

#### **IMPORTANT**

Ensure that only an authorized Savaria® Dealer installs and services the Vuelift® 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 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	:		

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### TO ENSURE SAFE OPERATION



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

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

- 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.

# 1. DESCRIPTION

Figure 1 shows the components of the Vuelift Residential Elevator. Note that the round acrylic elevator is shown below; there is also an octagonal-shaped elevator and glass model available.

Figure 1



# 2. GENERAL SPECIFICATIONS

\*For more information, please contact your Savaria regional sales manager

# **Vuelift Specifications**

Applied code	EN 81-41-2010
Load capacity	Round acrylic: 840 lb (381 kg) Octagonal acrylic: 840 lb (381 kg) Octagonal glass: 950 lb (432 kg)* Octagonal+ glass: 950 lb (432 kg)* Round+ glass: 950 lb (432 kg)*
Maximum travel	50 ft (15.24 m); 55 ft (16.76 m) available where code is not applicable
Travel speed	Round acrylic: 32 ft/min (0.16 m/s) Octagonal acrylic: 32 ft/min (0.16 m/s) Octagonal glass: 40 ft/min (0.20 m/s)* Octagonal+ glass: 40 ft/min (0.20 m/s)* Round+ glass: 40 ft/min (0.20 m/s)*
Noise level	65 dB
Daily cycle	Normal: 40 Heavy: 80 Excessive: 150 Maximum starts in 1 hour on standard installation: 20
Maximum levels serviced	6
Minimum overhead	Round and Octagonal acrylic:  • 108" (2.74 m) for 84" (2.13 m) cab  • 104" (2.64 m) for 80" (2.03 m) cab  • 96" (2.44 m) for 76.5" (1.94 m) cab  Octagonal glass and Octagonal+ glass:  • 108" (2.74 m) for 84" (2.13 m) cab*  • 104" (2.64 m) for 80" (2.03 m) cab*  • 96" (2.44 m) for 76.5" (1.94 m) cab*  Round+ glass:  • 108" (2.74 m) for 84" (2.13 m) cab*  • 104" (2.64 m) for 80" (2.03 m) cab*
Temperature operating range	−10 °C to +40 °C (14 °F to 104 °F)

Pit depth	4 - 12 in (102 - 305 mm) No pit with optional short ramp
Distance between 2 landings	93.5" (2362 mm) minimum
Footprint	Round acrylic: 54" (1.37 m) diameter Octagonal acrylic: 59.31"x 45.5" (1.5 m x 1.16 m) Octagonal glass: 59.31" x 45.5" (1.5 m x 1.16 m)* Octagonal+ glass: 59.31" x 45.5" (1.5 m x 1.16 m)* Round+ glass: 57.56" (1.46 m) diameter*
Cab (car)	Round and Octagonal acrylic: Cab interior height: 84" (2.13 m) Cab interior height: 80" (2.03 m) Cab interior height: 76.5" (1.94 m)* Cab weight: 550 lb (250 kg) Round acrylic cab floor area: 13.09 sq ft (1.22 sq m) Octagonal acrylic cab floor area: 12.83 sq ft (1.19 sq m)  Octagonal and Octagonal+ glass: Cab interior height: 84" (2.13 m) Cab interior height: 76.5" (1.94 m)* Octagonal glass cab weight: 1000 lb (455 kg) Octagonal glass cab floor area: 12.83 sq ft (1.19 sq m) Octagonal+ glass cab weight: 1200 lb (544 kg) Octagonal+ glass cab floor area: 14 sq ft (1.31 sq m)  Round+ glass: Cab interior height: 84" (2.13 m) Cab interior height: 84" (2.13 m) Cab interior height: 80" (2.03 m)* Cab weight: 1200 lb (544 kg) Cab floor area: 15 sq ft (1.4 sq m)
Power supply (circuit supplied by others)	30A, 230-V, single-phase, 50/60 Hz
Cab lighting	15A, 115V, single-phase, 50/60 Hz

Suspension	Type: Galvanized aircraft cable (2 x 10mm diameter) Construction: IWRC 7 x 19 RHRL Nominal strength: 14400 lb (6,545 kg) Weight of ropes: 0.243 lb/ft (3.616 g/cm) Travel cable weight: 0.228 lb/ft (3.393 g/cm)
Drive train	Type: Winding drum Motor: - 5 HP (3.5KW) @ 60Hz with integrated brake - 4 HP (3.0KW) @ 50Hz with integrated brake Transmission: Low vibration worm gear drive Motor control: Preprogrammed variable frequency drive Door interlocks: Xtronics
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, 3, 6 Optional colors:  • White (Texture White PX521W859)  • Silver (Texture Silver DX521S82)  • Custom powder-coat frame Note that Black is the standard color (Texture Black PX622N365) Other options: Up to 6 stops, balcony attachment Savaria Link remote monitoring (Vuelift Micro-6 only) Landing door handle painted to match unit Top header ring in sheet metal painted to match unit Custom size balcony Pitless option with ramp Sabbath service Flood switch Buffer springs for habitable space below Buck boost transformer

### 3. OPERATION

- **1** Press the hall call button.
- 2 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.

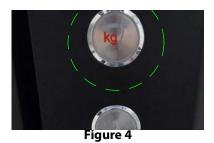


Figure 3

### 4. SAFETY FEATURES

## **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 Emergency Stop switch during travel will stop the elevator immediately and activate the alarm. Toggle the Emergency Stop switch to return the elevator to normal operation.

# **Battery Lowering System and Manual Lowering Device**



The manual lowering device is for **emergency use** only. When manually lowering, ensure the car floor is always within 2 inches (50 mm) of the landing prior to opening the hoistway door. 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.

If a power failure occurs, a battery lowering system will bring the Vuelift to the bottom level.

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



1 Turn off the main power disconnect.

Figure 4

- 2 Remove the aluminum snap cap cover on the right side of the top floor landing door (above the top floor ring) using a ¾" open-end wrench.
- 3 Insert the manual lowering tool (shown in Figure 4) into the hole provided in the rail.
- **4** Turn the manual lowering tool 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.

# **Reset Button**

There is a reset button located on the cover of the controller box.

In the event your Vuelift is not operating properly, press the reset button for 3 seconds.



If this issue persists, please contact your dealer/maintenance contractor for further assistance.



# 5A. CLEANING - Metal Rings and Painted Surfaces



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



DO NOT use any cleaning product anywhere on the entire unit that contain any amount of citrus, ammonia or petroleum. This includes Windex <sup>®</sup> and most traditional glass cleaners, as well as many "natural" cleaning solutions.



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 finish of the metal and damage nearby acrylic panels.

# Washing (Metal Surfaces)

**Clean the Metal Rings and Surfaces** with a mild soap and water solution using a new microfiber cloth or with a melamine sponge with water. Use a clean soft cloth, applying only light pressure. Rinse with clean water and dry by blotting with a damp cloth or chamois.

Not using harsh chemicals will preserve not only the look and texture of the powder coated metal, but also protect the acrylic sheets.

The fumes from many chemical cleaners (including citrus-based cleaners) will cause the acrylic to have surface cracks or create cracks that can go all the way through and can result in safety hazards.

# **Dusting (Metal Surfaces)**

Dust the metal rings and painted surfaces with a soft, damp microfiber cloth or chamois. Dry, gritty or previously used cloths may cause surface scratches.

# 5B. CLEANING - Acrylic Panels



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



DO NOT use any cleaning product anywhere on the entire unit that contain any amount of citrus, ammonia or petroleum. This includes Windex <sup>®</sup> and most traditional glass cleaners, as well as many "Natural" cleaning solutions.



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".

# **Washing (Acrylic Panels)**

Wash the acrylic panels with a microfiber cloth damp with water or with acrylic cleaner (see the list on the next page). Some precautions must be taken to ensure a long operating life and to maintain the acrylic panel clarity on your unit, including not using chemicals to clean the acrylic sheets. Use a clean soft cloth, applying only 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

Same or equivalent cleaners which **MAY BE USED** for acrylic panels:

- Plexus® (Anti-Static Cleaner)
- Novus® #1, 2, and 3 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"

Same or equivalent cleaners which **SHALL NEVER BE USED** for acrylic panels:

- Windex® Glass Cleaner
- Sprayway Ammonia-Free Glass Cleaner
- Goo-Gone®
- Natural 100% Citrus Solvent De-greaser
- Any citrus-based cleaners.

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.

### 5C. CLEANING - Glass Panels



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

**Clean glass panels** using a normal glass cleaner such as Windex® or equivalent.

# Washing (Glass Panels)

Wash the glass panels with a normal glass cleaner such as Windex® or equivalent. Use a clean soft, clean and lint-free cloth to remove the dust before applying the cleaning spray or solution. Apply only light pressure and use a different cloth to rub the solution on glass. Rinse with clean water and dry by blotting with a damp cloth or chamois..

# **Dusting (Glass Panels)**

Dust with a soft, damp cloth or chamois.

# Polishing (Glass Panels)

Protect the glass and maintain their surface gloss by occasional polishing with a good 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.

### Cleaners

Same or equivalent cleaners which MAY BE USED:

- Windex® Glass Cleaner
- Clean Choice® Glass Cleaner
- Chemical Guvs® Glass Cleaner
- 3M™ Glass Polishing Compound, 60150

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.

Note that damage caused by inappropriate cleaners and techniques is not covered under warranty.

### 6. MAINTENANCE



The 6-month inspection and all maintenance procedures **must** be performed by a Qualified Technician. Contact your Authorized Dealer.



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

Vuelift elevators are designed to require minimal maintenance.

A 6-month inspection of certain components is required to maintain the Vuelift Factory Warranty. The first required service of the drive train components (motor/gearbox, drums, etc.) is after 2,000 operational hours (approximately 120,000 trips).

The items that need to be checked during the 6-month inspection are listed in the Maintenance Schedule table.

**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 Procedures**

# **INSIDE CAR**

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.

### Car Controls and Panel

• Examine the condition of the car control panels and check the operation of all lights. Replace all burnt out lights.

### Leveling, Stopping, Acceleration and Deceleration

 Run the car to each floor in both directions to observe the leveling accuracy, stopping, acceleration and deceleration. Adjust as needed.

### Car Door Operation

 Observe the door for proper operation including smooth movement, starts and stops, and alignment.

#### Ride Floor to Floor

• Run the car from floor to floor and observe for smooth travel and unusual noises. Adjust or repair as needed.

### Car Lights and Ventilation

• Verify proper operation of the car emergency light and ensure adequate ventilation.

### Restricted Opening Device Mechanism

• Examine the restricted opening device mechanism (if applicable) for proper operation and adjust as needed.

### **OUTSIDE HOISTWAY**

Hall Call Stations 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.

### **Hoistway Doors**

 Examine the door panel and clearance between the panel and entrance frames. Examine proper interlock functionality and operation. Adjust as needed.

### **Unlocking Device**

 Examine the hoistway door unlocking device for damage. Repair or adjust asneeded.

### **MACHINE ROOM**

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.

### Trash, Used Parts and Oil

• Ensure that all trash is discarded after maintenance is complete.

#### Controller and Motor 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

#### TOP OF CAR

#### Stop Switch

Verify the car will not run with the stop switch in the STOP position.

#### Cleanliness

Clean all debris from the car top.

#### Top Car Guide

 Examine car rail to hoistway rail conditions at the car top. Note any abnormal wear patterns or changes in alignment.

#### **Guide Rails**

• Examine the car rails for loose fastenings and fit at all joints.

## **Traveling Cables**

• Examine the traveling cables for wear, chafing, kinking and alignment. Examine the attachment points for secure fastening and looseness.

## Door Hangers, Locks, etc.

- Verify the interlock is functioning properly.
- With the door open, attempt to move the car using the hall call and COP buttons.
- Observe the door closing for any roughness in bearings, inconsistent operation, or misalignment.

### Hoistway Cleaning

 Clean dirt and trash from all horizontal surfaces including the car and entrance sills

#### 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

#### 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.

### Leaving the Car Top

• Clean up and dispose of debris properly. Return the car to normal operation and the stop switch to the RUN position.

# PIT (IF APPLICABLE)

#### Stop Switch

 Examine the operation and condition of the stop switch. Repair as needed.

#### Cleaning

 Clean the pit. Examine the bottom level landing sill and clean as needed.

#### **Bottom Car Glides**

• Examine car rail to hoistway rail conditions at the car bottom. Note any abnormal wear patterns or changes in alignment.

#### Traveling Cables

• Examine the traveling cables for wear, chafing, kinking and alignment. Examine the attachment points for secure fastening and looseness.

# Leaving the Pit

• Remove all tools and verify operation of the elevator.

# **OVERSPEED**

### 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.

### 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.

### **BRAKES**

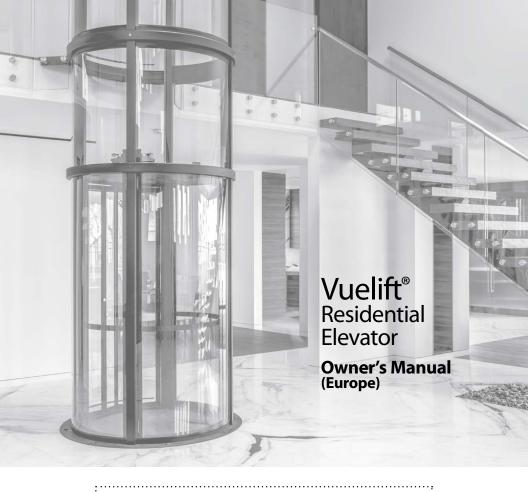
Verify proper operation of the safety brakes and the motor brake. Check with full load every 12 months.

# **Maintenance Schedul**

Verification by technician	Frequency
<ul> <li>INSIDE CAR</li> <li>Car interior</li> <li>Car controls and panel</li> <li>Leveling, stop, acceleration and deceleration</li> <li>Car door operation</li> <li>Ride floor to floor</li> <li>Car lights and ventilation</li> <li>Restricted opening device mechanism</li> </ul>	6 months
OUTSIDE HOISTWAY  • Hall call station and lights  • Hoistway doors  • Unlocking device	6 months
<ul><li>MACHINE ROOM</li><li>Housekeeping</li><li>Trash, used parts, etc.</li><li>Controller and starter</li></ul>	6 months
TOP OF CAR  • Stop switch  • Cleanliness  • Top car guides  • Guide rails  • Traveling cable  • Doors, hangers and locks  • Hoistway cleaning  • Other  • Examine the ropes  • Leaving car top	6 months
PIT (IF APPLICABLE)     Stop switch and light     Cleaning     Bottom car guides     Traveling cable     Leaving the pit	6 months
OVERSPEED (NEW CAR)  Overspeed belt  Overspeed system ELECTRICAL CIRCUIT OVERSPEED (ORIGINAL CAR)  Plastic flywheel and plastic flywheel gear  Plastic shaft bushings	6 months
BRAKES  • Safety brakes and motor brake  • Safety brakes and motor brake (with full load)	6 months 12 months

# **Maintenance Record**

Date	Time	Reason for call	Comments	Dealer
				L



please contact your installing dealer.	
Dealer Name:	
Dealer Phone:	

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

