

SoloLift

R710 Product Manual




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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



- 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. Clients will experience some pressure to soft tissues when lifted with the SoloLift.
- This product is intended for use by clients of unreliable judgment. Adult supervision is required at all times.
- To prevent falls and injuries:
 - This product is intended for indoor use only. 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.
 - Slippery clothing may cause the SoloVest to slide up on the client, making a safe transfer difficult.
 - Use only the Rifton SoloVest with the Rifton SoloLift.
- 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.


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 SoloLift is a Class 1 medical device. It is a mobile transfer device. Zero lifting enables a single caregiver to transfer a client weighing up to 350 lbs (160 kg) to and from a wheelchair, chair, toilet, gait trainer, bed, or the floor. It creates many new opportunities for easier and more dignified transfers by lifting clients in a natural sit-to-stand arc, from above the waist, using the unique SoloVest.

User and item dimensions

User dimensions - inches (cm)	R703 small SoloVest	R701 medium SoloVest	R702 large SoloVest
Girth	22–34 (56-86)	28–40 (71-101)	36–60 (91-132)
All SoloVests are rated at 350 lbs. (160 kg)			
	Key user dimension: girth Caregiver must consider client’s girth when selecting appropriate SoloVest.		
	Important: User’s weight and height must not exceed maximum.		

Item dimensions - inches (cm)	
Overall length	48 (122)
Overall width	31–52 (79-132)
Overall height	39–72½ (99-184)
SoloLift weight in lbs (kg)	140 (64)
SoloVest weight in lbs (kg)	5 (2.3)
Max. user weight in lbs (kg)	350 (160)
Max. user height	6’4" or 76" (193)

Check your order

Your SoloLift comes completely assembled, which includes two leg straps, two batteries, and two battery chargers.

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

Basic components

Inspection

WARNING

Check daily for external damage or wear to the SoloLift and proper functioning of the emergency stop.



Directions for use:

Rotation lock

Push the blue rotation lock lever (A) up to unlock and rotate client (B). Pull lever (A) down to lock after rotation is complete (see Figure 6a).

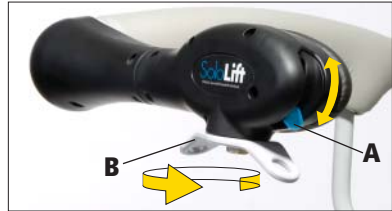


Figure 6a

Hand pendant

Operate the lift by using the up and down buttons on the hand pendant (see Figure 6b).



Figure 6b

Emergency mechanical lowering

If electrical operation fails, lower the client by pulling the red emergency lowering regulator straight up (see Figure 6c). (This will only work when the SoloLift is loaded.)



Figure 6c

Electrical emergency lowering

If the hand pendant fails to operate, lower the client by using a pointed object (such as a ball-point pen) to push the hole marked "EMERGENCY" on the control box (A) (see Figure 6d).

Emergency stop

To stop the SoloLift in an emergency, push the red emergency stop button on the control box (B). Reset by turning the button clockwise (see Figure 6d).



Figure 6d

Extending the legs

⚠ WARNING To avoid pinching or crushing, ensure all hands and feet are clear of the foot pedal mechanism, and junction of the base tube and legs, before adjusting base legs in or out.

Step on the upper foot pedal to extend or retract the frame legs (see Figure 7a).



Figure 7a

SoloVest

Three sizes of the SoloVest are available, to fit a range of clients. All SoloVests are rated at 350 lbs (160 kg). See user and item dimensions on page 4.

Inspection:

⚠ WARNING To avoid serious injury or death:

- A risk assessment must be conducted to ensure the correct size SoloVest is selected and is appropriate for each client being lifted.
- Do not attempt a transfer if the SoloVest slides up on the client during lifting. Sliding up is an indication that the SoloVest may be too big or the straps too loose, or that the product is unsuitable for that client.
- Check daily for external damage or wear to the SoloVest.



Small SoloVest (green)
Girth: 22"–34" (56–86 cm)



Medium SoloVest (light blue)
Girth: 28"–40" (71–102 cm)



Large SoloVest: (dark blue)
Girth: 36"–60" (91–152 cm)

Directions for use:

⚠ WARNING To avoid falls and resulting injury:

- Position the SoloVest well below the client's arms. Make sure it is low enough, with the bottom of the vest right at the hips.
- The SoloVest is too big for the client if the pads overlap too far and the straps cannot be tightened.

The key to using the SoloLift successfully depends on how the SoloVest is put on the user:

1. Choose the right size of SoloVest. There must be at least two inches of overlap between the front panels (see Figure 8a).
2. Make sure the back panel of the vest is centered on the client's back (see Figure 8b).
3. Clip the lower buckle together first and use the hand grip to pull the vest as snug as possible (see Figure 8c).
4. Clip the upper buckle together, pulling it as snug as possible.
5. Snug up lower buckle one final time.
6. As the SoloLift begins to lift the client, check under the arms to make sure the vest is not sliding up into the axilla (armpits) (see Figure 8d). If it is, lower your client, reposition SoloVest and tighten both buckles.



Figure 8a



Figure 8b



Figure 8c



Figure 8d

Operation and transfers

WARNING

To avoid injury, do the following before and during every transfer:

- **Thoroughly inspect the SoloVest for tears, rips and worn areas, giving special attention to the straps and buckles. Remove the product from service if any condition develops that might make use unsafe.**
- **Adult supervision is required at all times. Assess whether additional caregivers are needed.**
- **Ensure the SoloVest is positioned correctly and securely.**
- **Lock wheels on client equipment.**

The SoloLift is designed for patient transfers. These include transfers in the sitting position, and transfers to a standing position in order to transition to other adaptive equipment. Additionally, the SoloLift can perform transfers to and from the floor, and the SoloVest adapter strap makes it possible to use the SoloVest with an overhead track system that uses a spreader bar. See pages 10-13 for detailed instructions for these transfers.

Transfer to sitting position using leg straps:

1. Position the SoloVest around the client and pull the straps tight. (Refer to SoloVest section of product manual for correct positioning and sizing on Page 8.)
2. Roll the SoloLift up to the client with the swing arm in the raised position (see Figure 10a). Extend base legs if necessary (see Figure 7a). Once the SoloLift is in position, rotate the swing arm down behind the client.
3. Attach the SoloVest clips through the holes on the SoloLift swing arm (see Figure 10b).
4. Attach the leg straps by hooking the silver rings over the blue hooks on the user handle (see Figure 10c). Adjust the length of the leg strap as necessary so the client's hip remains at a 90° seated position.
5. Once the client is secure and comfortable, activate the lift by using the hand pendant, verifying that the SoloVest is secure and is not sliding up (see Figure 8d). If the SoloVest slides up, **stop lifting immediately**. Lift the client only high enough to perform the transfer (see Figure 10d).



Figure 10a



Figure 10b



Figure 10c



Figure 10d

Transfer to standing position without leg straps:

1. Position the SoloVest around the client and pull the straps until tight. (Refer to SoloVest section of product manual for correct positioning and sizing on Page 8.)
2. Roll the SoloLift up to the client with the swing arm in the raised position (see Figure 10a). Extend base legs if necessary (see Figure 7a). Once the SoloLift is in position, rotate the swing arm down behind the client.
3. Attach the SoloVest clips through the holes on the SoloLift swing arm (see Figure 10b). Leave the leg straps unattached to lift client into a standing position.
4. Once the client is secure and comfortable, activate the lift by using the hand pendant, verifying that the SoloVest is secure and is not sliding up (see Figure 8d). If the SoloVest slides up, **stop lifting immediately.**
5. As the client rises, move the lift forward slowly so that the client's feet remain in the same position during the entire lift to standing (see Figure 11a).
6. Push the blue rotation lock lever up to rotate client into a forward-facing position for a gait trainer or other standing device (see Figure 11b). Push lever back down to lock after rotation is complete. (see Figure 11c)
7. Secure client in the stander or gait trainer before removing the SoloVest (see Figure 11d).



Figure 11a



Figure 11b



Figure 11c



Figure 11d

Transfer from floor to wheelchair

1. Sit the client up.
2. Position the SoloVest around the client and pull the straps until tight (see page 8).
3. Move SoloLift behind the client, and lower the lift arm extending base legs if necessary. Once the SoloLift is in position, rotate the swing arm down behind the client. (see Figure 12a).
4. Attach the SoloVest clips through the holes on the SoloLift swing arm (see Figure 10b).
5. Once the client is secure and comfortable, activate the lift by using the hand pendant, verifying that the SoloVest is secure and is not sliding up (see Figure 8d). If the SoloVest slides up, **stop lifting immediately.**
6. As the client rises, move the lift forward slowly so that the client's feet remain in the same position during the entire lift to standing (see Figure 12b).
7. Once standing, turn the client 180°, bring wheelchair in behind the client and lower client into wheelchair (see Figure 12c).

Transfer from wheelchair to floor:

Repeat steps 1-7 in the reverse order.



Figure 12a



Figure 12b



Figure 12c

SoloVest adapter strap

▲ WARNING To avoid serious injury or death:

- A risk assessment must be conducted to ensure the correct size of SoloVest is selected and is appropriate for each client being lifted.
- Do not attempt a transfer if the SoloVest slides up on the client during lifting. Sliding up is an indication that the SoloVest may be too big or the straps too loose, or that the product is unsuitable for that client.
- The SoloVest adapter strap is rated for a maximum load of 350 lbs (160 kg).
- Adult supervision is required at all times.
- Check periodically for damage or wear to the SoloVest adapter strap. Remove the product from service if any condition develops that might make operation unsafe.



Figure 13a

The SoloVest adapter strap makes it possible to use the SoloVest with an overhead track system that uses a spreader bar. The SoloVest will not work with a Hoyer®-type lift (see Figure 13a).

Directions for use:

Position the SoloVest around the client and tighten the straps (see page 8). Clip the SoloVest adapter strap to the spreader bar or lift. Lower the lift until the adapter strap is hanging behind the SoloVest. Clip the SoloVest onto the two middle rings of the adapter strap.

Troubleshooting

Lift does not go up or down:

1. Make sure the emergency stop is not depressed (turn button clockwise to reset (see page 6).
2. Make sure the electrical cables are secure.
3. Check that battery is charged and installed correctly.
4. Make sure the battery contact plate is not damaged or broken.
5. Contact Rifton.

Battery does not charge:

1. Make sure the battery contact plate is not damaged or broken.
2. Check that wall charger is plugged securely into the wall socket.
3. Contact Rifton.

Any unusual noise:

Contact Rifton.

Battery charger

⚠ WARNING To prevent shock or electrocution, do not charge batteries in a wet area.

Installation

1. Remove the battery from the charger to access the mounting bracket.
2. Attach the charger to the wall near an outlet, using two screws (A) (see Figure 15a). Two screws are provided with the charger, however, they may not be suitable for every situation.
3. Place battery in charger (see Figure 15b).
4. Plug the charger cord into wall outlet.

Charging

- Charge batteries 24 hours before first use.
- When the battery needs charging, an indicator light on the hand pendant will go on.
- Remove the battery from the control box, and place it onto the wall-mounted charger.
- Batteries should be charged frequently to ensure maximum battery life.
- The charger and indicator light will shut off automatically when charging is complete.
- Charging normally takes approximately six hours.

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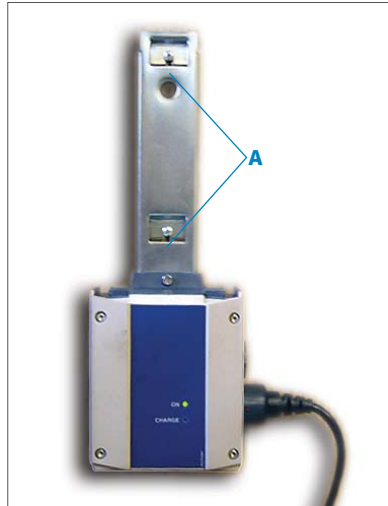



Figure 15a



Figure 15b

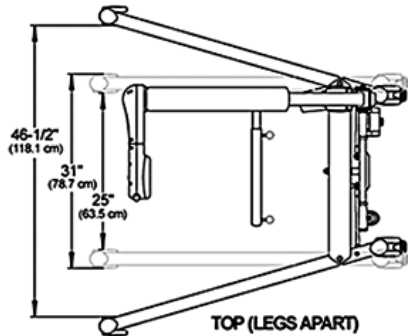
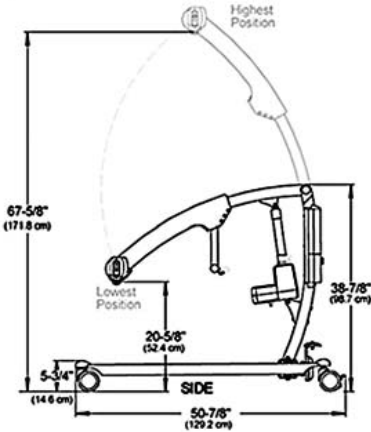
 Old batteries should be disposed of properly at an appropriate recycling facility.

Battery charger continued

- For best results, recharge fully after each day of SoloLift use.
- During long periods of inactivity or storage, batteries will lose charge. Allowing batteries to deep cycle (become nearly or completely dead) will destroy them. To prevent this, store batteries in charger. If you purchased an extra battery, you may want to consider purchasing a second charger.

Technical data

- **Lifting speed:** 2.1 inch/sec with no load
- **Batteries:** 24V, 2.9 Ah valve-regulated lead-acid gel-type batteries. (Replacement batteries available from Rifton)
- **Battery charger:** Wall-mounted charger, 100 - 240 V AC, max 650 mA
- **Motor:** 24 V, 10 A, permanent magnet motor
- **Emergency lowering:** Mechanical and electrical
- **Frame material:** Powder coated steel
- **Vest materials:** Urethane foam covered by PVC and tough nylon.
- **Wheels:** Front: 100mm dual. Rear: 100mm dual with brake
- **Duty cycle:** Two minutes continuous use followed by 18 minutes idle.
- **Degree of protection:** IP 65
- **Turning diameter:** 56" (142 cm)
- **Mass of SoloLift:** 140 lbs (64 kg).
- **Mass of SoloVest:** 5 lbs (2.3 kg)



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

Clean with disinfectant wipes or a solution of up to 10% bleach.

NOTICE

Do not machine wash or submerge SoloVest in water.

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. SoloVest materials include urethane foam covered by PVC and tough nylon.
- 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.

Rifton Contact Information



Email

Sales@Rifton.com



Phone

800.571.8198
9–5 EST



Mail

Rifton Equipment
PO Box 260
Rifton NY 12471–0260



Fax

800.865.4674



Online

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.



Find important details about the SoloLift,
and informative facts on lifting at:
www.rifton.com/sololift