

stryker®

Operations Manual

Medical

Transport Stretcher
Model ST104

**Important
Information**

File in your
maintenance
records

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



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Introduction

INTRODUCTION

This manual is designed to assist you with the operation of the Model 737 Transport Stretcher. Read it thoroughly before using the equipment or beginning any maintenance on it.

SPECIFICATIONS

Maximum Weight Capacity	500 pounds	
Overall Stretcher Length \ Width	83" / 30"	
Minimum \ Maximum Bed Height	21.5" / 36"	
Fowler Angle	0° to 90°	
Trendelenburg \ Reverse Trendelenburg	+18° to -18°	
Minimum Under Stretcher Clearance	6" (15 cm) nominal 1.75" (4.5 cm) under the hydraulic cylinders and 5th wheel	

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.



Safe Working Load

Summary of Safety Precautions

Before operating this stretcher, it is important to read and understand all information in this manual. Carefully read and strictly follow the warnings and cautions listed on this page.

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.

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

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

Keep fingers/hands clear of area around the Fowler release handle and the Fowler frame when lowering. Injury could result if care is not taken when lowering the Fowler.

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.

CAUTION

To avoid damage, remove any equipment that may be in the way before raising or lowering the litter height.

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

The push handles were designed for use while transporting the stretcher. Avoid using other parts of the stretcher as push/pull devices because damage could occur.

If the Pneumatic Fowler is difficult to operate, refer to the stretcher maintenance manual for "Pneumatic Fowler Adjustment"

To avoid damage, the weight of the I.V. bags should not exceed 40 pounds.

To avoid damage while transporting the stretcher, verify the I.V. pole is at a low enough height to allow it to safely pass through door openings and under light fixtures.

The unit cannot be raised (hydraulics on base) with a patient lift under the stretcher.

The hood may not be used for stepping.

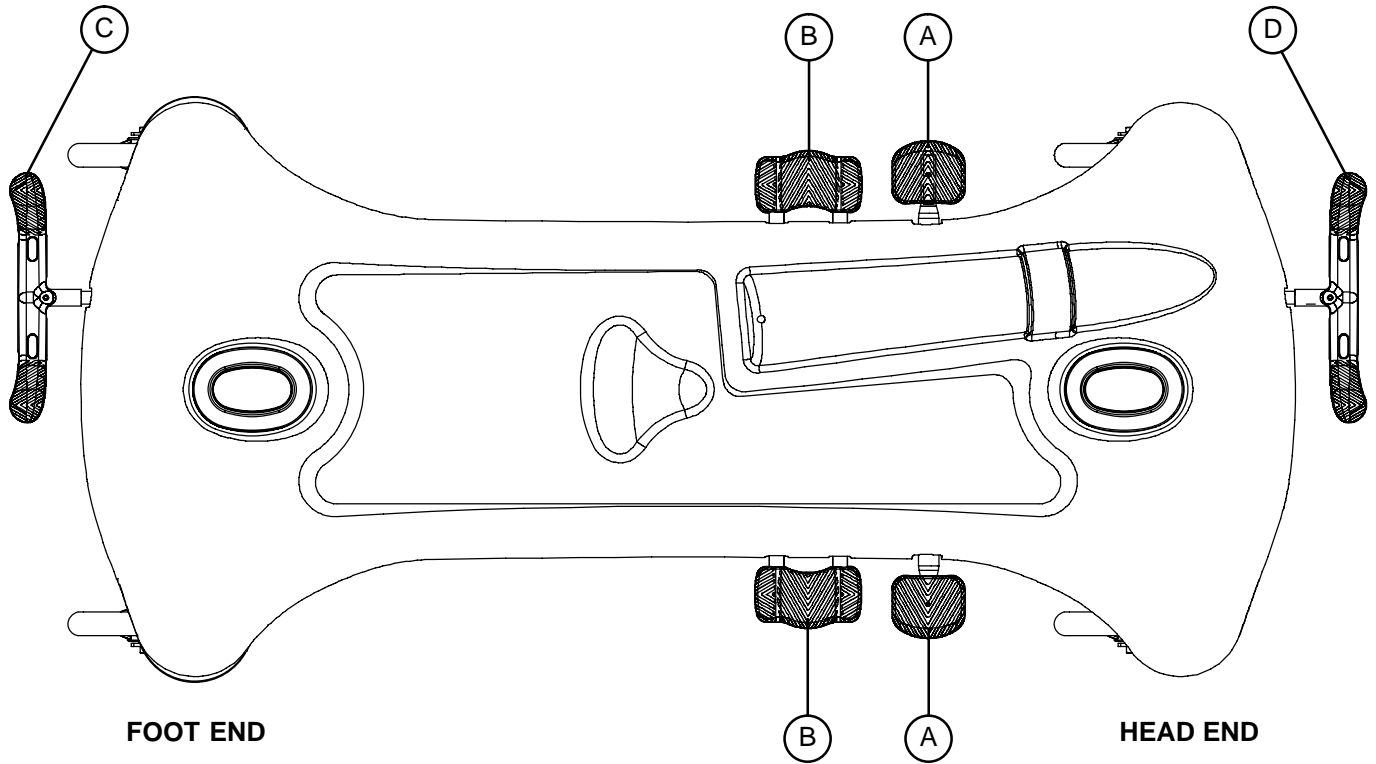
Note

Clean hood storage area regularly.

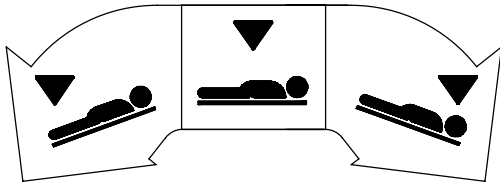
The bottom of the brake rings should be cleaned regularly to prevent wax and/or floor remnant buildup.

Stretcher Operation

OPERATING BASE CONTROLS – SIDE CONTROL



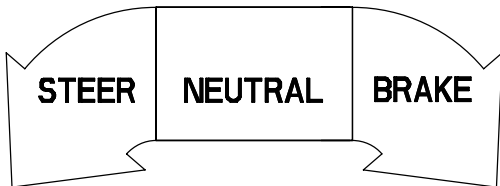
Pump pedal (A) to raise the litter.



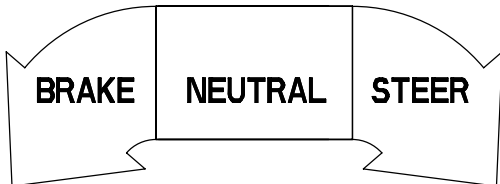
Depress in the center of pedal (B) to lower both ends of the stretcher together.

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

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



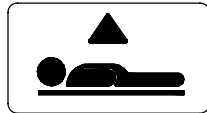
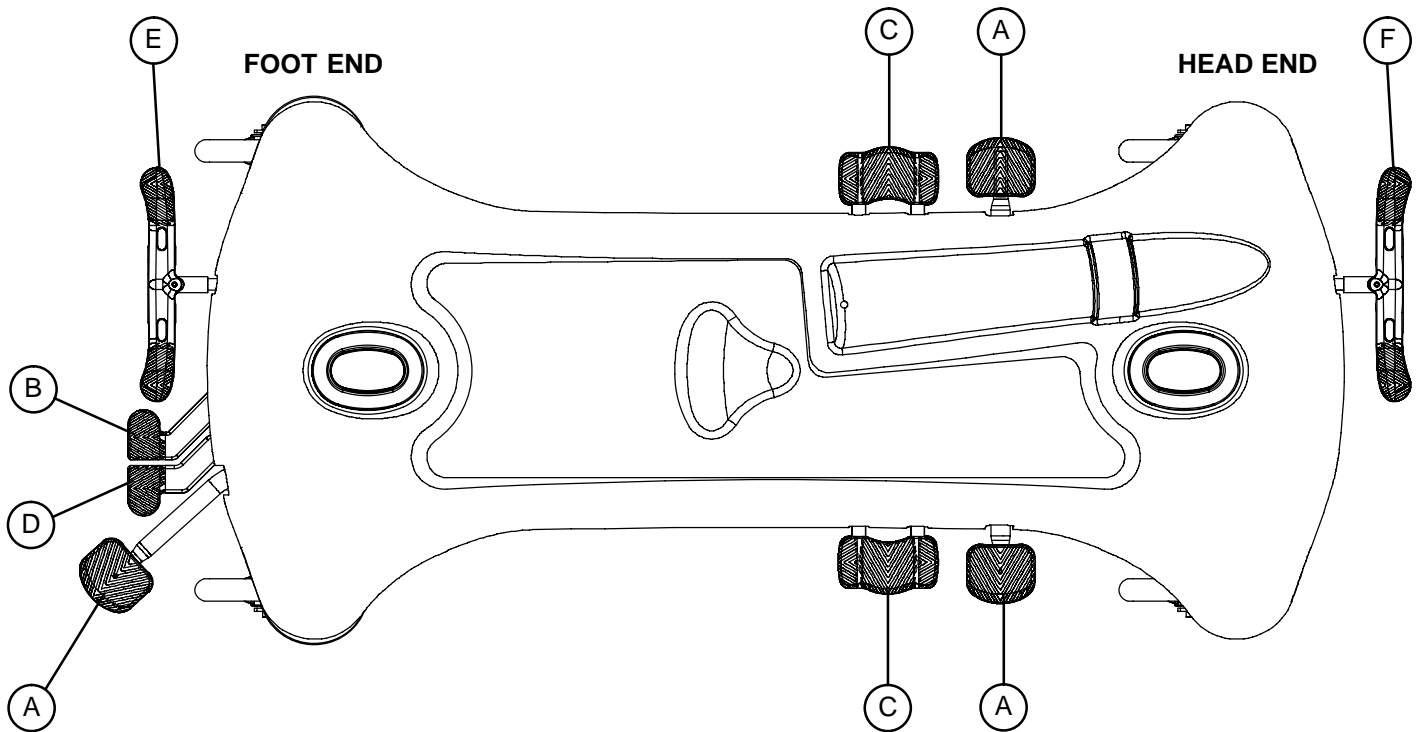
Pedal (C) – Brake and Steer functions (foot end)



Pedal (D) – Brake and Steer functions (head end)

Stretcher Operation

OPERATING BASE CONTROLS – 3-SIDED CONTROLS

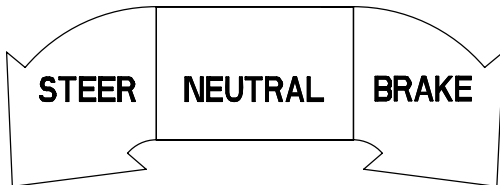
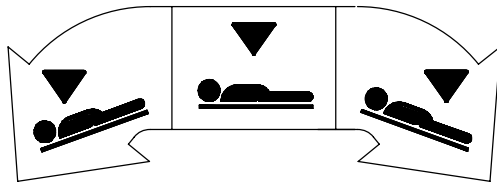


Pump pedal (A) at the foot end or sides of the stretcher to raise the litter

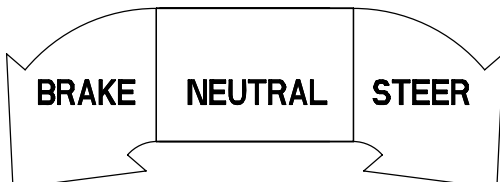
Depress pedal (B) or the side of pedal (C) closest to the head end of the stretcher to lower the head end of the stretcher.

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

Depress in the center of pedal (C) or depress pedals (B) and (D) together to lower both ends of the stretcher together.



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



Pedal (F) – Brake and Steer functions (head end)

Stretcher Operation

RAISING AND LOWERING LITTER HEIGHT – SIDE CONTROL

CAUTION

To avoid damage, remove 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 – 3-SIDED CONTROLS

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 simultaneously, depress pedal (B) and (D) together using the same foot or depress in the center of pedal (C). To lower only the head end of the litter, depress pedal (B) or the side of pedal (C) closest to the head end of the stretcher. To lower only the foot end of the stretcher, depress pedal (D) or the side of pedal (C) closest to the foot end of the stretcher.

TRENDELENBURG/REVERSE TRENDELENBURG – SIDE CONTROL

NOTE

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

CAUTION

To avoid damage, remove any equipment that may be in the way before lowering the 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°. Maximum reverse trend. angle is -18°).

TRENDELENBURG/REVERSE TRENDELENBURG – 3-SIDED CONTROLS

CAUTION

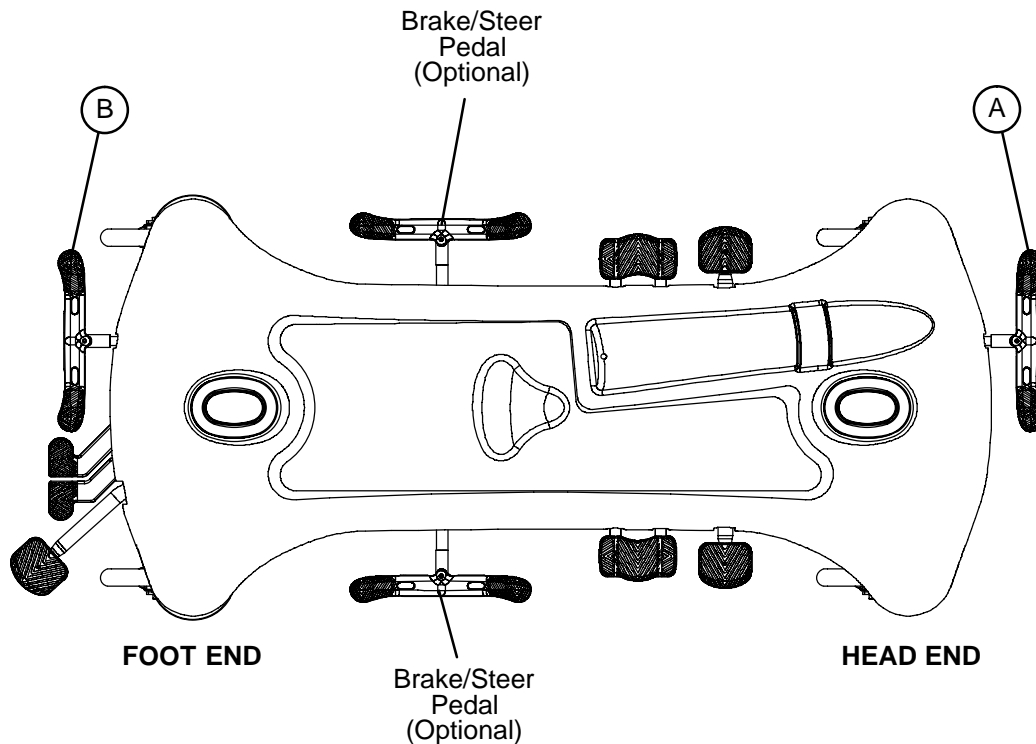
To avoid damage, remove any equipment that may be in the way before lowering the stretcher.

For **Trendelenburg** positioning (head down), depress pedal (B) or the side of pedal (C) closest to the head end of the stretcher (see illustration, [page 5](#)).

For **Reverse Trendelenburg** positioning (foot down), depress pedal (D) or the side of pedal (C) closest to the foot end of the stretcher.

Stretcher Operation

APPLYING THE BRAKE SYSTEM



NOTE

For user convenience, a brake/steer control 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.

To engage the brakes on the head end, push fully down on the left side of pedal (A).

To engage the brakes on the foot end, push fully down on the right side of pedal (B).

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.

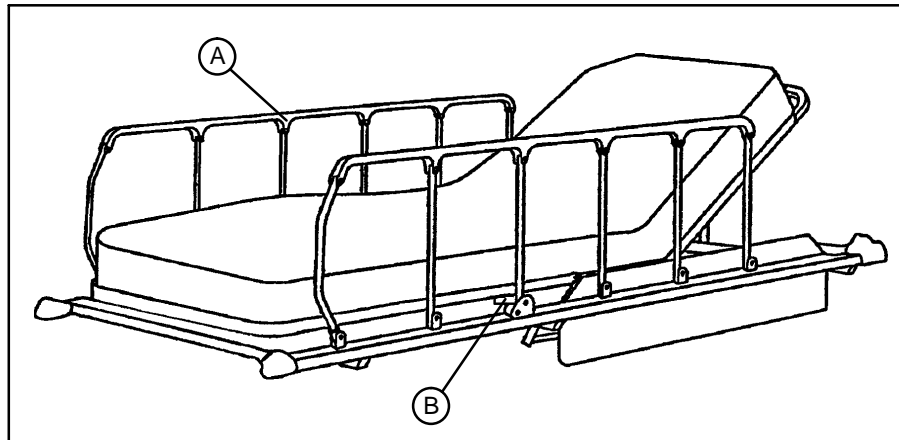
OPERATING THE FIFTH WHEEL

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

USING THE SIDERAILS



WARNING

Be sure the siderail latching mechanism (B) 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 (A) and raise to full up position so that latch (B) engages.

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

WARNING

When lowering the siderail to the collapsed position, 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.

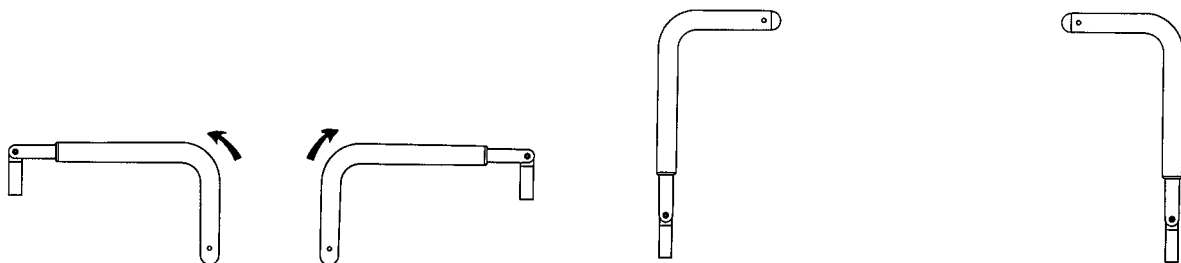
USING THE PUSH HANDLES

CAUTION

The push handles were designed for use while transporting the stretcher. Avoid using other parts of the stretcher as push/pull devices because damage could occur.

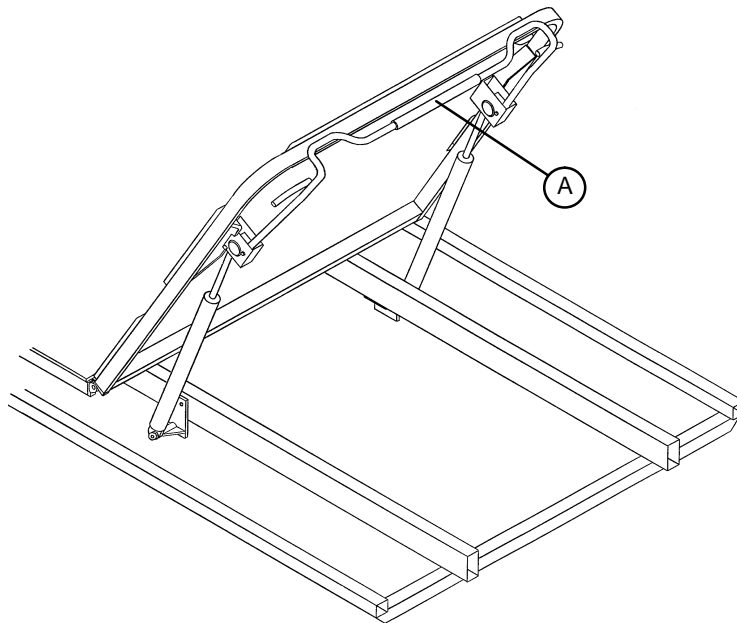
To use the push handles: Pivot the handles up and push down until they are locked into position.

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



Stretcher Operation

OPERATING THE FOWLER



Squeeze handle (A) for pneumatic assistance in lifting the Fowler to the desired height. Remove hand(s) from handle when the desired height is achieved.

To lower the Fowler, squeeze handle (A) and push down until the Fowler has reached the desired height. Remove your hand(s) from the handle when the desired height is achieved.

WARNING

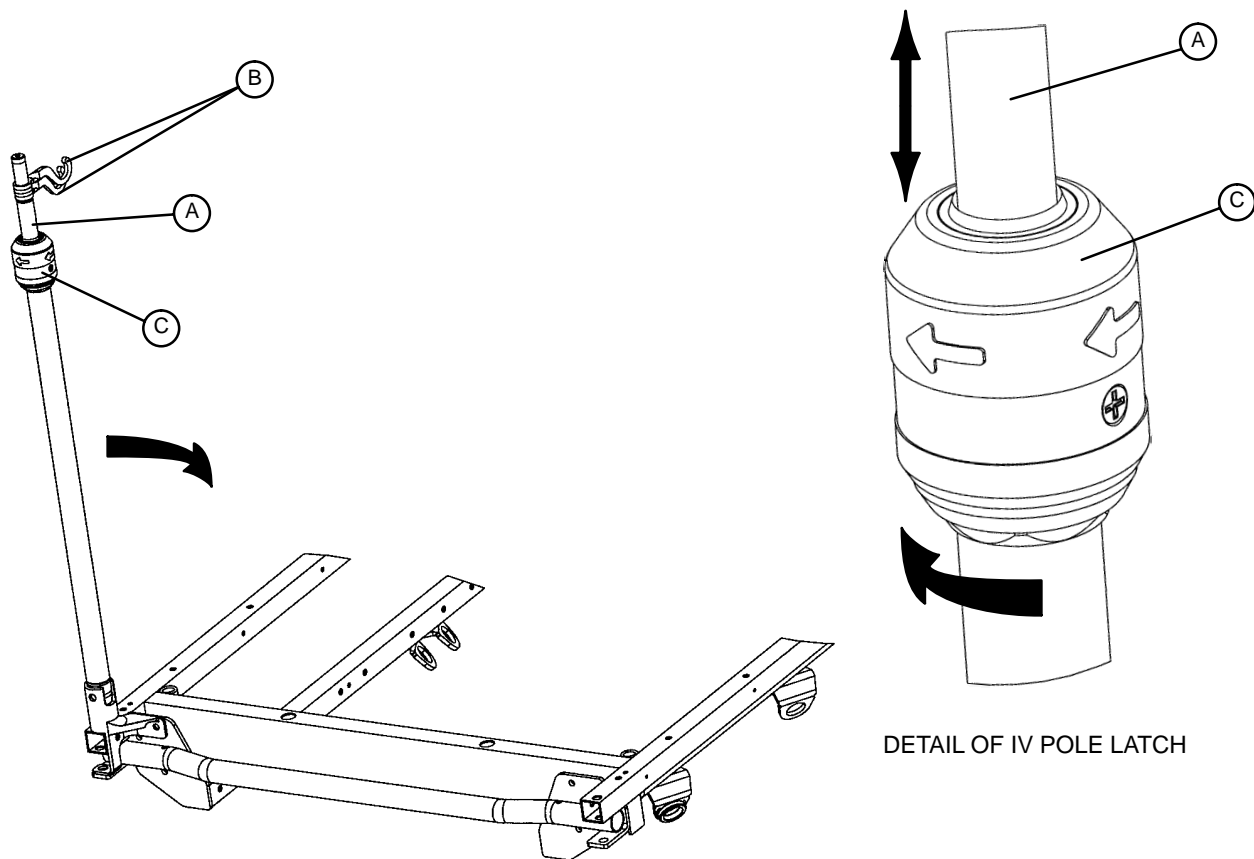
Keep hands/fingers clear of the area around the Fowler release handle and the Fowler frame when lowering the Fowler. Injury could result if care is not taken when lowering the Fowler.

CAUTION

If the pneumatic Fowler is difficult to operate, refer to the stretcher maintenance manual for a pneumatic Fowler adjustment procedure.

Stretcher Operation

OPERATING THE 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.

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.

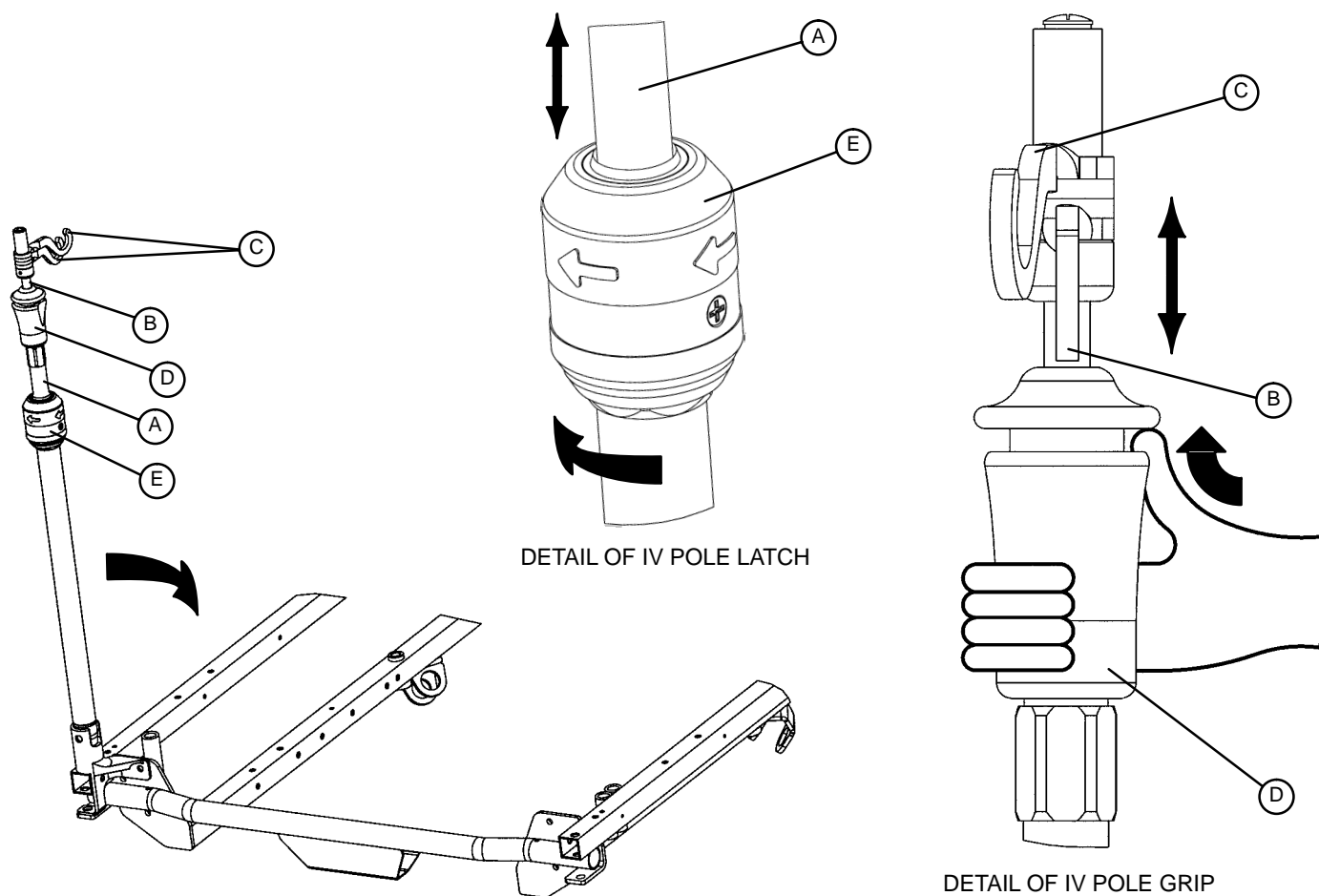
CAUTION

To avoid damage, the weight of the IV bags should not exceed 40 pounds.

To avoid damage while transporting the stretcher, verify the IV pole is at a low enough height to allow it to safely pass through door openings and under light fixtures.

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.

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

To avoid damage, the weight of the IV bags should not exceed 40 pounds.

To avoid damage while transporting the stretcher, verify the IV pole is at a low enough height to allow it to safely pass through door openings and under light fixtures.

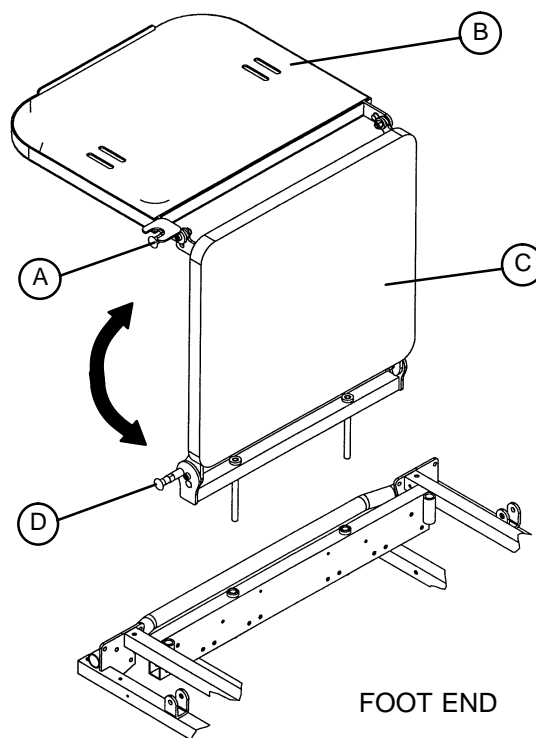
Stretcher Operation

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.

WARNING

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.



Preventative Maintenance

CHECKLIST

- _____ All fasteners secure
- _____ Siderails move and latch properly
- _____ Engage the brake pedal and push on the stretcher to ensure all casters lock securely
- _____ All casters secure and swiveling properly
- _____ Body restraints working properly
- _____ I.V. pole intact and operating properly
- _____ Oxygen bottle holder intact and operating properly
- _____ Fowler operates and latches properly
- _____ Trendelenburg/Reverse Trendelenburg operating properly
- _____ No rips or cracks in mattress cover
- _____ Ground chain intact
- _____ No leaks at hydraulic connections
- _____ Hydraulic jacks holding properly
- _____ Hydraulic drop rate set properly
- _____ Hydraulic oil level sufficient
- _____ Lubricate where required
- _____ Accessories and mounting hardware in good condition and working properly

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.

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.

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.)

In general, when used in those concentrations recommended by the manufacturer, either phenolic type or quaternary type disinfectants can be used. Iodophor type disinfectants are not recommended for use because staining may result. The following products have been tested and have been found not to have a harmful effect **WHEN USED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDED DILUTION.***

TRADE NAME	DISINFECTANT TYPE	MANUFACTURER	*MANUFACTURER'S RECOMMENDED DILUTION
A33	Quaternary	Airwick (Professional Products Division)	2 ounces/gallon
A33 (dry)	Quaternary	Airwick (Professional Products Division)	1/2 ounce/gallon
Beaucoup	Phenolic	Huntington Laboratories	1 ounce/gallon
Blue Chip	Quaternary	S.C. Johnson	2 ounces/gallon
Elimstaph	Quaternary	Walter G. Legge	1 ounce/gallon
Franklin Phenomysan F2500	Phenolic	Purex Corporation	1 1/4 ounce/gallon
Franklin Sentinel	Quaternary	Purex Corporation	2 ounces/gallon
Galahad	Phenolic	Puritan Churchill Chemical Company	1 ounce/gallon
Hi-Tor	Quaternary	Huntington Laboratories	1/2 ounce/gallon
LPH	Phenolic	Vestal Laboratories	1/2 ounce/gallon
Matar	Phenolic	Huntington Laboratories	1/2 ounce/gallon
Omega	Quaternary	Airwick (Professional Products Division)	1/2 ounce/gallon
Quanto	Quaternary	Huntington Laboratories	1 ounce/gallon
Sanikleen	Quaternary	West Chemical Products	2 ounces/ gallon
Sanimaster II	Quaternary	Service Master	1 ounce/gallon
Vesphene	Phenolic	Vestal Laboratories	1 1/4 ounce/ gallon

Quaternary Germicidal Disinfectants, used as directed, and/or Chlorine Bleach products, typically 5.25% Sodium Hypochlorite in **dilutions ranging between 1 part bleach to 100 parts water, and 2 parts bleach to 100 parts water are not considered mild detergents. These products are corrosive in nature and may cause damage to your stretcher if used improperly.** If these types of products are used to clean Stryker patient handling equipment, measures must be taken to insure the stretchers are rinsed with clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the stretchers will leave a corrosive residue on the surface of the stretcher, possibly causing premature corrosion of critical components.

NOTE

Failure to follow the above directions when using these types of cleaners may void this product's warranty.

REMOVAL OF IODINE COMPOUNDS

This solution may be used to remove iodine stains from mattress cover surfaces.

1. Use a solution of 1–2 tablespoons Sodium Thiosulfate in a pint of warm water to clean the stained area. Clean as soon as possible after staining occurs. If stains are not immediately removed, allow solution to soak or stand on the surface.
2. Rinse surfaces which have been exposed to the solution in clear water before returning bed to service.

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

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