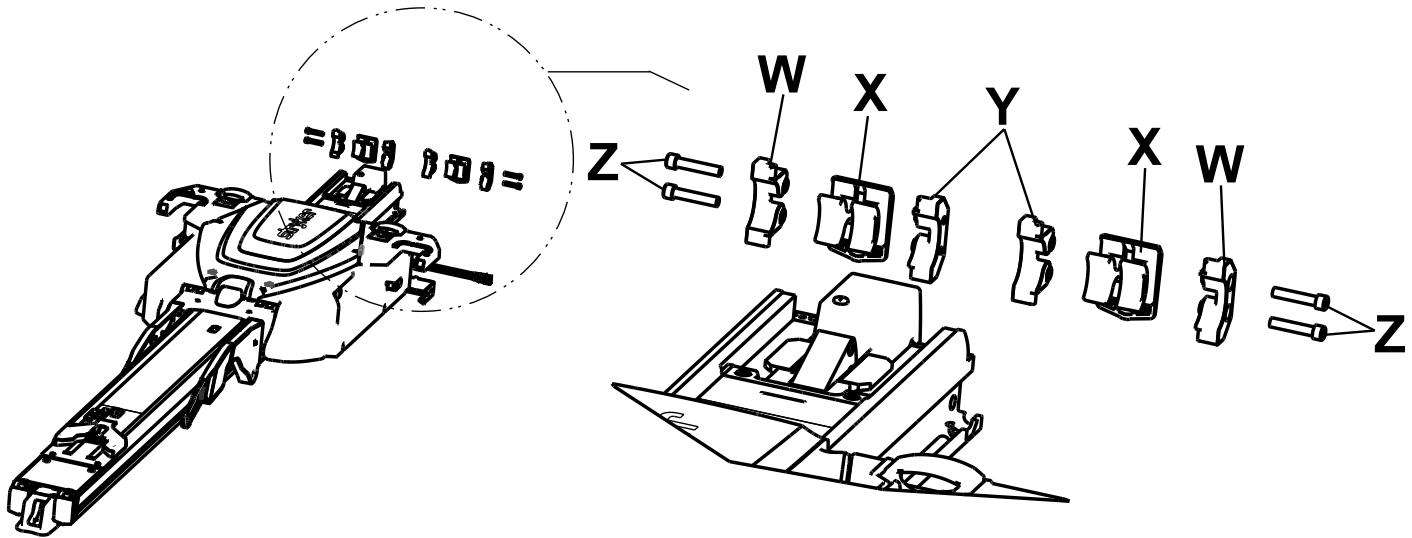


Figure 16 – Assemble bumper block

31. Slide the assembled components (X and Y) into the end of the transfer assembly.

Note - Position the dead stop bumper, so that the hump (AA) is on the bottom (Figure 17).

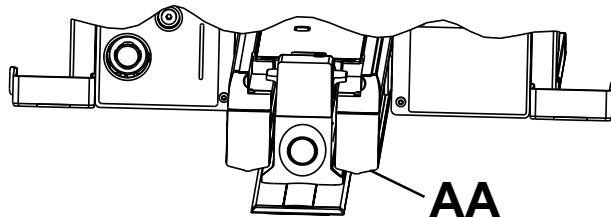


Figure 17 – Dead stop bumper hump

32. Align the dead stop block (639000010244) (with thru holes) (W) with the assembled components (X and Y) and slide it into the end of the transfer assembly.
33. Repeat steps 26 - 28 to assemble and install the second dead stop bumper.
34. Using a 3/16" hex wrench, install the four supplied socket head cap screws (0004-662-000) (two for each side) (Z) into the transfer assembly (Figure 16).
35. Visually inspect the head end transfer bumpers to make sure that they are installed flush to the outer edge of the transfer assembly with no signs of misalignment or improper installation.
36. Using a T25 Torx driver, install the two supplied button head cap screws (0004-665-000) (AB) to attach the supplied patient left transfer head end trim (639000010210) and supplied patient right transfer head end trim (639000010211) (AC) to the transfer assembly (Figure 18).

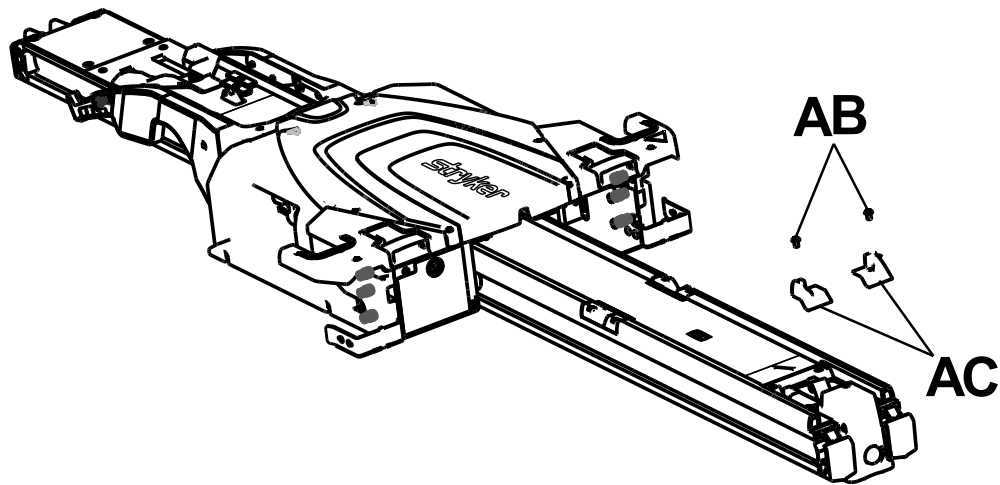


Figure 18 – Attach head end trim

37. Complete *Installing the battery* (page 24).

38. Press the main power button (AD) (Figure 19), on the patient left side of the trolley assembly, to turn power on to the product.

Note

- If you wired **Power-LOAD** into a circuit with a switch, make sure that the switch is turned on.
- When you press the main power button, a green battery power LED (AE) also turns on to indicate that the **Power-LOAD** system is on. If the trolley battery is low, a flashing amber error LED (AF) may also appear.

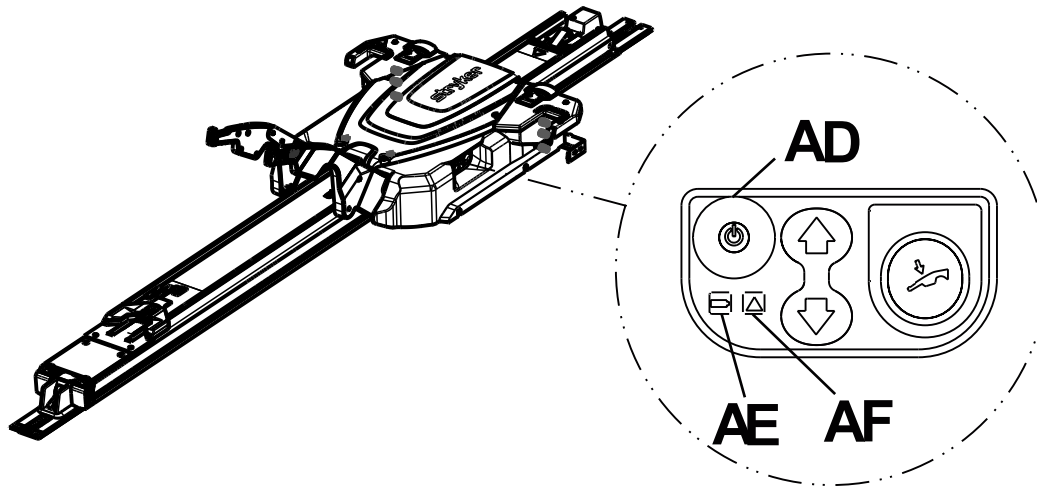


Figure 19 – Power-LOAD control panel

39. Raise the lifting arms and manually push the trolley into the head end of the vehicle patient compartment to charge the battery.

Note - The battery power LED (AE) flashes green while charging.

40. Affix the operation labels to the door or wall where it is visible to **Power-LOAD** operators (*Loading and unloading with powered operations* (page 34) and *Loading and unloading with manual operations* (page 35))

Note - Apply the label to a smooth surface or the supplied sheet metal plate (6390-001-467) that you can screw or rivet into the vehicle.

41. Complete the *Installation checklist* (page 25).

Installing the battery

After you install the trolley, follow these steps to install and charge the battery for the first time.

1. Insert the battery (A) into the battery compartment (D) until you hear a click (Figure 20).

Note - Make sure that you orient the battery so that the black cover faces up.

2. Raise the lifting arms and manually push the trolley into the head end of the vehicle patient compartment.
3. Lock the trolley at the head end of the vehicle patient compartment (transport position).
4. Press the main power button to make sure that the trolley will turn on.

Note - The battery will not charge if you do not turn power on to the product.

5. Make sure that the power LED is flashing green (see *Checking the battery power level on the Power-LOAD control panel* (page 37)).
6. Using a T25 Torx driver, secure the trolley cover plate (B) to **Power-LOAD** with the supplied screws (C) (Figure 20).
7. Connect the vehicle to the shoreline and charge the battery for at least six hours.
8. Slide the trolley to the foot end of the transfer and then back to the head end of the vehicle patient compartment to wake the system from Sleep Mode.
9. Press the main power button to turn power off to the product.
10. Make sure that the battery power LED is not illuminated so you know that the power is off.

Note

- If the power is not off, the product will drain your vehicle battery.
- To supplement the charge of the battery before installation, use the Odyssey OBC charger. Current draw: 6A (1-2 batteries in parallel), 12A (1-4 batteries in parallel), or 20A (1-6 batteries in parallel). This charger has connections for a single battery only. A harness that is rated for the current draw is required to create a parallel circuit for charging multiple batteries.
- If you do not follow these requirements and recommendations, fully charge the battery, and turn off the product when it is not in use, **Power-LOAD** battery failure may result.

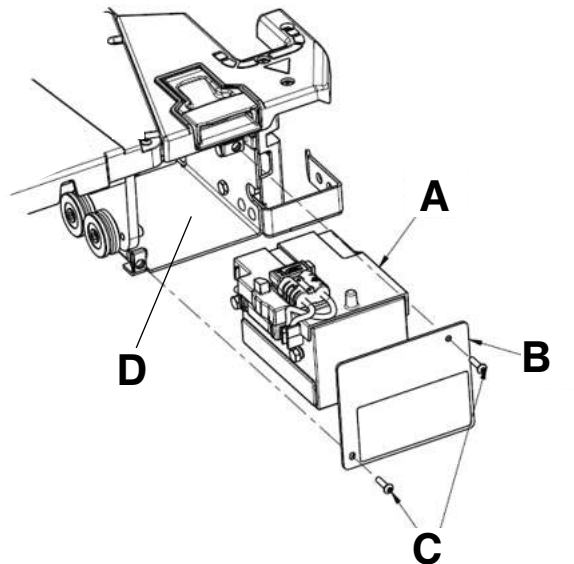


Figure 20 – Battery assembly

Installation checklist

CAUTION - The manual overrides allow the **Power-LOAD** system to move freely.

Note - Allow the battery to charge for a minimum of 20 minutes before you start the **Power-LOAD** functional check. The battery will only charge when the trolley is locked at the head end of the vehicle patient compartment. The battery power LED should flash green while charging.

Before you start the **Power-LOAD** functional check, make sure that the:

- Check is performed with a **Power-LOAD** compatible **Power-PRO** cot (Model 6500, 6506, 6510, 6516)
- **Power-LOAD** is locked at the foot end of the vehicle patient compartment with the lifting arms down
- Power is turned on
- LEDs on the trolley assembly wings flash amber

Note

- When you press the main power button, the battery power LED also illuminates to indicate that the **Power-LOAD** system is on. If the trolley battery is low, a flashing amber error LED may appear.
- Check both the upper and lower cot control switches when you check the cot button functionality.

_____ Lock the **Power-LOAD** compatible cot into **Power-LOAD**.

_____ Check that both cot load wheel pins are locked into **Power-LOAD** (latches).

_____ Check that LEDs change from flashing amber to solid green.

_____ Press and hold the retract (-) button on the cot control switch to fully retract the cot undercarriage.

_____ Push the cot into the vehicle patient compartment until it locks at the head end of the vehicle patient compartment. Make sure that the lifting arms lower until the cot wheels are on the vehicle patient compartment floor and the cot foot end locks into the cot fastener.

_____ Make sure that the cot is locked into **Power-LOAD** by firmly pulling side to side on the foot end of the cot.

_____ Press and hold the extend (+) button on the cot control switch to make sure that the cot does not extend in the vehicle patient compartment. The cot legs should not attempt to lift in the transport position.

Note - The retract (-) button on the cot control switch allows motion in some conditions.

_____ Press and hold the release lever at the foot end of the **Power-LOAD** system and pull to remove the cot from the vehicle patient compartment. Make sure that the lifting arms raise the cot until the cot wheels are off the vehicle patient compartment floor.

_____ Make sure that the head end LED indicators are off until the cot is fully extended. After the cot is fully extended, make sure that the LED indicators are solid green. Press and hold the extend (+) button on the cot control switch to extend the cot until the cot wheels rest on the ground and the cot is no longer supported by the **Power-LOAD** lifting arms.

_____ Press the up (↑) button on the **Power-LOAD** control panel to raise the lifting arms and the cot to the highest position.

Note - The cot legs do not retract.

_____ Press the down (↓) button on the **Power-LOAD** control panel to lower the lifting arms and the cot.

_____ Press the release button on the cot control switch to release the cot from **Power-LOAD**. The head end LED indicators will flash amber.

_____ Lock the cot into **Power-LOAD** again.

_____ Press the up (↑) button on the **Power-LOAD** control panel to lift the cot up to the highest position.

Note - The cot legs do not retract.

_____ Press the manual release button on the **Power-LOAD** control panel to lower the cot. Continue to hold the button and pull the **Power-LOAD** lifting arms to the fully lowered position.

_____ Lift one of the two manual cot release handles at the head end of the trolley to unlock the cot.

_____ Roll the cot away from **Power-LOAD**.

- _____ Raise the lifting arms and push the trolley into the vehicle patient compartment to the transport position. With the trolley at the head end, allow the arms to lower.
- _____ Make sure that the battery power LED is flashing green when the trolley is in the transport position.
- _____ Load the **Power-LOAD** compatible cot without using the load functions to simulate manual loading of the cot into the vehicle patient compartment. Make sure that the cot locks into place.
- _____ Press and hold the release lever at the foot end of the **Power-LOAD** system and pull to remove the cot from the vehicle patient compartment. Make sure that the cot safety bar is secured by the vehicle safety hook.

Note - Only the cot will unlock. The trolley should remain at the head end of **Power-LOAD**.

- _____ To unlock the trolley, raise the lifting arms and press the trolley release button at the head end of the **Power-LOAD** system.
- _____ Fully extend **Power-LOAD** out of the vehicle patient compartment.
- _____ Visually inspect the head end transfer bumpers to make sure that they are installed flush to the outer edge of the transfer assembly with no signs of misalignment or improper installation.
- _____ Visually check that all bolts and screws are tight, with no signs of protruding or missing fasteners.
- _____ For Type II ambulances or if the cot center line is 17.5 in. (44.5 cm) or less from the vehicle wall, make sure that the optional wheel guide assembly (6390-027-000) is installed. Mark N/A if the wheel guide is not required.
- _____ Press the main power button to turn the product off. You may need to turn the product on and then off to make sure that **Power-LOAD** is off and not in sleep mode.

Note - If you will not use **Power-LOAD** for a week or more, press the main power button to turn the product off and avoid draining the battery. You may need to turn the product on and then off to make sure that **Power-LOAD** is off and not in sleep mode.

Product serial number:			
Installed by:		Date:	
Inspected by:		Date:	

Note - Maintain a copy of this record for at least seven years.

Installation verification

Complete these checks to verify your **Power-LOAD** installation follows Stryker recommended best practices.

For floor plate installation:

- _____ Confirm that the floor plate was installed according to the Stryker Global Floor Plate Installation Manual (6390-009-020).
- _____ Make sure that all floor plate tie-down bolts are set to a minimum torque of 40 ft-lb (54.3N-m) in at least a two-step tightening process.
- _____ Visually check that the floor plate sits flat on the floor deck.
- _____ Confirm that the vehicle circuit can continuously deliver 12.8V-15.6V DC under a maximum load of 10A.
WARNING - Always connect Power-LOAD to a 15 A fuse/resettable breaker that is installed in the vehicle to prevent electrical hazards. Stryker recommends that you install the fuse/resettable breaker in the fuse box.
- _____ Make sure that the product is wired to the vehicle battery bank (Stryker's preferred installation method).
WARNING - Do not connect Power-LOAD to a 24V DC vehicle circuit.
- _____ Make sure that the installed floor plate bolts are 3/8-16 UNC flat head cap screws (ASTM-F835 or SAE grade 8).

Note - Each floor plate bolt and support structure must be able to withstand 2,750 lbf (12,230 N) in upward tension and 600 lbf (2,669 N) in shear in all horizontal directions.

You can cut the floor plate, if necessary (minimum 89.50 in. (227.33 cm) for **Power-LOAD**). Only remove material from the head end.

For floor plate and Power-LOAD installation:

- _____ Complete the floor plate installation checks above.
- _____ Confirm *Installing Power-LOAD* (page 14).
- _____ Confirm *Installing the battery* (page 24).
- _____ Confirm completion of the *Installation checklist* (page 25).
- _____ Load and unload the **Power-LOAD** compatible cot with power to check for functionality (*Loading and unloading with powered operations* (page 34)).
- _____ Load and unload the **Power-LOAD** compatible cot without power to check for functionality (*Loading and unloading with manual operations* (page 35)).
- _____ Make sure that the battery power LED is flashing green when the trolley is in the transport position.
- _____ Make sure that the anchor seals are installed into the grooves of the anchor assembly.
- _____ Visually inspect the head end transfer bumpers to make sure that they are installed flush to the outer edge of the transfer assembly with no signs of misalignment or improper installation.
- _____ Visually check that all bolts and screws are tight, with no signs of protruding or missing fasteners.
- _____ If the trolley LEDs stay off when the trolley reaches the loading position, confirm that the trolley is powered on and the battery is charged. Also make sure that the magnet activator (6390-001-106) is present and that it is fastened at the foot end of the anchor.
- _____ Confirm that the torque for the supplied anchor mounting posts is 60 ±10 ft-lb.
- _____ If you will not use **Power-LOAD** for a week or more, press the main power button to turn the product off and avoid draining the battery.
- _____ Turn the product on and then off to make sure that **Power-LOAD** is off and not in sleep mode.

Stryker offers a wheel guide option if you install the **Power LOAD** system close to the wall. See *Installing the optional wheel guide* (6390-009-021).

Call Stryker service at 1-800-327-0770 if you need help after installation.

Operation

User controls and LED indicators

Power-LOAD LED indicators, located on the side **Power-LOAD** control panel and at the head end of **Power-LOAD** display trolley battery and system status. This figure and table highlight all **Power-LOAD** buttons and LED indicators.

Note - If you will not use **Power-LOAD** for a week or more, press the red main power button (A) to turn the product off. Power off to avoid draining the battery. You may need to turn the product on and then off to make sure that **Power-LOAD** is off and not in sleep mode.

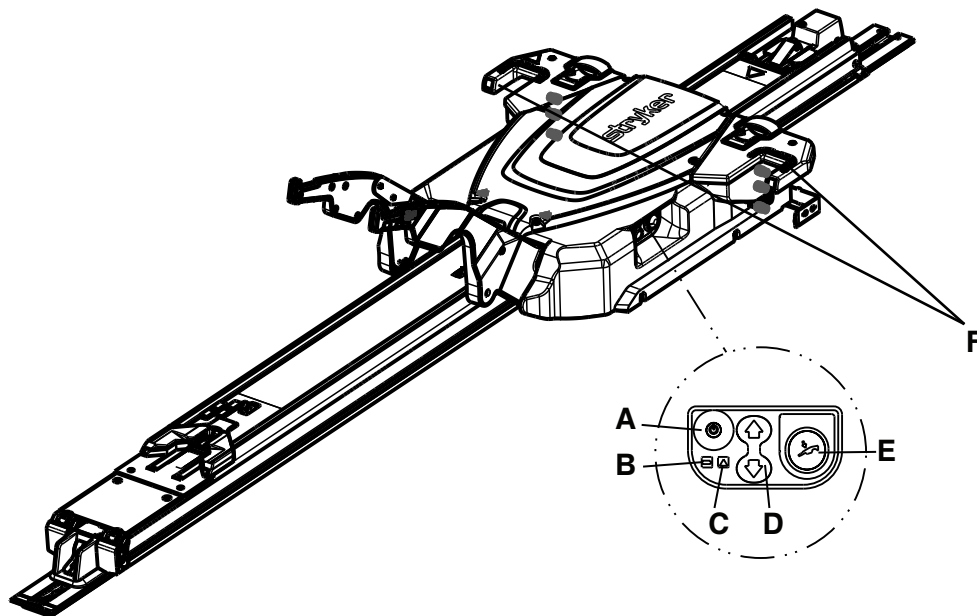
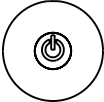


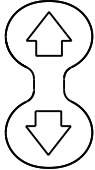




Figure 21 – Control panel

Ref and name	LED or button	Description
A: Main power		Press to power the product on or off. The battery power LED also illuminates to indicate that the Power-LOAD system is on. If the trolley battery is low, a flashing amber LED may appear.
B: Battery power		If LED is solid green, the Power-LOAD system is on and not charging. If LED is flashing green, the battery is charging. The battery will only charge when the trolley is locked at the head end of the vehicle patient compartment.
C: Error		If LED is solid amber, there is a Power-LOAD error. Press the main power button twice to reset the product. If the LED remains solid amber, contact technical support. If LED is flashing amber, the trolley battery power is low.

Ref and name	LED or button	Description
D: Up/down	 A vertical button with two circular sections. The top section contains an upward-pointing arrow, and the bottom section contains a downward-pointing arrow.	Press up (↑) to raise the lifting arms to the highest position. The cot legs do not retract. Press down (↓) to lower the lifting arms and the cot. Extend the cot base before you press.
E: Manual release	 A circular button with a hand icon pressing a lever.	Press to unload the cot in the event of a Power-LOAD power failure. Continue to hold the button until the lifting arms are clear of the cot. Extend the cot base before you press.
F: Head end LED indicator	 A perspective view of a rectangular LED indicator with a small circular lens.	If LEDs are solid green, the cot head end is in position. If LEDs are flashing amber, the cot head end is not in position.

Trolley head end LED indicators

These **Power-LOAD** LED indicators are located at the head end of the **Power-LOAD** trolley. The oil reservoir location is shown for your reference.

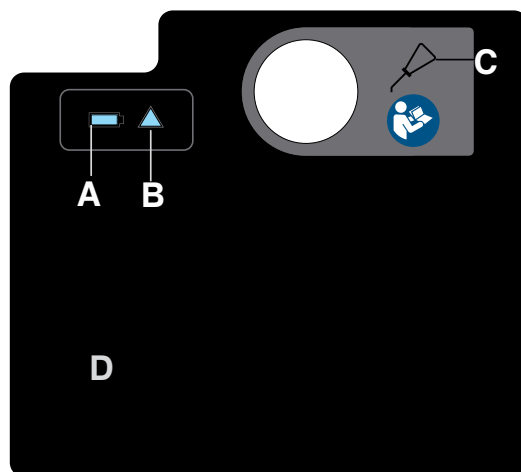





Figure 22 – Trolley head end label

Ref and Name	Icon or LED	Description
A: Battery power		<p>If LED is solid green, the Power-LOAD system is on and not charging.</p> <p>If LED is flashing green, the battery is charging.</p> <p>Note - The battery will only charge when the trolley is locked at the head end of the vehicle patient compartment.</p>
B: Error		<p>If LED is solid amber, there is a Power-LOAD error. Press the main power button twice to reset the product. If the LED remains solid amber, contact technical support.</p> <p>If LED is flashing amber, the trolley battery power is low.</p>
C: Oil reservoir		<p>Add Mobil Mercon V Blend ATF oil (6500-001-293) here until full. To avoid the risk of a product malfunction or leak, do not overfill the reservoir with oil.</p>
D: USB port	Not applicable	<p>Remove the plate to access the USB port for input/output diagnostics. Service only by qualified personnel.</p>

Manual user controls

Manual user controls allow you to release a cot from **Power-LOAD** without power:

- Release lever
- Transfer lock trigger
- Trolley release button
- Cot release handle
- Transfer lock slide

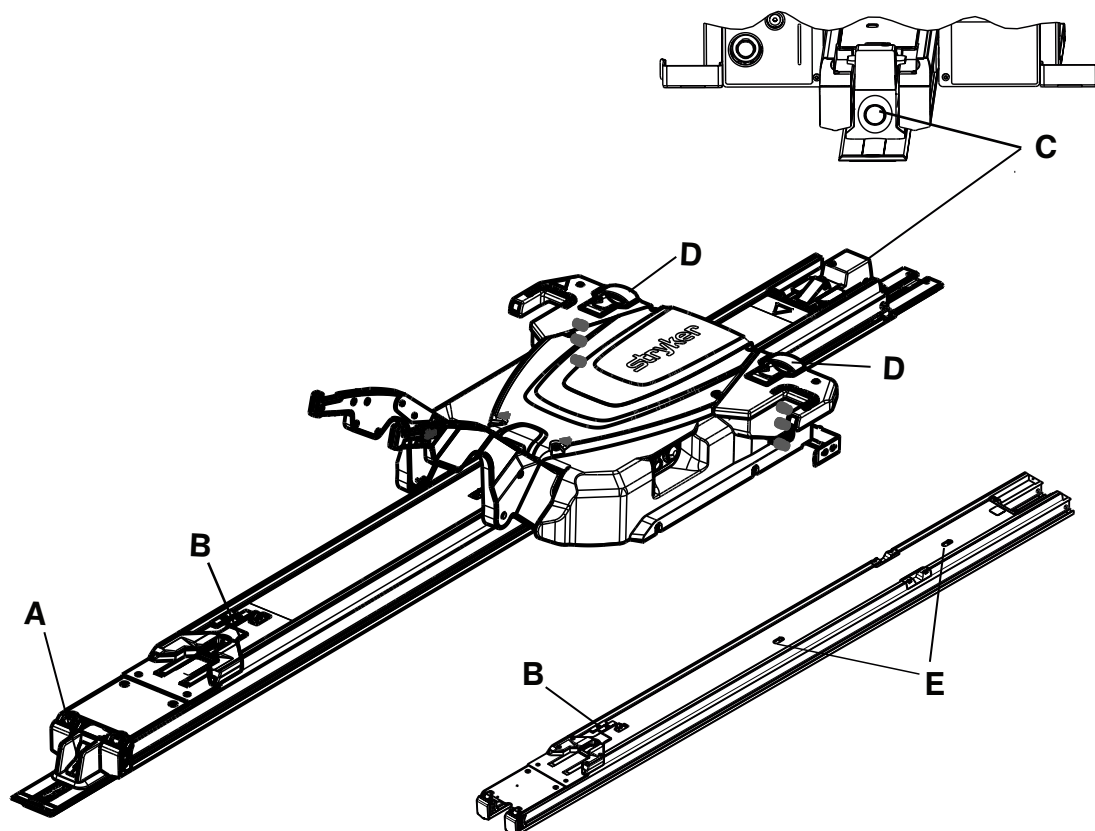




Figure 23 – Transfer shown with and without trolley

Ref and name	Icon or button	Description
A: Release lever (foot end)		Press and hold to release the cot from the patient compartment.
B: Transfer lock trigger (transfer)		Slide to release the transfer from a locked position.
C: Trolley release (head end)		Press while you raise the lifting arms to release and extend Power-LOAD from the vehicle patient compartment without a cot. Then, pull the trolley out of the vehicle patient compartment.

Ref and name	Icon or button	Description
D: Cot release handle (trolley)		Lift to unlock the cot from Power-LOAD when the cot base is fully extended.
E: Transfer lock slide (transfer)		Slide to release the transfer from a locked position.

Operating guidelines

WARNING

- Always make sure of **Power-LOAD** functionality before use. Failure may result in patient or operator injury.
 - Always use caution when you move around in the vehicle patient compartment to avoid tripping on **Power-LOAD**.
 - Always use caution when you operate **Power-LOAD** in adverse weather conditions (for example, rain, ice, snow).
 - Always operate the cot or **Power-LOAD** only when all persons are clear of the mechanisms. Entanglement in powered cot or **Power-LOAD** mechanisms can cause serious injury.
 - Always practice loading and unloading the cot with **Power-LOAD** until operation of the product is fully understood. Improper use can cause injury.
 - Do not allow untrained personnel to assist in the operation of **Power-LOAD**. Untrained technicians/personnel can cause injury to the patient or themselves.
 - Do not drive the vehicle with the trolley in the mid position. This position does not lock and is not intended for driving.
 - Always use both hands when you handle the cot. **Power-LOAD** is only an assisting device. Evaluate each situation to determine how to distribute and lift the weight that you are transporting.
 - Always use enough operators to handle the forces that are required to load or unload when you handle weights over 400 lb (181 kg). To increase safety, operators should load or unload on flat surfaces. For 36 in. (91 cm) vehicle deck heights, you may need to manually unload.
 - Always keep hands and extremities clear of the **Power-LOAD** trolley lifting arms and the cot base during powered loading and unloading.
-
- Check **Power-LOAD** for proper functionality before you start each shift. For example, the lifting arms should slightly raise the cot as the cot is unlocked, check the battery power level, and so on. If the product does not operate, remove the vehicle from service to diagnose and repair **Power-LOAD**.
 - Do not operate **Power-LOAD** with weights greater than 700 lb (318 kg), which includes patient weight and accessories. The safe working load of **Power-LOAD** is 870 lb (395 kg), which includes the weight of the cot.
 - Do not turn off the main power button during normal use as it will prevent battery charging.
 - Do not drive the vehicle with the trolley in the mid position. This position does not lock and is not intended for driving.
 - Operate **Power-LOAD** with the vehicle on a flat surface, if possible.
 - If you are unable to unload an occupied cot from the vehicle patient compartment, use a backboard to unload the patient.
 - Stryker recommends periodic training (at least once per year) on manual backup procedures. See www.stryker.com or contact your Stryker sales representative for an additional training checklist example (Mkt Lit-676).

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 24).

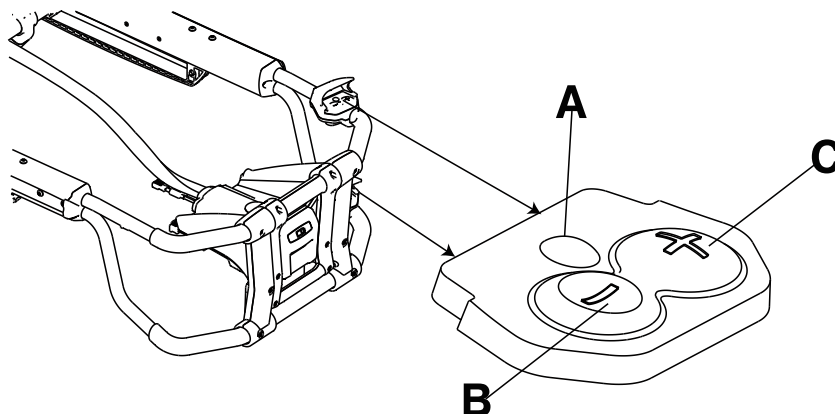


Figure 24 – Cot control switches

Reference	Name	Description
A	Release	Press to unlock the cot (for use with Power-LOAD 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

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.

Loading and unloading with powered operations

Adhere this Powered Operations instruction label to the plate (6390-001-467) and mount the plate on the inside door panel or wall of the vehicle patient compartment where the plate is visible to users.

See *User controls and LED indicators* (page 28) for button and LED locations.

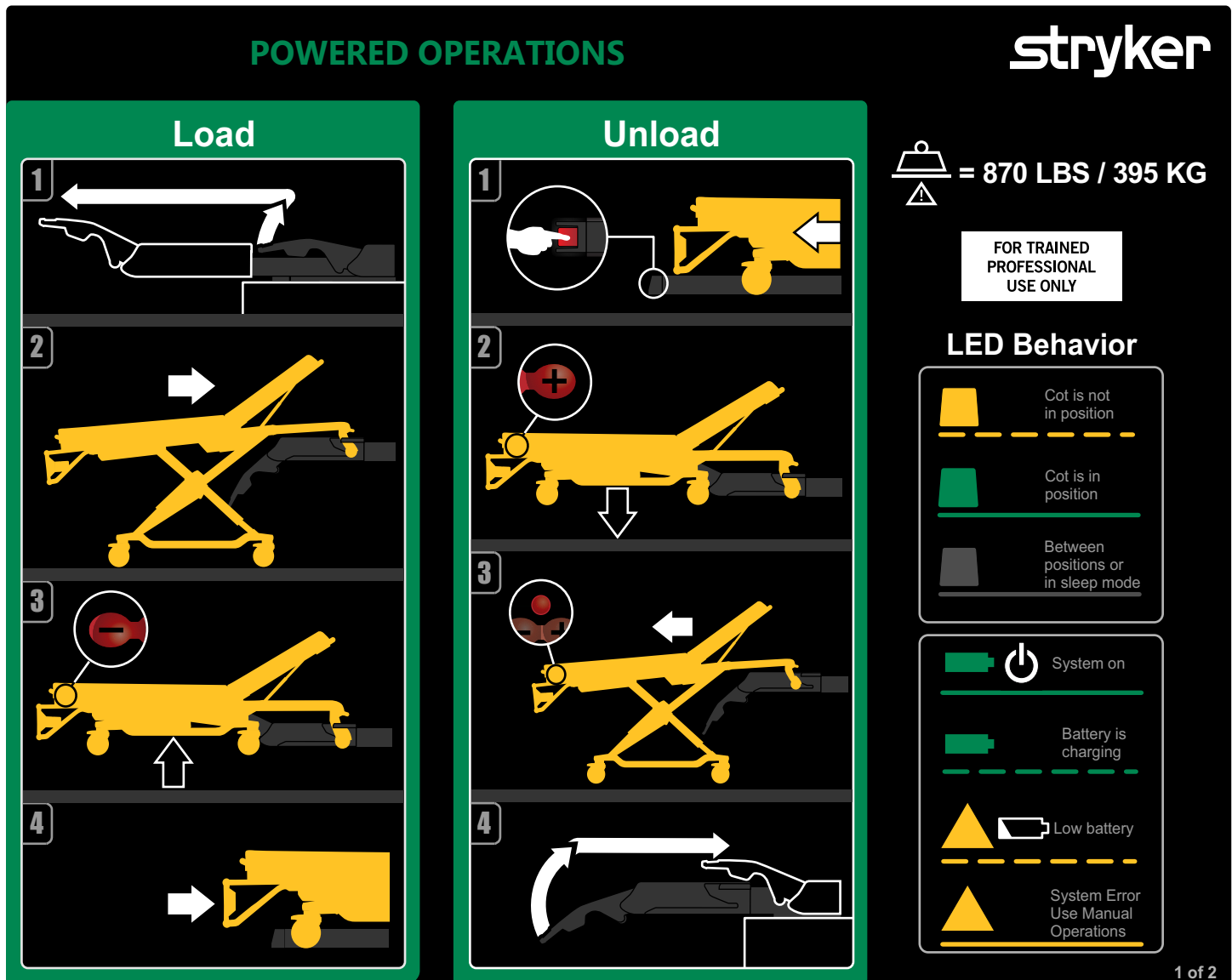


Figure 25 – Powered operations

Loading Power-LOAD with powered operations

1. Raise the lifting arms to guide and pull the trolley out of the vehicle patient compartment.
2. Push the cot into **Power-LOAD** until the cot load wheel pins lock into position. Make sure that the cot is aligned with the lifting arms when you load the cot.
3. Press and hold the retract (-) button on the cot control switch to fully retract the cot undercarriage until the cot is supported.
4. Push the cot into the vehicle patient compartment until the lifting arms lower and the cot locks into **Power-LOAD**.
5. Make sure that the cot is locked into **Power-LOAD** by firmly pulling side to side on the foot end of the cot.
6. For additional loading instructions, see *Loading a Power-PRO cot into a vehicle with the Power-LOAD option* (page 41).

Unloading Power-LOAD with powered operations

1. Press and hold the release lever at the foot end of the **Power-LOAD** system and pull to remove the cot from the vehicle patient compartment.
2. Press and hold the extend (+) button on the cot control switch to extend the cot until the cot wheels rest on the ground.
3. Press the release button on the cot control switch to unlock the cot from **Power-LOAD**.
4. Raise the lifting arms and guide the trolley into the vehicle patient compartment. Make sure that the trolley does not interfere when you close the vehicle doors.
5. For additional unloading instructions, see *Unloading a Power-PRO cot from a vehicle with Power-LOAD option* (page 42).

Note - If **Power-LOAD** will not be in use for a week or more, press the main power button to turn the product off and avoid draining the battery. You may need to turn the product on and then off to make sure that **Power-LOAD** is off and not in sleep mode.

Loading and unloading with manual operations

Adhere this Manual Operations instruction label to the plate (6390-001-467) and mount the plate on the inside door panel or wall of the vehicle patient compartment where the plate is visible to users.

See *User controls and LED indicators* (page 28) for button and LED locations.

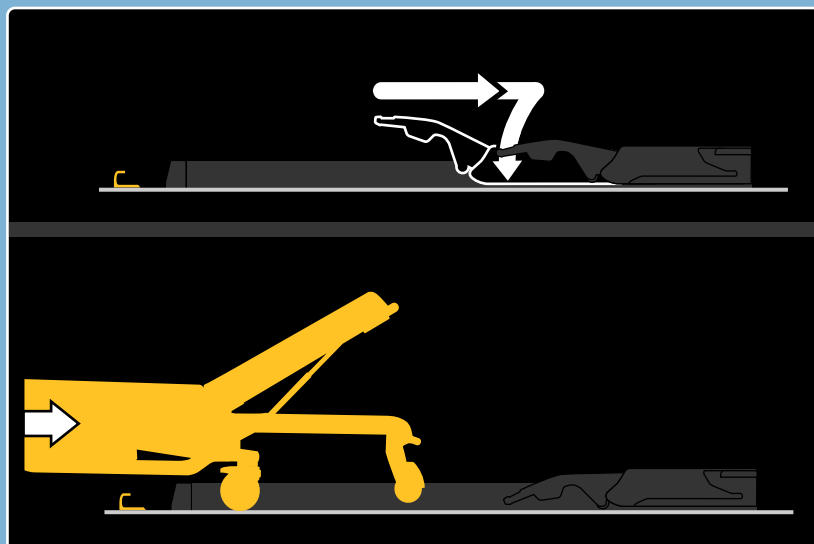
WARNING

- Always operate the **Power-LOAD** system and accessories only as described in the manuals. Improper usage of the **Power-LOAD** system or any accessory can cause injury to the patient or operator. Usage of this product in any other way becomes the complete responsibility of the owner or user.
 - Always support the weight at the foot end of the cot for manual operations.
 - Always make sure that you are ready to support the entire weight of the cot when you load and unload. Without power, the lifting arms will not raise the cot.
-

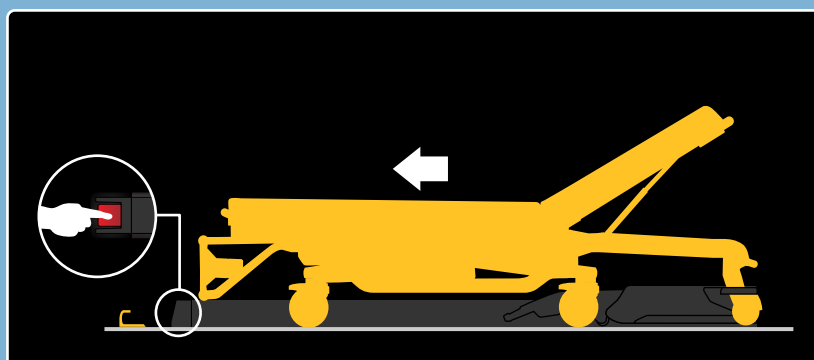
MANUAL OPERATIONS

stryker

Load



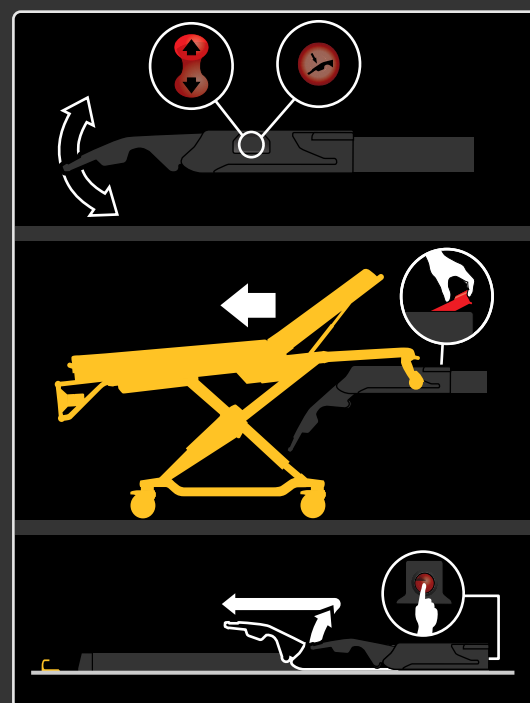
Unload



Improper usage of the Power-LOAD system or any accessory can cause injury to the patient or operator. Operate the Power-LOAD system and accessories only as described in the manuals.

For Manual Operations, the operator must support the foot end of the cot.

Other Controls



2 of 2

Figure 26 – Manual operations

Note - If **Power-LOAD** will not be in use for a week or more, press the main power button to turn the product off and avoid draining the battery. You may need to turn the product on and then off to make sure that **Power-LOAD** is off and not in sleep mode.

Loading Power-LOAD with manual operations

1. Make sure that **Power-LOAD** is located at the head end of the vehicle patient compartment with the lifting arms down.
2. Push the cot into the vehicle patient compartment until the cot locks into **Power-LOAD**.
3. Make sure that the cot is locked into **Power-LOAD** by firmly pulling side to side on the foot end of the cot.
4. For additional loading instructions, see *Loading a cot into a vehicle manually (Power-PRO power loss)* (page 47).

Unloading Power-LOAD with manual operations

1. Press and hold the release lever at the foot end of the **Power-LOAD** system.
2. Pull to remove the cot from the vehicle patient compartment.

Checking the battery power level on the Power-LOAD control panel

WARNING

- Always return damaged batteries to a service center for recycling. Do not dispose of as unsorted municipal waste. Refer to your local distributor for return and/or collection systems available in your country.
 - Always unplug the shoreline (if applicable), disconnect the vehicle battery, press the main power button to turn the product off, and then place the trolley into the loading position before you service **Power-LOAD**.
 - Do not remove the battery when **Power-LOAD** is in operation.
-

To check the battery power level:

1. Make sure that the battery power LED is turned on.
2. Check the battery power level on the **Power-LOAD** control panel (shown as a battery symbol).
 - The battery power LED is solid green when the **Power-LOAD** system is on and not charging.
 - The battery power LED flashes green when the battery is charging.
 - The error LED flashes amber when the battery is low.

Charging the battery

WARNING - Do not press the main power button to turn the product off during normal use as it will prevent battery charging.

Make sure that the battery is charged for the **Power-LOAD** to operate. When discharged, the battery requires a minimum of ten hours to recharge. The batteries charge whenever the trolley is locked into the head end of the vehicle patient compartment.

To charge the battery:

1. Raise the lifting arms and manually push the trolley into the head end of the vehicle patient compartment.
2. Lock the trolley at the head end of the vehicle patient compartment.

Note - The battery power LED flashes green when the battery is charging.

Storing Power-LOAD

Avoid draining the battery. All batteries lose charge during storage or periods of inactivity. If you will not use **Power-LOAD** for a week or more, press the main power button to turn the product off. You may need to turn the product on and then off to make sure that **Power-LOAD** is off and not in sleep mode.

Setting the cot load height

You must set the cot load height for the cot with the **Power-LOAD** option before you place the vehicle into service. For a list of compatible cots, see *Cot compatibility* (page 12). See the Operations Manual for your cot for more information about how to set the appropriate cot height.

Using a non-upgraded X-frame cot for a mass casualty incident

You can use some non-compatible cots, including most X-frame cots, in a mass casualty incident.

WARNING

- Do not allow the rail clamp to overlap the red adjustment limit label on the rail tube. To prevent the rail jaws from releasing the cot frame, the space between the rail clamp and the rail stationary jaw must never exceed 1 in. (2.5 cm).

- Do not use hand or fingers to press the release button when the rail jaws are open. The rail clamp fastener closes with a strong spring action.
-

The loading and unloading operations are similar to the instructions for manual loading and unloading of a cot. However, a rail clamp assembly is used instead of a foot end cot lock. When you load a non-compatible cot, lock the cot retaining post into the rail clamp assembly.

The mass casualty option contains a rail assembly for wall or floor mount. You should store this rail assembly in a cabinet in case of emergency for quick attachment in the vehicle patient compartment.

Extending Power-LOAD from the vehicle without a cot

To extend **Power-LOAD** from the vehicle patient compartment without a cot:

1. Walk to the head end of the **Power-LOAD** system.
2. While you raise the lifting arms, press the trolley release button at the head end of the **Power-LOAD** system (Figure 27).
3. Pull the trolley out of the vehicle patient compartment (Figure 28).



Figure 27 – Press trolley release button



Figure 28 – Pull trolley out

Loading a Performance-PRO cot into a vehicle with the Power-LOAD option

WARNING

- Always load or unload an occupied cot into a vehicle with a minimum of two trained operators.
 - Always load the **Power-LOAD** compatible cot into the vehicle patient compartment before all occupants.
-

CAUTION

- Do not slam the cot into the trolley when you load the cot to avoid the risk of equipment damage.
 - Do not push the cot into the vehicle patient compartment until the cot base is fully retracted.
-

1. Lift the vehicle bumper to the raised position, if equipped.
2. Raise the lifting arms to guide and pull the trolley out of the vehicle patient compartment (Figure 29).



Figure 29 – Guide trolley out of vehicle

3. Raise the cot to the load position.
4. Fully extend and lock the cot retractable head section before you load the cot into **Power-LOAD**.
5. Push the cot into **Power-LOAD** until the cot load wheel pins lock into position (Figure 30). Make sure that the cot is aligned with the lifting arms when you load the cot.



Figure 30 – Lock wheel pins into position

6. Check the head end LED indicators to make sure that the cot is ready to load.
 - If the LEDs are solid green, then the cot head end is in position.
 - If the LEDs are flashing amber, then the cot head end is not in position.
7. Press the up (↑) button on the **Power-LOAD** control panel to raise the lifting arms to the highest position (Figure 31).

Note - The cot legs do not retract.



Figure 31 – Raise the lifting arms to the highest position

8. Operator 1 (foot end): Grasp the cot frame at the foot end. Squeeze and hold the cot manual release.
9. Operator 2 (side): Grasp the outer rail to stabilize the cot. Then, grasp the base frame (Figure 32). After the foot end operator has lifted the cot and squeezed the cot manual release, retract the undercarriage with one hand and hold it in place.



Figure 32 – Grasp the base frame

10. Operator 1 (foot end): Release the cot manual release to lock the undercarriage in the retracted position. Make sure that the cot manual release is released. If the cot manual release is not released, the cot base will extend and the cot will not lock into the cot fastener.
11. Push the cot into the vehicle patient compartment until the lifting arms lower and the cot locks into **Power-LOAD**.
12. Make sure that the cot is locked into **Power-LOAD** by firmly pulling side to side on the foot end of the cot.

Unloading a Performance-PRO cot from a vehicle with Power-LOAD option

WARNING

- Always load or unload an occupied cot into a vehicle with a minimum of two trained operators.
- Always be ready to support the entire weight of the cot and patient if the lifting arms do not raise the cot when you unload a cot from the vehicle patient compartment. As the cot is unlocked for removal from the vehicle patient compartment, the **Power-LOAD** lifting arms will slightly raise the cot.
- Always make sure that the cot base is extended before you press any buttons on the **Power-LOAD** control panel when you unload the cot.

1. Lift the vehicle bumper to the raised position, if equipped.
2. Press and hold the release lever at the foot end of the **Power-LOAD** system and pull to remove the cot from the vehicle patient compartment.
3. Grasp the cot frame at the foot end to pull the cot out of the vehicle patient compartment.

Note - The head end LED indicators turn solid green only when the cot is ready to unload.

4. Operator 1 (foot end): Grasp the cot frame (Figure 33). Squeeze and hold the cot manual release.



Figure 33 – Grasp the cot frame

5. Operator 2 (side): Grasp the base frame where indicated (Figure 33), lift slightly, and lower the base frame to its fully extended position. Make sure that the cot wheels are on the ground.
6. Operator 1 (foot end): Release the cot manual release to lock the undercarriage into the extended position.
7. Press the down (↓) button on the **Power-LOAD** control panel to lower the lifting arms and the cot (Figure 34).



Figure 34 – Lower the lifting arms



Figure 35 – Unlock the cot

8. Lift one of the two manual cot release handles at the head end of the trolley to unlock the cot (Figure 35).
9. Raise the lifting arms and guide the trolley into the vehicle patient compartment until the arms are far enough in to not interfere with the vehicle doors.

Loading a Power-PRO cot into a vehicle with the Power-LOAD option

WARNING

- Always load or unload an occupied cot into a vehicle with a minimum of two trained operators.
- Always load the **Power-LOAD** compatible cot into the vehicle patient compartment before all occupants.

CAUTION - Do not slam the cot into the trolley when you load the cot to avoid the risk of equipment damage.

1. Lift the vehicle bumper to the raised position, if equipped.
2. Raise the lifting arms to guide and pull the trolley out of the vehicle patient compartment (Figure 36).



Figure 36 – Guide trolley out of vehicle



Figure 37 – Set the load height

3. Press and hold the extend (+) button on the cot control switch to extend the cot undercarriage to the set load height (Figure 37).
4. Fully extend and lock the cot retractable head section before you load the cot into **Power-LOAD**.
5. Push the cot into **Power-LOAD** until the cot load wheel pins lock into position (Figure 38). Make sure that the cot is aligned with the lifting arms when you load the cot.



Figure 38 – Lock wheel pins into position

6. Check the head end LED indicators to make sure that the cot is ready to load.
 - a. If the LEDs are solid green, then the cot head end is in position.
 - b. If the LEDs are flashing amber, then the cot head end is not in position.
7. Press and hold the retract (-) button on the cot control switch (Figure 39), to fully retract the cot undercarriage until the cot is supported.



Figure 39 – Fully retract the cot

8. Push the cot into the vehicle patient compartment until the lifting arms lower and the cot locks into **Power-LOAD**.
9. Make sure that the cot is locked into **Power-LOAD** by firmly pulling side to side on the foot end of the cot.

Unloading a Power-PRO cot from a vehicle with Power-LOAD option

WARNING

- Always load or unload an occupied cot into a vehicle with a minimum of two trained operators.
 - Always be ready to support the entire weight of the cot and patient if the lifting arms do not raise the cot when you unload a cot from the vehicle patient compartment. As the cot is unlocked for removal from the vehicle patient compartment, the **Power-LOAD** lifting arms will slightly raise the cot.
-

1. Lift the vehicle bumper to the raised position, if equipped.
2. Press and hold the release lever at the foot end of the **Power-LOAD** system and pull to remove the cot from the vehicle patient compartment (Figure 40).



Figure 40 – Press and hold the release lever



Figure 41 – Grasp the cot frame

3. Grasp the cot frame at the foot end to pull the cot out of the vehicle patient compartment (Figure 41).

Note - The head end LED indicators turn solid green only when the cot is ready to unload.

4. Press and hold the extend (+) button on the cot control switch to extend the cot until the cot wheels rest on the ground.
5. Release the extend (+) button after the cot is no longer supported by the lifting arms. The lifting arms will continue to move until they have fully lowered.
6. Press the release button (Figure 42) on the cot control switch at the foot end of the cot or lift one of the two manual cot release handles at the head end of the trolley to unlock the cot (Figure 43).



Figure 42 – Press the release button



Figure 43 – Unlock the cot

7. Raise the lifting arms and guide the trolley into the vehicle patient compartment until the arms are far enough in to not interfere with the vehicle doors.

Unloading a cot from a vehicle manually after loading with Power-LOAD (Power-LOAD power loss or system error)

If **Power-LOAD** loses power or experiences a system error after a cot was loaded, follow these instructions to unload the cot.

WARNING

- Always load or unload an occupied cot into a vehicle with a minimum of two trained operators.
 - Always be ready to support the entire weight of the cot and patient when you unload a cot from the vehicle patient compartment while **Power-LOAD** is experiencing a power loss or system error.
 - Always make sure that the cot base is extended before you press any buttons on the **Power-LOAD** control panel when you unload the cot.
 - Always make sure that you are ready to support the entire weight of the cot when you load and unload. Without power, the lifting arms will not raise the cot.
-

Note - The lifting arms will be in the up position.

1. Press and hold the release lever at the foot end of the **Power-LOAD** system and pull to remove the cot from the vehicle patient compartment (Figure 44).



Figure 44 – Press and hold the release lever

2. Grasp the cot frame at the foot end to pull the cot out of the vehicle patient compartment.

For Model 6500/6506 and 6510/6516 with **Power-LOAD** option:

- Operator 1: Grasp the cot frame at the foot end. While you support the weight of the cot, guide and pull the cot out of the vehicle patient compartment. Press and hold the extend (+) button on the cot control switch to extend the cot until the cot wheels rest on the ground.
- Operator 2: Grasp the outer rail to stabilize the cot.

For Model 6085/6086 with the **Power-LOAD** option:

- Operator 1: Grasp the cot frame.
- Operator 2: Grasp the base frame where indicated, lift slightly, and lower the base frame to its fully extended position while Operator 1 squeezes and holds the cot manual release. Make sure that the cot wheels are on the ground.
- Operator 1 (foot end): Release the cot manual release to lock the undercarriage into the extended position.

3. Press the manual release button on the **Power-LOAD** control panel (Figure 45).



Figure 45 – Press the manual release button



Figure 46 – Unlock the cot

4. Lift one of the manual cot release handles at the head end of **Power-LOAD** to unlock the cot (Figure 46).
5. Raise the lifting arms and guide the trolley into the vehicle patient compartment until the arms are far enough in to not interfere with the vehicle doors.
6. Remove the vehicle from service to diagnose and repair **Power-LOAD** after the call.

Loading a cot into a vehicle manually after a powered cot fastener power loss or system error

WARNING

- Always load or unload an occupied cot into a vehicle with a minimum of two trained operators.
 - Always load the cot before you allow patients to enter the vehicle patient compartment.
-

CAUTION - Do not push the cot into the vehicle patient compartment until you fully retract the cot base.

1. Lift the vehicle bumper to the raised position, if equipped.
2. Locate the trolley at the head end of the vehicle patient compartment with the lifting arms down. To move the trolley to the head end, raise the lifting arms and guide the trolley into the vehicle patient compartment until **Power-LOAD** locks into position with the lifting arms down.
3. Fully extend and lock the cot retractable head section before you load the cot into the powered cot fastener.
4. Place the cot in a loading position (any position where the cot loading wheels meet the vehicle patient compartment floor height).
5. Roll the cot to the open vehicle patient compartment.
6. Push the cot forward until the cot loading wheels are on the vehicle patient compartment floor and the cot safety bar is secured by the vehicle safety hook (Figure 47).



Figure 47 – Vehicle safety hook

Note - For maximum clearance to lift the base, pull the cot out until the cot safety bar is secured by the vehicle safety hook.

For **Power-PRO XT** or **Power-PRO IT** with the **Power-LOAD** option:

- Grasp the cot frame at the foot end.
- Lift the foot end of the cot and press and hold the retract (-) button on the cot control switch to fully retract the cot undercarriage.

Note - The cot undercarriage will retract in less than three seconds.

For **Performance-PRO XT** with the **Power-LOAD** option:

- Operator 1 (foot end): Grasp the cot frame at the foot end. Squeeze and hold the cot manual release.
- Operator 2 (side): Grasp the outer rail to stabilize the cot. Then, grasp the base frame. After the foot end operator has lifted the cot and squeezed the cot manual release, retract the undercarriage with one hand and hold it in place.
- Operator 1 (foot end): Release the cot manual release to lock the undercarriage in the retracted position.

7. Push the cot into the vehicle patient compartment until the cot locks into **Power-LOAD**.
8. Make sure that the cot is locked into the powered cot fastener by firmly pulling side to side on the foot end of the cot.

Remove the vehicle from service to diagnose and repair **Power-LOAD** after your service call.

Unloading a cot from a vehicle manually

WARNING

- Always load or unload an occupied cot into a vehicle with a minimum of two trained operators.
 - Always use both hands when you handle the cot. **Power-LOAD** is only an assisting device. Evaluate each situation to determine how to distribute and lift the weight that you are transporting.
 - Always use enough operators to handle the forces that are required to load or unload when you handle weights over 400 lb (181 kg). To increase safety, operators should load or unload on flat surfaces. For 36 in. (91 cm) vehicle deck heights, you may need to manually unload.
 - Always make sure that the cot base is extended before you press any buttons on the **Power-LOAD** control panel when you unload the cot.
-

1. Lift the vehicle bumper to the raised position , if equipped.
2. Press and hold the release lever or release button at the foot end of your cot fastener and pull to remove the cot from the vehicle patient compartment.
3. Grasp the cot frame at the foot end to pull the cot out of the vehicle patient compartment.

For **Power-PRO XT** or **Power-PRO IT** with the **Power-LOAD** option:

- Operator 1: Grasp the cot frame at the foot end. While you support the weight of the cot, guide and pull the cot out of the vehicle patient compartment until the cot safety bar is secured by the vehicle safety hook. Press and hold the extend (+) button on the cot control switch to extend the cot until the cot wheels rest on the ground.
- Operator 2: Make sure that the cot safety bar is secured by the vehicle safety hook. Securely grasp the cot outer rail to stabilize the cot. Push the cot safety bar release lever forward to release the cot safety bar from the vehicle safety hook in the vehicle patient compartment.

For **Performance-PRO XT** with the **Power-LOAD** option:

- Operator 1 (foot end): Grasp the cot frame at the foot end. While you support the weight of the cot, guide and pull the cot out of the vehicle patient compartment until the cot safety bar is secured by the vehicle safety hook.
- Operator 2 (side): Grasp the base frame where indicated, lift slightly, and lower the base frame to its fully extended position while Operator 1 squeezes and holds the cot manual release.
- Operator 1 (foot end): Release the cot manual release and make sure that the undercarriage locks into place. Set the cot onto the ground.
- Operator 2 (side): Push the cot safety bar release lever forward to release the cot safety bar from the vehicle in the vehicle patient compartment.

Note - In the unlikely case that the cot foot end fails and you cannot remove the cot from the vehicle, remove the patient by alternative means (for example, use backboard or field cot).

Removing a cot from a vehicle for repair

WARNING

- Always load or unload an occupied cot into a vehicle with a minimum of two trained operators.
- Always use both hands when you handle the cot. **Power-LOAD** is only an assisting device. Evaluate each situation to determine how to distribute and lift the weight that you are transporting.
- Always make sure that the cot base is extended before you press any buttons on the **Power-LOAD** control panel when you unload the cot.

1. Operator 1: Press and hold the trolley release button at the head end of the **Power-LOAD** system.
2. Operator 2: Slide both transfer lock triggers (closest to the foot end) toward the foot end of the transfer assembly to unlock. With the help of Operator 1, push the cot and transfer firmly out of the vehicle patient compartment.
3. Operator 1: With a screwdriver or similar tool, push on the hook assembly underneath the transfer while Operator 2 pushes the transfer forward toward the head end of the vehicle patient compartment to release the cot from the lock.
4. After the cot is unlocked, pull the cot all the way out.
5. Make sure that the cot base is extended, then lift one of the manual cot release handles at the head end of **Power-LOAD** to unlock the cot.

Loading a cot into a vehicle manually (Power-PRO power loss)

WARNING

- Always load or unload an occupied cot into a vehicle with a minimum of two trained operators.
- Always load the cot before you allow patients to enter the vehicle patient compartment.

CAUTION

- Do not push the cot into the vehicle patient compartment until you fully retract the cot base.
- Do not slam the cot into the trolley when you load the cot to avoid the risk of equipment damage.
- Do not let go of the manual release until the cot locks into position at the foot end. If you let go too early, then the cot base may prevent the cot from locking into **Power-LOAD**.

1. Lift the vehicle bumper to the raised position, if equipped.
2. Raise the lifting arms (Figure 48) to guide and pull the trolley out of the vehicle patient compartment.



Figure 48 – Guide the trolley out of the vehicle

3. Raise the cot to the load position.
4. Fully extend and lock the cot retractable head section before you load the cot into **Power-LOAD**.
5. Push the cot into **Power-LOAD** until the cot load wheel pins lock into position (Figure 49). Make sure that the cot is aligned with the lifting arms when you load the cot.
6. Check the head end LED indicators to make sure that the cot is ready to load.
 - If the LEDs are solid green, then the cot head end is in position.

- If the LEDs are flashing amber, then the cot head end is not in position.
7. Press the up (↑) button on the **Power-LOAD** control panel (Figure 50) to raise the lifting arms to the highest position.

Note - The cot legs do not retract.



Figure 49 – Lock the wheel pins into position



Figure 50 – Press the up button to raise the lifting arms

8. Operator 1 (foot end): Grasp the cot frame at the foot end. Squeeze and hold the cot manual release.
9. Operator 2 (side): Grasp the base frame. After the foot end operator squeezes the cot manual release, retract the undercarriage with one hand and stabilize the cot with your other hand.
10. Both operators: Push the cot into the vehicle patient compartment, until the lifting arms lower and the cot locks into **Power-LOAD**.
11. Operator 1: Continue to squeeze and hold the cot manual release.
12. Make sure that the cot is locked into **Power-LOAD** by firmly pulling side to side on the foot end of the cot.
13. After the call, remove the cot from service to diagnose and repair the **Power-PRO** cot.

Note - **Power-LOAD** automatically charges the **SMRT Pak** battery when the cot is locked into **Power-LOAD** in the transport position (no cable or connectors required). The cot battery LED indicator momentarily flashes green to signify that it is charging.

Cleaning and disinfecting with wipes

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

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

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

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

Note - For safety information, read the product label.

To clean or disinfect the external product surface:

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

Note

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

Cleaning

WARNING

- Always press the main power button to turn the unit off before service or cleaning.
 - Always use any appropriate personal protective equipment while power washing to avoid inhaling contagion. Power washing equipment may aerate contamination.
-

CAUTION

- Do not spray directly underneath the trolley up in to the trolley mechanism. Water could gain ingress into the trolley housing and may accelerate corrosion or degrade operation.
 - 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.
- Power wash **Power-LOAD** with recommended cleaners. Hose down the product and towel dry the transfer rails and arm hinges.
- Power wash **Power-LOAD** with a hand held wand unit or wipe the product with a clean cloth and recommended cleaners.
- When you hose down or power wash the product, do not spray directly underneath the trolley up in to the trolley mechanism. Water could gain ingress into the trolley housing and may accelerate corrosion or degrade operation.
- Using a soft cloth and brush, clean the transfer roller channels to prevent debris accumulation.
- Remove the trolley top cover and patient left side cover assembly to towel dry the control board assembly.
- Disconnect the motor and battery connectors and towel dry the connectors.
- Towel dry the transfer rails and arm hinges.
- When cleaning, park the ambulance uphill and extend the transfer and trolley so the water drains out of the rear end of the vehicle patient compartment.

Note - Water that gets into the **Power-LOAD** system will drain through the drain tube to the underside of the vehicle.

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 properly rinse and dry the product leaves a corrosive residue on the surface of the product and may cause premature corrosion of critical components.

Preventive maintenance

Regular inspection and adjustments

Maintenance intervals

This schedule is a general guide to maintenance. The required maintenance schedule may vary based on:

- Call volume
- Weather
- Terrain
- Geographical location
- Individual usage

If you are not sure how or when to perform these checks, contact your Stryker Service Technician.

When you perform **Power-LOAD** preventive maintenance checks, you must perform a preventive maintenance check on its corresponding **Power-LOAD** compatible cot and the optional wheel guide assembly (if applicable) to confirm operability of the entire system.

Power-LOAD compatible cot maintenance

Wear items that may require replacement on the **Power-LOAD** compatible cot include the cot arm spacer (6500-002-123), base dead stop (6085-001-094), and load wheel pin (6500-002-104).

Optional wheel guide assembly maintenance (if applicable)

To preserve **Power-LOAD** fastener functionality, make sure that the wheel guide is functional and its structure has not been compromised. The wheel guide rail system assists the **Power-LOAD** system in loading the cot. If the wheel guide has been compromised, replace it immediately.

Note - The **Power-LOAD** maintenance schedule is based on 10 calls per day. Adjust the routine maintenance schedule to your actual service usage.

Every month

Check	Routine
Lock location	Clean debris from the foot end lock location on the transfer

Every three months

Check	Routine
Loose fasteners	Replace if loose
Battery terminal screws	Tighten loose screws (torque to 9 in-lb)
Transfer assembly and anchor assembly	Clean debris from the top of the transfer assembly and anchor assembly
Transfer roller channels	Clean transfer roller channels to prevent debris accumulation
Trolley stop ramp	Tighten loose screws

Every twelve months

Check	Routine
Battery	Replace if lifting is sluggish
All parts	<p>Check and replace any worn parts, including arm covers, arm wear pads, trolley top and side covers, cot release handle springs, anchor lever cover, anchor inductive primary cover, transfer lock plate, transfer lock pin, or cot guides, if necessary</p> <p>Note - The transfer lock plate (639000010260) is only compatible with Power-LOAD units manufactured after July 31, 2017 or units that have been previously serviced with the 639007000021 kit. Check the product serial number tag to confirm date of manufacture.</p>
Dead stop bumpers	Replace if the corner is damaged
Motor	Replace when no motor motion exists
Cylinder rod end	Replace if Power-LOAD functions in manual mode and the error LED is illuminated
Full functionality	See <i>Installation checklist</i> in the Operations Manual
Hydraulic	Check for hydraulic leaks
Transfer lock bearing	<p>Replace once per year</p> <p>Note - During bearing replacement, make sure that the surrounding area is clean (anchor) and apply molybdenum disulfide grease to the transfer lock pin.</p>
V-guide rollers	If the product is difficult to roll or wear is noticeable in the transfer roller channel beyond the inner rod, replace the V-guide rollers on the trolley and switch the patient right, outside, bottom transfer rod with the patient right, outside top transfer rod. Check all remaining rollers for damage or excessive wear. Replace, if necessary.
Lift arm springs	Replace the lift arm springs (0038-895-000) that are located under the trolley top cover

Flat roller and V-guide part replacement schedule

You must replace the flat roller and V-guide parts every 14,110 calls. This is to make sure that the **Power-LOAD** remains functional. Follow this call volume time table to remain compliant with this requirement. The time table will also help plan appropriate service intervals.

Calls per day	Months
6	80
7-8	60
9-10	48
11-12	40
13	36
14-15	30

Transfer lock bearing part replacement schedule

You must replace the transfer lock bearing parts every 3,653 calls. This is to make sure that **Power-LOAD** remains functional. Follow this call volume time table to remain compliant with this requirement.

Calls per day	Months
2	60
3	40
4-5	24
6	20
7-8	15
9-10	12
11-12	10
13-15	8

Troubleshooting guide

These instructions are only intended for as a short-term solution. Contact your local Stryker Service Technician or Account Manager to schedule a maintenance inspection following any incident where troubleshooting is required. See your maintenance manual for complete troubleshooting information.

Cot gets stuck when unloading

Scenario: Cot gets stuck halfway out when you press the red release lever at the foot end of the anchor.

1. Pull the patient left transfer lock trigger and push the cot back into the vehicle until it locks into place.
2. Hold down the red release lever at the foot end of the anchor with your thumb and use your knuckle to hold the transfer in place while you pull the cot toward you until it raises up. Pull the cot out to unload.

Cot gets stuck when loading

Scenario: Trolley and cot get stuck halfway out when loading.

1. Check for debris in the transfer trolley lock.
2. Remove the debris so the roller will spring up. If there is no debris, see step 4.
3. Pull the cot and trolley all the way out of the vehicle to reset. Load the cot into the vehicle. The trolley will then lock into place.
4. If there is no debris in the transfer trolley lock, pull the patient left transfer lock trigger. Load the cot into the vehicle.

Cot will not unlock from the trolley

Scenario: Cot will not release from the trolley in the loading position and the error LED is illuminated.

1. Firmly press the manual release button on the **Power-LOAD** control panel to release pressure in the hydraulics.
2. To lower the lifting arms, press the extend (+) button on the cot or press down (↓) on the **Power-LOAD** control panel.
Note - You may need to apply pressure to the lifting arms while you press the manual release button to lower the lifting arms completely.
3. Remove the cot from the trolley.

Cot does not lower and lock into the transfer

Scenario: Trolley arms do not lower to lock the cot into the transfer when loading.

1. Firmly press the manual release button on the **Power-LOAD** control panel. The cot will then lower and lock into the transfer.

Cot locked into the trolley in the load position

Scenario: Cot begins to collapse and the trolley lifting arms do not raise.

1. Press up (↑) on the **Power-LOAD** control panel to raise the cot until the lifting arms stop.
2. At the foot end of the cot, press the retract (-) button to raise the cot legs. Load the cot into the vehicle.

Power-LOAD lifting arms stop when loading

Scenario: Lifting arms are not centered between the cot legs and amber head end LED indicators are flashing.

1. Realign the cot to center the lifting arms between the cot legs and the head end LED indicators are solid green.
2. Press up (↑) on the **Power-LOAD** control panel or the retract (-) button on the cot to resume loading.

EMC information

Guidance and manufacturer's declaration - electromagnetic emissions		
Power-LOAD is intended for use in the electromagnetic environment specified below. The customer or the user of Power-LOAD should assure that it is used in such an environment.		
Emissions test	Compliance	Electromagnetic environment
RF Emissions CISPR 11	Group 1	The Power-LOAD system uses 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	The Power-LOAD system must emit electromagnetic energy in order to perform its intended function. Nearby electronic equipment may be affected.
RF Emissions CISPR 11	Class A	The Power-LOAD system 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.


Recommended separations distances between portable and mobile RF communications equipment and Power-LOAD			
Power-LOAD is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of Power-LOAD can help prevent electromagnetic interferences by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and Power-LOAD 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 $d=(0.35) (\sqrt{P})$	800 MHz to 2.7 GHz $d=(0.70) (\sqrt{P})$
0.01	0.12	0.04	0.07
0.1	0.38	0.11	0.22
1	1.20	0.35	0.70
10	3.79	1.11	2.21
100	12	3.5	7
For transmitters rated at a maximum output power not listed above, the recommended separation distance d in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer. Note 1: At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies. Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.			

Guidance and manufacturer's declaration - electromagnetic immunity

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

Immunity test	EN/IEC 60601 test level	Compliance level	Electromagnetic environment-guidance
Electrostatic discharge (ESD) IEC 61000-4-2	± 8 kV contact ± 15 kV air	± 8 kV contact ± 15 kV air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Surge IEC 61000-4-5	± 1 kV line(s) to line(s) ± 2 kV line(s) to ground	± 1 kV line(s) to line(s) ± 2 kV line(s) to ground	Mains power quality should be that of a typical commercial or hospital environment.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	30 A/m	30 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Electrical transient conduction along supply ISO 7637-2	per ISO 7637-2	per ISO 7637-3	N/A

Guidance and manufacturer's declaration - electromagnetic immunity

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

Guidance and manufacturer's declaration - electromagnetic immunity

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

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

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

Note 4: Evaluated for immunity to proximity fields from RF wireless communication equipment per IEC 60601-1-2: 2014 Table 9.

^a 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-LOAD** is used exceeds the applicable RF compliance level above, the **Power-LOAD** system should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating **Power-LOAD**.

^b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 20 V/m.

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