

OPERATIONS MANUAL

CUB[™] EMERGENCY & ACUTE CARE PEDIATRIC STRETCHER - Model FL19



Technical Assistance and Parts

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Manufactured by Stryker Bertec Medical Inc

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NOTE

Stryker Bertec Medical gives special attention to the quality of the information found in this document. Any comments on its content will be most welcomed. Please forward your remarks to the Technical Service department (see section 1.2).

1. INTRODUCTION

This manual is designed to assist you with the operation of the Model FL19 Pediatric Stretcher (CUB). It is extremely important for the patient's safety to read and understand all information in this manual before operating the stretcher. The manual must be available at all times to hospital staff for reference.

This operations manual is an integral part of the stretcher and should be included if the unit is sold or transferred.

1.1 STRETCHER SPECIFICATIONS *

400 lb (181 kg)
65 1/4" x 37 1/8" (166 cm by 94 cm) 72 3/8" x 37-1/2" (184 cm by 95 cm
365 lb (166 kg) 300 lb (136 kg)
0°, 25°, 40°, 55° 0° to 50°
32" to 40" (81 to 102 cm) 100 lb (45 kg) 32" (81 cm)
0°, 6°, 12°
Four Wheel Ring Brake System Four Locking Casters +12° Trendelenburg / -12° Reverse Trendelenburg

* Stryker Bertec Medical Inc provides special attention to product improvement and reserves the right to change specifications without notice.

1.2 TECHNICAL SUPPORT

For questions regarding this product, contact the following Technical Service departments or your local representative:

In Canada:

Stryker Bertec Medical Inc Service in English: 1 800 428-5025 Service in French: 1 800 361-2040 E-mail (in Canada): <u>service@bertec.strykercorp.com</u> 70, 5th Avenue, P.O. Box 128 L'Islet (Quebec), GOR 2C0, Canada

In the United States:

Stryker Medical Inc 1 800 327-0770 6300 Sprinkle Road Kalamazoo, MI 49001-9799 USA

1.3 WARNING / CAUTION / NOTE DEFINITIONS

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



WARNING

The personal safety of the patient or user may be involved. Disregarding this information could result in injury to the patient or user.



CAUTION

These instructions point out special procedures or precautions that must be followed to avoid damaging the equipment.

NOTE

Notes provide special information to make maintenance easier or important instruction clearer.

1.4 SAFETY PRECAUTIONS

The following is a list of safety precautions that must be observed when operating or servicing the Cub Pediatric Stretcher. They are repeated throughout the manual, where applicable. For the patient's safety, carefully read and strictly follow them before operating or servicing this unit.



WARNING

- Staff and personnel should ensure a safe environment to the patient by verifying that the stretcher components (rails, access doors, accessories) are in good condition and properly secured before placing a patient on the stretcher.
- Always apply the brakes when a patient is removed from or placed on the stretcher. Always engage the brakes unless the stretcher is being moved. Push on the stretcher to ensure the brakes are securely locked. Injury could result if a stretcher moves while a patient is removed from or placed on the stretcher.
- When brakes are applied on a fixed height base stretcher, ensure all four casters are locked to ensure complete stabilization of the stretcher.
- To reduce risk of injury, ensure the litter is horizontal and in the lowest position with the rails fully raised when moving the pediatric stretcher with a patient on it.
- The rails must always remain in the highest position and the litter in the lowest position unless a patient is being tended. Never leave a patient unattended when the rails are lowered.
- Make sure that proper policies are put in place to ensure the patient's safety when a IV pole and/or an oxygen bottle is used. The patient should not be able to reach and manipulate them.
- To avoid injury or damage to the unit, ensure the rails are in their highest position before lowering the litter and verify all equipment and persons and their extremities are removed from the area below and around the litter.
- To avoid falls and injury, verify the rails and access doors are properly locked into position before leaving a patient unattended or after having moved a rail or an access door.
- To avoid injury, ensure the patient's extremities are clear of all moving parts before operating a rail.

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- To avoid injury, ensure that the access door open/close indicators (located on both lock release knobs) show green when the door is closed and locked into position. If one or both open/close indicators is yellow, the door is not completely closed and locked.
- Avoid using the access door and the rail handles as push/pull devices or damage to the unit or injury to the patient and/or user may occur.
- To avoid injury to the patient and/or user, do not attempt to move the stretcher directly sideways with the fifth wheel engaged.
- To avoid injury, verify the patient is safely positioned on the litter before lowering the siderail and operating the Fowler or foot section.
- To avoid injury when raising and lowering the manual Fowler or the foot section, verify the support arm is securely engaged in the arm supports before releasing the Fowler or foot section.
- When patient is able to climb out the stretcher or reaches the height of 35 in. (90 cm), the stretcher shall no longer be used.
- Do not place cords, straps or similar items that could become wound around the child's neck in or near the stretcher.
- Do not leave objects or toys in the stretcher.
- Do not use a water mattress with this stretcher.
- To avoid injury to the patient, any mattress used on this stretcher must be at least 57 1/2" (146.05 cm.) long by 29 3/8" (74.6 cm.) wide and not less than 3" (7.6 cm.) or more than 6" (15.3 cm.) thick.
- Failure to properly clean the mattress, or dispose of it if defective, may increase the risk of exposure to pathogenic substances and may cause injury to the patient and/or user.
- Do not use the stretcher if any components are missing or broken. Contact your dealer or Stryker Bertec Medical for replacement parts. Use only replacement parts provided by Stryker Bertec Medical.
- Maximum Static Weight Capacity = 400 lb (181.4 kg).

NOTE

Throughout the manual, the words "right" and "left" refer to the right and left sides of a patient lying face up on the stretcher.

1.5 WARRANTY

Limited Warranty

All Stryker Bertec Medical products are guaranteed against material or workmanship defects, improper operation of mechanisms, and premature wear of stretcher components under normal use conditions.

For questions regarding the warranty, please contact our Technical Service department (see section 1.2) or your local representative.

To Obtain Service and/or Parts

For an on-site diagnosis of a malfunction by a Stryker Field Service Representative or to order replacement parts (refer to section 1.5 of the Pediatric stretcher maintenance manual for the part ordering procedure), contact our Technical Service department (see section 1.2) or your local representative.

Return Authorization

Merchandise cannot be returned without approval from Stryker Bertec Technical Service department. An authorization number will be provided, which must be clearly printed on the returned merchandise. Stryker Bertec Medical reserves the right to charge shipping and restocking fees on returned items.

Damaged Merchandise

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 Bertec Medical will file a freight claim with the appropriate carrier for damages incurred. Claims will be limited in amount to the actual replacement cost. In the event that this information is not received by Stryker Bertec Medical within the fifteen (15) days period following the delivery of the merchandise, or the damage was not noted on the delivery notice 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 5 days of invoice.

1.6 STRETCHER CLEANING AND MATTRESS CARE

Cleaning Stretchers

Hand wash all surfaces of the stretcher with a soft cloth moistened with a solution of lukewarm water and a mild detergent.

Wipe the stretcher clean and dry thoroughly to avoid build up of cleaning solution.

Do not use harsh cleaners, solvents or detergents. Do not steam clean, hose off or ultrasonically clean the stretcher.

Germicidal disinfectant, used as directed, and/or chlorine bleach products 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, ensure the stretchers is 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. Failure to follow the above directions when using these types of cleaners may void this product warranty.

Mattress Care

Failure to properly clean the mattress, or dispose of it if defective, may increase the risk of exposure to pathogenic substances and may cause injury to the patient and/or user.

Inspection

Implement local policies to address regular care, maintenance, and cleaning of mattress and cover. The cover cleaning and sterilization procedures can be found below and/or on the mattress label.

Inspect mattress cover surface (also zip fasteners and cover inner surface if mattresses have zip fasteners) regularly for signs of damage. If the mattress cover is stained, soiled, or torn, remove the mattress from service.

Cleaning and Sterilization

Stains: Wash with lukewarm water using a mild detergent. Rinse with water and let dry. For tough stains, use chlorine bleach diluted with ten parts of water.

1.7 SET-UP PROCEDURES

It is important that the stretcher is working properly before it is put into service. The following list will help ensure that each part of the stretcher is verified.

Rail operation (on some stretchers, the foot endrail may be fixed):

- _____ Side/endrail handles operate properly, handle trigger and rotational movement operate smoothly.
- _____ Side/endrails raise and lower smoothly, and lock in the 9", 14" and upper positions.
- _____ Side/endrails automatically stops at the 9" position when lowered without stopping (handle kept rotated to the left or the right while lowering the siderail).
- _____ Rotating the handle left or right further lowers the siderail from the 9" position to its lowest position.

Access door operation (on some stretchers, access doors may all be fixed):

- _____ Release knobs operate properly.
- _____ Access doors open, close and lock properly.
- Check open/close color indicators for proper operation. Green should appear when the door is closed and locked, and yellow when the door is open. Verify the access doors are closed and locked when both open/close indicators show green.

Base operation:

- _____ Optional steer pedal operates properly. Fifth steer wheel operational with steer pedal engaged.
- _____ Optional brake pedal operate properly. All casters locks with brake pedal engaged.
- _____ Optional lift pedal operates properly. Litter raises and reaches maximum height (40" 101 cm) when lift pedal is pumped.
- _____ Optional uni-lower pedal operates properly. Trendelenburg positions and litter descent are operational when uni-lower pedal is depressed.
- _____ All casters secure and swivel properly.
- _____ Fixed height stretcher four casters lock and unlock properly using the brake lever.

Litter operation:

- _____ Optional pneumatic assist Fowler operates properly.
- _____ Manual Fowler operates properly.
- _____ Foot section support arm operates properly.
- _____ Ground chain secured to frame.
- _____ Optional premium or standard accessory brackets secure.
- _____ Optional IVCaddy secure and working properly.
- _____ Optional retracting protective top secure and folds properly.

If any problems are found during bed set-up, contact the Technical Service department (see section 1.2).

1.8 STRETCHER ILLUSTRATION

NOTE

The stretcher illustrated below is equipped with the following options: adjustable height base, fifth steer wheel, adjustable height side/endrails and movable access doors.

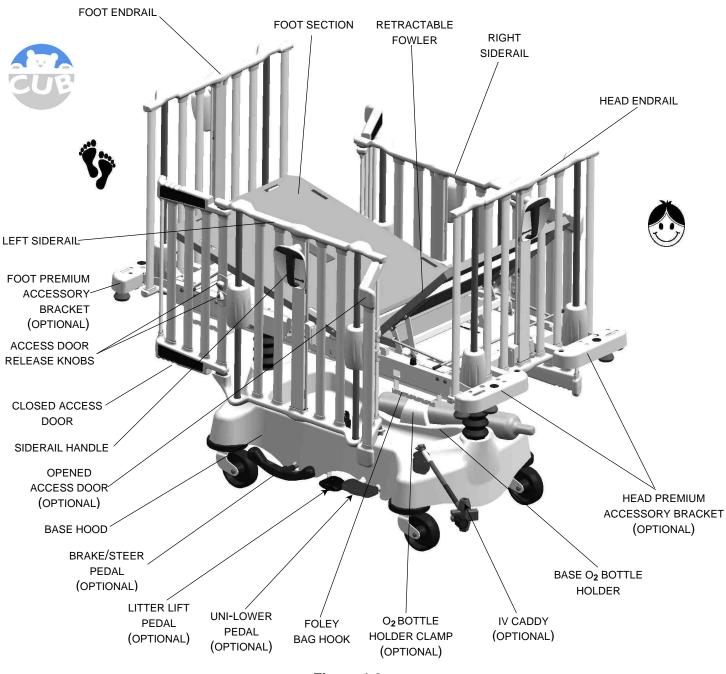


Figure 1.8

2. STRETCHER OPERATION

2.1 OPERATING BASE CONTROLS

There are two types of base options: fixed height base and adjustable height base. The configuration illustrated below is the adjustable height base with the fifth steer wheel.

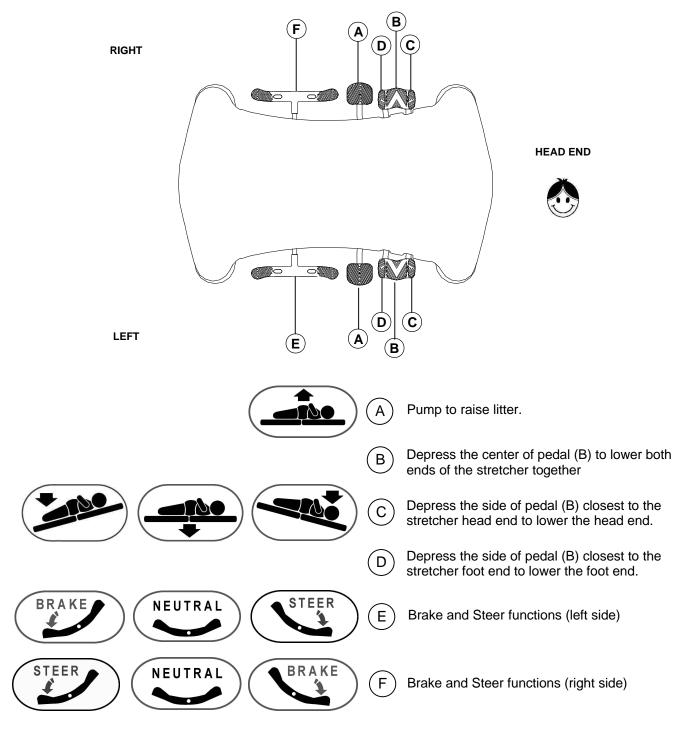


Figure 2.1

2.2 APPLYING THE BRAKE

WARNING

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

NOTE

There are two type of brake systems depending on the type of base: a single pedal operated 4-wheel brake system on the adjustable height base and four separate locking casters on the fixed height base.

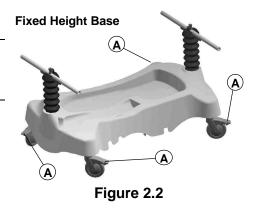
Brake Pedal Operation - Adjustable Height Base

- To engage the brakes at the left side of the stretcher, push fully down on the left side of brake pedal (E) (see page 10).
- To **engage** the brakes at the right side of the stretcher, push fully down on the right side of brake pedal (F) (see page 10).
- To **disengage** the brakes at either side of the stretcher, move the pedal to neutral position.

Wheel Lock Operation - Fixed Height Base

When brakes are applied, ensure all four casters are locked to ensure complete stabilization of the stretcher.

- To **engage** the caster brakes, press fully down on all four caster brake levers (A).
- To **disengage** the caster brake, depress the opposite side of the brake lever with your foot or lift up with your toe under the brake lever.



2.3 OPERATING THE RETRACTABLE FIFTH WHEEL (OPTIONAL))

WARNING

To reduce risk of injury, ensure the litter is horizontal and in the lowest position with the rails fully raised when moving the pediatric stretcher with a patient in it.

The purpose of the optional fifth steer wheel is to help guide the stretcher when transporting a patient along a straight line and also for pivoting at corners.

- To **engage** the fifth wheel at the left side of the stretcher, push fully down on the right side of steer pedal (E) (see page 10).
- To **engage** the fifth wheel at the right side of the stretcher, push fully down on the left side of the steer pedal (F) (see page 10).
- To **disengage** the fifth wheel at either side of the stretcher, move pedal to neutral position.

NOTE

When the fifth steer wheel is engaged, always move the stretcher foot end first not the reverse, and do not try to move stretcher sideways, the fifth wheel can not pivot. Positioning the pedal in neutral enables the stretcher to be moved in any directions, including sideways.

2.4 ADJUSTING THE LITTER HEIGHT (OPTIONAL)

To avoid injury or damage to the unit, ensure the rails are in their highest position before lowering the litter and all equipment and persons and their extremities are removed from the area below and around the litter.

- To **raise** the litter height, pump pedal (A) repeatedly until the desired height is achieved (see page 9).
- To **lower** both ends of the litter together, depress the center of pedal (see page 10) until the desired height is achieved. To lower only the head end of the litter, depress the side of pedal (B) closest to the head end (see page 10). To lower only the foot end of the litter, depress the side of pedal (B) closest to the foot end (see page 10).

2.5 TRENDELENBURG/REVERSE TRENDELENBURG POSITIONING (OPTIONAL)

NOTE

The litter height must be raised first in order to achieve a Trendelenburg position.

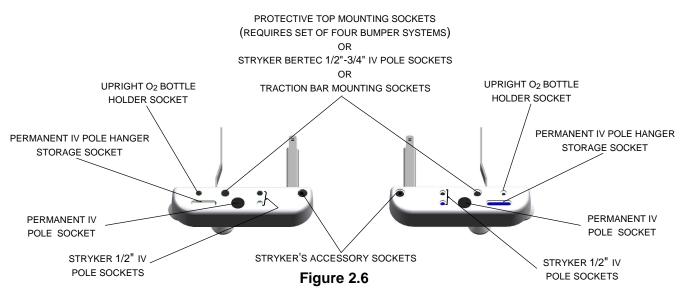
- For **Trendelenburg** positioning (head down), depress the side of pedal (B) closest to the stretcher head end (see page 10).
- For **Reverse Trendelenburg** positioning (foot down), depress the side of pedal (B) closest to the stretcher foot end (see page 10).

NOTE

The higher the litter is before pedal (B) is activated, the greater the Trendelenburg or reverse Trendelenburg angle will be. (Maximum Trendelenburg angle is +12°. Maximum reverse Trendelenburg angle is -12°).

2.6 PREMIUM ACCESSORY BRACKET USAGE (OPTIONAL)

The pediatric stretcher may be equipped with optional premium accessory brackets to hold different equipment needed for patient care. Designed for mounting at the head end or at both ends of the stretcher, they come in set of two or four. See illustration below for the support socket functions.



2.7 OPERATING THE FOWLER AND FOOT SECTION

NOTE

There are two types of Fowler options: manually operated and pneumatic assist operated. The foot section is manually operated.

To avoid injury, verify the patient is safely positioned on the litter before lowering the siderail and operating the Fowler or foot section.

To avoid injury when raising and lowering the manual Fowler or the foot section, verify the support arm is securely engaged in the arm supports before releasing the Fowler or foot section.

Manual Fowler Positioning

- To raise the Fowler, lift it up. The support arm (A) will fall into position and engaged the support brackets as the Fowler is raised. The Fowler can be locked at three angles:25°, 40° and 55°.
- To lower the Fowler, lift it up slightly with one hand and, with the other hand, lift one of the support arm handles (A) to disengage it from the support brackets. If the next lower position is desired, release the arm while lowering the Fowler to allow the arm to engage in the support bracket. Otherwise, continue to hold the handle while lowering the Fowler to flat.

Pneumatic Fowler (Optional) Positioning

- To raise the Fowler, lift up the right or left activation lever (B) for pneumatic assistance in raising the Fowler. Release lever once desired height is achieved.
- To **lower** the Fowler, push down Fowler while lifting up the right or left activation lever (B). Release lever once desired height is achieved.

Foot Section Positioning

- To raise the foot section, lift it up manually. The support arm will fall into position and engage the support bracket as the foot section is raised. The foot section can be locked at two angles: 6° and 12°.
- To lower the foot section, lift it up with one hand and, with the other hand, lift one of the support harm handless (C) to disengage it from the support bracket. Lower the foot section to the desired position.

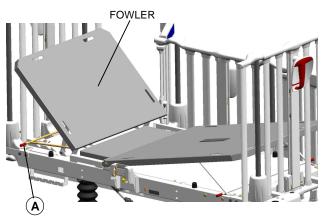


Figure 2.7A

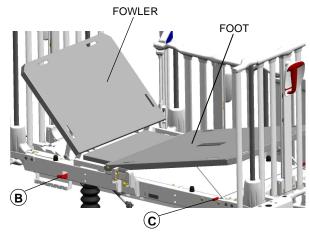


Figure 2.7B

2.8 OPERATING SIDERAILS AND ENDRAILS

To avoid injury, ensure the patient's extremities are clear of all moving parts before operating a rail. Verify the rail is securely locked after moving it.

The rails must always remain in the highest position and the litter in the lowest position unless a patient is being tended. Never leave a patient unattended when the rails are lowered.

To avoid falls and injury, verify the rails and access doors are properly locked into position before leaving a patient unattended or after having moved a rail or an access door.

NOTE

For safety, the siderails and endrails will not go any lower than 9" when being lowered from the upper positions, even if the handle is still rotated.

• **To raise a siderail/endrail**, grasp the top bar or the handle (A). Do not activate the trigger or rotate the handle. Pull the rail up to the desired height. The rail will lock into one of the three available positions, 9", 14" and 26". A "click" will be audible as available locking positions are crossed.

NOTE

To ensure the rails are safely locked into position, verify the the arrow pointers (B) located at each locking position level and on the rail central spindle are aligned.

• **To lower a siderail/endrail**, grasp the handle (A). Activate the trigger, rotate handle to the left or right and guide the rail down to the desired height. Return the handle back to vertical to lock the rail into desired position.

Figure 2.8

NOTE

Do not pull up on the rail before trying to lower it or the rail will stay locked.

2.9 OPERATING THE ACCESS DOORS (OPTIONAL)

WARNING

To avoid falls and injury, ensure the access door open/close indicators (located on both release knobs) show green when the door is closed and locked into position. If either open/close indicator is yellow, the door is not completely closed and locked.

- To open an access door, squeeze the two release knobs (A) located on each access door pivot bar and open the access door. The open/close indicators (B) will show yellow.
- **To close an access door**, return it back to the closed position and it will automatically lock. The open/close indicators (C) will show green.

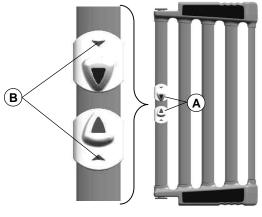


Figure 2.9

2.10 OPERATING THE IV CADDY (OPTIONAL)

The IVCaddy enables an IV pole to be transported when the stretcher is moved. Always ensure the IV Caddy is secured tightly on the IV pole before transporting to avoid damaging the IV pole or causing injury to the patient or user.

- 1. Lift the IV Caddy from the storage clip.
- 2. Pivot the IV Caddy to the desired position.
- 3. Turn knob (A) counterclockwise to loosen the pole clamp (C).
- 4. Pivot the knob away from the clamp (B). The clamp (C) may then be opened.
- 5. Place the IV pole into the clamp (B). Close the clamp (C) around the IV pole and pivot the knob (A) back into position.
- 6. Turn the knob clockwise to tighten it. The IV pole is now ready to move with the stretcher/bed.
- To remove the IV pole from the IV Caddy, turn knob (A) counterclockwise to loosen the pole clamp.
- Pivot the knob away from the clamp (B), open the clamp and remove the IV pole from the IV Caddy.
- 9. Store the IV Caddy.

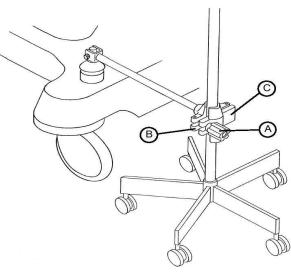


Figure 2.10

Always store the IV Caddy when not in use to avoid damaging it when the stretcher is moved.

2.11 O₂ BOTTLE CLAMP USAGE (OPTIONAL)

An optional O_2 bottle clamp (A) may be installed on the base hood to secure the O_2 bottle in the slot on the base.

Slide the O₂ bottle into the slot bottom first.

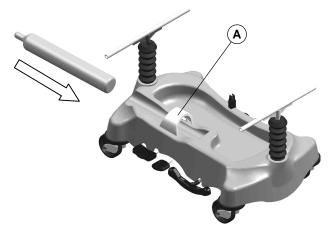
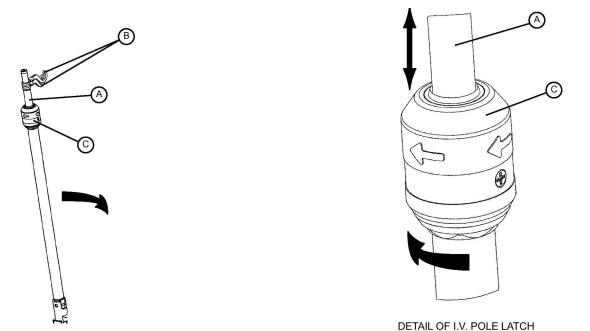


Figure 2.11

2.12 OPERATING THE 2-STAGE PERMANENTLY ATTACHED IV POLE (OPTIONAL)



To use the 2-stage permanently attached IV pole

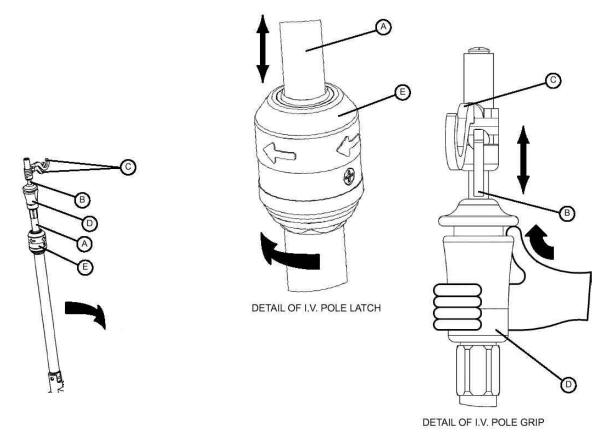
- 1. Lift and pivot the pole from the storage position and push down until it is locked into the receptacle.
- 2. To raise the height of the pole, pull up on the telescoping portion (A) until it locks into place at its fully raised position.
- 3. Rotate the Iv. hangers (B) to desired position and hang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

The weight of the IV bags should not exceed 40 lb (18 kg).

Make sure that proper policies are put in place to ensure the patient's safety when a IV pole and/or an oxygen bottle is used. The patient should not be able to reach and manipulate them.

2.13 OPERATING THE 3-STAGE PERMANENTLY ATTACHED IV POLE (OPTIONAL)

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 lb (18 kg).

Make sure that proper policies are put in place to ensure the patient's safety when a IV pole and/or an oxygen bottle is used. The patient should not be able to reach and manipulate them.

2.14 STANDARD ACCESSORY BRACKET USAGE (OPTIONAL)

Optional standard accessory brackets may be installed on each corner of the bed to support optional removable IV Poles and/or an optional retracting protective top (requires the complete set of four standard accessory brackets). A convenient rubber bumper completes the bracket assembly.

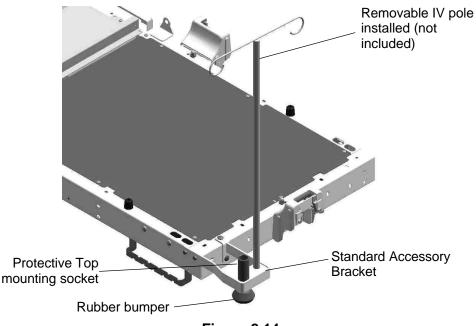


Figure 2.14

2.15 CHART HOLDER USAGE (OPTIONAL)

The optional chart holder, located under the litter on either or both sides of the stretcher, is a convenient storing device allowing the patient's medical records to follow when the patient is transferred in his stretcher from one unit to another.

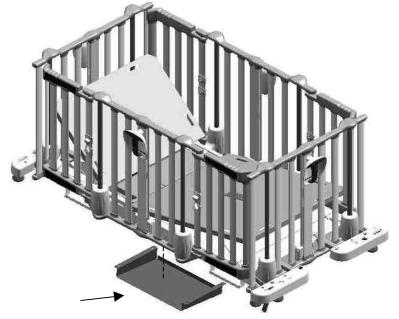


Figure 2.15