

# Infinity & Infinity HD Residential Elevators (with Micro-6 Controller)



# **OWNER'S MANUAL**

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

> Part No. 000842 05-m02-2014

## IMPORTANT

Ensure that only an Authorized Savaria Dealer installs and services the Savaria<sup>™</sup> Infinity & Infinity HD Residential Elevators. 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 Infinity & Infinity HD Residential Elevators.

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 Authorized 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**

TO ENSURE SAFE OPERATION	4
1. SPECIFICATIONS	5
2. FEATURES	6
3. OPTIONS	8
4. OPERATION	9
Operating from the Landing Controls	9
Operating from the Cab Operating Panel (COP) Controls	10
Cab Lights	
5. EMERGENCY LIGHTING	
6. POWER FAILURE AND EMERGENCY LOWERING	11
7. EMERGENCY OPENING OF AUTO SLIM LANDING DOORS	
8. MANUAL LOWERING DEVICE (MACHINE ROOM)	12
9. DIAGNOSTICS	
10. MAINTENANCE	14
Maintenance Record	

## 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 your Infinity or Infinity HD 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.

## **1. SPECIFICATIONS**

#### Infinity/Infinity HD Specifications

Load capacity	Infinity: 750 lb (341 kg) or 1000 lb (454 kg) Infinity HD: 1400 lb (635 kg)		
Rated speed	36 ft/min (0.18 m/s) nominal		
Power supply	208 volt, three phase, 30 amps or 230 volt, single phase, 40 amps		
Drive system	1:2 cable hydraulic		
Cab sizes	Infinity Type 1L/R, 2, 3, 4 and 5: • 36" x 48" (914 mm x 1219 mm) • 36" x 54" (914 mm x 1372 mm) • 36" x 60" (914 mm x 1524 mm) • 40" x 54" (1016 mm x 1372 mm) Infinity HD Type 1L/R, 2, 3, 4 and 5: • 48" x 60" (1219 mm x 1524 mm)		
Maximum travel	50 ft (15.24 m) or per local code		
Maximum # of stops	6 stops		
Pit depth required	Infinity: 8″ (203 mm) minimum Infinity HD: 12″ (305 mm) minimum		
Minimum overhead clearance	92" (2337 mm) for standard 80" cab; 96" (2438 mm) for 84" cab, 108" (2743 mm) for 96" cab		
Control system	Micro-6 controller with diagnostics		
Floor selection	Magnetic selector		
Flooring material	Plywood (standard) or hardwood (optional)		
Control panel finish	Clear or bronze anodized aluminum (standard) Stainless steel or brass (optional)		
Hall station finish	Clear or bronze anodized aluminum (standard) Stainless steel or brass (optional)		
Motor	Infinity: 3 HP (2.24 kW) Infinity HD: 5 HP (3.73 kW)		
Cab panel finish	Solid melamine or MDF panels (standard) Unfinished oak veneer or raised solid hardwood (optional)		
Lighting supply	115 volts, 60 Hz, 15 amps		
Standard features	Automatic on/off cab lighting "Car in use" illuminated hall call buttons Digital floor indicator in cab Emergency battery powered lowering and lighting with automatic recharging Emergency stop button in cab Emergency alarm button in cab Solid ceiling with four stainless steel pot lights Vertical keyed stainless steel control panel		

## 2. FEATURES

## 1 Cab Key Switch (Optional) (Figure 1-A)

The optional key switch turns the cab controls ON and OFF. It is provided to limit the use of the elevator to authorized persons only.

## 2 Cab Operating Panel Buttons (Figure 1-B)

Automatic control panel buttons facilitate the UP/DOWN movement of the cab between landings. Once the selected landing button is pressed, the cab will automatically move to the landing. The cab will stop when the selected landing is reached.

## 3 Alarm Button (Figure 1-C)

This button can be pressed at any time to sound the alarm in case of an emergency.

## 4 Run/Stop Button (Figure 1-D)

This button can be used at any time to stop the cab and activate the alarm buzzer.

#### 5 Phone Button

For units that have a hands-free phone, there will be a phone button on the COP (not shown here).

#### 6 Handrail

A single handrail is mounted on the Cab Operating Panel side of the cab.

#### Figure 1: 6-Stop COP



#### 7 Landing Hall Call Station Controls (Figure 2)

Hall Call buttons are installed at all landings to move the cab to the landing from which it is being called. An optional key switch limits the use of the elevator to authorized persons only.

#### 8 Landing Door and/or Gate Interlock

The Landing Door/Gate lock prevents the movement of the cab unless the door/gate is in the closed and locked position. If the door/gate is not completely closed, the cab will not move.

#### 9 Emergency Battery Operation

In the event of a building power failure, the door system is provided with a temporary power back-up system to continue the opening operation for a number of times. On resuming normal building power, the back-up system will turn OFF and begin automatic recharging.

#### Figure 2: Hall Call



## **3. OPTIONS**

#### Automatic Door Opener

- 1 Press the Landing Hall Call button to call the elevator. The entrance door will open automatically once the elevator stops at the landing.
- **2** Press the Remote Control (if equipped) to open the entrance door once the elevator stops at the landing.
- **3** Push 'n' Go allows the entrance door to open automatically with a slight push to the door itself. The door timer is inoperative when this feature is activated.

#### **Automatic Gate Opener**

- 1 Press the Landing Hall Call button to call the elevator. The gate will open automatically once the elevator stops at the landing and the entrance door is fully open.
- **2** Manually open the entrance door; the gate will open automatically once the entrance door is fully open.

#### NOTE

If the cab is equipped with a gate, the gate must be closed after exiting the cab. If the gate is left open, all controls will remain inoperable.

An "entry" and "exit" timer allows approximately 9 seconds before the Hall Call buttons become operational. This delay allows time for a person to enter/exit the cab.

## 4. OPERATION

## **Operating from the Landing Controls**

- 1 If equipped with a key switch, insert the key into the key switch on the Hall Call station and turn the key to the ON position.
- **2** Press the Hall Call button once and release. The elevator will automatically come to your landing.
- 3 Turn the key (if equipped) to the OFF position and remove the key.
- 4 If required, turn the door handle and pull the door open.
  - Note that if you open the door and don't open the gate (or interrupt the light screen, if equipped), the unit will not take the next call and will beep three times.
- 5 If the cab has a manual gate, slide the gate open and enter the cab.
- 6 Once inside the cab, close the gate, insert the key (if equipped) into the key switch, and turn the key to the ON position.

#### NOTE

When using the landing controls, the cab can only be moved (called) to the level from which you are calling. When using the control buttons in the cab, the cab can be moved to any level.



Wheelchair wheels must be locked at all times when the elevator is moving.

## **Operating from the Cab Operating Panel (COP) Controls**

- 1 If equipped with a key switch, insert the key into the key switch on the Cab Operating Panel and turn the key to the ON position.
- **2** Press the selected Landing button once and release. The elevator will automatically travel to and stop at the selected landing.
- 3 Turn the key (if equipped) to the OFF position and remove the key.
- 4 Unlock the wheelchair wheels (if applicable) and exit the cab.

#### NOTE

If the cab is equipped with a gate, the gate must be closed after exiting the cab. If the gate is left open, all controls will remain inoperable.

An "entry" and "exit" timer allows approximately 9 seconds before the Hall Call buttons become operational. This delay allows time for a person to enter/exit the cab.

## **Cab Lights**

If the cab door is left open and the cab lights turn off, there are two ways to get the lights back on again:

- Enter the cab, close the door and gate and then press a Landing button.
- Press a Hall Call button before entering the cab.

## **5. EMERGENCY LIGHTING**

In the event of a main power failure, the emergency COP light will turn on automatically.

NOTE

*If one of the cab ceiling lights burns out, replace the bulb with a 10W bulb ONLY.* 

## 6. POWER FAILURE AND EMERGENCY LOWERING

In the event of a power failure, the elevator is equipped with a Battery Back-Up system that allows you to lower the elevator from the inside of the cab. This device operates on batteries and is only activated if a main power supply failure occurs. The operation is as follows:

- 1 For elevators with **automatic operation**, press any Landing button below the floor where the elevator is located.
- 2 For elevators with **constant pressure operation**, press and hold any Landing button below the floor where the elevator is located. Maintain constant pressure until the cab is level with the lower landing.
- 3 On arrival at the selected floor, the landing door will automatically unlock.
- 4 If there is an automatic gate, the gate will open.
- **5** Release the Landing button, remove the key, open the manual gate (if equipped) and exit the cab.

## 7. EMERGENCY OPENING OF AUTO SLIM LANDING DOORS

To open the auto slim landing doors in an emergency, first turn off power at the main disconnect. Then insert the emergency key (shown below) into the hole at the top of the landing doors, turn the key to unlock the doors and manually open the doors.

When power is turned back on, the elevator will go to the lower landing to relearn the doors.



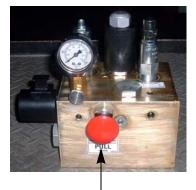


## 8. MANUAL LOWERING DEVICE (MACHINE ROOM)

In the event of a power failure, the cab can be moved manually to a lower level using the following procedure:

- 1 Obtain the key to unlock the door to the machine room where the elevator pump unit is located (if applicable).
- 2 Instruct the passenger (s) in the elevator to remain calm and stay well back from the door of the elevator. Ease their concern by telling them your intentions.
- **3** Switch the main disconnect switch for the main power supply to the elevator pump unit to the "OFF" position.
- 4 If equipped, use the owner's key to unlock the Controller Tank cover. The EPV Valve is located inside.
- 5 Locate the RED manual release knob on the EPV Valve and pull the knob to lower the cab (refer to Figure 3). Maintain a constant pull on the knob until the elevator reaches the lowest landing and stops automatically. (Although you may not be able to see the elevator, this is readily detected; there will be no further noise as the oil flows to the reservoir).
- 6 To exit the cab, open the lower landing door (using the special key) and assist the passenger.

#### Figure 3: EPV Valve



Manual release knob (pull to lower cab)

7 After the passenger has exited the cab, remove the cab key. Make sure the landing door is closed, reconnect the disconnect switch in the machine room, and lock the door.

## 9. DIAGNOSTICS

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

If you press a Hall Call button and it flashes but the car does move, refer to the information in the following table.

Flash code	Action to take				
Service codes					
1 long flash (2 seconds) followed by 1 short flash (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 flash (2 seconds) followed by 2 short flashes (1/2 second)	Contact your authorized Savaria dealer for service. There is a problem with the re-level shutdown low pressure switch.				
1 long flash (2 seconds) followed by 3 short flashes (1/2 second)	Contact your authorized Savaria dealer for service. There is a problem with the selector fault, selector encoding error, or position error.				
User codes					
1 short flashMake sure the "Stop" switch in the c the Run position.(1/2 second)Check that the car gate is closed.					
2 short flashes (1/2 second)	Check that the landing door is closed.				
3 short flashes (1/2 second)	Manually open the gate.				

## **10. MAINTENANCE**

Regular maintenance (performed by your Authorized Savaria Dealer) will keep your elevator in proper operating condition. As the owner of this elevator, you are responsible for making sure that maintenance and upkeep are done on a regularly scheduled basis. To ensure proper operating condition of your unit, the items listed below must be inspected and, if necessary, serviced at least **twice per year**. Additional inspections may be required depending on usage.

**NOTES:** Units installed in adverse environments will require additional maintenance on a monthly basis.

If the unit is shut down for an extended period of time, contact your Authorized Savaria Dealer to perform complete maintenance before starting up the unit.

- 1 Tighten all rail and cab fastening bolts.
- 2 Lubricate the door hinges and adjust the door closure if required.
- 3 Lubricate the rails with light grease, such as white lithium.
- 4 Inspect the travelling cable for wear. Replace the cable if any cuts or damage to the jacket are evident.
- 5 Inspect the elevator cables for wear or damage and replace if necessary. Always replace the safety washers at the swaged end of the cable when replacing cables. The washers are provided with replacement cables.
- 6 Inspect the safety washers at the swaged end of the elevator cables. Put the elevator on slack rope high enough so you can safely get under the elevator. Pull the manual lowering device so there is enough slack in the rope to pull the rope with the swag fitting down to view the washer. Replace the washer if there is any visible damage.
- 7 Check for any hose/pipe leaks. Replace and/or tighten the fittings to correct any hydraulic leaks found.
- 8 Check the fluid level of the pump reservoir (with the elevator at its lowest landing), and fill as required. (Use Grade 32 Hydraulic Oil). There must be at least 1" inch of oil on the dipstick.
- **9** Tighten any hose connections or bleeder valves found loose. Check the hydraulic cylinder (jack) for any leaks. If necessary, the packing seals may have to be replaced.
- **10** Replace the batteries in the control panel as indicated on the battery label.
- **11** To perform the required maintenance to the door locks, contact your Authorized Savaria Dealer.
- 12 Activate and test the safety mechanism.



Pump controls or valve settings must be adjusted by by an Authorized Savaria Dealer ONLY.

## **Maintenance Record**

Date	Time	Reason for Call	Comments	Dealer

## Infinity & Infinity HD (with Micro-6 Controller) OWNER'S MANUAL

Part No. 000842 Copyright © 2014

Savaria Corporation Elevators and Lifts www.savaria.com

Sales 2 Walker Drive Brampton, Ontario, L6T 5E1, Canada Tel: (905) 791-5555 Fax: (905) 791-2222 Toll Free: 1-800-661-5112

