

HTS

Rifton HTS Hygiene Toileting System

Z110, Z120 & Z130 Product Manual



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WARNING




- 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.
- 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.
 - Tighten all adjustment knobs before use and immediately after making any adjustments.
- To prevent falls, strangulation, head entrapment or other injuries:
 - Always use seatbelt when the tray, chest strap or headrest are in use.
 - Tighten the seatbelt portion of the butterfly harness before tightening the upper straps.
- The portable base is intended for travel use only and should not be used as the primary base. Ensure adequate stability when using the portable base.
- 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.
 - 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.

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.

IMPORTANT

Please save this product manual for future reference. Additional copies are available at <http://www.rifton.com/customer-service/product-manuals>.

Recommended use

The Rifton HTS is a Class 1 medical device. The intended use of the HTS is to compensate for disease, injury, or disability by allowing comfortable toileting and showering, and by providing modification for anatomical positioning.

The many different configuration options of the HTS provide great versatility; it can be used as a stand-alone commode, over the toilet, mounted directly on the toilet, in a roll-in shower, or for a tub shower. Optional supports and components allow the HTS to be used for clients with a wide range of needs and disabilities.

User and item dimensions

User dimensions - inches (cm)	Z110 small	Z120 medium	Z130 large
Height	30-46 (76-117)	42-56 (106-142)	50-74 (127-188)



Key user dimension: height

The user's overall height is a general guide to help you select the appropriate size of HTS. Choose the model that allows for growth.

Important: Make sure that seat width, depth and height are adequate for each individual user, and that the user's weight does not exceed the maximum weight recommended.

Item dimensions— inches (cm)	Small	Medium	Large
Tilt-in-space mobile base footprint	21 x 27 (53 x 69)	21 x 27 (53 x 69)	23½ x 33 (60 x 84)
Tilt-in-space base length when fully extended (incl. headrest)	43 (109)	49¼ (125)	57¼ (145.5)
Non-tilt base footprint	20 x 25 (51 x 64)	20 x 25 (51 x 64)	23½ x 29 (60 x 74)
Seat (front) to footboard height*	8½-13½ (22-34)	10½-15½ (27-39)	11¼-17½ (28.5-44)
Seat (front) to floor; mobile tilt frame**	15½-21½ (39-55)	15½-21½ (39-55)	17½-23 (44-58)
Seat (front) to floor; mobile non-tilt frame**	16-20 (41-51)	17-20½ (43-52)	18-22 (46-56)
Seat (front) to floor; stationary non-tilt frame	13-17 (33-43)	14-17½ (36-44)	15-19 (38-48)
Seat depth (1" increments)	8-11 (20-28)	11½-14½ (29-37)	14½-17½ (37-44)
Seat width (depending on hip guides)	6/8/10/12 (15/20/25/30)	8/10/12/14 (20/25/30/36)	11/13/15/17 (28/33/38/43)
Hole size in seat pad	open 4x9 (10x23) closed 3x8 (8x20)	open 4½x12 (11x30) closed 3½x10 (9x25)	open 6x14 (15x36) closed 4½x12 (11x30)
Armrest height	5¼ (13.5)	6½ (17)	8 (20)
Backrest height above seat	16½ (42)	19½ (50)	24½ (62)
Backrest width	11½ (29)	13½ (34)	16 (41)
Tilt in space FORWARD	5°	5°	5°
Tilt in space BACK	25°	25°	25°
Backrest angle adjustment	6° fwd, 6°; 18° back	6° fwd, 6°; 18° back	6° fwd, 6°; 18° back
Footboard angle adjustment	10°, 20°, 30° fwd, 10° back	10°, 20°, 30° fwd, 10° back	10°, 20°, 30° fwd, 10° back
Max. clear height under seat (tilt frame)	20½ (52)	20½ (52)	20¾ (52.5)
Max. clear height under seat (stationary non-tilt frame)	15 (38)	15 (38)	16½ (42)
Max. clear height under seat (mobile non-tilt frame)	18 (46)	18 (46)	19½ (50)
Portability base clearance (fits over ADA compliant toilets)	18½ (47)	18½ (47)	N/A
Bottom of frame to floor; tilt-in-space mobile base	2 (5)	2 (5)	2 (5)
Tub base footprint	23x16½ (58x42) at feet 19 (48) at top	23x16½ (58x42) at feet 19 (48) at top	N/A
Tub base height (floor to seat pad)	front: 11 (28) back: 9½ (24)	front: 11 (28) back: 9½ (24)	N/A
Max. working load - lbs (kg)	75 (34)	150 (68)	***250 (113)

* When mobile base is in lowest positions and footboard is fully extended, it may prevent front casters from swiveling. In this case, either change footboard angle or raise seat height to give casters room to swivel.

** Add 1" (3 cm) to this measurement when using large casters.

*** The maximum working load for the large HTS footboard is 150 lbs (68 kg).

Check your order

Your Rifton HTS has been shipped according to your specifications. It will require some tool-free assembly. Follow these instructions to ensure that your product is assembled and used correctly. This product manual is comprehensive, and may discuss features not included in your configuration of the HTS.

If your shipment is incomplete or in any way damaged on arrival, please call Customer Service, 800.571.8198.

Basic item

A *Quick Reference Guide* for the HTS can be downloaded from a QR code on the back of the backrest.

Tip: Every blue lever or button indicates a point of adjustment.

Seat depth

Figure 6a: The side pieces allow for seat depth adjustment. Lift the blue latches (A) on both outer sides. Move both sides together to the desired seat depth and find a latched position.

This same adjustment will also enable both sides to slide forward off the seat for cleaning the area underneath.



Figure 6a

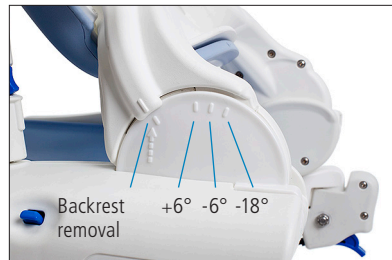


Figure 6b

Backrest angle

Figure 6b: The backrest angle can be adjusted 6° forward, 6° back, and 18° back.

Figure 6c: Raise both back angle triggers (B), adjust to desired angle and release into a latched position.



Figure 6c

Backrest installation or removal

Figure 7a: To install the backrest: Tip the backrest toward the front. Insert the bottom end of the backrest between the latch plates (A) while raising the backrest angle triggers (B). Firmly press down on the backrest while rotating it back towards the first latched position.

To remove the backrest, adjust the back angle all the way forward. Then lift the backrest up.

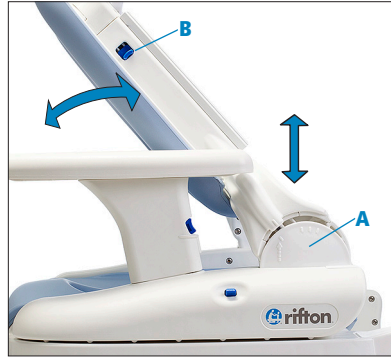


Figure 7a

Seatbelt

⚠ WARNING To prevent falls, strangulation, head entrapment or other injuries, always use seatbelt when the tray, chest strap or headrest are in use.

Figure 7b: Every HTS is provided with a seatbelt. To attach the seatbelt insert the seatbelt attachment clip (C) into the socket at the back end of the side piece. Check to ensure that the seatbelt latches into place.



Figure 7b

Figure 7c: For users that tend to slide forward on the seat, you may benefit from threading the seatbelt to the inside of the backrest supports.



Figure 7c

Figure 7d: On the small HTS there is an additional option for seatbelt threading to ensure a more secure positioning for small active users. Thread the seatbelt through the hooks provided at the bottom back edge of the seat.



Figure 7d

Armrests

Figure 8a: To attach the armrest, insert the bottom of the armrest into the oval slots in the side pieces and press down firmly until it latches into place.

To remove the armrest, squeeze the release button (A) and pull the armrest up.

Tip: Armrests of different sizes can be retrofitted.



Figure 8a

Bases

⚠ WARNING To prevent falls and injuries, always make sure both seat hooks are inserted into the base sockets and that both seat latches are latched to base.

Attaching the seat

Figure 8b: Insert both hooks at the rear of the seat into the sockets of the frame. Then push front of seat down onto frame until the latches audibly engage.



Figure 8b

Removing the seat

Figure 8c: To remove the seat from a base, pull both seat latches (B) under the front edge of the seat, and lift it from the base.



Figure 8c

Base height adjustment



WARNING To prevent falls and injury, do not adjust height with user in the product.

Figure 9a: To lower the seat, squeeze both height latches (A) on the frame uprights while supporting the weight of the seat. Lower both sides evenly to prevent binding.

To raise the seat, flip up the footboard, put one foot on the frame cross bar, and pull up on the seat frame (there is no need to release the height latches).

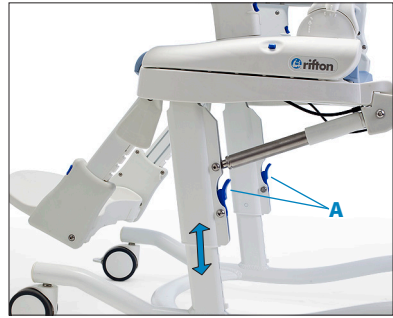


Figure 9a

Tip: If height adjustment feels tight, then try with the tilt-in-space all the way forward or back.

Tilt-in-space adjustment

Figure 9b: The tilt-in-space adjustment is available on the Z122 and Z132 bases. Use the tilt trigger (B) at the right rear of the seat to release the two locking gas springs. Tilt adjusts 5° forward and 25° back. It is easy to tilt the HTS with the user in the product.

A tilt angle converter kit is available to change the tilt range to 15° forward and 15° back.



Figure 9b

Casters and stationary feet 🦿

The casters and stationary rubber feet can be replaced. On non-tilt bases, stationary rubber feet and casters are interchangeable.

Contact your Rifton representative for parts kits and instructions.

Caster brakes

Figure 10a: To apply the brake, step down on the brake lever (A). To release the brake, raise the lever.

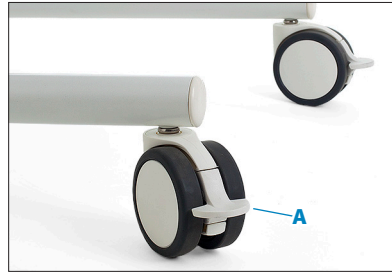


Figure 10a

Footboard



To prevent falls, tipping or other injury:

- Do not exceed 150 pounds on the footboard.
- Do not stand on footboard while it is angled forward.
- Do not place maximum load at front edge of footboard.

Height adjustment

Figure 10b: To adjust footboard height, press both height buttons (B), moving the footboard to the desired height, then release the buttons at a latched position.



Figure 10b

Footboard angle adjustment

Figure 10c: The angle of the footboard can be adjusted by pushing up on both angle triggers (C) while moving the footboard to the desired angle. The footboard angle adjusts in five 10° increments: 10° back and up to 30° forward.



Figure 10c

Figure 10d: Footboard can be folded up out of the way for floor-level transfers.



Figure 10d

Mounting bars

⚠️ WARNING To prevent falls or injuries, ensure that the toilet is securely attached to the floor and that the seat bolts are in good condition before attaching the mounting bar. Inspect the toilet stability and seat bolts at regular intervals while the mounting bar is in use.

Figure 11a: The two kinds of mounting bars fit either standard round or elongated toilets. To determine which type you need, measure from the centerline of the seat bolts to the front edge of the porcelain bowl. Use a standard toilet mounting bar if this is 17" (43 cm) or less, otherwise use the elongated toilet mounting bar.

Figure 11b: To install the mounting bar on the toilet, remove the nuts (A) under the toilet bowl rim which fasten the toilet seat and lid to the toilet. Remove the seat and lid. Place two of the rubber washers (B) provided with the mounting bar over the two holes. Place the mounting bar over the washers with the warning label facing up and forward. Replace the seat and lid with the bolts (C) going through the holes in the mounting bar, the washers, and the holes in the toilet. Replace the nuts (A) and tighten firmly.

Attaching seat to mounting bar

⚠️ WARNING To prevent falls or injuries, ensure that both hooks are fully engaged in the sockets of the mounting bar before using the HTS.

Figure 11c: To attach the seat to the mounting bar, move the backrest out of the way by tilting or sliding it forward, then insert both hooks (D) on the seat into the sockets on the mounting bar and lower the seat onto the toilet bowl.



Figure 11a

Tip: For the large HTS, only one style of mounting bar is available.

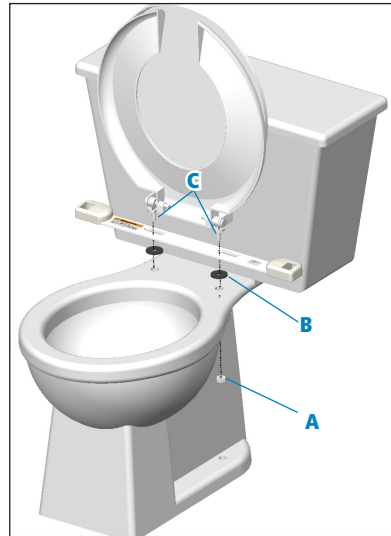


Figure 11b



Figure 11c

Components

Seat and back pads

The seat and back pads are removable for cleaning. They are made of durable, closed-cell polyethylene foam.

Figure 12a: There are three styles of seat pad. The rear-open pad has a wide opening which facilitates rear hygiene care. The rear-closed pad has a narrower opening, closed at the back providing more support for the user.

Figure 12b: The no-hole pad has no hole and comes with a rigid, white plastic hole filler (A) to stabilize the seat.

The back pad is held in place by a rim that stretches over the edges of the backrest.

Figure 12c: The seat pads attach with four snaps (B) that snap into the holes in the seat.

Headrest

⚠️ WARNING To prevent head entrapment or injury, always use seatbelt while the headrest is in use.

Figure 12d: To attach and adjust headrest height, push height button (C). Insert the stem of headrest into the headrest slot to desired height. Release the button and adjust height until the latch audibly engages.

To adjust depth and angle of headrest, loosen oval knobs (D), adjust to the desired position and retighten the knobs.

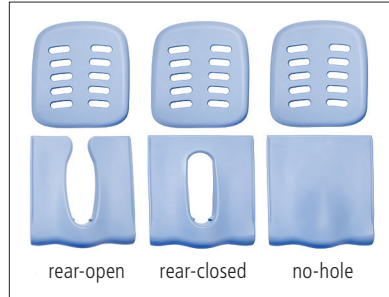


Figure 12a



Figure 12b



Figure 12c



Figure 12d

Butterfly harness

⚠ WARNING To prevent falls, strangulation or other injuries:

- Tighten the seatbelt portion of the butterfly harness before tightening the upper straps.
- Check fit of harness after every adjustment.

Figure 13a: To attach the butterfly harness, remove the center section of the seatbelt (A). Replace it with the butterfly harness (B), which has a built-in seatbelt.

Figure 13b: Adjust the seatbelt tension, then clip the shoulder straps to the sockets on the backrest.

Figure 13c: For small users, you may wish to attach the shoulder straps through the upper slot in the backrest.

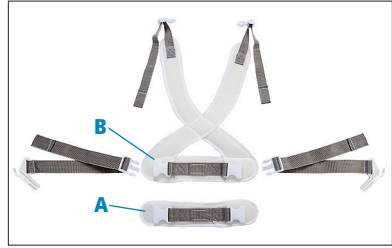


Figure 13a



Figure 13b

Push handles

Figure 13d: A pair of push handles is available for the HTS mobile base. They attach using the same extrusion (C) as the laterals at the back of the backrest.

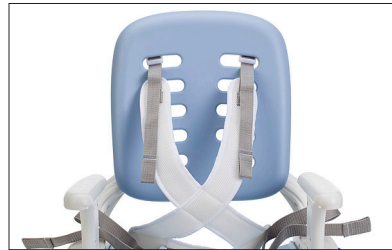


Figure 13c



Figure 13d

Anterior support/tray

⚠ WARNING To prevent falls, strangulation or other injuries, always use a seatbelt when the tray is in use.

Figure 14a: The anterior support has a padded surface for the user to lean against, which provides an excellent, forward-leaning, toileting position with trunk and arms supported by the tray.

Figure 14b: To adjust tray depth, squeeze latch (A) under the front of tray.



Figure 14a

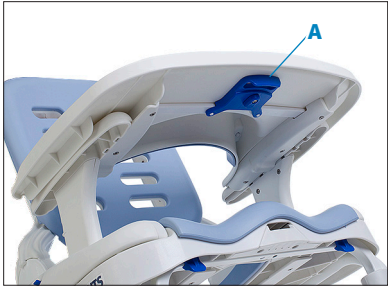


Figure 14b

Lateral supports

Figure 15a: Lateral supports are available with or without a chest strap for secure upper trunk positioning. They may be adjusted separately in height, angle and width using the knob (A) behind the backrest.

Figure 15a: Loosen the knob (A) and insert the key into the slot (B) behind backrest. Adjust the height, width, and angle of the lateral, then tighten knob securely.

Figure 15b: Push the lateral release button (C) and swing lateral out or in.

Chest strap

⚠ WARNING To prevent falls, strangulation or other injuries:

- Always use seatbelt when the chest strap is in use.
- Always ensure that chest strap is correctly adjusted.

Figure 15c: The chest strap threads onto the lateral supports as shown.

Figure 15d: The chest strap should thread to the inside of the lateral supports.



Figure 15a



Figure 15b



Figure 15c



Figure 15d

Hip guides

Figure 16a: The seat width may be adjusted with a pair of hip guides that attach onto the armrests. In the first position they reduce the seat width by 2" (5 cm), and in the second position they reduce it by 4" (10 cm).

The large hip guides with thick pads allow narrower seat width adjustment, reducing the seat width by another 2" (5 cm) in both positions.

Slide the hip guide onto the armrest with the notch in the hip guide (A) up and back. Insert the armrest into the armrest slot through the hip guide.



Figure 16a

Pan

Figure 16b: The pan enables the HTS to be used as a stand-alone commode.

Figure 16c: Insert the pan into the tracks under the seat from the back of the chair. Push until it latches into place. Remove it by pulling straight back.



Figure 16b

Bowl adapter

Figure 16d: The bowl adapter accommodates situations where the hole in the HTS isn't fully over the hole in the toilet. It is inserted at the front edge of the hole, under the seat pad. A seat pad must be used in conjunction with the bowl adapter.



Figure 16c



Figure 16d

Deflectors

Figure 17a: The standard deflector inserts into the slot on the seat pad with the hollow cup of the deflector toward the user.

Tip: Adding the abductor to the standard deflector provides stability to the deflector (see figure 17c).



Figure 17a standard deflector

Figure 17b: The splash guard provides even more coverage. It is held against the user with the seatbelt or butterfly harness.



Figure 17b splash guard

Abductor

Figure 17c: The padded abductor inserts into the slot at the front edge of the seat. It can be removed by squeezing the blue latch (A) and pulling the abductor out.

CAUTION To minimize risk of infectious disease transmission, the HTS should be cleaned and disinfected between uses by different patients. Inadequate cleaning and disinfecting of equipment may increase the risk of cross contamination.

Remove the foam pads for cleaning with soapy water or a mild disinfectant.



Figure 17c

Calfrest

This option requires the use of a footboard.

Figure 18a: The calfrest attaches above the footboard. It should be removed if the footboard is in the top positions.

Figure 18b: The calfrest attaches to the footboard uprights. With the padding toward client, wrap the webbing straps around the uprights and engage both buckles at the back. Adjust the two straps so that assembly is snug around the uprights.



Figure 18a



Figure 18b

Ankle straps

This option requires the use of a footboard.

To attach the ankle straps:

1. **Figure 18c:** Insert the webbing tab into the horizontal slot at the back of the footboard.
2. **Figure 18d:** Turn the webbing to slide it into the vertical slot and pull to engage it.
3. Adjust the straps to fit the user's needs.

NOTICE

The straps with buckles may be laundered at 160F (70C) or less. Engage the closures before washing. Do not iron.



Figure 18c



Figure 18d

Footboard for mounting bar attachment

⚠️ WARNING To prevent falls or other injury:

- Ensure that the square metal tubing attaching the footboard to the seat rests on the front edge of the toilet.
- Do not stand on footboard for mounting bar attachment.

Figure 19a: To attach a footboard to the HTS when used on the toilet with a mounting bar:

Figure 19b:

1. Turn the HTS seat upside down.
2. Insert the small metal tabs at the end of metal tubing on footboard (A) into slots at the back of the seat.
3. Push footboard down firmly to latch square tubing onto blue latches (B).
4. Attach HTS to mounting bar (see page 11).

The other adjustments for the footboard are the same as described on page 10.

Tub base

⚠️ WARNING To prevent falls and injuries, always make sure both seat hooks are inserted into the base sockets and that both seat latches are latched to base.

Figure 19c: The tub base is for use in a bathtub to bathe or shower the client.

Attaching the seat

Figure 19d: Insert both hooks at the rear of the seat into the sockets of the tub base frame. Then push front of seat down onto frame until the latches audibly engage.



Figure 19a

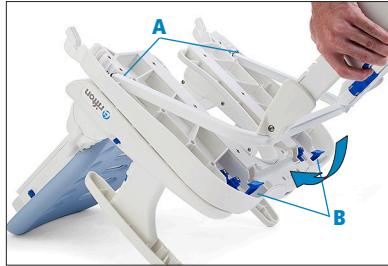


Figure 19b



Figure 19c



Figure 19d

Portability base with carry-bag

⚠ WARNING To prevent falls and injuries:

- The portable base is intended for travel use only and should not be used as the primary base. Ensure adequate stability when using the portable base.
- Check that the two pieces of the frame are fully engaged before attaching the seat.
- Always make sure both seat hooks are inserted into the base sockets and that both seat latches at the front are latched to base.

Figure 20a: The portability base is a light-weight, foldable frame with a carry-bag. This base fits in the back pouch of the carry-bag.

Figure 20b: The seat, back, armrests and other components fit into the front pouch of the carry-bag.

Figure 20c: To assemble the base, unfold both halves of the frame and insert the square peg of one half into the square tube of the other half of the frame. Make sure the two pieces of the frame are fully engaged before attaching the seat.

Figure 20d: Then attach the seat to the frame as described on previous page (see figure 19d).



Figure 20a



Figure 20b



Figure 20c



Figure 20d

Operation

The Rifton HTS has two main functions: toileting and showering.

Figure 21a: For toileting, the ideal position often incorporates forward-leaning of the trunk and a closed hip angle. This can be achieved by angling the backrest slightly forward, adjusting the seat to level or slightly back, using the anterior support to provide support at the trunk and arms, and raising the footboard so that feet are well supported.

Figure 21b: For showering, raise the height adjustment and tilt the frame back. With the backrest reclined and the footboard extended, a restful reclined position can be achieved for showering and hair washing. The caregiver should adjust the positioning to fit the unique needs of each client.



Figure 21a



Figure 21b

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, users must ensure that the product remains in a safe and useable condition, including regular maintenance and inspections as specified in the 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.
- 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. Order information for replacement parts is provided on the back of this product manual.

Cleaning

After each use, clean with disinfectant wipes or a solution of up to 10% bleach.

The straps with buckles may be laundered. Engage the buckles before washing. Do not iron.

The polyethylene pads are easy to remove to allow cleaning and drying underneath. Wipe pads clean with soapy water or mild disinfectant. Pads can be immersed in water, and smaller pads can be machine washed on a warm setting as needed.

Warranty Statement


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

Materials

- Steel hardware items (nuts, bolts, screws, etc) are stainless steel.
- Pads, support blocks, and padded prompts are waterproof polyethylene integral skin foam.
- The frame is aluminum and stainless steel, coated with a baked-on paint finish.
- Straps are made of polypropylene webbing with quick-drying Spacer Mesh fabric for padding.
- Plastic components are injection-molded from a variety of industrial resins.

All components are lead free and not made with natural rubber latex.

User modifications

 WARNING 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.

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www.rifton.com

To order replacement parts

1. **Locate the ID number** of the product on the small white label.
2. Have this number available when you call **800.571.8198** for your customer service representative.

Use only replacement parts supplied by Rifton Equipment.

We are glad to supply replacement parts. Although Rifton makes every effort to supply correct parts and instructions for repairing or refurbishing your equipment, you are responsible to make sure that the repairs or modifications are correctly and safely completed.



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www.rifton.com/HTS