

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 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.

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.

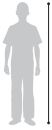
Recommended use

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 accessories 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
Overall width	21¼ (54)	21¼ (54)	23½ (60)
Seat (front) to footboard height*	8-13 (20-33)	10-15 (25-38)	13-18 (33-46)
Seat (front) to floor; mobile tilt frame	15-21½ (38-55)	15-21½ (38-55)	17-22½ (43-57)
Seat (front) to floor; mobile non-tilt frame	15½-20 (39-51)	15½-20 (39-51)	18-22 (46-56)
Seat (front) to floor; stationary non-tilt frame	12½-17 (32-43)	12½-17 (32-43)	15-19 (38-48)
Seat depth	8/9/10/11 (20/23/25/28)	11½/12½/13½/14½ (29/32/34/37)	14½/15½/16½/17½ (37/39/42/44)
Seat width	8/10/12 (20/25/30)	10/12/14 (25/30/36)	13/15/17 (33/38/43)
Armrest height	5¾ (14.5)	7 (18)	8¾ (22)
Backrest height above seat	16½ (42)	19½ (50)	24½ (62)
Backrest width	11½ (29)	13½ (34)	16 (41)
Tilt in space FORWARD	15°	15°	15°
Tilt in space BACK	15°	15°	15°
Backrest angle adjustment	6° fwd, 6° and 18° back	6° fwd, 6° and 18° back	6° fwd, 6° and 18° back
Max. clear height under seat (tilt frame)	19 (48)	19 (48)	20 (51)
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
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.

** 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.

Basic components

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

The side pieces allow for seat depth adjustment. Lift the blue latches on both outer sides (see figure 6a), move both sides together to the desired seat depth and find a latched position.

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

Backrest angle

The backrest angle can be adjusted 6° forward, 6° back, and 18° back (see figure 6b). Raise both back angle triggers, adjust to desired angle and release into a latched position (see figure 6c).



Figure 6a



Figure 6b



Figure 6c

Backrest installation or removal

To install the backrest: Tip the backrest toward the front (see figure 7a). Insert the bottom end of the backrest between the latch plates while raising the backrest angle triggers. 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.

Seatbelt

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

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

For users that tend to slide forward on the seat, you may benefit from threading the seat belt to the inside of the backrest supports (see figure 7c).

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

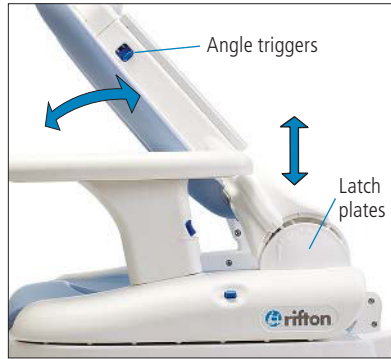


Figure 7a



Figure 7b



Figure 7c



Figure 7d

Armrests

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 (see figure 7c).

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

Tip: Armrests of different sizes can be retrofitted.

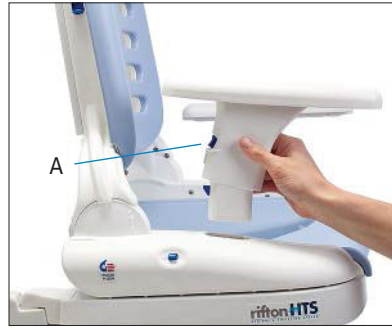


Figure 7c

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

Insert both hooks at the rear of the seat into the sockets of the frame (see figure 8a). Then push front of seat down onto frame until the latches audibly engage.



Figure 8a

Removing the seat

To remove the seat from a base, pull both seat latches under the front edge of the seat (see figure 8b) and lift it from the base.



Figure 8b

Base height adjustment

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

To lower the seat, squeeze both height latches on the frame uprights (see figure 9a) 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).

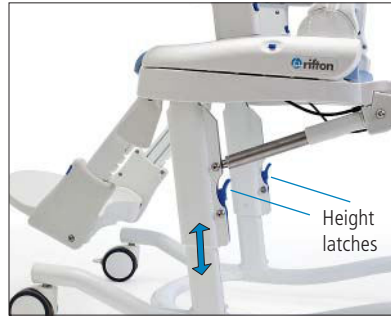


Figure 9a

Tilt-in-space adjustment

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

The tilt-in-space adjustment is available on the Z122 and Z132 bases. Use the tilt trigger at the right rear of the seat (see figure 9b) to release the two locking gas springs. Tilt adjusts 15° forward and 15° back. It is easy to tilt the HTS with the user in the product.



Figure 9b

Casters and stationary feet

The casters and stationary rubber feet can easily be replaced or exchanged. Simply pull the caster stem or rubber foot out of the end cap (see figure 9c). Ensure that replacement casters or feet are inserted to their full depth.



Figure 9c

Caster brakes

To apply the brake, step down on the brake lever. To release the brake, raise the lever (see figure 9d).



Figure 9d

Footboard

⚠ CAUTION 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.

The footboard is included with mobile bases.

Height adjustment

To adjust footboard height, press both height buttons, moving the footboard to the desired height, then release the buttons at a latched position (see figure 10a).

Footboard angle adjustment

The angle of the footboard can be adjusted by pushing up on both angle triggers while moving the footboard to the desired angle (see figure 10b).

Footboard can be folded up out of the way for floor-level transfers (see figure 10c).



Figure 10a



Figure 10b



Figure 10c

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.

There are two kinds of mounting bars, to fit either standard round, or elongated toilets (see figure 11a).

The mounting bar attaches with the bolts that hold the seat, and provides a firm attachment point for the seat and back units (see figure 11b).

To determine which type of mounting bar 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.

Attachment of 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.

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 on the seat into the sockets on the mounting bar and lower the seat onto the toilet bowl (see figure 11c).



Figure 11a



Figure 11b



Figure 11c

Accessories

Seat and back pads

The seat and back pads are removable for cleaning. They are made of Polyurethane with a durable integral skin.

There are two styles of seat pad. One has a wider opening which opens to the rear facilitating hygiene care (see figure 12a). The second one has a narrower opening, which is closed at the back and provides more support for the user (see figure 12b).

The seat and back pads attach with four snaps that snap into the holes in the seat and backrest (see figure 12c).



Figure 12a



Figure 12b

Headrest

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

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

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

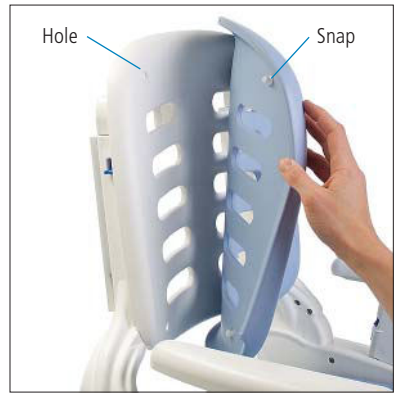


Figure 12c

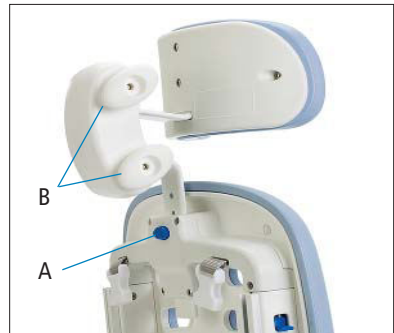


Figure 12d

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.

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 (see figure 13a).

Adjust the seatbelt tension, then clip the shoulder straps to the sockets on the backrest (see figure 13b).

For small users, you may wish to attach the shoulder straps through the upper slot in the backrest (see figure 13c).

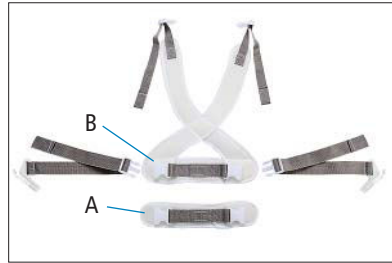


Figure 13a



Figure 13b



Figure 13c

Anterior support/tray

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

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 (see figure 14a).

To adjust tray depth, squeeze latch under the front of tray (see figure 14b).



Figure 14a

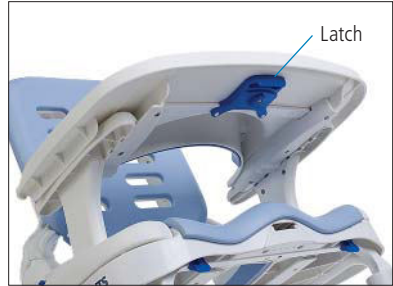


Figure 14b

Lateral supports

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 (B) behind the backrest.

To attach and/or adjust lateral support (A), loosen knob (B) and insert the key (C) into extrusion (D) at the rear of the backrest. Adjust height, angle and width of lateral support to fit client by sliding it up and down, sliding bracket (E) along its slot and by rotating bracket (E) around the knob. When desired adjustment is reached, tighten knob firmly (see Figure 15a).

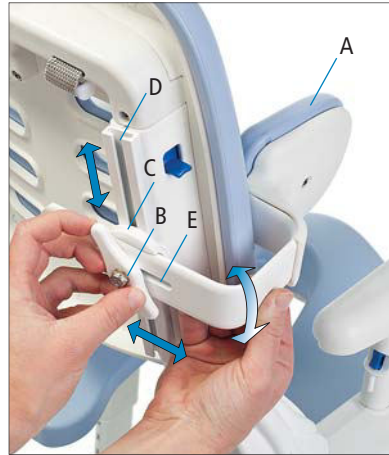


Figure 15a

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.

The chest strap threads onto the lateral supports as shown (see figure 15b). The chest strap should thread to the inside of the lateral supports (see figure 15c).



Figure 15b



Figure 15c

Hip guides

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) (see figure 16a).

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



Figure 16a

Pan

The pan (see figure 16b) enables the HTS to be used as a stand-alone commode. 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 (see figure 16c).



Figure 16b

Bowl adapter

The bowl adapter (see figure 16d) 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

The **standard deflector** inserts into the slot on the seat pad with the hollow cup of the deflector toward the user (see figure 17a).

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

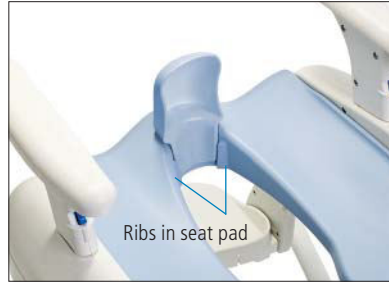


Figure 17a standard deflector

The **splash guard** provides even more coverage. It is held against the user with the seatbelt or butterfly harness (see figure 17b).



Figure 17b splash guard

Abductor

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 (see figure 17c).

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 Polyurethane pads for cleaning with soapy water or a mild disinfectant.



Figure 17c

Calfrest

This option requires the use of a footboard.

The calfrest attaches above the footboard (see figure 18a). It should be removed if the footboard is in the top positions.

The calfrest attaches to the footboard uprights. With the webbing at the back, and rounded corners down, loop the webbing around the uprights and thread webbing through the metal ring at the front, engaging the hook and loop snugly around uprights (see figure 18b).



Figure 18a



Figure 18b

Ankle straps

This option requires the use of a footboard.

To attach the ankle straps:

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



Figure 18c

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



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.

To attach a footboard to the HTS when used on the toilet with a mounting bar (see figure 19a):

1. Turn the HTS seat upside down (see figure 19b).
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.

The tub base is for use in a bathtub to bathe or shower the client (see figure 19c).

Attaching the seat

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



Figure 19a

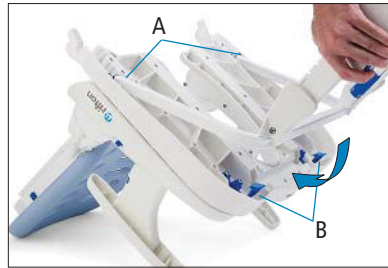


Figure 19b



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.

The **portability base** is a light-weight, foldable frame with a carry-bag (see figure 20a). This base fits in the back pouch of the carry-bag.

The seat, back, armrests and other accessories can go into the front pouch of the carry-bag (see figure 20b).

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

Then attach the seat to the frame (see figure 20d) 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.

For **toileting**, the ideal position often incorporates forward-leaning of the trunk and a closed hip angle. This can be achieved with the HTS 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 (see figure 21a).

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 (see figure 21b). 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 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. 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 hook and loop closures may be laundered. Engage the closures before washing. Do not iron.

The Polyurethane pads are easy to remove to allow cleaning and drying underneath. They can be wiped clean with soapy water or a mild disinfectant.

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.
- Upholstery items (pads, support blocks, padded prompts, etc) are waterproof Polyurethane 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 materials are latex, lead and phthalates free.

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.