

### IMPORTANT

Ensure that only an authorized Savaria® Dealer installs and services the Vuelift® Mini Residential Elevator. Under no circumstances is anyone other than a dealer with Savaria training and authorization to install, adjust, service or modify any mechanical or electrical device on this equipment. Failure to follow this warning can result in safety system compromises or defeat; this can result in serious injury or death. Savaria accepts no liability for property damage, warranty claims or personal injury, including death, in this circumstance.

Passenger safety is the result of countless details in the equipment's design, manufacture, and installation. After installation, reliable operation and continual safe operation requires regular service and inspection at least twice per year, or more frequently where usage, environment, or local jurisdiction requires. As the Owner, you are responsible for ensuring that regular service and inspections occur in a timely manner.

Refer to this manual for specifications, operating instructions and maintenance of the Vuelift Mini Residential Elevator.

Upon completion of installation, the dealer must provide you with the following information and ensure it is recorded in this manual. In addition, either the dealer or you must keep any service and/or maintenance records in the Maintenance Record section of this manual.

#### WARRANTY

Ensure your Savaria Dealer provides you with a copy of the manufacturer's limited parts warranty and documentation relating to any Dealer labour warranty.

### FOR OWNER'S RECORDS

Customer Name: _			
Installing Dealer: _			
Dealer's Telephone	Number:		
Date Installed:			
Serial/Job Number	:		

## **TABLE OF CONTENTS**

### 1. SAFETY INSTRUCTIONS

To ensure safe operation of this unit, pay careful attention to the important notes below.

## **To Ensure Safety**



At no time should children under the age of 16 use the elevator/lift while unsupervised.

- Read this manual carefully before using the equipment.
- To prevent accidents, adhere strictly to the instructions and keep clear of moving parts at all times.
- Be aware of any hazards, such as hall doors, car doors, emergency stops, or timers, especially for small children.
- Follow instructions on all equipment labels at all times. Replace any damaged labels immediately.
- Ensure that only qualified personnel perform maintenance and service on the unit.
- When replacing parts, be sure that only genuine Savaria parts are used.
- This unit is intended for use by a mature person who understands its proper operation as set out in this manual.
- · Prior to operation, make sure that:
  - All doors and gates are locked and secure.
  - All areas in and around the lift are clear of any obstructions.
  - All lights are functioning properly.
- Test your keys and emergency stop button every month.

### **Intended Use**

Do not use the Vuelift Mini to transport goods or freight



Failure to follow this instruction could result in damage to the equipment and could potentially cause serious personal injury. Using the Vuelift Mini to transport freight voids the warranty.

Use the handrails when operating the lift.



At no time should the lift be operated while contacting any surface/other/than the handrail all or control panel.



### Modification



Danger due to unauthorized modifications!

Never perform unauthorized modifications on your Vuelift Mini. Modifications to your Vuelift Mini may only be carried out following consultation with written consent from Savaria or a certified representative.

Only use the original spare parts and accessories approved by Savaria

Unauthorized modifications to load bearing or safety relevant components can lead to life-threatening injuries.



If your Vuelift Mini is modified without authorization, the warranty and product liability and void

# **Dismantling and Disposal**



Danger of serious injuries due to incorrect dismantling!

Have dismantling carried out exclusively by a service technician certified by Savaria.

Consult the manufacturer for subsequent changes of location.

Unauthorized dismantling or changes of location is prohibited.

Errors in dismantling can lead to life-threatening situations or cause considerable damage to property.

## 2. DESCRIPTION

## **Exterior View**

Figure 1 shows the components of the Vuelift Mini Residential Elevator.

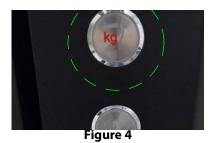
Figure 1



Cab with manual rotating sliding door

### **Overload Sensor**

The overload sensor ensures that the lift can not be started when overloaded. If the lift is overloaded the button shown in figure 4 will light up, an alarm will sound and the car will not start.



## **Safety Brakes**

The safety brakes (safeties) stop the lift in the event of cable failure.

During operation, cable tension keeps the brake up so the cam does not interfere with the hoistway rails.

If a cable failure occurs, the brake mechanism comes down and the brake cam stops movement of the lift.

## **Emergency Stop**

Actuating the red STOP switch during travel will stop the elevator immediately and activate the alarm. Toggle the switch back to RUN to return the elevator to normal operation.

## **Emergency Operation:**

## **Battery Lowering System:**

If a power failure occurs, a battery lowering system will bring the Vuelift Mini to the bottom level only at a rated speed of no faster then 0.05 m/s

When you stop at a lower landing, open the door and exit the lift.



Do not re enter or attempt to use the lift until building mains power has returned.

Always test the lift empty after a power failure prior to riding the lift.

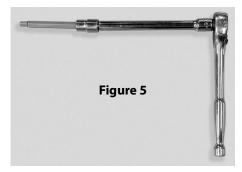
### Manual Lowering Device:

If the battery fails while operating, there is a manual lowering device that can be used to bring the Vuelift Mini to a lower landing level as described below.



The manual lowering device is for **emergency use** only. After use of any emergency function (access key or manual lowering device), ensure that all doors/gates are secure and locked. While the emergency function is in use, DO NOT leave the area unattended.

- 1 Turn off the main power disconnect.
- 2 Remove the cover on the glass/acrylic in line with the motor brake at the top landing.
- 3 Insert the manual lowering tool (shown in Figure 4) into the hole in the glass/acrylic.
- **4** Turn the manual lowering tool clockwise until the unit is at the desired landing level.
- **5** Make sure the floor of the cab is level (within 2 inches) to the landing.
- **6** Use the special emergency key to manually open the landing door.



# 3. SPECIFICATIONS

# **Vuelift Mini Specifications**

Applied code	ASME 17.1/CSA B44 - Section 5.3
Applied code	EN 81- 41
Load capacity	250 kg
Maximum travel	16.76 m
Travel speed	0.15 m/s
Daily cycle	Normal: 40 Heavy: 80 Excessive: 150 Maximum starts in 1 hour on standard installation: 20 NOTE: Please consult your Sales Representative if there's a chance you may exceed these amounts.
Maximum levels serviced	6
Minimum overhead	2.44 m
Cab	Cab walls: Full clear acrylic or silica glass Cab interior height: 1.97 m Cab weight (acrylic models): 250 kg Cab floor area: 0.76 sq m
Floor by others (in cab)	12.7 mm maximum
Footprint	1.26 m diameter
Acrylic diameter	1.08 m
Hoistway ring diameter	1.11 m
Power supply	single-phase, 220-V, 50 Hz/9 A/16 slow
Cab lighting	10A, 220V, single-phase, 50/60 Hz
Suspension	Type: White Zinc coated steel rope 06x133 Construction: IWRC 7 x 19 RHRL Nominal strength: 3175 kg Weight of ropes: 3.616 g/cm Travel cable weight: 3.393 g/cm

Drive train	Type: Winding drum Motor: 2.5HP (1.85 kW) @ 50 Hz with integrated brake Motor control: Preprogrammed variable frequency drive	
Distance between landings	2362 mm minimum	
Pit depth	Minimum: 76 mm, 102 mm with buffer springs (required if habitable space below) Maximum: 305 mm	
Temperature operating range	-10 °C to +40 °C (14 °F to 104 °F) <b>NOTE:</b> For optimal running conditions, each landing of the unit should be in a climate-controlled environment.	
Safety features	Pit run/stop switch and car top run/stop switch Emergency stop switch Safety brakes Overspeed Manual lowering Emergency battery back-up for cab lighting and lowering	
Options	Optional configurations: Type 2 cab Optional colors:  • White (Texture White PX521W859)  • Silver (Texture Silver PX521S343)  • Custom powder-coat frame Note that Black is the standard color (Texture Black PX622N365) Savaria Link remote monitoring Pitless option with ramp Sabbath service Flood switch Buffer springs for habitable space below Buck boost transformer Up to 6 stops; balcony attachment or thru-floor configuration Cab shipped disassembled Landing door handle painted to match unit Top header ring in sheet metal painted to match unit	

### 4. USING THE DEVICE

- 1 Press the hall call button.
- When the hall call door unlocks, open the hoistway door.
- **3** Open the car door and enter the elevator.
- 4 Close the hoistway door and then close the car door.
- 5 Press a button on the Car Operating Panel (COP) to select a floor.



Figure 2

- 6 When you arrive at the selected floor, open the car door and exit the elevator.
- 7 Close the car door and then close the hoistway door.

Note that you can press the Alarm button at any time in case of an emergency.

Note that there is a keypad phone located on the COP for use in an emergency.

- To dial a phone number, press the red ON/OFF button on the keypad to turn on the phone.
- Dial the phone number.
- Press the blue VOL key on the keypad to raise or lower the volume.
- Press the red ON/OFF button on the keypad to turn off the phone.



### 5. CLEANING

### A. Metal Surfaces



**NOTE** 

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# Under no circumstances should you ever attempt to remove panels for cleaning!

DO NOT use any cleaning product on acrylic that contain ammonia or petroleum. This includes Windex ® and most traditional glass cleaners.

DO NOT use window cleaning sprays, kitchen scouring compounds or solvents such as acetone, gasoline, benzene, alcohol, carbon tetrachloride, or lacquer thinner. These can scratch the sheet's surface and/or weaken the sheet causing small surface cracks called "crazing.".

**Clean acrylic panels** with a mild soap and water solution or with acrylic cleaner (see the list on the next page). A few precautions must be taken to ensure a long operating life and to maintain the acrylic panel clarity on your unit.

## Washing (Acrylic Panels)

Wash the acrylic panels with a solution of mild soap or detergent and lukewarm water. Use a clean soft cloth, applying light pressure. Rinse with clean water and dry by blotting with a damp cloth or chamois.

## **Dusting (Acrylic Panels)**

Dust acrylic panels with a soft, damp cloth or chamois. Dry or gritty cloths may cause surface scratches and create a static electric charge on the surface (refer to the section on Neutralizing Static Electricity on the next page).

## **Polishing (Acrylic Panels)**

Protect the acrylic panels and maintain their surface gloss by occasional polishing with a good plastic cleaner and polish (refer to the section on Cleaners for a list of acceptable cleaners and polishes).

Apply a thin, even coat with a soft clean cloth and polish slightly with cotton flannel or a microfiber towel. Then wipe with a damp cloth to help eliminate electrostatic charges that can attract dust particles.

# **Neutralizing Static Electricity (Acrylic Panels)**



A de-ionizing tool can be used during installation to eliminate a majority of the static electricity (causes the dust to fall away).



Damage caused by inappropriate cleaners and techniques is not covered under warranty.

A static electrical charge can develop on the acrylic panels during handling and processing. This is not unique to the acrylic panels, but is common to many materials, particularly plastics.

When the paper or film masking is stripped off the acrylic sheet, a static charge is created on the sheet surface. Static electricity attracts dust, chips, etc. floating in the air or on nearby work surfaces and holds these contaminants tightly to the surface. A compressed air gun will remove some of this surface dirt, but much of it continues to cling to the sheet.

Several anti-static cleaners for plastics are also available which will reduce static electricity and dust attraction. Wiping with a soft damp cloth or chamois is all that is necessary to keep the acrylic panels dust-free between applications of these cleaners.

### **Cleaners**

Cleaners which **MAY BE USED** for acrylic panels:

- Plexus® (Anti-Static Cleaner)
- Novus® #1 Acrylic Cleaner and Polish
- ATM Mirage Glass and Acrylic Cleaner
- Zep® Commercial Glass Cleaner (must state for use on Plexiglas®)
- Plexi-Clean (Anti-Static Cleaner)
- Prist Aerospace Anti-Static Acrylic, Plastic & Glass Cleaner
- Cleaners which explicitly state "Safe for use with plastics and acrylic"

### Cleaners which **MAY NOT BE USED** for acrylic panels:

- Windex® Glass Cleaner
- Sprayway Ammonia-Free Glass Cleaner
- Goo-Gone®

These above lists are for reference only and are not comprehensive. If you have any questions about the acceptability of a specific cleaner, please contact your authorized dealer.

### 6. DIAGNOSTICS

Diagnostic beep codes are provided to help you diagnose a problem. All beep codes that begin with a long beep (on for 2 seconds) are Service codes (contact your authorized Savaria dealer).

If you press a Hall Call button and hear a beep from the car top, but the car doesn't move, refer to the information in the following table.

Beep code	Action to take	
Service codes		
1 long beep (2 seconds) followed by 1 short beep (1/2 second)	Contact your authorized Savaria dealer for service. There is a problem in one of the following areas: overload trip, run timer trip, main safety chain open, door lock fault, or auto shutdown counter.	
1 long beep (2 seconds) followed by 2 short beeps (1/2 second)	Contact your authorized Savaria dealer for service. There is a problem with re-level shutdown or the low pressure switch is activated.	
1 long beep (2 seconds) followed by 3 short beeps (1/2 second)	Contact your authorized Savaria dealer for service. There is a selector fault, selector encoding error, or position error.	
User codes		
1 short beep (1/2 second)	Make sure the "Stop" switch in the car in the Run position. Check that the car gate is closed.	
2 short beeps (1/2 second)	Check that the landing door is closed.	
3 short beeps (1/2 second)	Manually open and close the gate.	

### 7. MAINTENANCE

Vuelift elevators are designed to require minimal maintenance, however are still subject to wear and tear from use. The unit still require inspections and maintenance to maintain the Vuelift Factory Warranty. The items that need to be checked during the inspection are listed in the Maintenance Schedule, showing the recommended frequency.



Savaria products are only to be installed, adjusted, serviced, or maintained by Savaria licensed dealers and technicians. Your Savaria product will have the warranty voided if a non-Savaria approved technician performs work on the Savaria product.

For units with high or excessive daily cycles, outdoor use, or use in harsh environments, inspection and maintenance should be conducted more frequently to ensure optimal performance.



Rail lubrication is NOT allowed for the Vuelift hoistway or car rails.

**IMPORTANT:** Please test the phone in your elevator during every maintenance. If the phone is inactive, please shut down the elevator until the phone line is active.

## **Maintenance Schedule**

## 1. Inside Car

Verification by technician		Frequency
Car Interior	Examine the car interior for damage including the ceiling, handrails, door panels, lighting and floor. Tighten all fasteners in the car panel and replace as needed.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Car controls and panel	Examine the condition of the car control panels and check the operation of all lights. Replace all burnt out lights.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Leveling, stop, acceleration and deceleration	Run the car to each floor in both directions to observe the leveling accuracy, stopping, acceleration and deceleration. Adjust as needed.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Car door operation	Observe the door for proper operation including smooth movement, starts and stops, and alignment.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Ride floor to floor	Run the car from floor to floor and observe for smooth travel and unusual noises. Adjust or repair as needed.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Car lights and ventilation	Verify proper operation of the car emergency light and ensure adequate ventilation.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Restricted opening device mechanism	Examine the restricted opening device mechanism (if applicable) for proper operation and adjust as needed.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months

## 2. Outside Hoistway

\*Minimum once a year is required

Verification by technician		Frequency
Hall call station and lights	Examine the hall stations for condition and replace all burnt out lights. Observe operation of the audible signal when the Emergency Stop is activated.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Hoistway doors	Examine the door panel and clearance between the panel and entrance frames. Examine proper interlock functionality and operation. Adjust as needed.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Unlocking device	Examine the hoistway door unlocking device for damage. Repair or adjust as needed.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months

## 3. Machine Room

Verification by technician		Frequency
Housekeeping (Required with Remote Controller Option)	Clean the machine room floor to prevent slipping and trip hazards, fire hazards and contamination of the equipment. Ensure the machine room is not being used for storage and inform the customer of any violation.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Trash, used parts, etc.	Ensure that all trash is discarded after maintenance is complete.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Controller and starter	Examine the controller and motor starter for:  - Cleanliness - Condition of contacts and remaining contact material - Fuses for correct size and fit in holders and corrosion in fuse holder - Relays for worn shunts and signs of overheating - Evidence of overheating	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months

# 4. Top of Car

Verification by technician		Frequency
Stop switch	Verify the car will not run with the stop switch in the STOP position.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Cleanliness	Clean all debris from the cartop.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Top car guides	Examine car rail to hoistway rail conditions at the car top. Note any abnormal wear patterns or changes in alignment.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Guide rails	Examine the car rails for loose fastenings and fit at all joints.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Traveling cable	Examine the traveling cables for wear, chafing, kinking and alignment. Examine the attachment points for secure fastening and looseness.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Doors, hangers and locks	<ul> <li>Verify the interlock is functioning properly.</li> <li>With the door open, attempt to move the car using the hall call and COP buttons.</li> <li>Observe the door closing for any roughness in bearings, inconsistent operation, or misalignment</li> </ul>	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Hoistway cleaning	Clean dirt and trash from all horizontal surfaces including the car and entrance sills.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months

Other	Observe any hoistway problems that should be addressed such as:  - Unauthorized equipment installed in the hoistway  - Damage to the hoistway enclosure which would affect its fire resistance rating  - Evidence of intentional acts  - Any evidence of unauthorized people entering the hoistway	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Examine the ropes	Examine the car ropes for equal tension, and visually inspect for any frays or deformation of the ropes which would negatively impact their strength.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Leaving car top	Clean up and dispose of debris properly. Return the car to normal operation and the stop switch to the RUN position.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months

# 5. Pit (If applicable)

\*Minimum once a year is required

Verification by technician		Frequency
Stop switch and light	Examine the operation and condition of the stop switch. Repair as needed	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Cleaning	Clean the pit. Examine the bottom level landing sill and clean as needed.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Bottom car guides	Examine car rail to hoistway rail conditions at the car bottom. Note any abnormal wear patterns or changes in alignment.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Traveling cable	Examine the traveling cables for wear, chafing, kinking and alignment. Examine the attachment points for secure fastening and looseness.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Leaving the pit	Remove all tools and verify operation of the elevator.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months

# 6. Overspeed (New Car)

Verification by technician		Frequency
Overspeed belt	Make sure the overspeed belt is in good condition and that it has no frays or cuts. Check that the ends are secure.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Overspeed system	Check for any signs of wear in the overspeed system. Remove any dust or dirt from the belt and pulleys. Do not use harsh chemicals on the overspeed components; use only mild detergents.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months

# 7. Electrical Circuit Overspeed (Original Car)

\*Minimum once a year is required

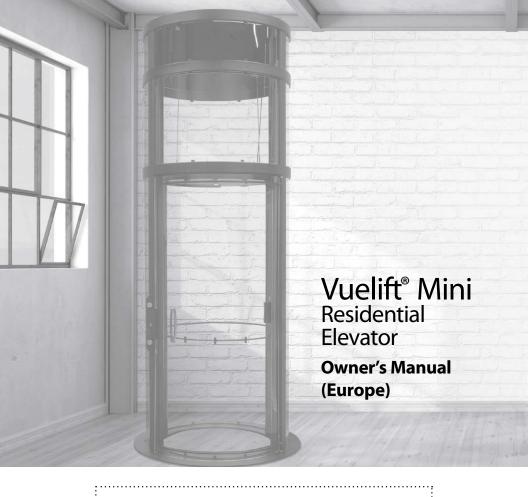
Verification by technician		Frequency
Plastic flywheel	Check to ensure the plastic flywheel rotates during lift operation (gears are fully engaged)	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Plastic flywheel gear	Check for wear (ensure all teeth are present) and replace as needed.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months
Plastic shaft bushings	Check for wear and replace as needed.	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months

## 8. Brakes

Verification by technician		Frequency
Safety brakes and motor brake	Verify proper operation of the safety brakes and the motor brake. Check with full load <b>every 12 months</b> .	Normal: Once a Year Heavy: Every Year Excessive: Every 6 months

# **Maintenance Record**

Date	Time	Reason for call	Comments	Dealer
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please contact your installing dealer.	
Dealer Name:	

**Savaria Concord Lifts, Inc.**2 Walker Drive Brampton ON L6T 5E1 Canada

Dealer Phone:

