#### Stander

## **Rifton Stander**

S410 Product Manual







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### **IMPORTANT**

Please save this product manual for future reference.

## **Key for users**

Use this key to determine which sections of this product manual apply to you.

- **Technical Users** For professionals who order and set up Rifton products.
- **Home Users** For care-givers who use Rifton products on a regular basis.
- **Maintenance Personnel** For anyone who is responsible for service or re-ordering of Rifton products and parts.

## Check your order 14

Your Rifton Stander comes assembled in one carton, though you may need to attach some of the components. Check that all required components and the optional components you selected are present. (You may not have ordered all of the available components.)



## **▲WARNING 1 A** Y

- Thoroughly read and understand the information in this product manual before attempting
  to use this product. If the procedures and instructions in this product manual are not
  followed, serious injury or death could occur.
- A qualified professional must assess the appropriateness and safety of all equipment for each user
- A qualified medical professional must perform the initial set-up of the Stander, and must ensure that other caregivers are trained in correct operation.
- This product is intended for use by clients of unreliable judgment. Adult supervision is required at all times.
- To prevent falls and injuries:
  - Do not use this product on rough and uneven terrain, around swimming pools, or near stairways.
  - Ensure the appropriate use of straps and supports at all times. Straps and supports
    are provided for the safety of the user and must be carefully adjusted for comfort and
    security.
  - Ensure that you use all the correct straps and supports for the specific Stander configuration (prone or supine). Refer to the labeling and this manual.
  - o Tighten all adjustment knobs before use and immediately after making any adjustments.
  - Lock brakes at all times except when transporting the Stander, and lock brakes for all transfers in and out of the product.
- To prevent tipping and resulting injury:
  - Use the Rifton Stander indoors only.
  - When moving the Stander, hold the push handle firmly, move at a slow and controlled speed, and take extra care on doorsills, ramps, corners, and any uneven surfaces.
- Do not use this product for clients outside the height and weight limits specified in this
  manual.
- To prevent structural failure, which may result in serious injury or death:
  - Inspect this product and components regularly for loose or missing screws, metal fatigue, cracks, broken welds, missing attachments, general instability or other signs of excessive wear.
  - Immediately remove this product from use when any condition develops that might make operation unsafe.
  - $\circ$  Do not use Rifton components or products for any purpose other than their intended use.

## Recommended use 1 4 Y

The Rifton Stander is a Class 1 medical device. It is intended to position people with disabilities in standing, providing the health and therapeutic benefits of supported standing. The Rifton Stander allows for growth and can be configured for prone or supine standing. The multi-position configuration allows both. A variety of padded supports, straps and adjustments allow comfortable and precise positioning for users with different physical needs. Configuration and initial setup should be done by a qualified medical professional.

## User and item dimensions 1 4 Y

User dimensions – inches (cm)	Size 1
Height	28-42 (71-107)
Key user dimension: height The user's overall height is a general guide to help you select the appropriate size. Choose the model that allows for growth.	
Important: User's weight must not exceed the	maximum working load.
Item dimensions – inches (cm)	Size 1
Base length	32½ (83)
Base width	21½ (55)
Horizontal body support height above floor	22–28 (56–71)
Sandal to knee height	6¾ -11 (17 -28)
Knee to hip height	61/4 - 101/2 (16 - 27)
Sandal to top of headrest	31½ – 43 (80 – 109)
Distance between trunk laterals	5½ – 10 (14 – 25)
Distance between thigh medial and lateral support	21/2 - 4 (6 - 10)
Basic item weight (Prone)	47 lbs (21 kg)
Basic item weight (Supine)	52 lbs (23.5 kg)
Max. working load in lbs (kg)	75 (34 kg)



## Critical supports 1 A

#### **A** WARNING

To avoid falls or strangulation,

always ensure the correct straps and supports are used in each configuration. The infographic to the right shows the minimum straps and supports required for safe positioning in prone and supine standing.

These minimum supports are denoted throughout this guide by \* for supine and \* for prone.

**Figure 6a:** Straps have color coded tags. Use components with **GREEN** tags for supine positioning, and components with **BLUE** tags for prone positioning.



Figure 6a

## Basic item frame 1 A



Product can tip over if used incorrectly.

Always engage brakes during transfers and standing.

#### Wheels / Brakes

The wheeled base has two large wheels on the side and casters at the front and rear for excellent maneuverability. When the stander is loaded, the rear caster is intentionally raised slightly off the floor, which helps when negotiating doorsills or uneven floors. Foot operated brakes are located on both of the large wheels.

**Figure 7a:** Press down on the white pedal to lock brake, kick forward on the top tab to release



The column allows 6 inches of height adjustment, with gas spring assist.

**Figure 7b:** Grasp the handle on top of the column and squeeze the white trigger to unlock and adjust the height. You may need to take some of the body support weight with your other hand.

### **Caregiver handle**

Use the caregiver handle for steering and pushing the Stander, as well as for adjusting the body support angle.

**Figure 7c:** Adjust the handle position using the knob at the attachment point. Always ensure the handle adjustment knob is tight before changing the body support angle or moving the Stander.



Figure 7a



Figure 7b



Figure 7c



## Tilt adjustment

**AWARNING** 

To prevent falls or other injury, ensure all

straps are secure and knobs tight before tilting client to a standing position.

The body support can be adjusted from horizontal to completely vertical (90°).

**Figure 8a:** Grasp the caregiver handle firmly and squeeze the double trigger to adjust the body support angle. Release the triggers to lock the adjustment.

## Body support and trunk laterals

The body support is the central padded section where the upper trunk support, trunk laterals and several straps attach.

The trunk laterals may be used at the trunk, at the pelvis, or in both positions if a second pair of laterals was selected.

Figures 8b and 8c: Use the white triggers (A) on the side of the body support for width adjustment or removal. Use the knob (B) to adjust the height of each lateral pad, and use the white trigger (C) to swing lateral away for ease of transfer.

### **Strap attachment**

All straps on the body support attach with similar clips.

**Figure 8d:** Insert the tip of the clip into corresponding socket behind the body support and pull forward until it clicks. Pull the clip back away from the pad to remove the strap.



Figure 8a



Figure 8b



Figure 8c



Figure 8d

### Leg supports

**Figure 9a:** Adjust the padded leg supports so that the pad is centered at the user's knee. The inside knob (A) adjusts thigh length, and the outside knob (B) adjusts lower leg length.

#### **Abduction**

The Rifton Stander provides independent abduction up to 30° for each leg.

**Figure 9b:** Loosen knob (C) behind the hip joint to adjust hip abduction.

#### Sandals

The sandals have adjustable heel cups and straps with buckles to position and secure the feet.

**Figure 9c:** Loosen the knob underneath (D) to rotate the sandal or adjust it forward and back. Use the knob toward the outside of the sandal (E) to adjust the ankle plantar flexion/dorsiflexion through a total of 30°. Rotate the sandal 180° to switch between prone and supine configuration.



Figure 9a



Figure 9b



Figure 9c



## Basic item PRONE 1 A

See pages 7–9 for base frame, body support, leg, sandal, and height adjustments.

### Trunk strap\*

**AWARNING** 

To prevent falls or other injury, all users

should be secured with a trunk strap (standard or rotation control) in prone standing.

A trunk strap (standard or rotation control) stabilizes the trunk and is required for prone standing.

**Figure 10a:** The padded trunk strap attaches under the arms and securely positions the upper body.

**Figure 10b:** To attach the trunk rotation control strap, detach the top end of the trunk pad and slide the webbing loop down behind the pad. Re-attach the trunk pad, then clip the ends of webbing strap to the body support. Close the strap snugly around the user, then close the buckle and tighten either side to control trunk rotation.

#### Pelvic harness\*

**AWARNING** 

To prevent strangulation or

other injury, in prone standing the prone pelvic harness MUST be used with all five attachment points secured.

In prone standing the pelvic harness provides critical support behind the user's hips to maintain the standing position. This is a shaped, padded harness, with a 5-point attachment system for safety.

**Figure 10c:** Tighten lower straps first to secure the harness low under the user's hips and provide ideal support. Then secure the remaining straps and adjust until snug. Use the three buckles on the right side and center when transferring the user in and out.



Figure 10a



Figure 10b



Figure 10c

## Basic item SUPINE 1 A

See pages 7–9 for base frame, body support, leg, sandal, and height adjustments.

## **Upper trunk support**

The upper trunk support includes head and arm support and attaches to the top of the body support.

#### **Attaching**

**Figure 11a:** To attach the upper trunk support, tilt it back 45° from the plane of the body support and insert stampings into slots.

#### **Adjusting**

**Figure 11b:** Squeeze the white triggers to adjust the upper trunk support height. It should be adjusted near the top of the user's shoulders, although it is fine for smaller users to end up lower on the pad.

### **Arm supports**

**Figure 11c:** The padded arm supports are mounted permanently on either side of the upper trunk support. They provide support behind the arms in supine positions. A knob (A) behind the attachment point allows each arm support to swing up out of the way behind the headrest during transfers.



Figure 11a



Figure 11b



Figure 11c



#### Headrest

**Figure 12a:** The headrest is attached to the upper trunk support and provides posterior support for the user's head. Attach optional head laterals for additional support (see p. 16).

#### Trunk strap\*

**AWARNING** 

To prevent falls or other injury, all users

should be secured with a trunk strap (standard or rotation control) or butterfly harness in supine standing.

A trunk strap (standard or rotation control) securely positions and stabilizes the trunk. For additional upper trunk positioning and stabilization, a butterfly harness may be used in supine standing. See p. 16 for full instructions and important safety information.

A trunk strap (standard or rotation control) or a butterfly harness is required for supine standing.

**Figure 12b:** The padded trunk strap attaches under the arms and securely positions the upper body.

Figure 12c: To attach the trunk rotation control strap, detach the bottom end of the trunk pad and slide the webbing loop up behind the pad. Re-attach the trunk pad, then clip the ends of webbing strap to the body support. Close the strap snugly around the user, then close the buckle and tighten either side to control trunk rotation.



Figure 12a



Figure 12b



Figure 12c

## Supine hip strap\* SUPINE ONLY

A hip strap (standard or rotation control) is required for supine standing.

**Figure 13a:** The padded supine hip strap provides support around the hips and positions the user securely on the body support.

**Figure 13b:** To attach the hip rotation control strap, detach the bottom end of the trunk pad and slide the webbing loop up behind the pad. Re-attach the trunk pad, then clip the ends of webbing strap to the body support. Close the strap snugly around the user, then close the buckle and tighten either side to control trunk rotation.



**AWARNING** 

To prevent strangulation or other

injury, in supine standing the user's knees MUST be secured with knee straps.

**Figure 13c:** The individual padded knee straps clip onto the leg supports at either side of each knee with a keyhole type attachment onto the posts provided (A). These split knee straps have an opening at the patella for user comfort, and may be tightened securely by pulling the strap ends. The posts on the sides of the leg supports should align with the user's knees for correct strap placement.

Loosen the strap by lifting the plastic tab on the attachment clip and unclip one end from the post to release the strap completely.



Figure 13a



Figure 13b



Figure 13c



## Basic item MULTI-POSITION 1 #

The multi-position option has all the features and components of both Prone and Supine Standers described above and may include any of the optional components selected as well. The multi-position option enables both prone and supine configurations.

To upgrade your device from a prone or supine stander to a multi-position stander, select the appropriate upgrade kit below.

#### **PRONE to MULTI-POSITION**

**Figure 14a:** Choosing this option will upgrade a Prone Stander to the multiposition Stander by adding the functionality of supine standing. This package includes the upper trunk support with attached headrest and arm supports, a supine hip strap, and a pair of supine knee straps.

#### **SUPINE to MULTI-POSITION**

**Figure 14b:** Choosing this option will upgrade a Supine Stander to the multiposition Stander by adding the functionality of prone standing. This adds the prone pelvic harness to the product.



Figure 14a



Figure 14b

## Optional Components 1 A

#### **Tray**

#### **Attaching**

**Figure 15a:** The tray has a single mounting point at the side of the Stander, and may be used in either Prone or Supine standing. To attach the tray, insert the bolt on the tray arm into the socket at the side of the Stander. Push the knob (A) up and turn to tighten.



**Figure 15b:** Adjust the tray position easily by loosening all 3 knobs that face downward and moving tray to the desired position before tightening the knobs again. The knob under the center of the tray (B) also allows tray angle adjustment. To adjust the tray height use the knob (C) that faces forward.

## Medial/lateral thigh supports

One or two pairs of thigh support pads may be used. When used at the medial thigh they provide an abductor function. Mount the medial/lateral thigh supports on the inside for medial support, or on the outside for lateral support.

**Figure 15c:** Adjust the width using the white trigger (D). The mounting bracket is off-center, so the pad has two possible height positions. Swap pads to change height position.





Figure 15a



Figure 15b



Figure 15c



#### **Head laterals**

**Figure 16a:** Add a pair of head laterals for additional head support and control. To attach, insert at the top of the slot and slide down to desired position. Loosen the knob (A) to adjust independently in height and width.

### **Butterfly harness**

**AWARNING** 

To prevent strangulation, always

attach center safety strap and make sure all straps are snug before every use.

**Figure 16b:** In supine standing a butterfly harness may be used in place of a trunk strap. The butterfly harness provides more upper trunk positioning and stabilization. For safety, always use all five attachment points.

## Prone knee cuffs PRONE ONLY

**Figure 16c:** Prone knee cuffs are available for prone standing only. They wrap around the user's knee and give some medial/lateral stabilization of the knee on the padded leg support. They are also useful for preventing knee hyperextension when necessary.

In addition, some degree of rotational control can be achieved by tightening the strap on one side of the cuff more than the other.



Figure 16a



Figure 16b



Figure 16c

## Operation 1 A

The Rifton Stander is intended to allow users who may be unable to stand independently to be positioned safely in prone or supine standing, up to fully vertical as needed. Review the following positioning and transfer information for proper operation of this Stander, and also refer to the safety information on page 4 of this product manual.

### **Positioning basics**

Figure 17a: To position the user at the correct height in the stander, align their hips with the "HIP" tags (A) on either side of the body support. Remember that the user may tend to sink down slightly in the stander when it is tilted toward vertical, so it may help to position them slightly higher to begin with.

When adjusting leg length or upper trunk support height to fit the user, ensure that the user's hips remain in line with the "HIP" tags.

**Figure 17b:** For correct alignment of the leg pads and knee straps, the user's knee should line up with the strap attachment posts (B) on either side.

To position the pelvic harness correctly in prone, tighten the lower side straps first to get the support low and tight under the hips and comfortably support the user's weight.

Check for any pressure areas and adjust the supports to relieve them. You may need to move the sandals forward or back to get the leg comfortably supported against the leg pad.

## Positioning smallest users in size 1 Stander:

(users 28"-32" tall)

For the smallest users, use one set of trunk laterals in the lower position and attach the trunk strap in the lower position on the body support.



Figure 17a



Figure 17b



#### **Transfers**

Follow these steps for easy transfer into the Stander:

## Prone transfer 1 (sit-to-stand transfer)

#### Figure 18a:

- Measure from the center of the user's knee to the bottom of their foot and set lower leg length on the Stander to match.
- Measure from the center of the user's hip to the center of their knee and set thigh length on the Stander to match.
- Position the Stander close to the client with the body support nearly vertical. Lock the brakes.
- 4. Place the user's feet on the sandals, legs against the pads.
- 5. Help the client to stand up and secure the pelvic harness.
- 6. Apply the other straps and supports, and secure the sandal straps.
- 7. Check that minimum required supports for prone standing are secure:
  - Trunk strap (standard or rotation control)
  - Pelvic harness 5 straps
  - Sandals
- 8. Adjust to desired angle for standing.



Figure 18a

#### Prone transfer 2 (lifting transfer)

#### Figure 19a:

- Measure from the center of the user's knee to the bottom of their foot and set lower leg length on the Stander to match.
- Measure from the center of the user's hip to the center of their knee and set thigh length on the Stander to match.
- 3. Adjust the stander to horizontal or near horizontal and lock the brakes.

- 4. Lift the user into the stander and secure the pelvic harness.
- 5. Apply the other straps and supports and secure the sandal straps.
- 6. Check that minimum required supports for prone standing are secure:
  - Trunk strap (standard or rotation control)
  - Pelvic harness 5 straps
  - Sandals
- 7. Adjust to desired angle for standing.

#### Supine transfer Figure 19b:

- 1. Measure from the center of the user's knee to the bottom of their foot and set lower leg length on the Stander to match.
- Measure from the center of the user's hip to the center of their knee and set thigh length on the Stander to match.
- 3. Position the Stander horizontal at the desired height for transfer. Lock the brakes.
- 4. Open the straps and swing the laterals out of the way.
- Lift the user onto the Stander and align hips with the hip markers on the stander. Secure the hip strap first.
- 6. Adjust thigh and lower leg length if necessary.
- 7. Ensure the posts on the sides of leg supports align with user's knees for correct strap placement. Secure the knee straps.
- 8. Apply the other straps and supports and secure the sandal straps.
- 9. Check that minimum required supports for prone standing are secure:
  - Trunk strap (standard or rotation control) or butterfly harness
  - Supine hip strap (standard or rotation control)
  - Knee straps
  - Sandals
- 10. Adjust to the desired angle for standing.



Figure 19a



Figure 19b



# PRONE / SUPINE conversion Multi-Position Stander only 1 4

It is very important to configure the product correctly and to ensure that the correct straps and supports are used in each position. Straps have color coded tags. Use components with **GREEN** tags for supine positioning, and components with **BLUE** tags for prone positioning.



## **Switching to PRONE**

#### 1. Remove upper trunk support

Squeeze the triggers on the back of the trunk support. Pull the upper trunk support up and tilt it back to remove it.



If the tray is used, loosen attachment knob (A), remove the tray and attach it facing the other direction. For use in prone, adjust the tray up and the caregiver handle down and out of the way.



Remove the supine hip strap. Install the pelvic harness by attaching all 5 straps.

#### 4. Remove knee straps

Optional prone knee cuffs may be added.

#### 5. Rotate sandals 180°

Loosen the knob under the sandal (B), rotate them so that heel cups are towards the front of the stander, and tighten the knob.









#### **Switching to SUPINE**

#### 1. Add upper trunk support

Tilt the upper trunk support back 45° from the plane of the body support and insert the stampings into the slots. Squeeze the triggers on the back of the body support to adjust the upper trunk support down to the desired position.

#### 2. Switch tray direction

If the tray is used, loosen attachment knob (A), remove the tray and attach it facing the other direction.

#### 3. Switch to supine hip strap

Remove the pelvic harness at all 5 attachment points. Install the supine hip strap (standard, or rotation control).

#### 4. Add knee straps

Clip the knee straps onto the posts on either side of the knee.

#### 5. Rotate sandals 180°

Loosen the knob under the sandal (B), rotate them so that the heel cups are towards the back of the stander, and tighten the knob.













## **Materials**

- Steel hardware items (nuts, bolts, screws, etc) are typically zinc or nickel plated, or stainless steel.
- Upholstery items (pads on the body support) are polyurethane foam with a fireretardant cover.
- Other padded supports are made of molded cross-linked polyolefin foam.
- Frames are welded steel tubing coated with a baked-on paint finish. Some frame components are aluminum extrusions.
- Wheels have solid tires and do not require inflation.
- Straps are typically made of polypropylene webbing with laminated foam padding.
- Plastic components are typically injection molded from a variety of industrial resins.

All materials are latex, lead and phthalates free.

## **Maintenance**

This product is designed and tested for an expected life of 5 years when used and maintained in accordance with this manual. At all times, clients must ensure that the product remains in a safe and useable condition, including regular maintenance and inspections as specified in this product manual.

To prevent structural failure, which may result in serious injury or death:

- Inspect this product and accessories regularly for loose or missing screws, metal fatigue, cracks, broken welds, missing attachments, general instability or other signs of excessive wear.
- Immediately remove this product from use when any condition develops that might make operation unsafe.
- Do not use Rifton components or products for any purpose other than their intended use.
- Replace or repair components or products that are damaged or appear to be unstable.
- Use only Rifton authorized replacement parts.

## Cleaning 1 A Y

The Stander can be cleaned with disinfectant wipes or a solution of up to 10% bleach. Do not use excessive amounts of water. This includes metal parts, upholstery, harnesses and padded straps. You may also use a commercial cleaning agent suitable for imitation leather for the upholstery.

Do not machine wash harness or padded straps.

## Warranty Statement 1 4 ?

If a Rifton product breaks or fails in service during the first year, we will replace it free of charge.

## User modifications 1 4 ?

To prevent serious injury or death, do not modify or alter Rifton products or components, or use Rifton products or components in conjunction with products from other manufacturers. Rifton does not accept responsibility for any modifications or alterations made to our components or products after they leave our premises. Customers modifying or altering our components or products, or using them in conjunction with products from other manufacturers, do so at their own risk.

