# 🕤 savaria.

# **Vuelift** Residential Elevator



# **OWNER'S MANUAL**

(To Be Retained by Owner After Installation by Authorized Savaria Dealer)

Part No. 001122 26-m04-2018

# 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.

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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

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

- Read this manual carefully before using the Vuelift Residential Elevator.
- To prevent accidents, adhere strictly to the instructions and keep clear of moving parts at all times.
- 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:
  - The door is 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 elevator is shown below; there is also an available octagonal shaped elevator.

#### Figure 1



# 2. GENERAL SPECIFICATIONS

# **Vuelift Specifications**

Applied code	ASME 17.1/CSA B44 - Section 5.3
Load capacity	Round (acrylic): 840 lb (381 kg) Octagonal (acrylic): 840 lb (381 kg) Octagonal (silica glass): 950 lb (432 kg)
Maximum travel	42.5 ft (12.95 m)
Travel speed	Round (acrylic): 32 ft/min (0.16 m/s) Octagonal (acrylic): 32 ft/min (0.16 m/s) Octagonal (silica glass): 40 ft/min (0.20 m/s)
Maximum # of stops	6
Daily cycle	Normal: 40 Heavy: 80 Excessive: 150 Maximum starts in 1 hour on standard installation: 20
Noise level	65 dB
Cab (car)	Cab walls: Full clear acrylic or silica glass Cab interior height (standard): 84 in (2.13 m) Cab interior height (optional): 76.5 in (1.94 m) Cab weight (acrylic models): 550 lb (250 kg) Cab weight (silica glass models): 1000 lb (455 kg) Cab floor area (round): 13.09 sq ft (1.22 sq m) Cab floor area (octagonal): 12.83 sq ft (1.19 sq m)
Footprint	Round (acrylic): Diameter 54 in (1.37 m) Octagonal (acrylic): 48 in x 48 in (1.2 m x 1.2 m) Octagonal (silica glass): 48 in x 48 in (1.2 m x 1.2 m)
Overhead clearance	Round (acrylic): 106 in (2.69 m) Round (acrylic), optional short cab: 96 in (2.44 m) Octagonal (acrylic): 106 in (2.69 m) Octagonal (acrylic), optional short cab: 96 in (2.44 m) Octagonal (silica glass): 108 in (2.74 m)
Power supply (circuit supplied by others)	30A, 230-V, single-phase, 50/60 Hz
Cab (car) lighting	15A, 115V, single-phase, 50/60 Hz

Suspension	Type: Galvanized aircraft cable (2 x 3/8" diameter) Construction: IWRC 7 x 19 RHRL Nominal strength: 14,400 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)
Pit depth	4 - 12 in (102 - 305 mm) No pit with optional short ramp
Temperature operating range	–10 °C to +40 °C (14 °F to 104 °F)
Drive train	Type: Winding drum Motor (acrylic model): 1.5 HP with integrated brake Motor (silica glass model): 3.0 HP with integrated brake Transmission: Ultra-low vibration, 3-stage, right-angle, helical-bevel drive Motor control: Preprogrammed variable frequency drive Door interlocks: Honeywell RDI-G-L5B certified (compliant with ASME A17.1 Section 2.12.4.3)
Safety features	Emergency battery back-up for cab lighting and lowering Manual lowering Emergency alarm and stop switch Safety brakes Overspeed governor Pit run/stop switch and car top run/stop switch
Options	<ul> <li>Round:</li> <li>Optional configurations: Type 1, 2, 3</li> <li>Optional colors: White, silver, or custom powder-coat frame (note that black is the standard color)</li> <li>Other options: Up to 6 stops, panoramic car ceiling, balcony attachment</li> <li>Octagonal:</li> <li>Optional configurations: Type 1, 2, 3</li> <li>Optional cab wall and hoistway: Low-iron silica glass</li> <li>Optional colors: White, silver, or custom powder-coat color frame</li> <li>Other options: Up to 6 stops, panoramic car ceiling, balcony attachment</li> </ul>

## **3. OPERATION**

**1** Press the hall call button.





- 2 When the hall call button flashes, open the hoistway door.
- **3** Enter the elevator and close the hoistway door, and then the internal car door behind you.
- 4 Press a button on the Car Operating Panel (COP) to select a floor.



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

Figure 3

# **4. SAFETY FEATURES**

# **Safety Brakes**

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

When the lift is in operation, the cable tension keeps the brake mechanism up so that the brake's 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. Figure 4



# **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.

# **Manual Lowering and Battery Lowering System**

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

Figure 5

If the battery fails while operating, there is a manual lowering device that can be used to bring the Vuelift to the bottom level.

Turn off the main power disconnect and then use the manual lowering device to bring the elevator to the bottom level.

Once the elevator is at the bottom level, use the special emergency key to manually open the landing door (see Figure 5).



The manual lowering device is for emergency use only.



# **5. CLEANING**



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

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

NOTE

**DO NOT use any cleaning product that contains ammonia or petroleum.** This includes Windex <sup>®</sup> and most traditional glass cleaners.

## Washing

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

#### NOTE

**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.".

## Dusting

Dust 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).

# Polishing

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**

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.

#### NOTE

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

# Cleaners

#### Cleaners which MAY BE USED:

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

#### Cleaners which MAY NOT BEUSED:

- Windex<sup>®</sup> Glass Cleaner
- Sprayway Ammonia-Free Glass Cleaner
- Goo-Gone<sup>®</sup>

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

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).

Note that rail lubrication is NOT ALLOWED for the Vuelift hoistway or car rails.

The items that need to be checked during the 6-month inspection are listed in the table on the next page.



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

# **Maintenance Schedule**

Verification by technician	Frequency
INSIDE CAR	
Car interior	
<ul> <li>Car controls and panel</li> </ul>	
<ul> <li>Leveling, stop, acceleration and deceleration</li> </ul>	6 months
Car door operation	omontins
Ride floor to floor	
<ul> <li>Car lights and ventilation</li> </ul>	
<ul> <li>Restricted opening device mechanism</li> </ul>	
OUTSIDE HOISTWAY	
<ul> <li>Hall call station and lights</li> </ul>	
Hoistway doors	6 months
Unlocking device	
<ul> <li>Firefighters' service tests (if applicable)</li> </ul>	
MACHINE ROOM	
Housekeeping	6 months
<ul> <li>Trash, used parts, etc.</li> </ul>	omontris
Controller and starter	
TOP OF CAR	
Stop switch	
Cleanliness	
Top car guides	
Guide rails	
Traveling cable	6 months
<ul> <li>Doors, hangers and locks</li> </ul>	
Hoistway cleaning	
• Other	
Examine the ropes	
Leaving car top	
PIT (IF APPLICABLE)	
<ul> <li>Stop switch and light</li> </ul>	
Cleaning	6 months
Bottom car guides	
Traveling cable	
Leaving the pit	

#### NOTE

Refer to the Maintenance Procedures section for a description of individual items.

# **Maintenance Record**

Date	Time	Reason for Call	Comments	Dealer

# **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 as needed.

Firefighters' Service Tests

• Check for proper operation of the firefighters' service and record in test log (where applicable).

# **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 cartop.

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 problems with or within the hoistway 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.

# Troubleshooting

A basic set of diagnostic tools is provided through the call buttons. During normal operation, you may notice that the call buttons flash either slowly or quickly, depending on the operation. These same flashes can assist in diagnosing potential operational issues.

- **Quick Blinking Call Button** This signals that the hoistway door is ready to open at a landing.
- **Slow Blinking Call Button** This signals that there is a break in the safety chain, (for example, the hoistway door is open, the car door is open, or a safety has been tripped).

The following table lists potential problems and their possible solutions. If the problem persists, contact your authorized dealer.

Potential Problem	Possible Solution
	Check to make sure the car door is closed completely and free of any obstructions.
The elevator will not move when the button is pressed.	If the car door is not completely closed, the buttons inside the car will blink slowly (or one may be blink quickly while the others blink slowly).
The elevator stopped moving while riding in it.	CAR DOOR OPTION - Check to make sure the car door is closed completely and free from any obstructions. If the door has been inadvertently opened during operation, the unit will stop. Close the door completely and press the button again for the desired floor.
	LIGHT CURTAIN OPTION - Something is protruding past the light curtain. Remove the obstruction and the car will return to normal operation.
	It is also possible there was a power spike or drop in the area which may have caused the elevator computer to reset. Press the button again for the desired floor. If this does not solve the problem, toggle the Emergency Stop switch from "Run" to "Stop" and then return to "Run". Press the button again for the desired floor.

The button outside the elevator is blinking slowly and the car is not at the required landing. When the button is pressed, the elevator will not come up.	The hoistway door on a level below where you are is not closed. Close the open hoistway door and try pressing the button again. The car door is not closed. Close the car door and try pressing the button again. There is a problem with one of the safeties. Contact your authorized dealer to schedule a service call.
The elevator has gone past the top/bottom landing and now it won't move.	The elevator is actuating the final limit switch or the slack cable switch. Contact your authorized dealer to schedule a service call.
The elevator was installed not too long ago, but now when it stops at the floor, the car is below the floor level.	During the first six months to a year, the elevator cables may stretch slightly. This is normal. It may be necessary to contact your authorized dealer to come and adjust the floor heights.
There were a few people riding in the elevator at the same time, and when the button was pressed to go up/down, the elevator moved and then stopped.	It is possible that the capacity of the elevator was exceeded. Turn the power to the elevator off at the disconnect switch, wait 30 seconds, then turn the power back on. If this does not solve the problem, contact your authorized dealer to schedule a service call.
The light stays on for a long time in the elevator car.	Code requires that the light in the elevator car stay on for a minimum of 5 minutes from the last time the safety chain was broken (i.e. the car or hoistway door was open or closed, or a button was pressed). If the car light stays on for longer than 10 minutes, it is possible that there may be a power failure on the car light circuit. The car light will also be illuminated if there is a break in the safety chain (i.e. a door is open). Once the safety circuit is corrected, the light should turn off within 10 minutes. If the light remains illuminated, contact your authorized dealer to schedule a service call.
The elevator came equipped with a light curtain. When the button is pressed, the elevator did not move but the button is illuminated completely.	There is an obstruction between the light curtain send and receive units. Remove the obstruction and the unit will begin to move. The light curtain may be dirty. Clean the light curtain using plastic cleaner and a soft cloth.

Part No. 001122, 26-m04-2018

# **Authorized Savaria Dealer**

# Vuelift Residential Elevator OWNER'S MANUAL

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For service or questions about this product, please contact your installing dealer.

DEALER NAME:

DEALER PHONE:

