



# KYRA COMFORT™ STIRRUP

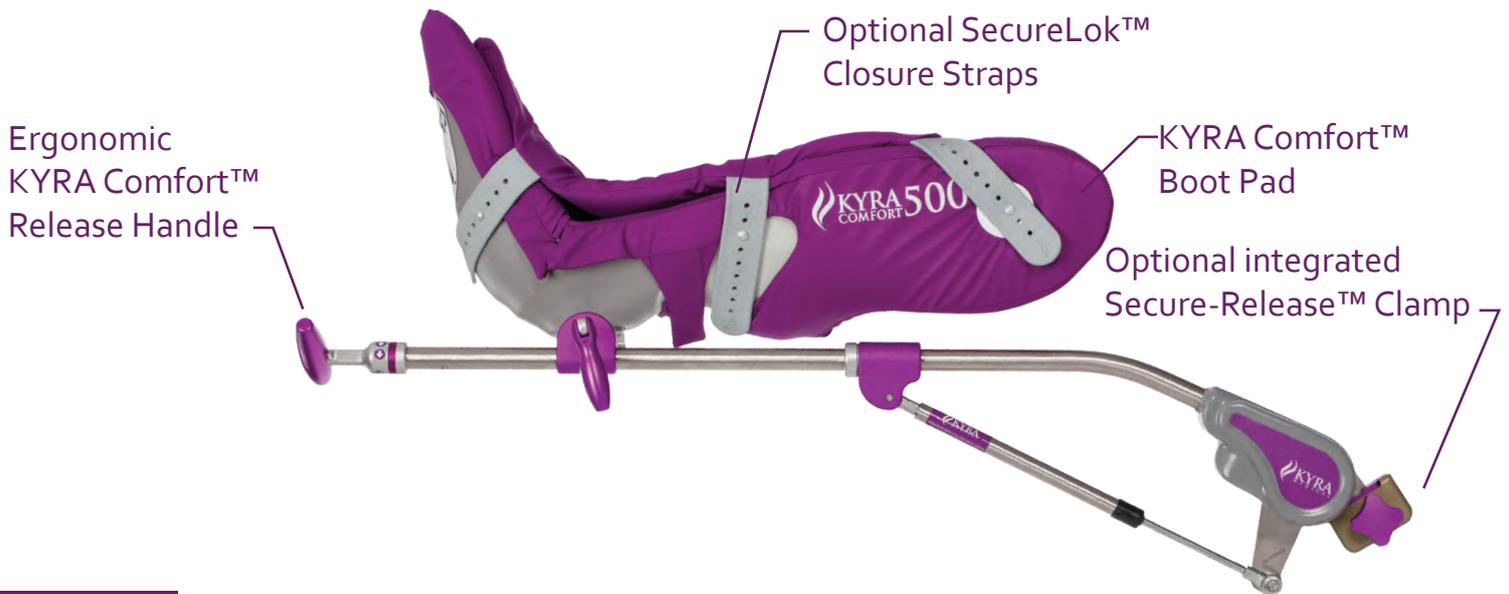
## INSTRUCTIONS FOR USE



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### Scope:

This document provides instructions for the operation of the KYRA Comfort Stirrup™, the Kyra Comfort Stirrup with SecureLok™ closure straps, and the KYRA Comfort Stirrups with optional integrated Secure-Release™ clamp.

### Features:

This innovative stirrup design contains many features relevant to **Today's Modern OR™** including...

- Ergonomically designed stirrup boot, designed to provide pressure relief and support for a wide range of leg and calf sizes.
- Durable and lightweight construction, featuring a flexible calf section.
- Removable and reusable Kyra Comfort Boot Pad with 1" of memory foam to protect and relieve pressure on patient limbs.
- Curved support spar that eliminates dangerous pinch hazards.
- Lithotomy range of motion from -55° to +85°
- Optional Kyra SecureLok™ closure straps. These unique straps eliminate Velcro Brand™ straps.
- Optional Secure-Release™ Integrated clamps allows for quick and easy mounting of the device and eliminates the problem of missing clamps.
- Kyra Comfort™ Release handle which reduces stress on the clinicians hand while allowing full range of lithotomy and abduction/adduction motion.

## 1. Safety Precautions:



**WARNING:** Please read the instructions for equipment set up and use. Familiarize yourself with the product before application on a patient prior to use.



**WARNING:** Always examine the device and surgical side rails for and damage or wear before using. **DO NOT USE IF PRODUCT FAILS TO PERFORM AS EXPECTED OR IF DAMAGE IS VISIBLE.**



**WARNING:** Verify the attaching clamps or optional integrated attaching clamps are completely engaged to the surgical table side rails and are firmly in place. Test the clamping mechanism of the clamp to ensure that there is no movement when the device is activated and moved into high/low Lithotomy position and/or when the stirrup is abducted and/or adducted.



**WARNING:** When the patient is put in to Trendelenburg/reverse Trendelenburg position positioning devices should be used to secure the patient in place. The stirrup and stirrup boot should never act as a securement device for the patient when in these positions.



**CAUTION:** Kyra Comfort 350 Do not exceed **350 lb. (160 kg)** patient weight.  
**CAUTION:** Kyra Comfort 500 Do not exceed **500 lb. (230 kg)** patient weight.  
**CAUTION:** Kyra Comfort 800 Do not exceed **800 lb. (364 kg)** patient weight.



**CAUTION:** Do not submerge in liquids of any kind since this could damage the equipment. Do not clean with high pressure water.



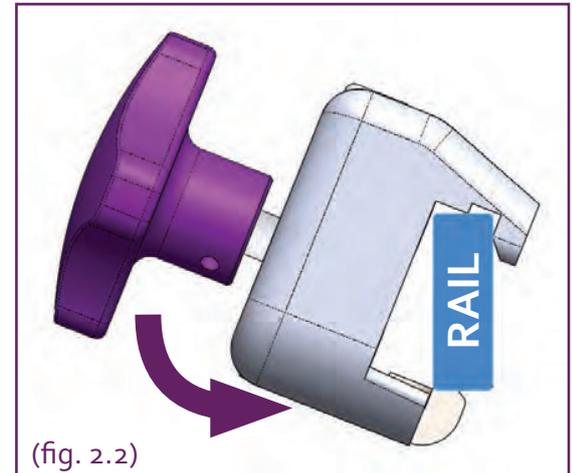
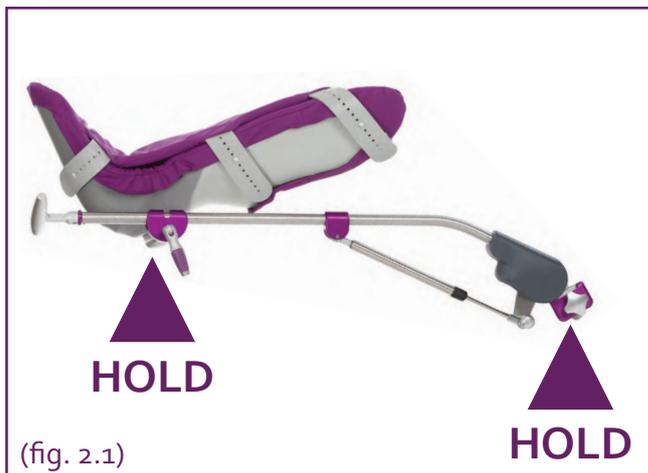
**CAUTION:** Never raise the thigh closer to the torso than 90° as this could cause nerve injury to the patient.



**CAUTION:** To ensure that the device is in working order only Kyra Repair Kits and Kyra trained service/bio-medical engineers or Kyra service technicians should repair the equipment. Failure to do this will void the warranty and could lead to device failure and injury.

## 2. Equipment Setup:

1. Prior to placing the Kyra Comfort Stirrups on the table the patient should be examined and assessed for any pre-existing conditions that might prohibit the safe use of lithotomy positioning equipment.
2. Kyra Comfort Stirrups can be mounted to the table using a standard surgical table rail clamp. Kyra Comfort Stirrups with Integrated Kyra Secure Release clamps can be mounted directly to the surgical table rail.
3. Use of Kyra Comfort Stirrups with Integrated Secure Release Clamps while grasping the support structure of the stirrup with one hand and the clamp with the other hand, (fig. 2.1); push the channel side of the integrated clamp against the rail. (fig.2.2) The patented "Secure-Release feature allow the clamp to engage anywhere along the table rail.



4. Position the blade clamp adjacent to the patient's hip. (fig. 2.3) The long fin of each boot should be positioned on the lateral side of the patient leg.
5. The patented curve in the stirrup support structure should be positioned as close as possible to the patient's greater trochanter joint.



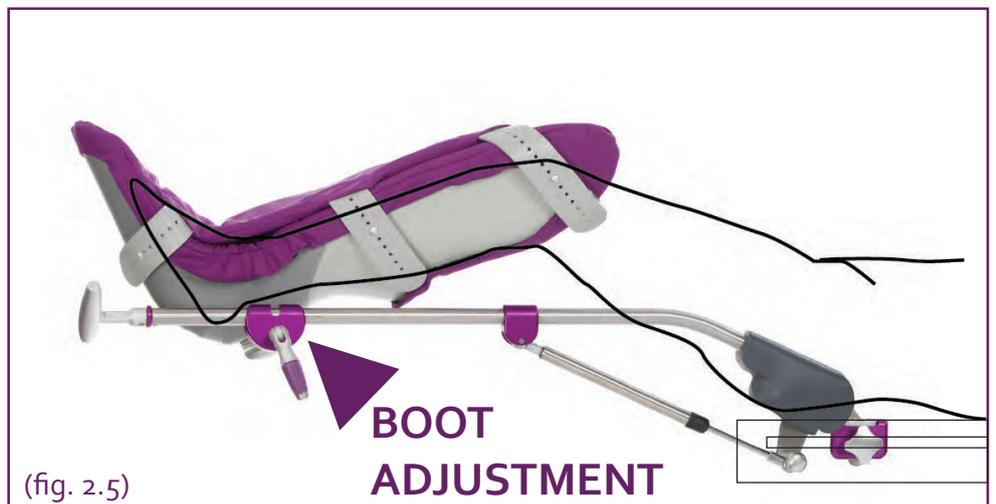


6. **WARNING:** Once the stirrup is in the desired position the blade clamps should be tightened in the clamping mechanism. (fig. 2.4) It is important that the clamps be tightened, then tested for security.



(fig. 2.4)

7. Loosen the locking mechanism, (fig. 2.5) in order to slide boot along support rod until the calf portion of the boot is located near the patient's calf. Tighten the mechanism on the boot securely such that boot cannot be moved. Do the same for the other stirrup.



(fig. 2.5)

8. Position stirrups level with the table by either turning the handle (Kyra Comfort Release Handle) while moving the stirrups into place.

### 3. Placing the Patient into the Stirrups:

1. Position the patient onto the Operating Room table according to the requirements of the surgeon.
2. Loosen boot-clamping mechanism and slide boot along rod until the top end (calf portion) of the boot is at patient's mid-calf. Tighten the clamp.
3. Ensure patient is positioned on O.R. table in accordance with procedure and surgeon requirements.
4. Pre-position stirrup boots. Loosen boot-clamping mechanism and slide boot along rod until top end (calf portion) of boot is approximately at patient's mid-calf. Tighten clamp.
5. Safe Positioning patient positioning requires at least two staff members. Each staff member will simultaneously place the patient's legs into a stirrup. Grasp the heel in one hand and place the other hand under the patient's knee. Gently flex the patient knee and while supporting the leg with both hands each clinician should simultaneously transfer a leg into stirrup boot.
6. Check that the patient's heels are in the heel section of the boot and securely in place.
7. **Proper initial leg flexion includes the following safe guidelines:**

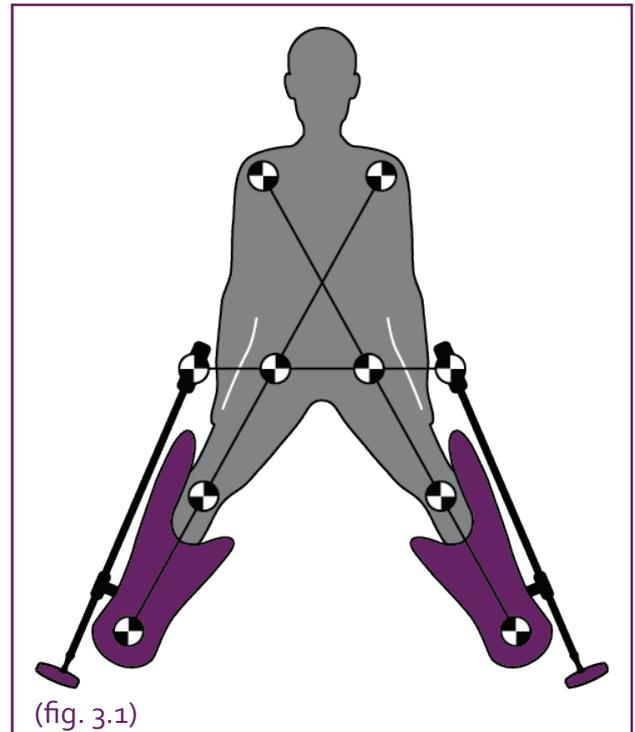
**When using LOW LITHOTOMY, do not to hyper-extend the leg while achieving desired abduction.**

**When using MEDIUM OR HIGH LITHOTOMY, use minimal amounts of leg flexion/abduction initially as these will increase as the legs are moved into higher positions.**

**Continued on next page**



8. Ensure that the ankle, knee and opposite shoulder are maintained in alignment during positioning. Usually the foot and thigh are abducted at the same angle. (fig. 3.1)



9. In order to move the boot position and change flexion the boot should be supported at heel with one hand and with the other hand the boot clamp should be loosened by turning the handle on the boot clamping mechanism with small turns of  $\frac{1}{8}$  of a turn. Use both hands to support and adjust boot to desired position. Tighten clamping mechanism securely.
10. Perform a final check to ensure that the patient's heels are properly seated in the heels of the boots and that there are no pressure points on the calf. The leg must be centered in the boot to eliminate pressure on the peroneal nerve.
11. Close the boot pad by using the Kyra Comfort medial to lateral closure system with optional SecureLok™ Closure Straps.

## 4. Cleaning and Maintenance:

1. After each use, clean the device.
2. Clean and disinfect using a quaternary ammonium disinfecting/cleaning solution following the manufacturer's recommendation for achieving low-level disinfection.
3. Read the cleaning product's directions and follow the instructions on the label. Use caution in areas where fluid migration may occur:
  - Handles
  - Side-rail clamps
4. Wipe device with a clean, dry cloth.
5. Make certain the product is dry prior to reinstalling to avoid damage.



**CAUTION:** Damage may result if product is cleaned with bleach or other caustic chemicals or harsh abrasives.



**ATTENTION:** If the KYRA Comfort™ Stirrup is damaged or appears to be functioning abnormally, discontinue use and contact Customer Service at 1-508-936-3550



## 5. Kyra Comfort™ Stirrups with Integrated Secure-Release™ Clamps:

1. Kyra Comfort Stirrups with Integrated Secure Release Clamps can be mounted anywhere along the surgical table rail.
2. NOTE: For ease of installation, it is recommended to remove X-Ray Cassette tops prior to installing the Kyra Comfort™ Stirrups with Integrated Secure-Release™ Clamps
3. The first stirrup that will be placed on the surgical table prior to the patient be transferred to the OR Table on the side opposite should be positioned in the “high lithotomy”. This can be accomplished by “actuating the stirrup” prior to approaching the surgical table. (fig. 5.1 & 5.2)



4. Position the clamp's upper lip level with the top of the table's surgical rail. (fig. 5.3)



5. Keep the clamp parallel (left to right) with the surgical rail and lower the clamp until an audible “click” is heard. This indicates the lower clamp jaw has grabbed the rail. Tighten the knob. (fig. 5.4)



- Once the clamp is locked and the knob tightened, lower the stirrup in the horizontal lithotomy position. (fig. 5.5 & 5.6)



- Once the patient is placed on the table, attach the second stirrup using steps 1-6. (fig. 5.7)



- Prior to removing the stirrups from the surgical table, move the stirrups into high-lithotomy position. (fig. 5.8 & 5.9)



9. Loosen the clamp by rotating the knob counter-clockwise. (fig. 5.9)



10. Depress the release button while holding the clamp. Tilt the stirrup so the bottom clamp jaw clears the rail and lift the stirrup up and away. (fig. 5.10)





Removal of the optional integrated clamp from the stirrup should only be done by a Kyra trained biomedical engineer or Kyra service personnel.



1. The patented Integrated SECURE RELEASE™ Clamp can be removed by use of a 1/8" hex wrench.
2. Place the stirrup length wise on a table or flat work surface. Tighten the boot clamp to secure the boot from moving. The clamp body should be on a working surface and not hanging off the edge of a table or work surface **Do NOT mount the stirrup to a surgical table when removing the integrated clamp.**
3. Place the wrench into the upper restraint pin socket located on the restraint pin's head. Turn the wrench counterclockwise until the pin disengages and remove the upper restraint pin.
4. Place the wrench into the lower restrain pin socket located on the restraint pin's head. Turn the wrench counterclockwise until the upper restraint pin disengages and remove the upper restraint pin.
5. Slide the clamp off the blade. The stirrup blade (and stirrup) can now be mounted to any standard blade clamp.
6. The removed clamp can also be used with any standard accessory or device that requires a blade.

**End**



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