



# OWNER'S MANUAL

(Includes Operation, Maintenance and Parts)



## STREAMLINE® IV SUSPENSION SYSTEM

Read this manual before operating the IV Suspension System! This information is necessary for the safe and efficient operation of the equipment.

## DEVICE DESCRIPTION

The Streamline® IV Suspension System (ISS) is a unique and effective solution available for managing cumbersome IV poles with mounted IV infusion pumps or other equipment at the bedside and during intra-hospital transports. The ISS provides an easy, safe and effective technology platform that mounts the ISS to any bed or stretcher in the hospital or other care facility, allowing for easier and safer transport of the patient in a hospital bed.

In seconds the ISS can go from a standard infusion stand to a suspended, securely locked part of any bed or stretcher. ISS technology serves a growing need for safety and efficiency for both patients and caregivers in the hospital setting. The product provides caregivers with an efficient means of handling the growing amount of patient equipment that remains with patients as they move about a hospital.



**Read and follow the ISS user guide before use, or serious injury may result. If you do not understand any part of these warnings, cautions, or instructions, contact a healthcare professional for direction in the use of the ISS.**

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### Manufactured by:



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## INTENDED USE



**Do not use the ISS as a walking or standing support or aid, as serious injury may result.**



**Do not use in MRI areas. Scanning a patient who is using the ISS may result in serious injury.**

The Streamline® IV Suspension System is indicated to suspend intravenous (IV) fluid bags and secure medical equipment, such as infusion pumps.

## CONTRAINDICATIONS

There are no known contraindications for the Streamline® IV Suspension System.

The base language for this document is ENGLISH. Any translations must be from the base language document.

Printed copies are not controlled documents.

Although current at the time of publication, SKYTRON'S policy of continuous development makes this manual subject to change without notice. If current manuals are required, contact your local SKYTRON representative or contact SKYTRON directly at the distribution addresses listed above.

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## SECTION 1. SAFETY INFORMATION

## 1-1. Safety Warnings and Safeguards

The following summary of WARNINGS and CAUTIONS should be reviewed by all personnel prior to operating the Streamline ISS equipment.

Carefully read the manual before proceeding to operate or service the Streamline ISS equipment.

**WARNING**

*WARNING with a safety alert symbol indicates a hazardous situation that, if not avoided, could result in death or serious injury.*

**Read and follow the ISS user guide before use, or serious injury may result. If you do not understand any part of these warnings, cautions, or instructions, contact a healthcare professional for direction in the use of the ISS.**

**Do not use the ISS as a walking or standing support or aid, as serious injury may result.**

**Do not use in MRI areas. Scanning a patient who is using the ISS may result in serious injury.**

**The operating instructions should be read and followed before ISS use.**

**The ISS is only intended to be loaded with fluid bags, infusion pumps, and monitors. The IV stand has a safe-operating load of 105 lbs. [47.63 kg], including medical equipment and IV infusion bags. DO NOT overload the IV pole with or without the use of the bed mount, as serious injury may result.**

**Do not attach the devices to the back side of the IV stand wing, as device interference with bed accessories may cause device dislodgement and serious injury.**

**Potential eye hazard. Maintain a safe distance from the hooks on the ISS.**

**When routing cables or hoses from the ISS to the patient, DO NOT squeeze or pinch them between parts of the ISS and bed.**

**Personal injury to patient or staff may result from a lack of proper maintenance of this equipment.**

**If components are damaged or missing, contact Skytron. Do not use non-Streamline® replacement or substitution parts. Use only Streamline® parts. Non-Streamline® parts could cause serious injury and damage to the ISS.**

**CAUTION**

*CAUTION with the safety alert symbol indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.*

**Do not attempt to retract IV stand legs unless the ISS is properly secured in the bed mount.**

**When the IV stand is mounted on the bed, do not use the IV stand to push, pull, or steer the bed during patient transport.**

**Use only the push down pedal to lower the legs while the ISS is mounted in the bed mount.**

**Do not raise the fluid bag halo beyond the red warning line.**

**Before replacing casters, remove all equipment from the IV pole to ensure the IV stand is not bearing any weight.**

**CAUTION**

*CAUTION without the safety alert symbol, is used to address practices not related to personal injury but with a possibility of damage to equipment.*

**Do not wash under water pressure, steam clean, or use cleansers that could damage the Streamline® IV Suspension System finish.**

**Any parts or assemblies not listed in this section must be serviced or replaced by SKYTRON authorized service personnel only. This is necessary to avoid the possibility of damage to the equipment.**

**NOTICE**

*Indicates important information not related to personal injury.*

### 1-2. Equipment Label Locations

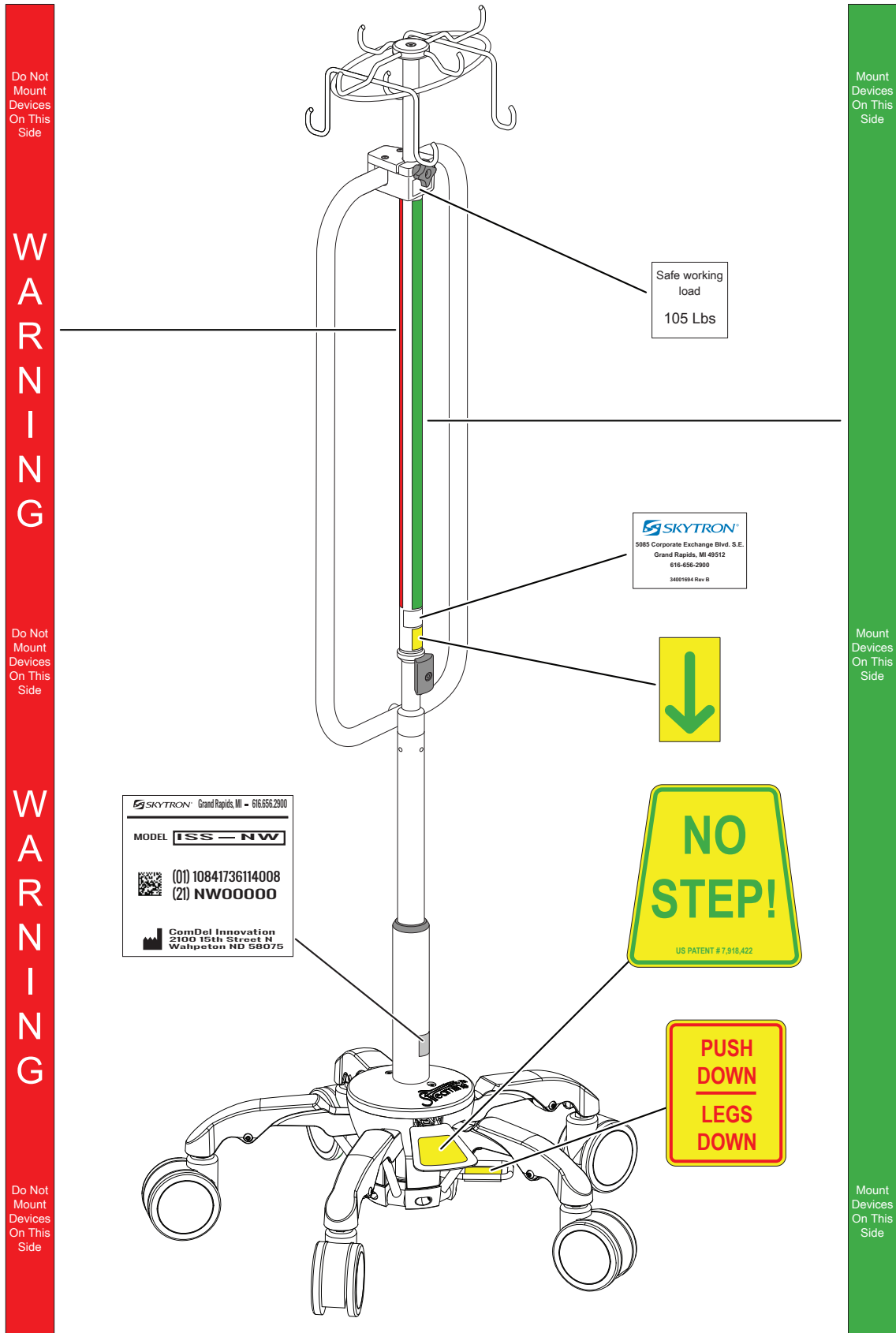


Figure 1. Label Locations

## SECTION 2. IV STAND ASSEMBLY

### 2-1. Tools Needed for Assembly

- (1) 1/4" Allen hex wrench
- (1) 5/32" Allen hex wrench
- (1) Loctite 243 thread lock (included with the IV stand)

### 2-2. Assembly Instructions

1. Remove base with wheels. Apply blue 243 Loctite to threads of the 1/2"-20 x 1/34" long set screw. Using a 1/4" Allen wrench, thread set screw into top of base (Figure 2).

2. Thread the mast onto the set screw and base.
3. Remove the 1/4"-20 x 2" long flathead cap screw and apply blue 243 Loctite to threads.
4. Slide the wing assembly on to the mast and align the screw boss on the wing with the counter bore on the base. Secure using the flathead cap screw.
5. Slide the halo assembly into the wing and tighten the adjustment knob.

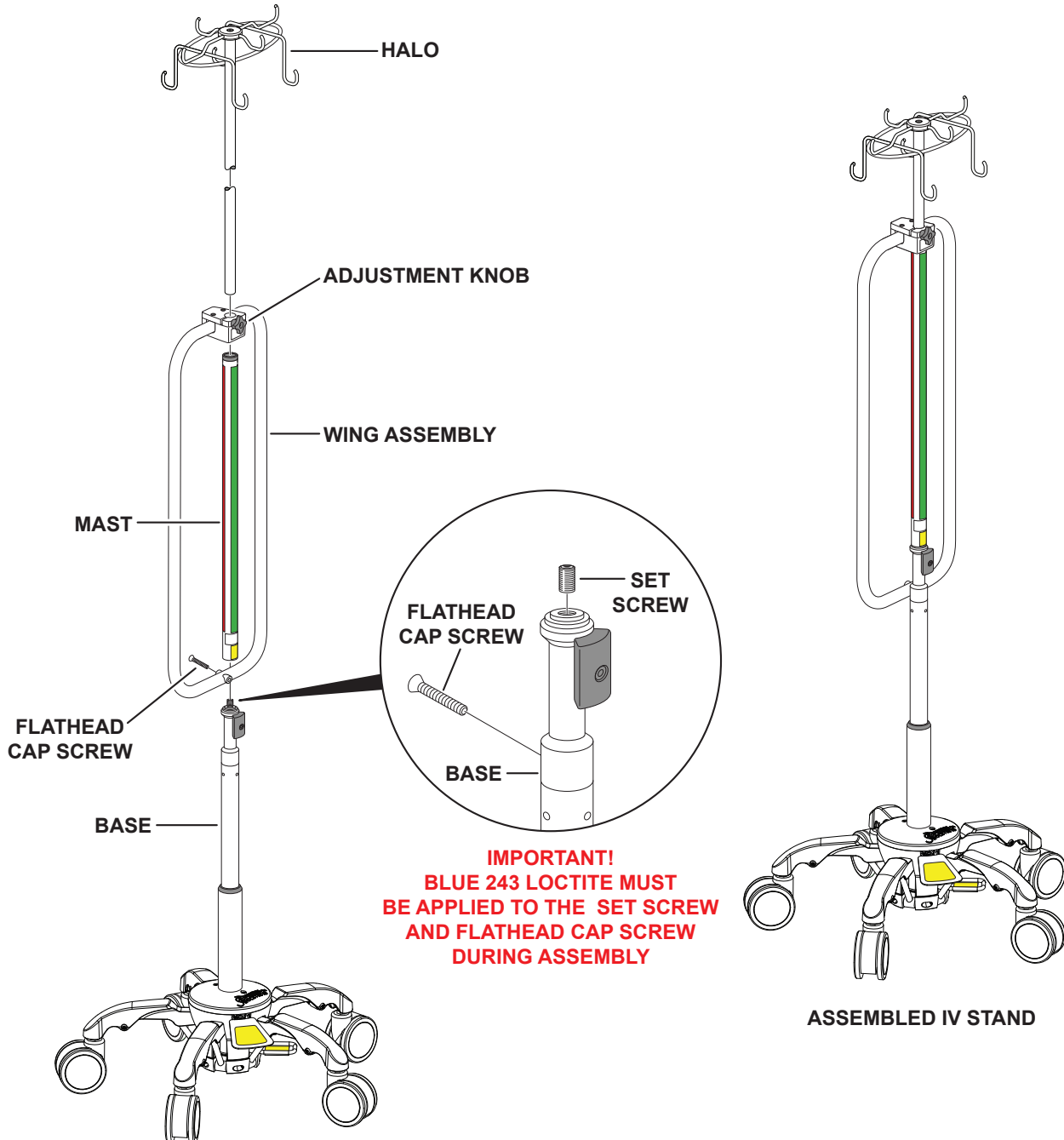


Figure 2. IV Stand Assembly

## SECTION 3. IV STAND DOCKING

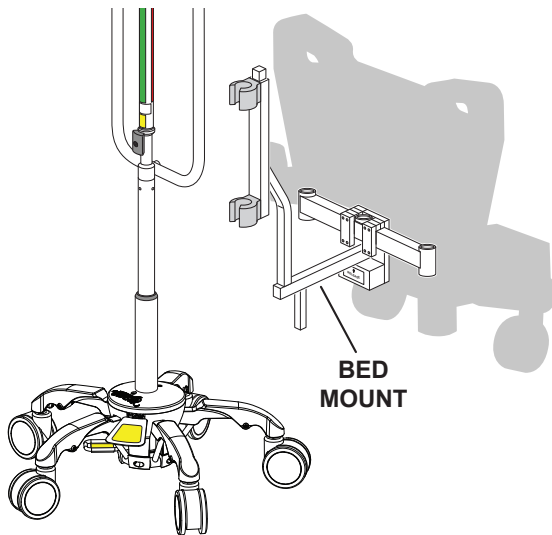
**WARNING**

The operating instructions should be read and followed before ISS use.

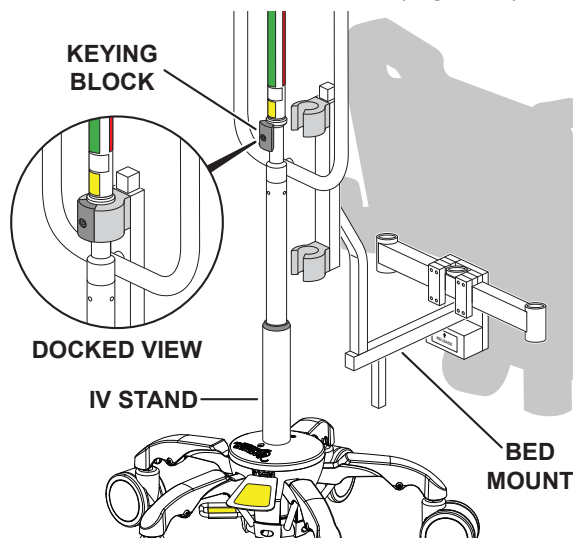
**3-1. Attach the IV Stand to the Bed Mount****Notice**

Bed mounts vary depending on bed model. A generic bed mount is shown for basic attachment and operation.

1. Move bed mount into docking position (Figure 3).

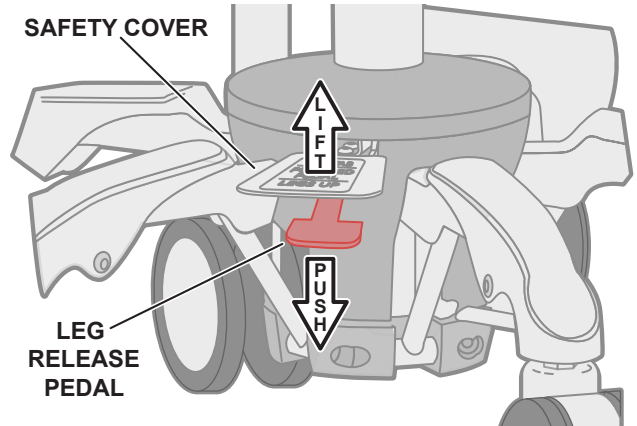
**Figure 3. Bed Mount Docking Position**

2. Align IV stand to the bed mount with the keying block facing the user. Push firmly and click the IV stand into the mount (Figure 4).

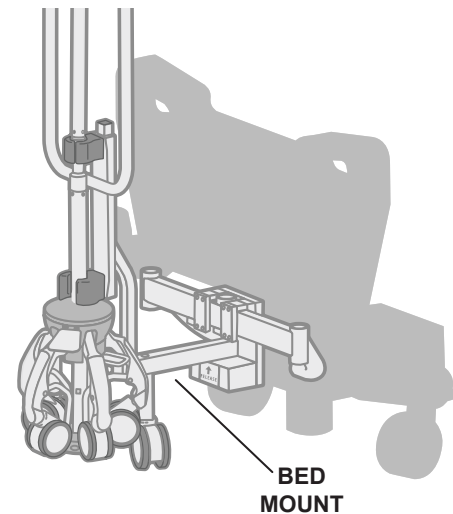
**Figure 4. Dock IV Stand to Bed Mount****CAUTION**

Do not attempt to retract IV stand legs unless the ISS is properly secured in the bed mount.

3. With one hand on the IV stand for stability, lift the leg release safety cover with the top of foot (Figure 5).

**Figure 5. Release Safety Cover**

4. Push down on the red leg release pedal, located under the cover. The legs will release and the IV stand will automatically lock into the bed mount (Figure 6).

**Figure 6. Locked IV Stand**

### 3-2. Position the IV Stand



#### CAUTION

When the IV stand is mounted on the bed, do not use the IV stand to push, pull, or steer the bed during patient transport.

1. With legs retracted and locked, the user is able to move the IV stand anywhere behind the bed (Figure 7).

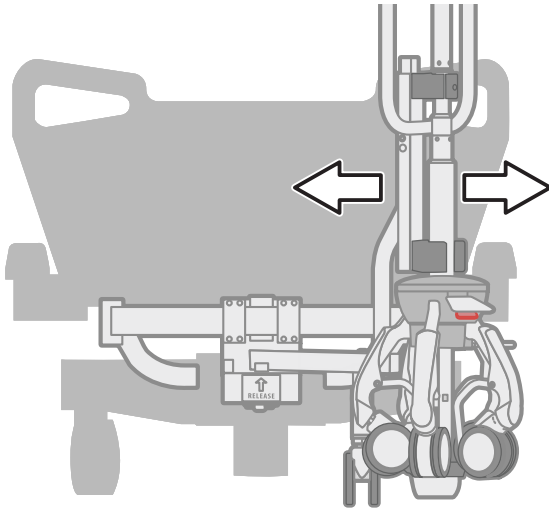


Figure 7. Position the IV Stand

#### Notice

Some bed models only allow one-sided lock due to brake pedals.

2. Using your foot, push down on the release button/lever to position the IV stand/bed mount as desired (Figure 8).

#### Notice

For easier transport, position the bed mount to either side of the bed depending on model. The release button/lever will prevent the bed mount from moving during transport.

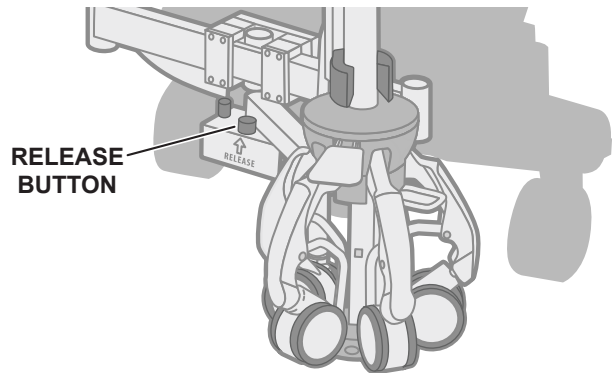


Figure 8. Release Button



## SECTION 4. IV STAND UNDOCKING

## 4-1. Remove the IV Stand from the Bed Mount

1. Move the bed mount to the undock position (Figure 9).

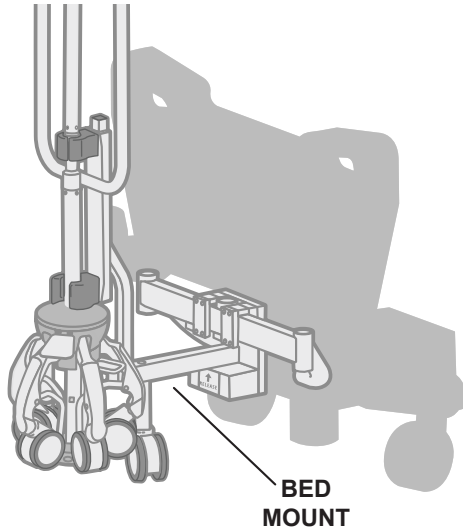


Figure 9. Position Bed Mount

**CAUTION**

Use only the push down pedal to lower the legs while the ISS is mounted in the bed mount.

2. Using your foot, apply firm downward force on the down pedal until the legs automatically lock in the extended position (Figure 10) and a loud click is heard.

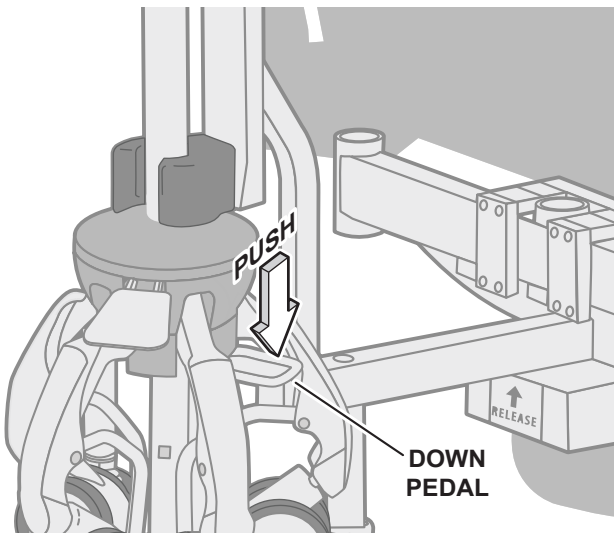


Figure 10. Push the Down Pedal

3. With the legs locked in the extended position, undock the IV stand from the bed mount. (Figure 11).

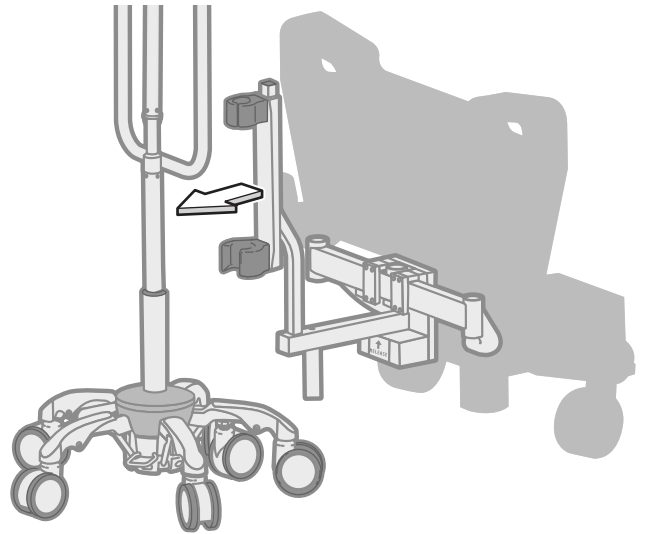


Figure 11. Undock the IV Stand

4. Rotate the bed mount to the side/transport position until further needed (Figure 12).

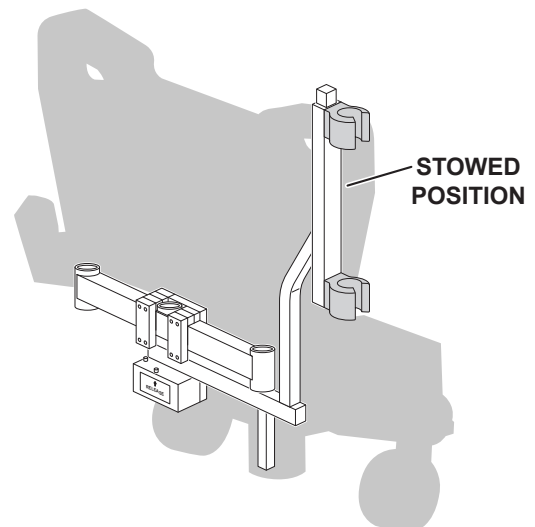


Figure 12. Stow the Bed Mount

## SECTION 5. DEVICE PLACEMENT AND FLUID BAG HALO

### WARNING

The ISS is only intended to be loaded with fluid bags, infusion pumps, and monitors. The IV stand has a safe-operating load of 105 lbs. [47.63 kg], including medical equipment and IV infusion bags. **DO NOT** overload the IV pole with or without the use of the bed mount, as serious injury may result.

#### 5-1. Device Placement

### WARNING

Do not attach the devices to the back side of the IV stand wing, as device interference with bed accessories may cause device dislodgement and serious injury.

Pumps are to be attached to the front of the IV stand wing only as indicated by the green label (Figure 13). Maximum capacity is 105 lbs [47.63 kg].

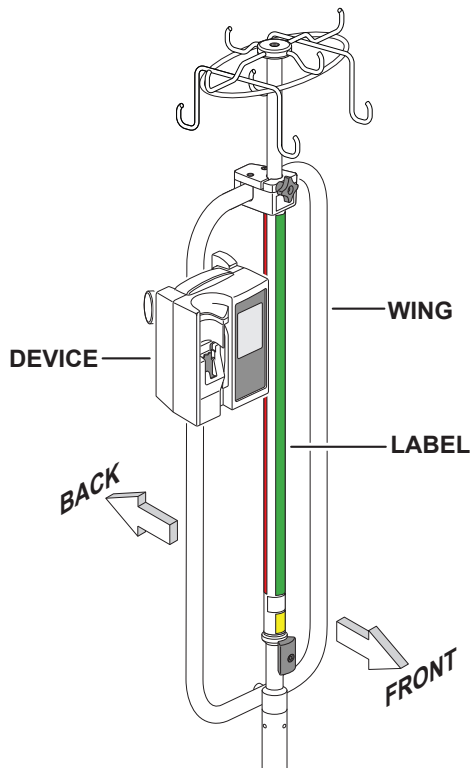


Figure 13. Device Placement

#### 5-2. Fluid Bag Halo

### WARNING

Potential eye hazard. Maintain a safe distance from the hooks on the ISS.

### CAUTION

Do not raise the fluid bag halo beyond the red warning line.

To adjust fluid bag halo, turn the knob counter clockwise to loosen. Adjust halo to the desired height and tighten knob clockwise. (Figure 14).

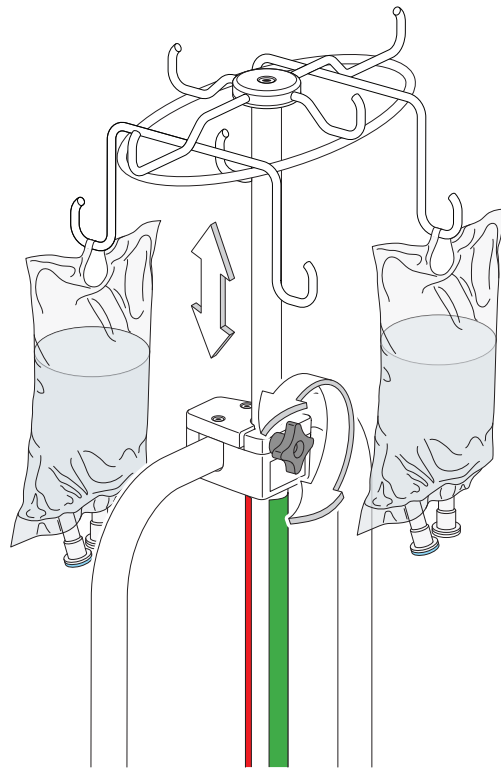


Figure 14. Halo Adjustment

### WARNING

When routing cables or hoses from the ISS to the patient, **DO NOT** squeeze or pinch them between parts of the ISS and bed.

## SECTION 6. CLEANING &amp; MAINTENANCE

## 6-1. Cleaning and Disinfecting

**CAUTION**

Do not wash under water pressure, steam clean, or use cleansers that could damage the Streamline® IV Suspension System finish.

**NOTICE**

Always follow current AORN/EORNA Journal Guidelines to ensure proper cleaning and disinfection procedure.

Always follow product cleaning and disinfecting instructions and warnings provided by the cleaning product manufacturer.

Regular cleaning per your institution's protocol is recommended.

## 6-2. Lubrication

**WARNING**

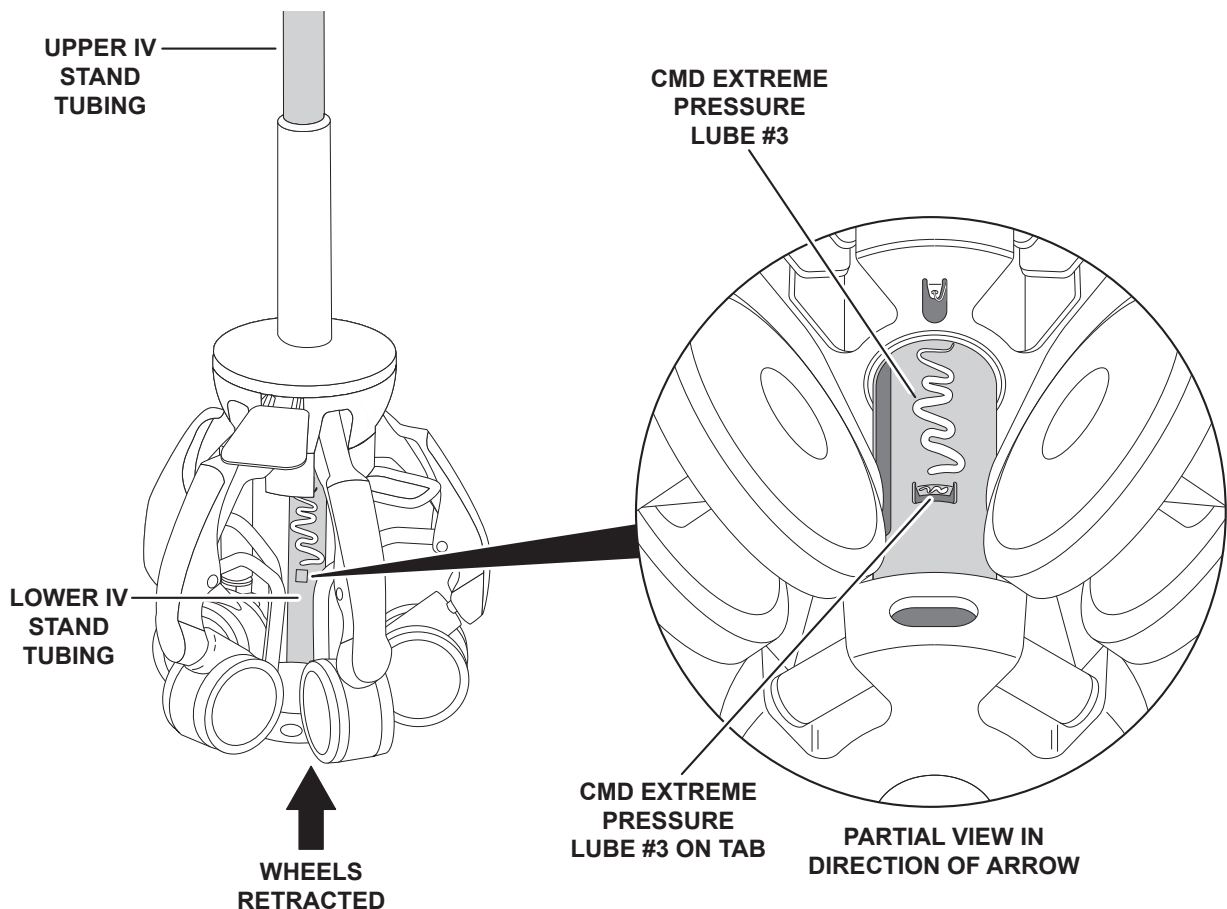
**Personal injury to patient or staff may result from a lack of proper maintenance of this equipment.**

Lubricate the Streamline IV Suspension System at six month intervals, depending on use or use conditions. Lubrication of the IV Suspension System should directly follow regular cleaning.

1. Apply 3M™ 5-Way Penetrant or equivalent, to the upper and lower main IV stand tubing (Figure 15).
2. Apply Chicago Manufacturing and Distribution Co. Inc. (CMD) Extreme Pressure Lube #3, or equivalent, to the lower IV stand as shown. Make sure to apply under the tab area.

## 6-3. Hardware

Routinely check the flathead cap screw securing the wing assembly to the base is tight (Figure 2). If necessary remove the screw and reapply blue 243 Loctite to the threads at six month intervals.



**Figure 15. Required Lubrication Points**

### SECTION 7. REPLACEMENT PARTS

#### **WARNING**

If components are damaged or missing, contact Skytron. Do not use non-Streamline® replacement or substitution parts. Use only Streamline® parts. Non-Streamline® parts could cause serious injury and damage to the ISS.

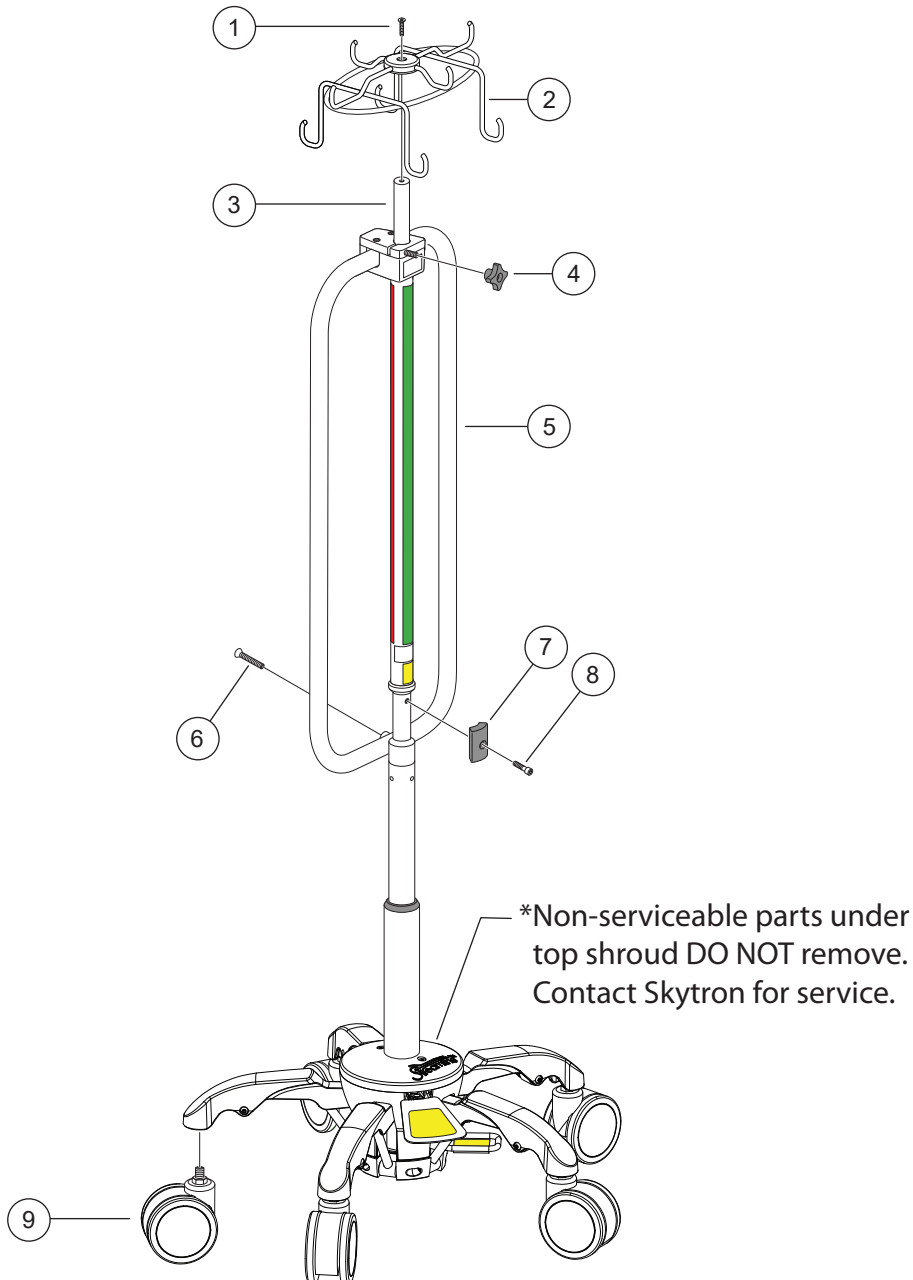
Replacement parts listed in this section have been identified by SKYTRON as serviceable by facility personnel and are available for purchase. To obtain SKYTRON certified parts and authorized service, contact your SKYTRON representative.

#### **CAUTION**

Any parts or assemblies not listed in this section must be serviced or replaced by SKYTRON authorized service personnel only. This is necessary to avoid the possibility of damage to the equipment.

#### 7-1. IV Stand Components

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## IV Stand Components (continued)

Item	Part No.	Description	Qty.
1	42002786	FLAT HEAD HEX CAP SCREW ¼ - 20 x 1	1
2	42002779	HALO	1
3	52000812	HALO MAIN TUBE	1
4	42002996	HALO ADJUSTMENT KNOB	1
5	52002065	WING, NARROW	1
	52000819	WING, WIDE	1
6	42002982	WING RETAINER CAP SCREW ¼ - 20 x 2"	1
7	52001120	KEYING BLOCK	1
8	42002954	CAP SCREW ¼ - 20 x 1"	1
9	42002919	CASTER	1

## 7-2. Halo Replacement

1. Remove all fluid bags and equipment from the halo hooks before removal.
2. Loosen the wing adjustment knob and remove the halo assembly (Figure 16).

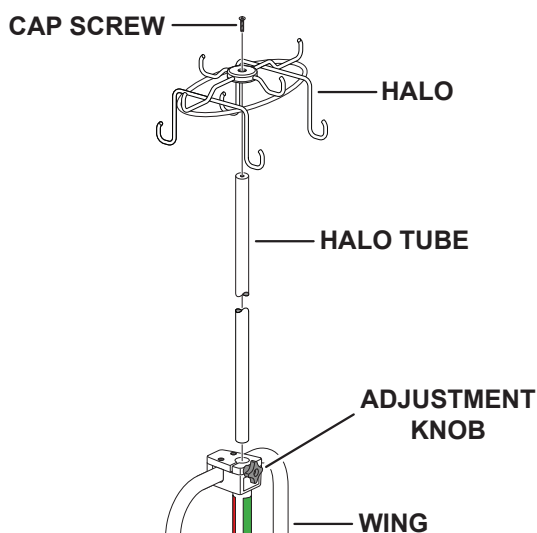


Figure 16. Halo Replacement

3. Remove the ¼ - 20 x 1 flat head hex cap screw using a 5/32" Allen wrench. Retain screw for reinstallation.
4. Seat the new halo on top of the halo tube.
5. Apply Blue 243 Loctite to the cap screw threads and secure the halo to the halo tube using a 5/32" Allen wrench. Wipe off excess Loctite after installation.
6. Reinstall the halo assembly in the wing and tighten the adjustment knob.

## 7-3. Wing Replacement

1. Remove the halo assembly. See section "7-2. Halo Replacement".
2. Remove any equipment from the wing assembly before removal.
3. Remove the ¼"-20 x 2" wing retainer cap screw (Figure 17). Retain screw for reinstallation.

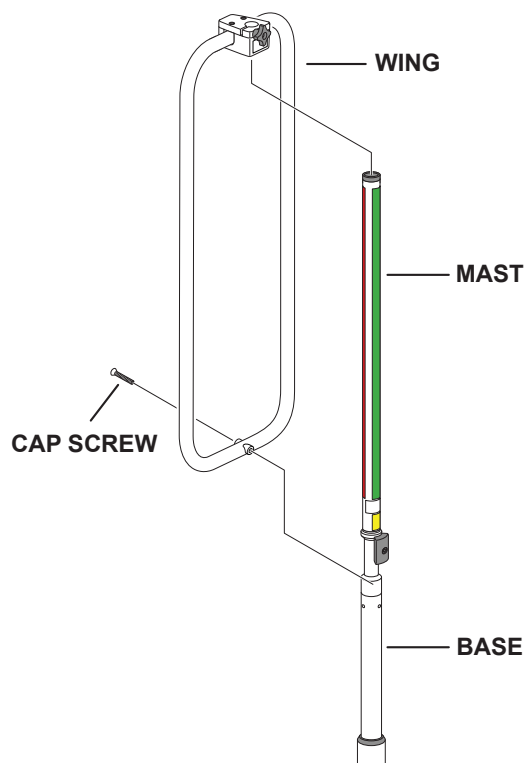


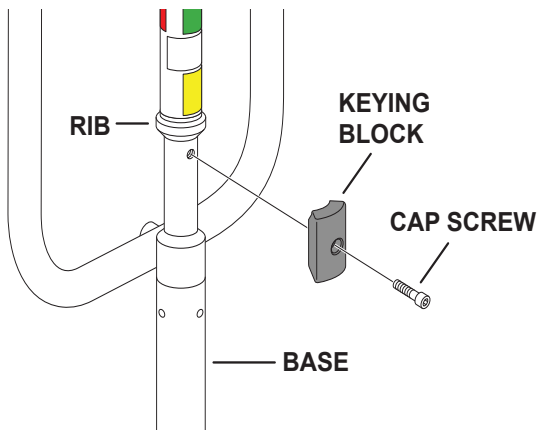
Figure 17. Wing Replacement

4. Disengage the screw boss on the bottom of the wing from the base and slide the wing assembly up off the mast.

5. Slide the new wing assembly down on to the mast and align the screw boss on the wing with the counter bore in the base.
6. Apply blue 243 Loctite to the flat head cap screw threads and secure the wing to the base.

#### 7-4. Keying Block Replacement

1. Remove the ¼ - 20 x 1 cap screw from the keying block using a 3/16" Allen wrench (Figure 18). Retain screw for reinstallation.
2. Orient the new keying block so the cutout end butts up against the rib on the base.



**Figure 18. Keying Block Replacement**

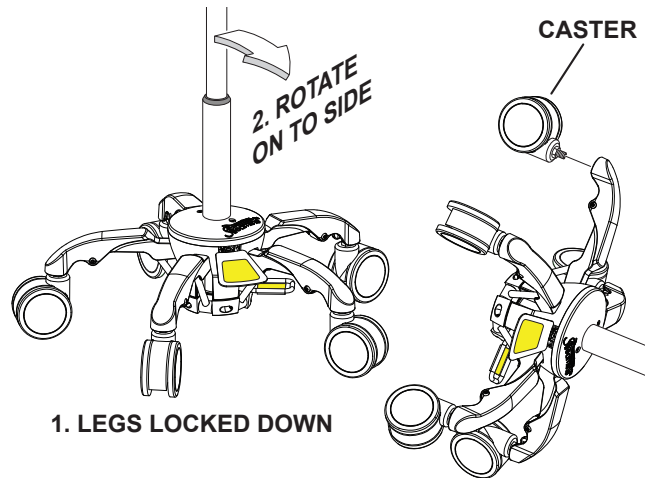
3. Align the holes in the keying block and base. Apply Blue 243 Loctite to the cap screw and secure keying block to the base.

#### 7-5. Caster Replacement



**Before replacing casters, remove all equipment from the IV pole to ensure the IV stand is not bearing any weight.**

1. Bring the legs downward into the legs locked position (Figure 19).



**Figure 19. Caster Replacement**

2. Rotate the IV stand down onto its side.
3. Remove the existing caster using a 14 mm open end wrench.
4. Apply Blue 243 Loctite to the threads of the new caster and screw into the leg.
5. Use the 14 mm open end wrench to tighten. Wipe off excess Loctite.
6. Repeat steps three through five as necessary to replace other casters.

**SECTION 8. REVISION HISTORY**

<b>Date</b>	<b>Revision</b>	<b>Revision History</b>
03/28/2017	0	Initial release
10/18/2017	1	Pg 5 and 7: Added clarification to press the release pedal firmly
02/27/2019	2	Pg 4 Revised Figure 2 to include apply Loctite notice Pg 9 Added Section 6-3 Hardware
09/17/2019	3	Updated all Loctite from 242 to 243. Pg3 - Added UDI label



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