

stryker®

Operations Manual

Medical

**Important
Information**

File in your
maintenance
records

**Electric Stretcher
Model 1550**

**For parts or technical
assistance call
800 327 0770 (option 2)**



Table of Contents


Introduction	
Specifications	2
Warning / Caution / Note Definition	2
Stretcher Symbols	3
Base Operation	
Operating Base Controls	4
Raising And Lowering Litter Height	6
Trendelenburg/Reverse Trendelenburg Positioning	7
Applying The Brake System	8
Operating Directional Steering Caster/Fifth Wheel Options	8
Litter Operation	
Operating Fowler And Knee Gatch	9
Operating Siderails	10
Operating Siderail Patient Controls	11
Using Patient Control Lockout	11
Using Push Handles	12
Operating Optional Permanently Attached I.V. Poles	13, 14
Operating Optional Foot Extension/Defibrillator Tray	15
Using the Optional Serving Tray	16
Using the Optional Upright Oxygen Bottle Holder	17
Using the Optional Defibrillator Tray	18
Cleaning	19
Preventative Maintenance Checklist	20
Limited Warranty	
Obtaining Parts and Service	21
Supplemental Warranty Coverage	21
Return Authorization	22
Freight Damage Claims	22

Introduction

INTRODUCTION

This manual is designed to assist you with the operation of the model 1550 Electric Stretcher. Read it thoroughly before using the equipment.

SPECIFICATIONS

Safe Working Load	500 pounds (227 kilograms)	
Overall Bed Length/Width	83.5"/34"	
Minimum/Maximum Bed Height	22"/35"	
Knee Gatch Angle	0° to 30°	
Fowler Angle	0° to 70° (Electric), 0° to 90° (Crank)	
Trendelenburg/Reverse Trendelenburg	+18°/-18°	
Electrical Requirements	120 VAC, 60 Hz, 7.0 Amp	
Weight of Product	340 pounds (154 kilograms) – standard configuration 400 pounds (181 kilograms) – all options/accessories	

Stryker reserves the right to change specifications without notice.

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 equipment 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.

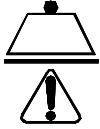
NOTE

This provides special information to make maintenance easier or important instructions clearer.

Stretcher Symbols



Warning, Revert to Operations or Service/Maintenance Manual



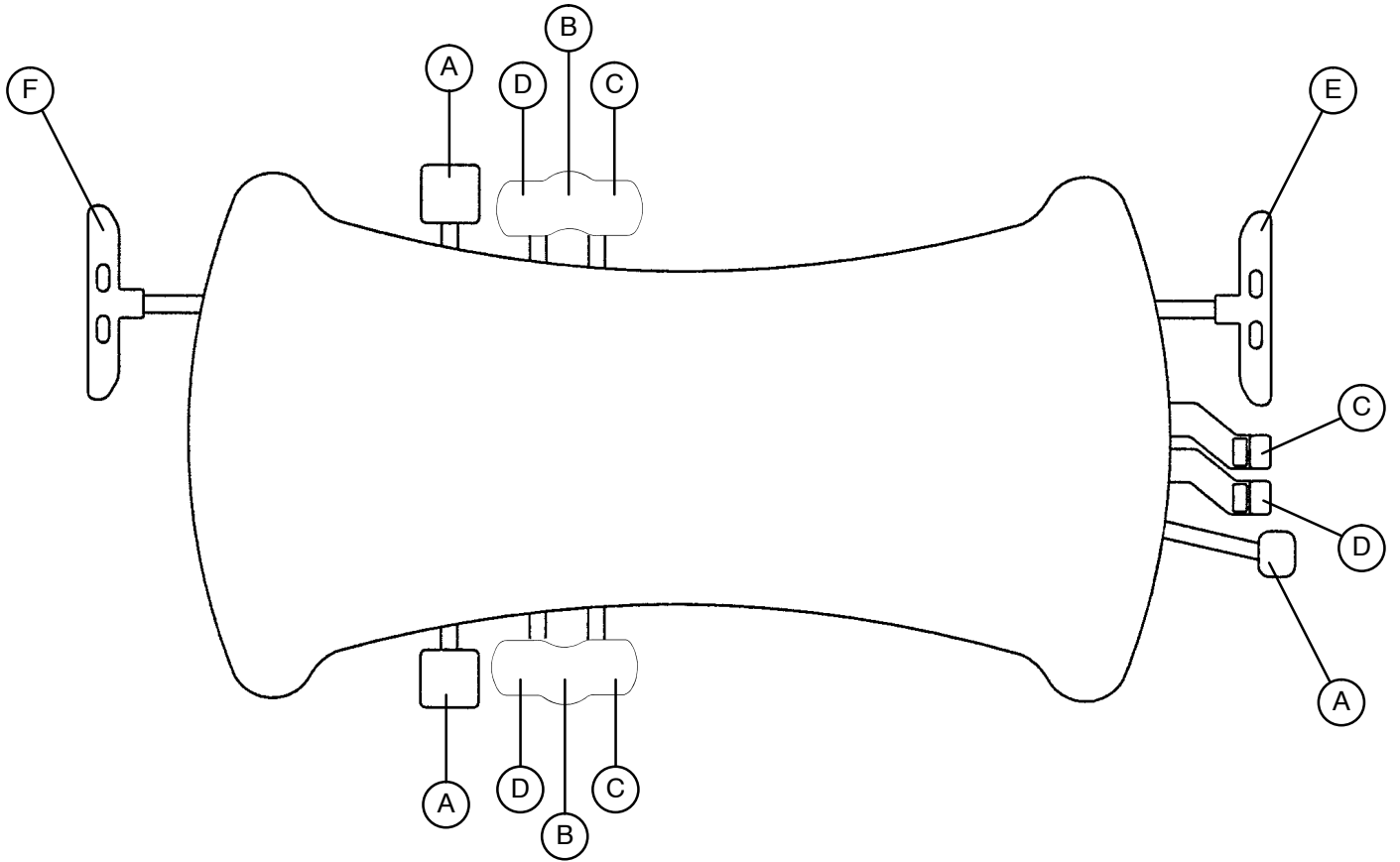
Safe Working Load Symbol



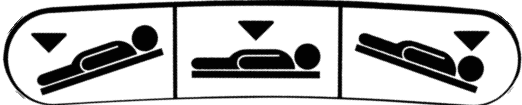
Medical Equipment Listed by Underwriters Laboratories Inc. with Respect to Electric Shock, Fire and Accidental Hazards Only in Accordance with UL 544.
UL60601-1
CAN/CSA C22.2
NO.601.1

Stretcher Operation

OPERATING BASE CONTROLS - UNI-LOWER PEDAL



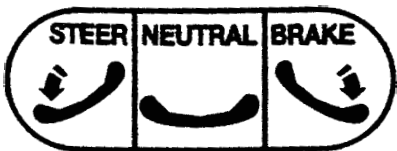
(A) Pump to raise litter.



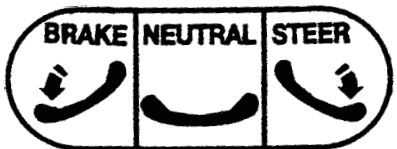
(B) Depress in the center of pedal (B) to lower both ends of the stretcher together.

(C) Depress the side of pedal (B) closest to the foot end of the stretcher to lower the foot end.

(D) Depress the side of pedal (B) closest to the head end of the stretcher to lower the head end.



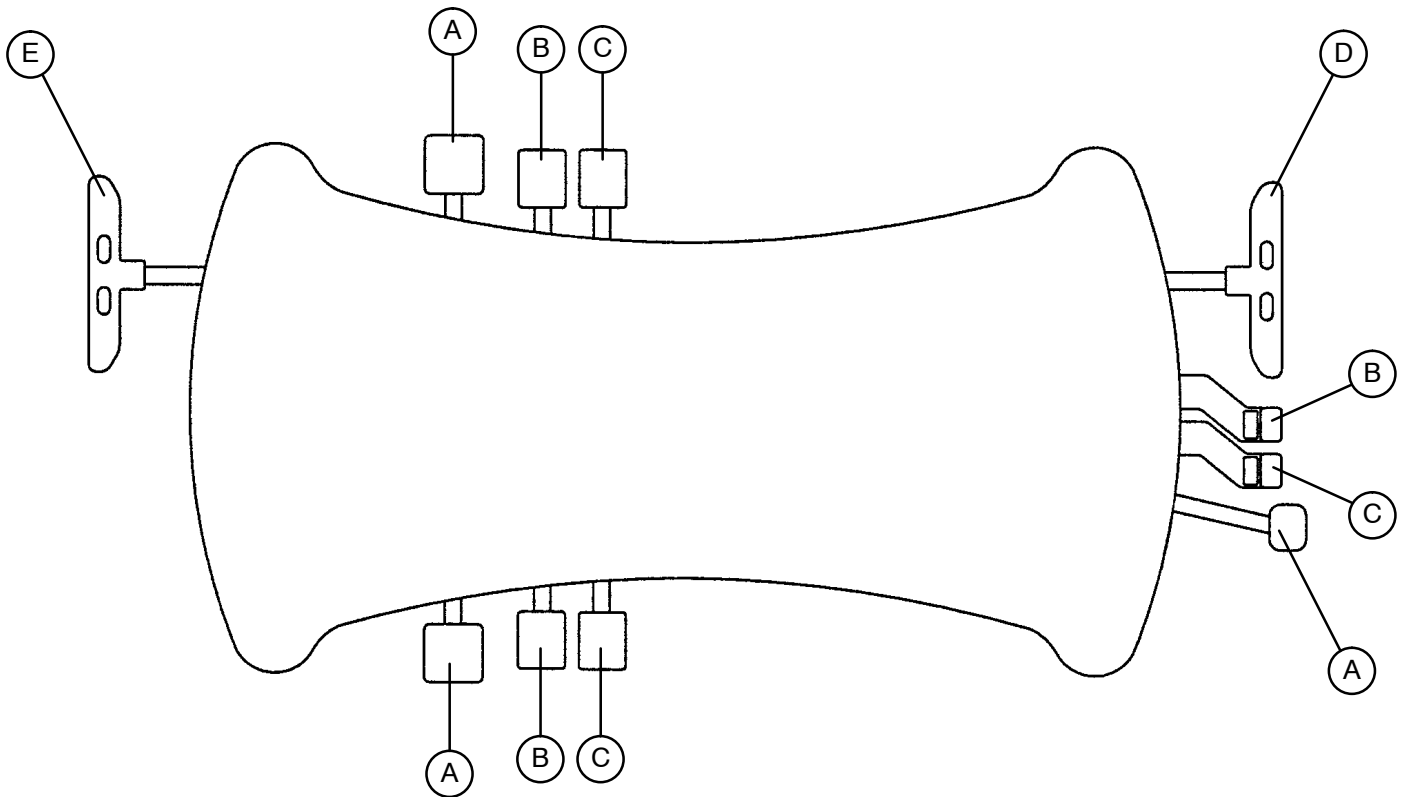
(E) Brake and Steer functions (foot end).



(F) Brake and Steer functions (head end).

Stretcher Operation

OPERATING BASE CONTROLS - DUAL LOWERING PEDALS



(A) Pump to raise litter.

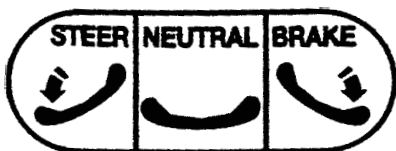


(B) Depress to lower head end.

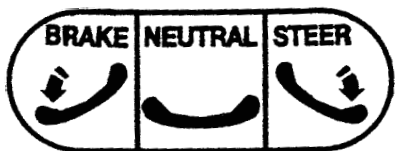


(C) Depress to lower foot end.

Note: Depress B & C together to lower both ends of the litter simultaneously.



(D) Brake and Steer functions (foot end).



(E) Brake and Steer functions (head end).

Stretcher Operation

RAISING AND LOWERING LITTER HEIGHT – UNI-LOWER PEDAL

CAUTION

Be sure to move any equipment that may be in the way before raising or lowering the litter height.

To **raise** the litter height, pump pedal (A) repeatedly until the desired height is achieved (see illustration on [page 4](#)).

To **lower** both ends of the litter together, depress the center of pedal (B). To lower only the head end of the litter, depress the side of pedal (B) closest to the head end. To lower only the foot end of the litter, depress the side of pedal (B) closest to the foot end (see illustration on [page 4](#)).

RAISING AND LOWERING LITTER HEIGHT – DUAL LOWERING PEDALS

CAUTION

Be sure to move any equipment that may be in the way before raising or lowering the litter height.

To **raise** the litter height, pump pedal (A) repeatedly until the desired height is achieved (see illustration on [page 5](#)).

To **lower** both ends of the litter together, depress pedal (B) and (C) together using the same foot. To lower only the head end of the litter, depress pedal (B). To lower only the foot end of the stretcher, depress pedal (C) (see illustration on [page 5](#)).

LITTER POWER LIFT OPTION

CAUTION

Be sure to move any equipment that may be in the way before raising or lowering the litter height.

To **raise** the litter height electrically, depress pedal (A) fully for 3–5 seconds (see illustration on [page 4](#) or [5](#)). The litter will begin to raise. Hold the pedal down until the desired litter height is achieved. Release the pedal at any time to stop the litter motion.

To **lower** both ends of the litter together on a stretcher equipped with a uni-lower pedal, depress the center of pedal (B). To lower only the head end of the litter, depress the side of pedal (B) closest to the head end. To lower only the foot end of the litter, depress the side of pedal (B) closest to the foot end (see illustration on [page 4](#)). The base may be equipped with optional variable descent controls. With variable descent controls, the farther you press down on the pedal, the faster the litter will lower.

To **lower** both ends of the litter together on a stretcher equipped with dual lowering pedals, depress pedal (B) and (C) together using the same foot. To lower only the head end of the litter, depress pedal (B). To lower only the foot end of the stretcher, depress pedal (C) (see illustration on [page 5](#)).

Stretcher Operation

TRENDELENBURG/REVERSE TRENDELENBURG – UNI-LOWER PEDAL

NOTE

Litter height must be raised first in order to achieve a trend. or reverse trend. position.

CAUTION

Be sure to remove any equipment that may be in the way before lowering stretcher.

For **Trendelenburg** positioning (head down), depress the side of pedal (B) closest to the head end of the stretcher (see illustration, [page 4](#)).

For **Reverse Trendelenburg** positioning (foot down), depress the side of pedal (B) closest to the foot end.

NOTE

The higher the litter is before pedal (B) is activated, the greater the trend. or reverse trend. angle will be. (Maximum trend. angle is $+18^{\circ}$. Maximum reverse trend. angle is -18°).

TRENDELENBURG/REVERSE TRENDELENBURG – DUAL LOWERING PEDALS

NOTE

Litter height must be raised first in order to achieve a trend. or reverse trend. position.

CAUTION

Be sure to remove any equipment that may be in the way before lowering stretcher.

For **Trendelenburg** positioning (head down), depress pedal (B) (see illustration, [page 5](#)).

For **Reverse Trendelenburg** positioning (foot down), depress pedal (C) (see illustration on [page 5](#)).

Stretcher Operation

APPLYING THE BRAKE SYSTEM

NOTE

For user convenience, the brake/steer pedal is located on both ends of the stretcher.

WARNING

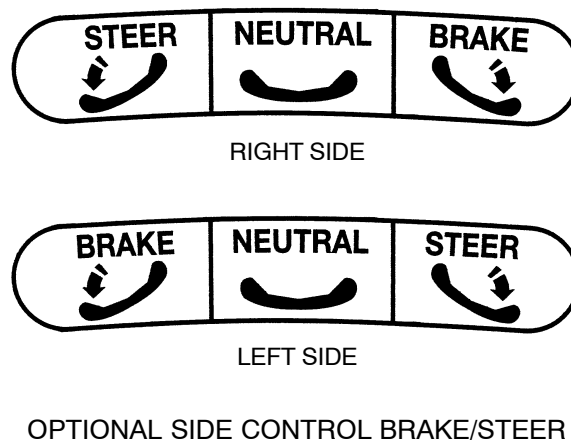
Always apply the caster brakes when a patient is getting on or off the stretcher. Push on the stretcher to ensure the brakes are securely locked. Always engage the brakes unless the stretcher is being moved. Injury could result if the stretcher moves while a patient is getting on or off the stretcher. If brakes do not hold properly, refer to your stretcher maintenance manual for a brake adjustment procedure.

To engage the brakes on the head end, push fully down on the left side of pedal (E) (see [page 5](#)).

To engage the brakes on the foot end, push fully down on the right side of pedal (D) (see [page 5](#)).

NOTE

Your stretcher may be equipped with optional side control brake and steer functions in addition to the standard head and foot end controls. The side control brakes operate the same as the head and foot end versions. They are indicated by a label on each side of the stretcher base.



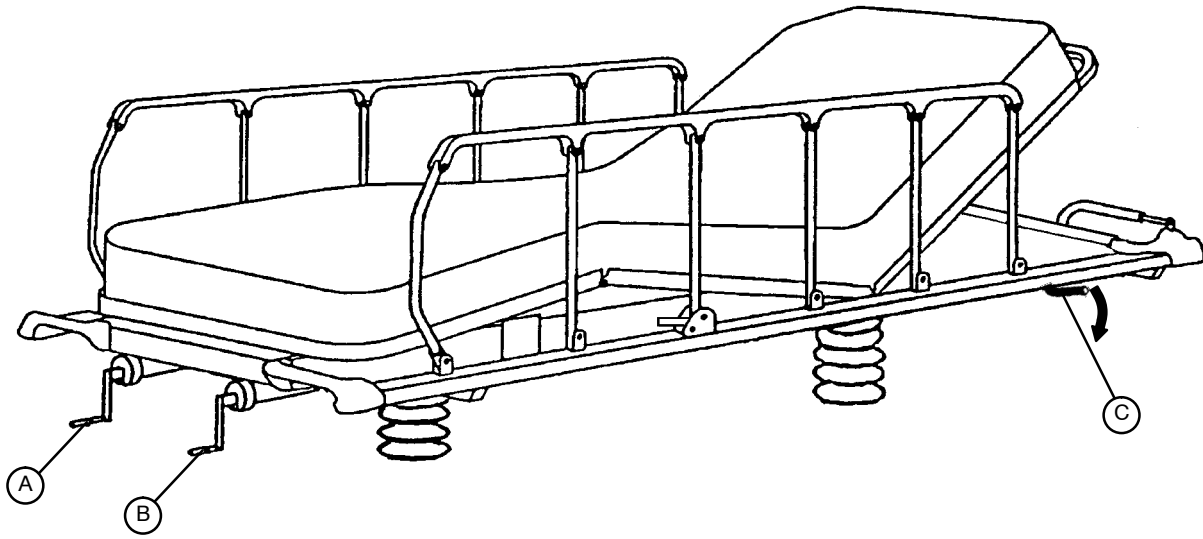
OPERATING THE FIFTH WHEEL

The purpose of the fifth wheel is to help guide the stretcher along a straight line during transport and to help pivot the stretcher around corners.

To engage the fifth wheel, push the proper side of the brake/steer pedal to the full down position.

Stretcher Operation

OPERATING FOWLER AND KNEE GATCH CRANKS



WARNING

To avoid accidental activation and injury while using the cranks, lock out the patient controls (using the switch at either end of the bed) or unplug the stretcher power cord from the wall receptacle.



(A) Push in crank and rotate until it engages. Turn crank clockwise to raise Fowler and counterclockwise to lower.

NOTE

With electric operation, the Fowler will raise only to 70 degrees. For angles up to 90 degrees, the crank can be used.



(B) Push in crank and rotate until it engages. Turn crank clockwise to raise Knee Gatch and counterclockwise to lower.

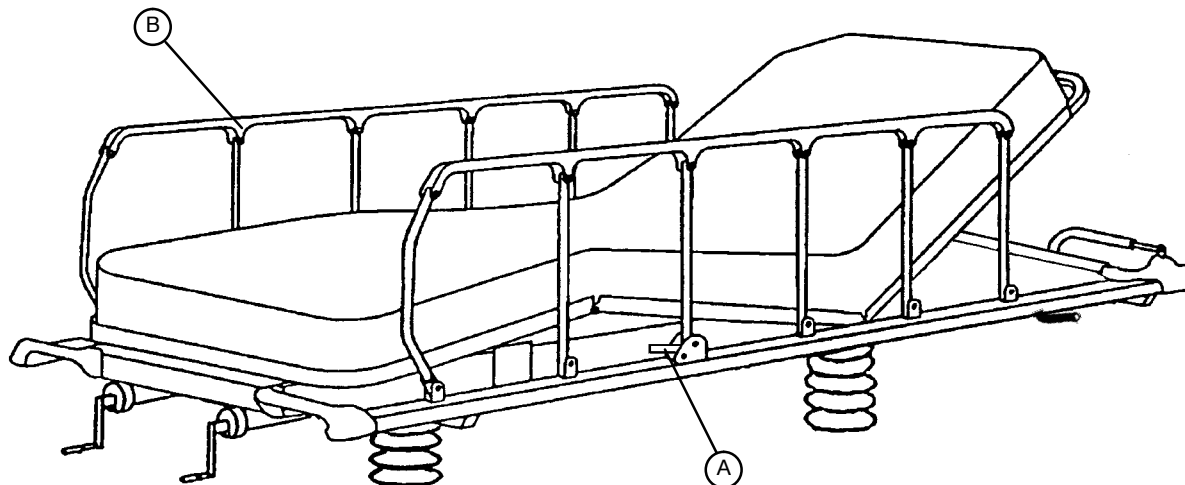
OPERATING EMERGENCY DROP FOWLER AND KNEE GATCH (OPTIONAL EQUIPMENT)



The optional Emergency Drop feature is available in two configurations: Fowler only or Fowler and Knee Gatch. To activate the Emergency Drop Fowler and/or Knee Gatch, rotate the red handle (C), located at the head end on both sides of the stretcher. *The Fowler and/or Knee Gatch must be reset after the Emergency Drop feature is used or they will not raise.* To reset, press and hold the patient control Fowler and Knee Gatch down buttons until the motor stops. For faster reset, manually lift Fowler and Knee Gatch until locked.

Stretcher Operation

OPERATING SIDERAILS



CAUTION

Be sure the siderail latching mechanism (A) is working properly at all times. If it is not, refer to your stretcher maintenance manual for "Siderail Latch Adjustment".

To engage siderails: Pull up siderail (B) and raise to full up position so that latch (A) engages.

To disengage siderails: Pull up on latch (A) and guide siderail to the full down position.

WARNING

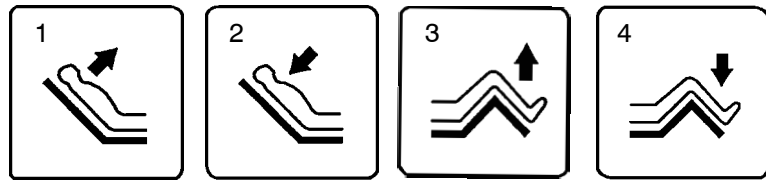
When raising or lowering the siderail, keep extremities of patients and staff away from the siderail spindles or injury could occur.

To avoid injury or damage to the equipment, do not allow the siderail to lower on its own.

Stretcher Operation

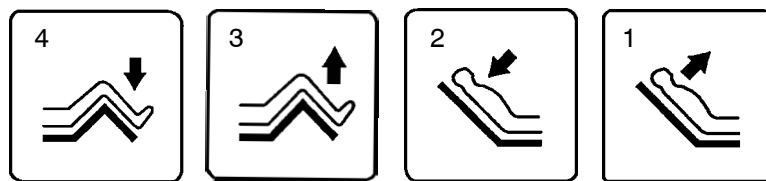
OPERATING SIDERAIL PATIENT CONTROLS

Each siderail has a set of controls to allow the patient to position the Fowler and Knee Gatch. The power cord must be plugged into the wall socket for the patient controls to operate.



FOWLER UP FOWLER DOWN GATCH UP GATCH DOWN

PATIENT'S LEFT SIDERAIL



GATCH DOWN GATCH UP FOWLER DOWN FOWLER UP

PATIENT'S RIGHT SIDERAIL

1. Press to raise Fowler (head section).
2. Press to lower Fowler (head section).
3. Press to raise Knee Gatch (foot section).
4. Press to lower Knee Gatch (foot section).



TOP RAIL CUES

NOTE

The figures on the siderail top rail are not function buttons. They are there to assist the nurse/attendant with operation of the patient controls.

USING PATIENT CONTROL LOCKOUT

To prevent the patient from using the siderail controls to move the Fowler and Knee Gatch, press the lockout switch located at either end of the stretcher. The yellow LED beside the switch (as identified by the label at right) will be on when the patient controls are active.

**PATIENT CONTROLS
ARE ON
WHEN LIT**

Stretcher Operation

USING PUSH HANDLES

CAUTION

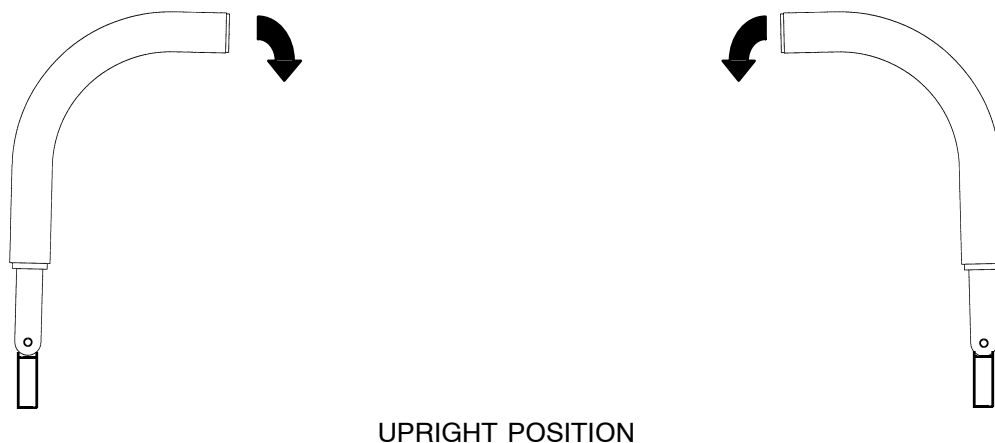
The push handles at the head end of the stretcher should always be used when transporting patients. They were installed for this purpose for user convenience. Using other parts of the stretcher as push devices could cause damage.

To use the push handles:

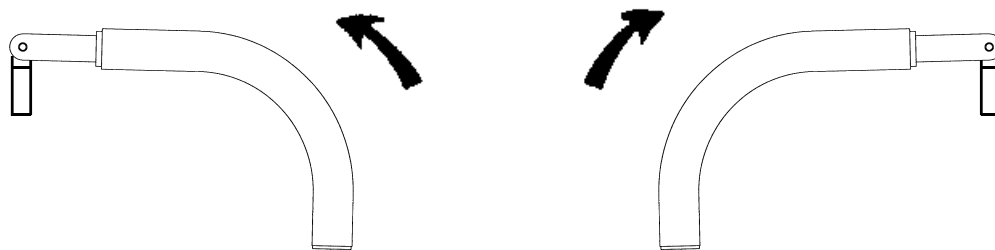
Pivot the handles up and push down until they are locked into position.

To store the push handles:

Lift the handles up and pivot them down to store in the handle rests.



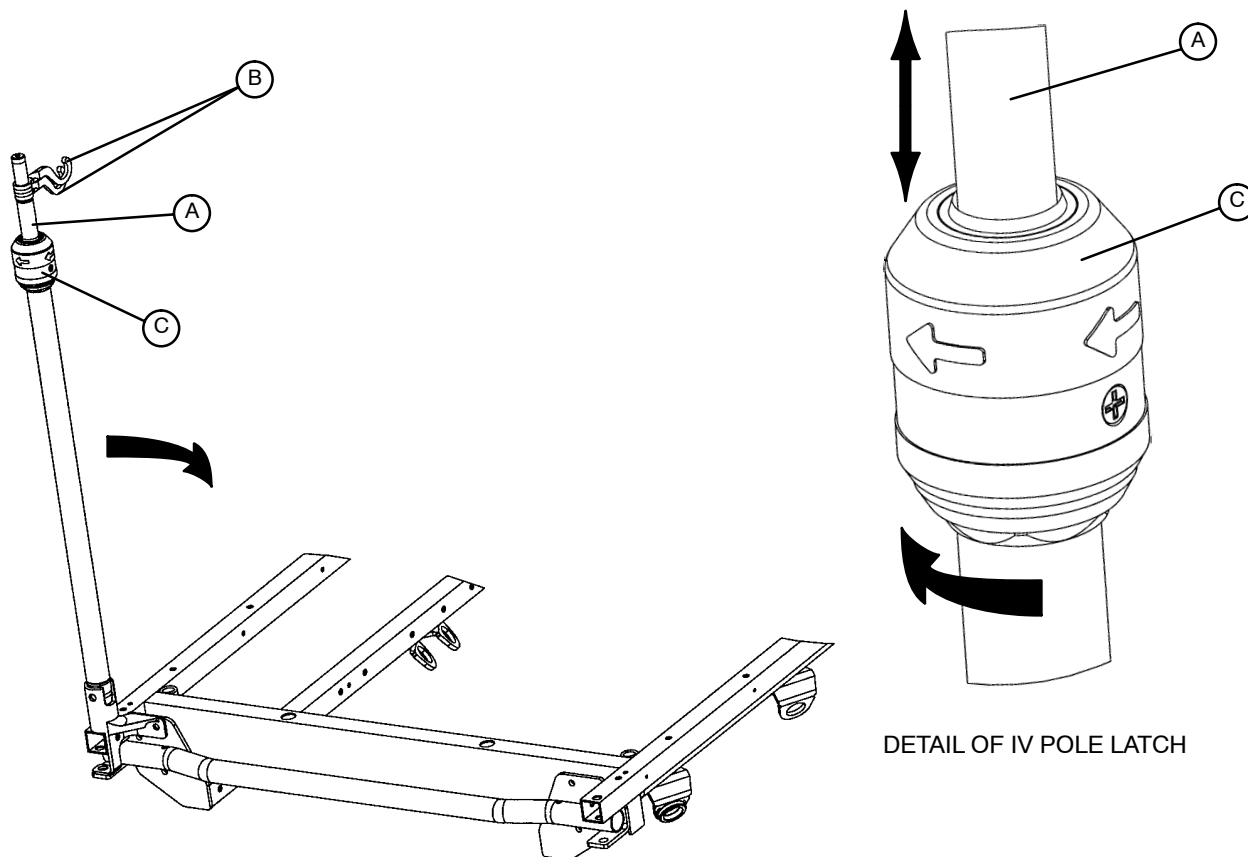
UPRIGHT POSITION



STORED POSITION

Stretcher Operation

OPERATING OPTIONAL 2-STAGE PERMANENTLY ATTACHED IV POLE



NOTE

The 2-stage permanently attached IV pole is an option and may have been installed at either the head, foot or both ends of the stretcher. The choice was made at the time the stretcher was purchased.

To use the 2-stage permanently attached IV pole:

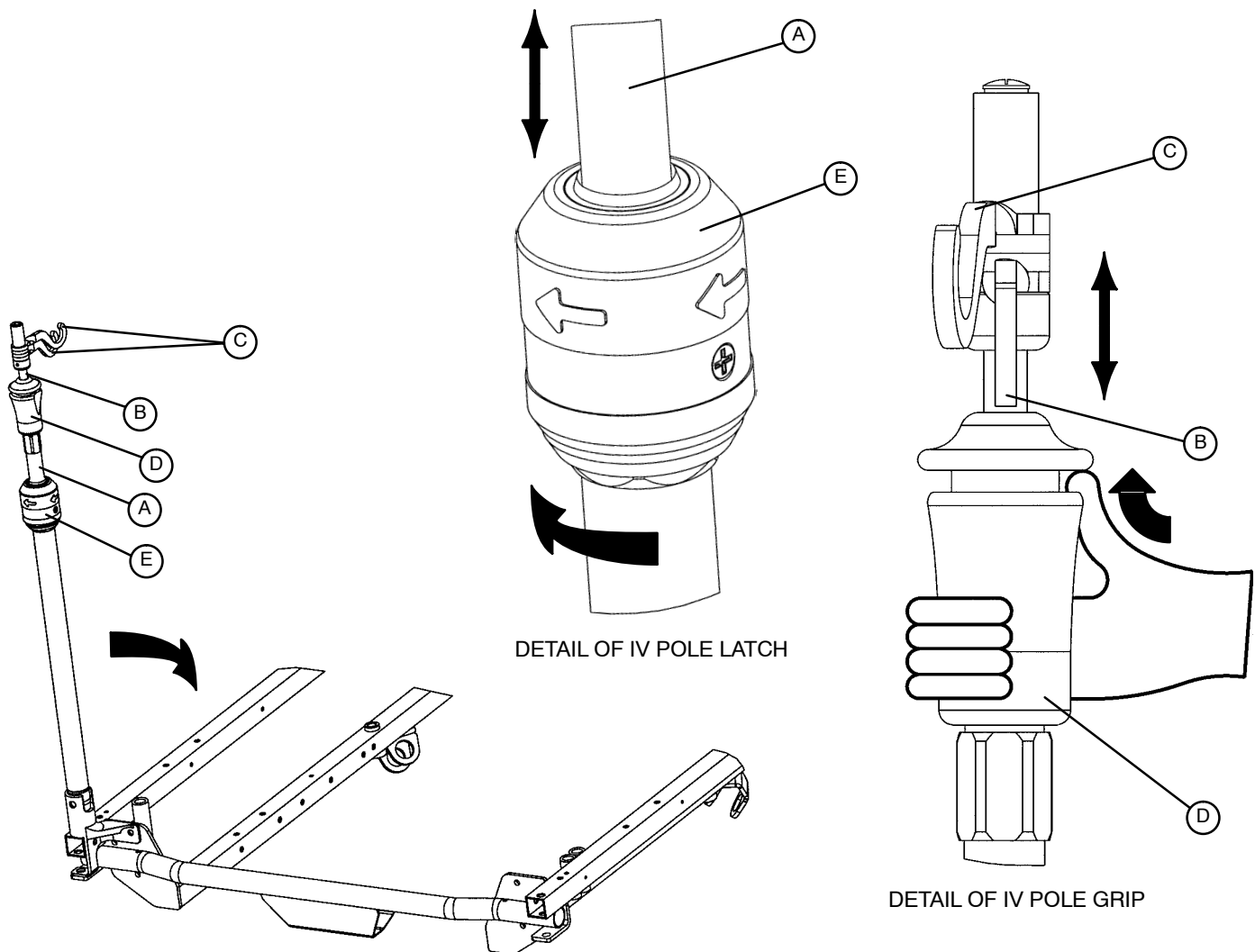
1. Lift and pivot the pole from the storage position and push down until it is locked into the receptacle.
2. To raise the height of the pole, pull up on the telescoping portion (A) until it locks into place at its fully raised position.
3. Rotate the IV hangers (B) to desired position and hang the IV bags.
4. To lower the IV pole, turn the latch (C) clockwise until section (A) lowers.

CAUTION

The weight of the IV bags should not exceed 40 pounds.

Stretcher Operation

OPERATING OPTIONAL 3-STAGE PERMANENTLY ATTACHED IV POLE



NOTE

The 3-stage permanently attached IV pole is an option and may have been installed at either the head, foot or both ends of the stretcher. The choice was made at the time the stretcher was purchased.

To use the 3-stage permanently attached IV pole:

1. Lift and pivot the pole from the storage position and push down until it is locked into the receptacle.
2. To raise the height of the pole, pull up on the telescoping portion (A) until it locks into place at its fully raised position.
3. For a higher IV pole, pull up on section (B). Release section (B) at any desired height and it will lock into place.
4. Rotate the IV hangers (C) to the desired position and hang the IV bags.
5. To lower the IV pole, push up on the red portion of grip (D) while holding onto section (B) until it lowers. Turn latch (E) clockwise until section (A) lowers.

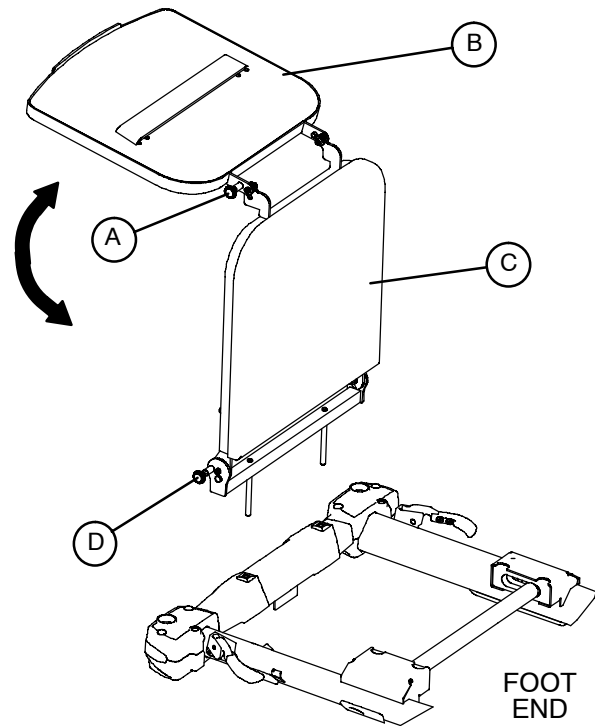
CAUTION

The weight of the IV bags should not exceed 40 pounds.

Stretcher Operation

OPERATING THE OPTIONAL FOOT EXTENSION/DEFIBRILLATOR TRAY

1. To use as a defibrillator tray, pull out the top knob (A) and pivot the tray (B) over the foot extension (C) until the tray extends flat over the foot end of the stretcher.
2. To use as a foot extension, pull out knob (A) and pivot the defibrillator tray back until it locks against the foot extension (C). While holding onto the assembly, pull out the bottom knob (D) and lower the foot extension down until it is flat.



CAUTION

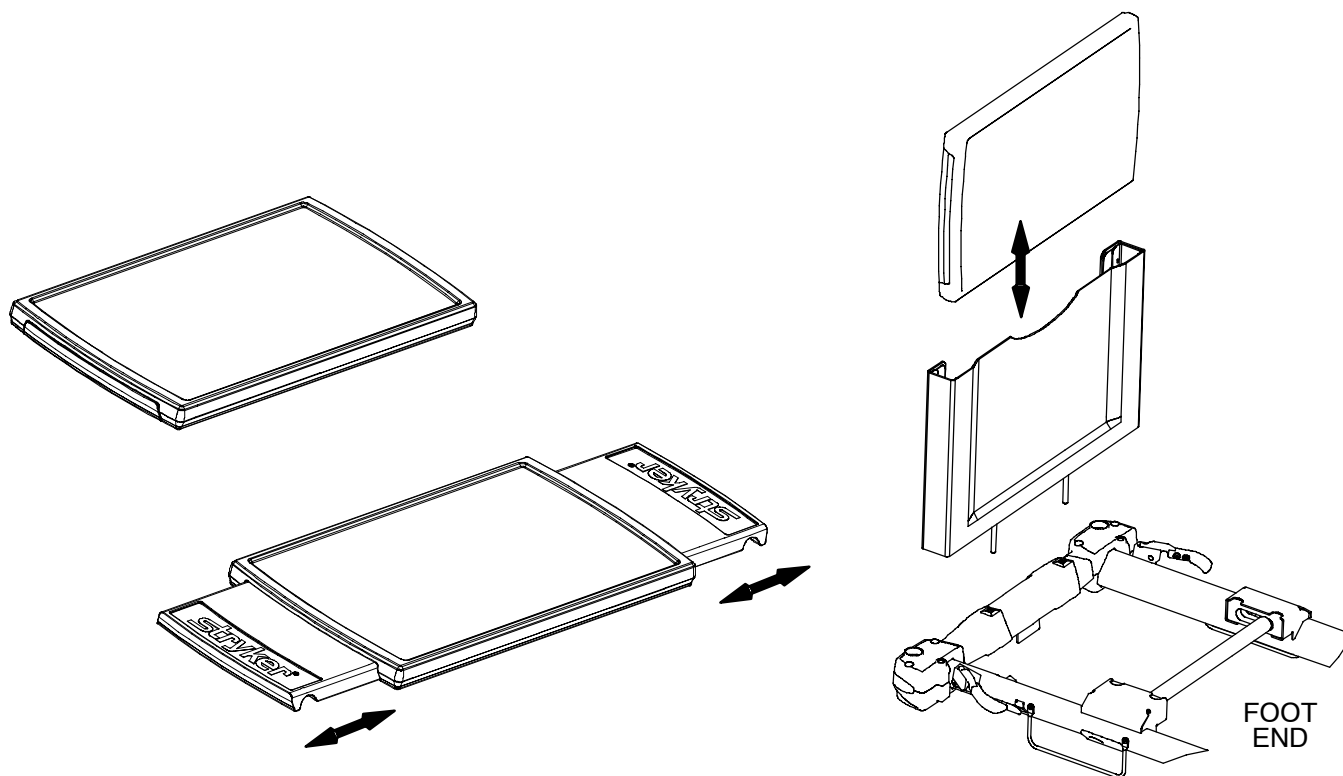
If the stretcher is equipped with the optional foot end IV pole, the IV pole must be in the raised position when the foot extension/defibrillator tray is installed. If the IV pole is not raised, the foot extension will not function properly and injury could occur.

If the stretcher is equipped with the optional foot end push handles, use caution while the foot extension/defibrillator tray is installed to avoid pinching your fingers.

To avoid damage do not put items weighing more than 30 pounds on the foot extension/defibrillator tray.

Stretcher Operation

USING THE OPTIONAL SERVING TRAY



Pull out on either end of the serving tray to extend it to the proper width to fit on top of the stretcher siderails.

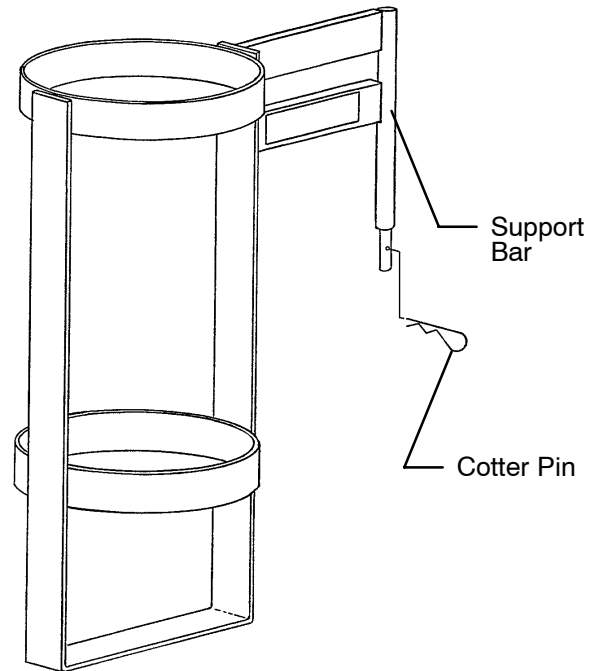
To store the serving tray in the optional serving tray holder/foot board, push in both ends of the serving tray and slide it into the holder.

CAUTION

To avoid damage, do not put items weighing more than 30 pounds on the serving tray.

Stretcher Operation

USING THE OPTIONAL UPRIGHT OXYGEN BOTTLE HOLDER



Insert the support bar into the IV socket at any of the four litter corners. Insert the cotter pin through the hole in the support bar to hold the bottle holder in place.

CAUTION

To avoid damage, do not put items weighing more than 40 pounds in the upright oxygen bottle holder.

Stretcher Operation

USING THE OPTIONAL DEFIBRILLATOR TRAY



Insert the the pins on the defibrillator tray into the footboard sockets at the foot end of the stretcher. Secure the equipment to the tray using the strap.

CAUTION

To avoid damage, do not put items weighing more than 30 pounds on the defibrillator tray.

Cleaning

Hand wash all surfaces of the stretcher with warm water and mild detergent. DRY THOROUGHLY. Do not steam clean, pressure wash, hose off or ultrasonically clean. Using these methods of cleaning is **not** recommended and may void this product's warranty.

Suggested cleaners for stretcher surfaces:

Quaternary Cleaners (active ingredient – ammonium chloride)

Phenolic Cleaners (active ingredient – o-phenylphenol)

Chlorinated Bleach Solution (5.25% – less than 1 part bleach to 100 parts water)

Avoid oversaturation and ensure the product does not stay wet longer than the chemical manufacturer's guidelines for proper disinfecting.

 **CAUTION**

SOME CLEANING PRODUCTS ARE CORROSIVE IN NATURE AND MAY CAUSE DAMAGE TO THE PRODUCT IF USED IMPROPERLY. If the products described above are used to clean Stryker patient care equipment, measures must be taken to insure the beds are wiped with clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the beds will leave a corrosive residue on the surface of the bed, possibly causing premature corrosion of critical components. Failure to follow the above directions when using these types of cleaners may void this product's warranty.

For mattress cleaning instructions, please see the tag on the mattress, or contact the mattress manufacturer.

Clean Velcro® AFTER EACH USE. Saturate Velcro® with disinfectant and allow disinfectant to evaporate. (Appropriate disinfectant for nylon Velcro® should be determined by the hospital.)

Preventative Maintenance

CHECKLIST

- _____ All fasteners secure
- _____ Siderails move and latch properly
- _____ Engage brake pedal and push on the stretcher to ensure all casters lock securely
- _____ Steer function working properly
- _____ All casters lock with brake pedal engaged
- _____ All casters secure and swiveling properly
- _____ Fowler operates
- _____ Knee Gatch operating properly
- _____ Trendelenburg/Reverse Trendelenburg operating properly
- _____ Ground chain intact
- _____ No leaks at hydraulic connections
- _____ Hydraulic jacks holding properly
- _____ Hydraulic drop rate set properly
- _____ Hydraulic oil level sufficient
- _____ Lubricate where required, including the brake adjuster assembly and brake cam
- _____ Body restraints working properly
- _____ IV pole intact and operating properly
- _____ Oxygen bottle holder intact and operating properly
- _____ No rips or cracks in mattress cover
- _____ No cables worn, pinched or frayed
- _____ All electrical connections tight
- _____ All grounds secure to the frame
- _____ Ground impedance not more than 100 milliohms max: Test point(s) include electronics enclosure (litter) and motor chassis (gatch and fowler) and lift motor enclosure.
- _____ Current leakage not more than 300 microamperes (per UL 60601-1)
- _____ Batteries sufficiently charged (optional scale system)
- _____ Display housing intact and not damaged (optional scale system)
- _____ Display label intact and not damaged (optional scale system)
- _____ Load cells intact and not damaged (optional scale system)
- _____ Scale calibrated properly. Recalibrate, if necessary (optional scale system)

Serial No.: _____

Completed By: _____ Date: _____

NOTE

Preventative maintenance should be performed at a minimum of annually. A preventative maintenance program should be established for all Stryker Medical equipment. Preventative maintenance may need to be performed more frequently based on the usage level of the product.

Warranty

Limited Warranty:

Stryker Medical Division, a division of Stryker Corporation, warrants to the original purchaser that its products should be free from defects in material and workmanship for a period of one (1) year after date of delivery. Stryker's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product which is, in the sole discretion of Stryker, found to be defective. If requested by Stryker, products or parts for which a warranty claim is made shall be returned prepaid to Stryker's factory. Any improper use or any alteration or repair by others in such manner as in Stryker's judgement affects the product materially and adversely shall void this warranty. Any repair of Stryker products using parts not provided or authorized by Stryker shall void this warranty. No employee or representative of Stryker is authorized to change this warranty in any way.

Stryker Medical stretcher products are designed for a 10 year expected service life under normal use, conditions, and with appropriate periodic maintenance as described in the maintenance manual for each device. Stryker warrants to the original purchaser that the welds on its stretcher products will be free from structural defects for the expected 10 year life of the stretcher product as long as the original purchaser owns the product.

This statement constitutes Stryker's entire warranty with respect to the aforesaid equipment. STRYKER MAKES NO OTHER WARRANTY OR REPRESENTATION, EITHER EXPRESSED OR IMPLIED, EXCEPT AS SET FORTH HEREIN. THERE IS NO WARRANTY OF MERCHANTABILITY AND THERE ARE NO WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL STRYKER BE LIABLE HEREUNDER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR IN ANY MANNER RELATED TO SALES OR USE OF ANY SUCH EQUIPMENT.

To Obtain Parts and Service:

Stryker products are supported by a nationwide network of dedicated Stryker Field Service Representatives. These representatives are factory trained, available locally, and carry a substantial spare parts inventory to minimize repair time. Simply call your local representative, or call Stryker Customer Service at (800) 327-0770.

Service Contract Coverage:

Stryker has developed a comprehensive program of service contract options designed to keep your equipment operating at peak performance at the same time it eliminates unexpected costs. We recommend that these programs be activated *before* the expiration of the new product warranty to eliminate the potential of additional equipment upgrade charges.

A SERVICE CONTRACT HELPS TO:

- Ensure equipment reliability
- Stabilize maintenance budgets
- Diminish downtime
- Establish documentation for JCAHO
- Increase product life
- Enhance trade-in value
- Address risk management and safety

Warranty

Stryker offers the following service contract programs:

SPECIFICATIONS	GOLD	SILVER	PM* ONLY
Annually scheduled preventative maintenance	X		X
All parts,** labor, and travel	X	X	
Unlimited emergency service calls	X	X	
Priority one contact; two hour phone response	X	X	X
Most repairs will be completed within 3 business days	X	X	
JCAHO documentation	X	X	X
On-site log book w/ preventative maintenance & emergency service records	X		
Factory-trained Stryker Service Technicians	X	X	X
Stryker authorized parts	X	X	X
End of year summary	X		
Stryker will perform all service during regular business hours (9-5)	X	X	X

* Replacement parts and labor for products under PM contract will be discounted.

** Does not include any disposable items, I.V. poles (except for Stryker HD permanent poles), mattresses, or damage resulting from abuse.

Stryker Medical also offers *personalized* service contracts.

Pricing is determined by age, location, model and condition of product.

***For more information on our service contracts,
please call your local representative or call (800) 327-0770 (option #2).***

Return Authorization:

Merchandise cannot be returned without approval from the Stryker Customer Service Department. An authorization number will be provided which must be printed on the returned merchandise. Stryker reserves the right to charge shipping and restocking fees on returned items.

SPECIAL, MODIFIED, OR DISCONTINUED ITEMS NOT SUBJECT TO RETURN.

Damaged Merchandise:

ICC Regulations require that claims for damaged merchandise must be made with the carrier within fifteen (15) days of receipt of merchandise. **DO NOT ACCEPT DAMAGED SHIPMENTS UNLESS SUCH DAMAGE IS NOTED ON THE DELIVERY RECEIPT AT THE TIME OF RECEIPT.** Upon prompt notification, Stryker will file a freight claim with the appropriate carrier for damages incurred. Claim will be limited in amount to the actual replacement cost. In the event that this information is not received by Stryker within the fifteen (15) day period following the delivery of the merchandise, or the damage was not noted on the delivery receipt at the time of receipt, the customer will be responsible for payment of the original invoice in full.

Claims for any short shipment must be made within thirty (30) days of invoice.

International Warranty Clause:

This warranty reflects U.S. domestic policy. Warranty outside the U.S. may vary by country. Please contact your local Stryker Medical representative for additional information.

European Representative

Stryker EMEA RA/QA Director
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