K509 & K501

Pacer Gait Trainer

K509 & K501 Product Manual

K509 Mini Pacer

K501 Small Pacer

made in USA

CE

rifton

Contents

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.

⚠WARNING

- The mini Pacer is NOT a baby walker for use by a normally developing child.
- 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.

⚠WARNING

- 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.
  - Position accessories so that the client's weight is centered between the casters.
- 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.
- Adequately supervise use of the Pacer to prevent:
  - Excessive movement and speed
  - Sudden stops from hitting a curb, cracks, or debris
- Use adequate accessories to ensure that user's feet remain within boundaries of the Pacer frame.
- Use special care and supervision when using the Pacer under conditions which might affect stability, including:
  - Uneven ground
  - Ramps, slopes, or hills
  - Clients who experience strong involuntary movements or seizures

Recommended use

The Pacer gait trainer is a Class 1 medical device. It is designed to help a disabled child learn to walk. For a child lacking active use of their trunk and leg muscles, the Pacer provides necessary support during gait training and requires little or no weight-bearing.

The mini Pacer is recommended for users with elbow height of 15½"–20½" (39–52 cm). The maximum working load for the mini Pacer is 50 lbs (23 kgs).

The small Pacer is recommended for users with elbow height of 18½"–27½" (47–70 cm). The maximum working load for the small Pacer is 75 lbs (34 kgs).

User and item dimensions

User Dimensions - inches (cm)	K509 mini	K501 small
Elbow height	15½-20½ (39-52)	18½-27½ (47-70)

Key user dimension: elbow height
Measure the vertical distance from the bent elbow to the floor while the user is standing upright. Choose the gait trainer that allows for growth.

Item dimensions - inches (cm)	Mini	Small
Arm prompt height	15½-20½ (39-52)	18½-27½ (47-70)
Overall width	20½ (52)	22½ (57)
Overall length	22½ (57)	27 (69)
Chest prompt height (top edge)	17½-22½ (44-57)	22-30½ (56-78)
Frame height	12½ (32)	15½-19½ (39-50)
Frame weight - lbs (kg)	7½ (3)	10½ (5)
Max. working load - lbs (kg)	50 (23)	75 (34)
Chest prompt circumference - inches (cm)	14-28 (36-71)	14-28 (36-71)

Check your order

The Pacer frame and accessories you specified in your order are shipped together in a single carton (except for the guide bar). Use the diagrams in this manual to make sure your order is complete.

Basic components

⚠CAUTION **Make sure both sides of the small Pacer frame engage, are level, and are adjusted to equal height.**

Frame

Adjustments

Small frame height adjustments:
(see Figures 6a and 6b)

1. Pull triggers up while holding top bar.
2. Slide top bar to desired position.
3. Release triggers.
4. Push or pull on top bar until triggers engage securely and firmly into position.

Mini frame height adjustments:
(see Figure 6c)

All height adjustments are made by raising and lowering the prompts. The frame is fixed and does not adjust

Figure 6a

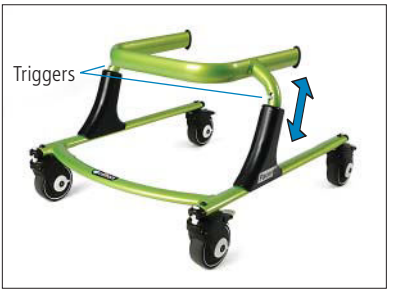

Figure 6b

Figure 6c

Casters

Adjustments

Swivel lock (A) prevents the caster from swiveling. To engage the swivel lock:

1. Straighten caster and press lever (A) into notch.
2. Locking all four casters will keep the user traveling in a straight line.
3. Locking only the two rear casters will prevent the user from veering sideways while walking.

Caster brake (B) stops wheel rotations completely. To engage caster brake:

1. Press bottom part of brake pedal all the way down.
2. Release brake by pressing top part of pedal.

Caster drag (C) provides resistance for stronger users who may move too fast or too suddenly. To engage caster drag:

1. Rotate dial (C) from the rabbit (fast) to the turtle (slow) for desired resistance.
2. To disengage caster drag, rotate dial back to the rabbit.

Directional lock (D) allows the caster to turn in one direction only, helpful for users who may involuntarily roll backward while trying to walk. To engage the directional lock:

1. Push lever (D) down until it snaps into place.
2. When the directional lock is engaged, the caster will make a clicking noise while moving forward and lock when pushed backward.

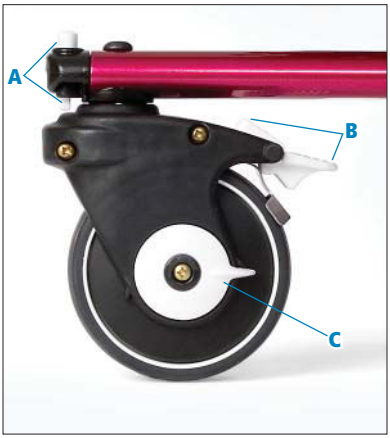

Figure 7a

Figure 7b

Accessories

Clamps

Attaching

Most accessories are attached to the frame by means of clamps and posts. Figures 8a & 8b show how to attach a clamp to the top bar of the Pacer.

1. Loosen knob and swing it down.
2. Swing band up.
3. Place clamp around oval bar.
4. Swing knob up.
5. Tighten thoroughly.

Placement of accessories on the frame will vary according to the position and abilities of the user and the number of accessories used.

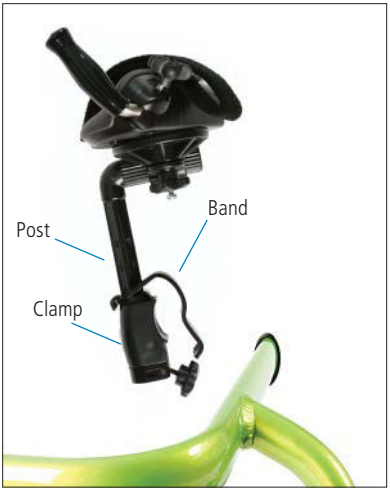

Figure 8a


Figure 8b

Hand loops

Attaching

It is recommended that hand loops are attached forward of the main frame uprights (see Figure 8c). This creates stable positioning and leaves plenty of room for other accessories.

Hand loop clamps can be attached on the outside of the top bar (see Figure 9c). For slimmer users, the clamps for any accessory can be installed on the inside of the top bar (see Figure 9b). This way the prompts will be positioned closer to the user.


Figure 8c

Adjustments

Loosen knob (A) to:

- Completely remove the hand loop and clamp.
- Or slide the hand loop toward or away from the user along the top bar.

To adjust height of hand loop:

- Press button (B) and slide post up or down to desired position.
- Release button (B) and push hand loop to engage post.

To tilt hand loop:

Loosen knob (C) and tilt hand loop to desired position. Tighten knob to secure. Compare tilt angle (see Figures 9a and 9c).

To reposition the entire hand loop:

- Completely remove the hand loop from the Pacer (see Figures 8a and 8b). Attach inside or outside the top bar (see Figures 9b and 9c).
- Press button (B) and completely remove the post, now rotate the post to the desired position, insert it back into clamp and slide to desired height.

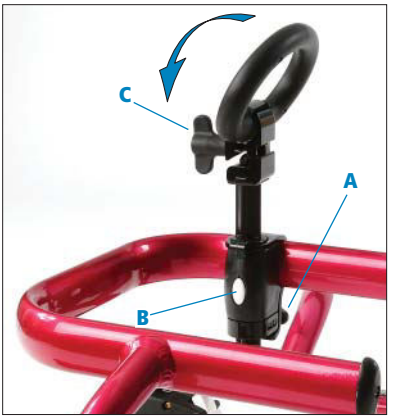

Figure 9a


Figure 9b Mounted inside of top bar

Figure 9c Mounted outside of top bar

Arm prompts

Attaching

⚠WARNING To prevent tipping and resulting injury, do not position arm prompts on the front of the top bar (see Figure 10a).

It is recommended that arm prompts are attached forward of the main frame uprights (see Figures 10b and 10c). This creates stable positioning and leaves plenty of room for other accessories.

Arm prompt clamps can be attached on the outside of the top bar (see Figure 10b). For slimmer users, the clamps for any accessory can be attached on the inside of the top bar (see Figure 10c). This way the prompts can be positioned closer to the user. (To reposition clamps and posts see pages 8 and 12.)

Figure 10a

Figure 10b Attached outside of top bar

Figure 10c Attached inside of top bar

Adjustments

Loosen knob (A) to:

- Slide arm pad toward or away from the user.
- Rotate up or down.
- Rotate in or out.
- Move the arm pad backward or forward.

To adjust the height of arm prompt:

1. Press button (B) and slide post to desired position.
2. Release button and push post to engage it.

To adjust the handhold:

1. Loosen knob (C).
2. Slide handhold forward or back for different forearm lengths.
3. Rotate the handhold from side to side.

Arm strap (D) and wrist strap (E) secure the user's arm in the arm prompt.

Using the wrist strap prevents the user's arm from inadvertently coming out of the arm prompt.

To reposition the entire arm prompt:

1. Loosen knob (F).
2. Slide arm prompt to desired position on the frame.

Or completely remove the arm prompt from the Pacer by pressing button (B) and pulling out the post.

Figure 11a

Figure 11b

Arm prompt posts can be removed and repositioned to adjust the width between arm prompts (see Figure 12a).

Arm prompt clamps can be removed and repositioned to further adjust the width between arm prompts.

- Steps 1 and 2 show the clamp on the inside of the top bar.
- Step 3 shows the clamp on the outside of the top bar, which increases the width between prompts.
- For instructions on how to remove and reattach the clamps, see page 8.

Take time to familiarize yourself with the adjustments on each arm prompt (see Figure 12b).

Step 1. Loosen knob (A) and remove arm prompt pad.

Step 2. Press button (B), lift post out of clamp, and turn to desired position.

Step 3. Insert post back into clamp, slide arm prompt pad back onto post, and use button (B) to adjust the height of the arm prompt.

Figure 12a

Arm prompts can (see Figure 12b)**:**

1. Rotate around horizontal section of post.
2. 360° rotation around vertical post.
3. Slide in and out on horizontal section of post.
4. Clamp holding post can be moved along top bar.
5. Post has four positions at 90° each.

Figure 12b

Chest prompt

Attaching

⚠WARNING To prevent tipping and resulting injury, position chest prompt so that the client's center of gravity is centered between the casters.

To prevent falls and injury, tighten all adjustment knobs on chest prompt prior to use.

Attach chest prompt directly behind the main frame uprights (see Figure 13a). The front of the chest prompt has a containment loop to keep the pads together. Rear opens for easy access.

Figure 13a

Adjustments

To adjust width of chest prompt:

- Place clamps on the inside or the outside of the top bar (see Figures 9b and 9c).
- Loosen knob (C) to slide sides of chest prompt in or out.
- Retighten knobs.

To rotate chest prompt:

- Loosen knobs (C) completely.
- Rotate prompt to desired position.
- Retighten knobs.

To adjust height of chest prompt:

- Press buttons (B) and slide posts to desired height.
- Release buttons (B) and push post to engage it.

Repositioning entire chest prompt on frame:

- Loosen knobs (A).
- Slide chest prompt backward or forward and retighten knobs (A).
- Or completely remove the chest prompt from the Pacer.

Four straps (D) can be adjusted independently to tighten or loosen the chest prompt or to adjust the forward leaning angle of the user (see Figures 23b, 24a). Chest prompt opens front and back. This way the user can be positioned into the Pacer in the anterior or posterior position (see pp. 23, 24 and 25).

Hip positioner

Attaching

⚠WARNING To prevent tipping and resulting injury, do not position prompts at the rear ends of the top bar (see Figure 14a).

The hip positioner is designed to encourage forward-leaning. Attach this accessory with its two clamps and handholds near the back of the top bar, and straps with buckles (A) in front of the frame uprights (see Figure 14b).

To attach the front of the hip positioner:

- Use buckles (A), attaching them at desired location in front of main uprights (see Figure 14b).

To attach rear of hip positioner:

- Attach rings (D) to handholds (see Figure 14b).

Figure 14a

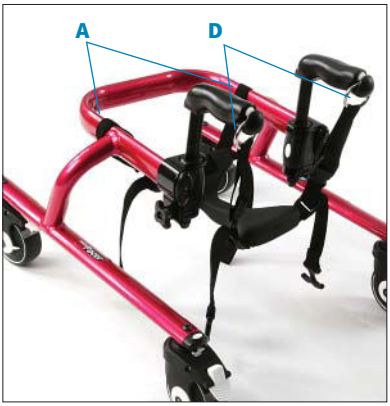

Figure 14b

Adjustment

To adjust position of handholds on frame:

- Loosen knob (A).
- Slide handholds and clamps to desired position on frame.

To adjust rear height of hip positioner:

- Press button (B) and raise handholds to desired height.
- Release button (B) and push down handholds to engage them.

To raise and lower hip positioner use strap adjusters (C) at back and (D) at front (see Figures 15a and 15b).

Users are usually more comfortable with the rear of the hip positioner substantially lower than the front (see Figures 15a and 15b). To achieve this, shorten front straps (D) and attach them as high as possible.

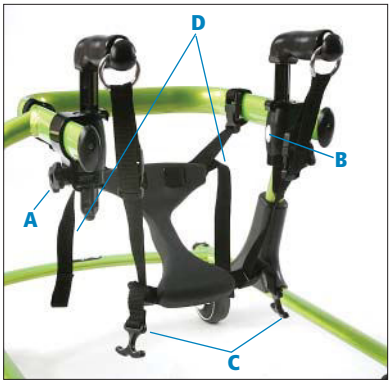

Figure 15a

Figure 15b

Hip positioner pad

Assembly

1. Push the rear straps of the **hip positioner** through the crossed over straps and pull the **pad** into place (see Figure 16c).
2. Snap front and side flaps of **pad** together around the **hip positioner**. Make sure both snaps are securely fastened.
3. Attach hip postitioner on Pacer.
   - Front of hip positioner raised about 4" (10cm) higher than the back.
   - Try to keep the hip positioner at this angle when in use so the grey seat pad remains the main weight-bearing portion.

Figure 16a Top of hip pad

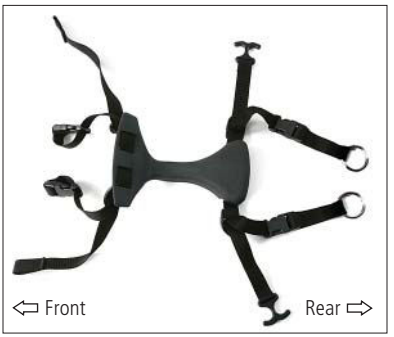

Figure 16b Hip postioner

Figure 16c Underside of hip positioner with pad

Pelvic support

Attaching

⚠WARNING To prevent tipping and resulting injury, do not position prompts at the rear ends of the top bar (see Figure 17a).

The pelvic support provides weight-bearing assist. It is an alternate option to the hip positioner. Attach this accessory with its two clamps and handholds near the back of the top bar, and straps with buckles (C) in front of the frame uprights (see Figure 17b).

Figure 17a

To attach front of pelvic support

- Use buckles (C) to attach the pelvic support at the optimal location indicated for positioning. Locations for strap attachment may include any secure position along the top bar of the frame in front of main uprights, at the base of the clamps/accessories in use, or at the chest prompt cross bar.

To attach rear of pelvic support

- Attach rings to handholds (D) (see Figure 17b).

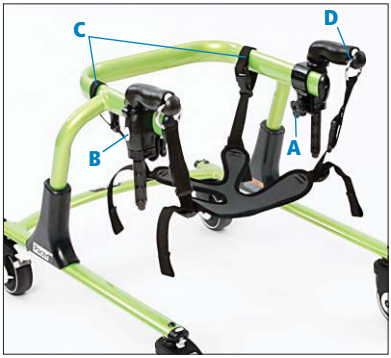

Figure 17b

Adjustment

To adjust rear height of pelvic support:

- Press buttons (B) and slide handholds to desired height.
- Release buttons (B) and push down on handholds to engage them.

To adjust position of handholds on frame:

- Loosen knob (A).
- Slide handholds and clamps backward or forward on the frame.

To raise and lower pelvic support:

- Use strap adjusters (C) and (D) at the back or front of pelvic support (see Figure 18b).

Figure 18a

Figure 18b

Thigh prompts

Attaching

Thigh prompts work best if attached behind the chest prompt on top bar (see Figure 19a). Thigh prompt clamps are slightly different from the clamps of other accessories, but attach to the top bar in the same manner.

Figure 19a

Adjustment

1. **To swing the thigh pad toward or away from the user:**
   - Loosen knob (D).
   - Adjust thigh pads (B) and retighten.
2. **To move the thigh pads up or down, or to rotate the thigh pad to a comfortable position against the user's leg:**
   - Loosen knob (C).
   - Adjust thigh pads and retighten.
3. **To reposition thigh prompts on frame:**
   - Loosen knob (A).
   - Slide clamp along the top bar of the frame.
   - Or completely remove the thigh prompts from the Pacer (see page 8).
4. **To secure and adjust strap around the thigh of the user, use buckle adjuster (E).**

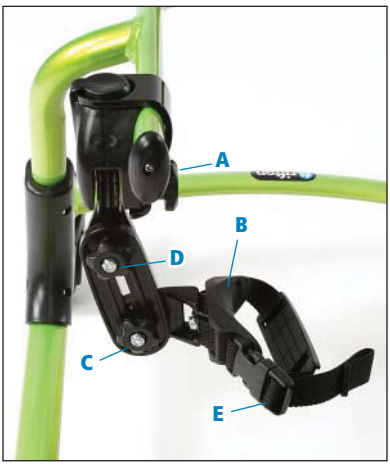

Figure 19b

Ankle prompts

Attaching

- Insert the ankle prompt latches into slots at the bottom of pacer frame tubes (see Figure 20b). The white tooth should snap securely into the tube.
- To remove press the white button on the latch and release the tooth from the slot.

Figure 20a

Adjustments (see Figure20b)

1. To secure, loosen or tighten strap around the ankle of the user, use buckle adjuster (A).
2. Strap (B) can be adjusted to help guide the stride of the user.
3. To limit or increase the stride of the user, squeeze and slide spring adjusters (C) along rods.

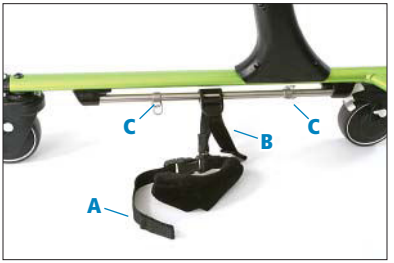

Figure 20b

Tray

⚠WARNING **To prevent tipping and resulting injury:**

- **Do not use the tray as a restraint or body support.**
- **Directly supervise client's use of the tray.**
- **Do not place more than 10 pounds on tray.**

Attaching

1. For maximum stability attach the tray centered at the front of the top bar (see Figure 21a).
2. The maximum weight that can be placed on the tray is 10 lbs (4.5 kg).

Figure 21a

Adjustment (see Figures 21a and 21b)

To adjust angle of tray:

- Loosen knob (C).
- Change the tilt angle of the tray.
- Rotate the tray from side to side.

To adjust the height of the tray:

- Press button (B).
- Slide post to desired height.
- Release button (B) and push tray up/down to engage post.

To reposition entire tray on Pacer frame:

- Loosen knob (A).
- Slide the clamp with tray along the top bar.
- Or completely remove the tray from the Pacer (see page 8).

To remove insert (D):

- Push fingers up through holes in tray (G).
- Re-install insert (D) by placing tabs (E) in slots (F) and pressing down on front edge of insert until it snaps in place.

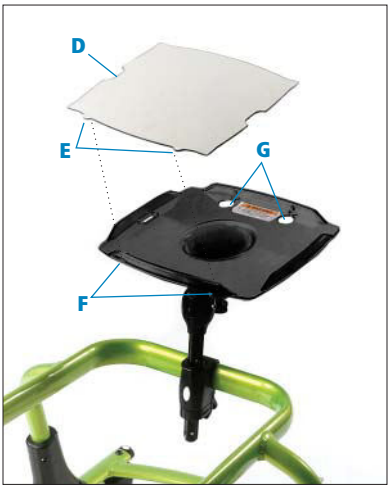

Figure 21b

Attendant guide bar

⚠WARNING **To prevent injury, adult supervision is required at all times. Always remove guide bar when not in use.**

Attaching

1. For maximum stability attach the guide bar centered at the front of the top bar (see Figure 22a).
2. Guide bar is attached by tightening knob (A) to clamp it on.

Adjustments

1. Rotate guide bar until it is behind the user for pushing or in front for pulling by caregiver.
2. Tighten knob (A) to make guide bar stay at the desired height when the handle is released.

Figure 22a

Figure 22b

Operation

Once the accessories are attached and adjusted approximately, the user can be placed in the Pacer in either an anterior or posterior position.

Anterior positioning

⚠WARNING **To prevent tipping and resulting injury, position prompts so that the user's center of gravity is centered between the casters.**

Use adequate accessories to ensure that user's feet remain within boundaries of the Pacer frame.

Forward facing

1. Apply the caster brakes to immobilize the Pacer.
2. Approximate the adjustments of:
   - chest prompt
   - arm prompts
   - hip positioner or pelvic support
   - frame height (top bar of frame).
3. Unfasten:
   - Hip positioner or pelvic support rings at rear of Pacer
   - Buckles at the rear of the chest prompt
   - Straps of arm prompts, thigh prompts and ankle prompts
4. Place the user in the Pacer
   - Fasten the rear buckles of the chest prompt.
5. Pull the hip positioner or pelvic support through the legs and:
   - Connect the rings to the handholds.
   - Or fasten buckles if preferred.

Figure 23a

Figure 23b Shows normal positioning. Note that the chest prompt has no tilt and the slightly forward-leaning angle of the user is achieved by locating the hip positioner/pelvic support behind the shoulders.

continued on next page

Continued from previous page...

6. **Secure the forearms** with arm prompt straps or place hands on the hand loops.

7. **Fasten straps to:**

   - Secure the thigh prompt straps around the user's legs.
   - Secure the ankle prompt straps around the user's ankle.

8. **Release the caster brakes.**

Figure 24a

Forward-leaning

Figure 24a shows how a more extreme forward-leaning angle is achieved. Note the chest prompt tilt and the location of the hip positioner behind the shoulders. The front hip positioner straps are attached to the chest prompt posts. (It is recommended that the front of the hip positioner is adjusted slightly higher than the back for maximum comfort.) The hand loop clamps are attached to the front of the top bar.

1. **To adjust the user's forward-leaning angle:**

   - Use the chest prompt tilt adjustment (see Figures 23b and 24a).
   - Keep the top of the chest prompt away from the armpits to avoid pressure and discomfort.

2. **Adjust hip positioner or pelvic support:**

   - Adjust height of handhold posts.
   - Use straps to adjust hip positioner or pelvic support angle and to position user's pelvis in the desired forward-leaning angle in relation to the chest prompt (see Figures 23b and 24a).

3. **Adjust arm prompts or hand loops:**

   - To adjust the width, height and angle of the arm prompts (see pages 10-12).
   - To adjust hand loops (see pages 8 and 9).

4. **Adjust thigh prompts:**

   - Adjust the height, angle, and strap length to guide the stride of the user (see Figure 19b).
   - The thigh prompt is important for positioning the user's thighs closer together or further apart. It also prevents the user's body from twisting in the Pacer.

5. **Adjust ankle prompts:**

   - Adjust straps and spring adjusters to guide the stride of the user (see Figure 20b).

6. **Adjust the tray position and angle** (see Figure 21a).

7. **Release the caster brakes.**

Posterior positioning

Rear facing

Users can be positioned in the Pacer facing the rear (open end) of the frame. This is called posterior positioning, and allows advanced users to move freely without obstructions below or in front of them.

Users positioned posteriorly generally require less support and fewer accessories (see Figure 25a).

- Arm prompts or handloops should be attached as close to main frame uprights as possible (see Figure 25a). Refer to the warnings on pages 3 and 4 for important safety information.
- Chest prompt (if used) opens front and back for easy transfers during posterior positioning.

1. **Apply the caster brakes** to immobilize the Pacer.
2. **Remove accessories.** Unfasten the clamps around the top bar (see Figures 8a and 8b).
3. **Turn accessories** to face open end of Pacer frame and reattach to the top bar (see Figure 25a).
4. **Reset swivel locks** in opposite direction if needed (see Figure 7a).
5. **If any other prompts are required** follow anterior positioning instructions in reverse (see Pages 23 and 24).
6. **Release caster brakes.**

For more details on accessories, function and recommended uses, go to:

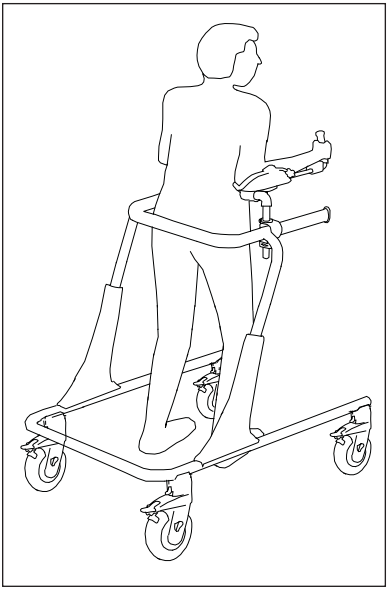

Figure 25a

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 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. Order information for replacement parts is provided on the back of this product manual.

Do not use petroleum-based or solvent-based lubricants on casters, but lubricate when necessary with silicone spray or graphite.

Cleaning

As needed, clean with disinfectant wipes or a solution of up to 10% bleach. Do not use excessive amounts of water.

The straps with hook and loop closures may be laundered. Engage the closures before washing. Do not iron.

Wash casters with water after outdoor use. Avoid mud and sand.

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 typically zinc or nickel plated, or stainless steel.
- Upholstery items (pads, support blocks, padded prompts, etc) are typically polyurethane foam with a fire-retardant cover made from expanded vinyl.
- Frames are typically steel or aluminum tubing, welded together, and coated with a baked-on paint finish. Some frame components may also be stainless steel.
- Straps are typically made of polypropylene or nylon webbing.
- Plastic components are typically 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.**