



# Orion

## LU/LA Commercial Elevator



# OWNER'S MANUAL

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

Part No. 000586  
03-m12-2013

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**IMPORTANT**

Ensure that only an authorized Savaria Dealer installs and services the Orion LU/LA Commercial 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 Orion LU/LA Commercial 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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<b>FOR OWNER’S RECORDS</b>
Customer Name: _____
Installing Dealer: _____
Dealer’s Telephone Number: _____
Date Installed: _____
Serial/Job Number: _____

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**DANGER**

**This product is designed and manufactured to exact specifications. Modifications to this product in any way can be dangerous and will void the warranty.**

## **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 Orion Limited Use/Limited Access (LU/LA) Commercial 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. GENERAL SPECIFICATIONS

Load capacity	1400 lb (635 kg)
Rated speed	30 feet per minute (0.15 m/s) nominal
Maximum machine room temperature	80 degrees F (27 degrees C)
Cab sizes	48" wide x 54" deep (1220 mm x 1372 mm) 42" wide x 60" deep (1067 mm x 1524 mm) 51" wide x 51" deep (1295 mm x 1295 mm) 54" wide x 54" deep (1372 mm x 1372 mm)
Door opening	36" x 80" (890 mm x 2030 mm) nominal
Maximum travel	25 feet (7.6 m)
Maximum # of stops	5 stops
Pit depth required	14" (356 mm) minimum, 96" (2438 mm) maximum
Overhead clearance (minimum)	120" (3048 mm) – existing building 134" (3404 mm) – new building
Control system	Single automatic push button
Floor selection	Magnetic selector
Sub-floor material	Masonite over plywood sub-floor
Cab finish	Fire-rated steel panel cab interior in choice of white or black; optional laminate panel overlays available
Standard finishes	Standard architectural white or black steel Stainless steel Car Operating Panel (COP) Handrail and stainless colour trimmed light fixtures
Power supply	208 volt, three phase, 30 amps, 60 Hz or 240 volt, single phase, 40 amps, 60 Hz
Drive system	1:2 cable hydraulic
Motor	5 hp (3.73 kW) submersed
Lighting supply	110 volts, 60 cycle, 15 amps
Standard features	Fully automatic operation Modular rail construction for easy installation Automatic cab on/off interior lighting Digital display on Car Operating Panel (COP)
Safety features	Emergency battery back-up for lowering and interior lighting Emergency stop and alarm buttons Emergency manual lowering Safety brakes

## 2. DESCRIPTION

### Cab Operating Panel (COP) Buttons (Figure 1-A)

The Cab Operating Panel (COP) 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.

### Door Open/Close Buttons (Figure 1-B)

The elevator door will close automatically after a preset adjustable time in seconds. These buttons can be pressed to open/close the door when the cab is at a landing.

### Alarm Button (Figure 1-C)

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

### Emergency Stop Button (Figure 1-D)

Press the Emergency **STOP** button at any time to stop the cab and activate the alarm buzzer.

### Phase 2 Fire Service Keyswitch (Optional)

The keyswitch in the **ON** position enables cab controls as per Code B44 2.27. The keyswitch in the **OFF** position allows for normal lift operation. The keyswitch in the **HOLD** position holds the doors open when the cab is at a landing.

### Call Cancel Button (Optional)

Used with Fire Service; when pressed, this button cancels all registered calls. The cab will stop at the next landing.

### Emergency Light

The COP emergency light remains **ON** in the event of a main power failure. The emergency light uses a Battery Back-Up system with an automatic recharger.

### Handrail

A single handrail is mounted to the Cab Operating Panel (COP) side of the cab below the COP.



**Figure 1**  
Keypad COP

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

Hall Call Stations are installed at all landings to move the cab to the landing from which you are calling. Press the **CALL** button to call the cab to your landing. The position indicator displays the landing the cab is at. An optional keyswitch limits the elevator's use to authorized persons only.

### Landing Door and/or Gate Interlock

The Landing Door/Gate lock prevents 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.

### Emergency Battery Operation

In the event of a building power failure, the door/gate 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 automatically recharging.



**Figure 2**  
Keyed Hall Call

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### 3. OPERATING FROM THE LANDING CONTROLS

#### NOTE

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

#### To call the elevator to the appropriate level:

- 1 Press the **CALL** button. The cab will automatically stop at your landing.
- 2 When the cab reaches the landing, the door lock on the landing door will automatically release, and then:

If the elevator is equipped with our **Automatic Two-Speed Horizontal Sliding Doors**, follow this procedure:

- a When the elevator reaches the landing, the sliding doors will open automatically. Enter the cab. The doors will close behind you after a few seconds. Once inside the cab, lock the wheelchair wheels.

If the elevator is equipped with our **Automatic Pro-Doors**, follow this procedure:

- b Stay clear of the swing of the landing door. The door will “chime” and then swing open automatically. If the cab is equipped with an automatic gate, the gate will open at this time. The door and gate are timed to stay open for a few seconds. Enter the cab. Once inside the cab, lock the wheelchair wheels.

If the elevator is equipped with our **Manual Pro-Doors**, follow this procedure:

- c Pull on the door handle and open the landing door. If the cab is equipped with a gate, slide the gate open at this time and enter the cab. Once inside the cab, close the landing door and then the gate. Lock wheelchair wheels at this time.



#### WARNING

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

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## 4. OPERATING FROM THE COP CONTROLS

- 1 If sitting in the cab in a wheelchair, lock the wheelchair wheels. If standing in the cab, hold on to the handrail.
- 2 Press the appropriate landing button to “send” the cab to the desired landing.
- 3 When the cab reaches the landing, the door lock on the landing door will automatically release, and then:

If the elevator is equipped with our **Automatic Two-Speed Horizontal Sliding Doors**, follow this procedure:

- a When the elevator reaches the landing, the door will “chime” and the sliding doors will open automatically. Exit the cab. The doors will close behind you after a few seconds.

If the elevator is equipped with our **Automatic Pro-Doors**, follow this procedure:

- b The gate will open and then the door will “chime” and swing open automatically. The door and gate are timed to stay open for a few seconds. Exit the cab. The gate and door will close behind you.

If the elevator is equipped with our **Manual Pro-Doors**, follow this procedure:

- c If the cab is equipped with a gate, slide the gate open at this time and then open the manual swing landing door. Exit the cab. Close the gate and then the landing door.



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

## 5. DOOR OPEN BUTTON

The Door Open button is located on the Car Operating Panel (COP) of elevators equipped with **Two-Speed Automatic Sliding Doors** or **Automatic Pro-Doors**.

When the elevator is at a landing level, the Two-Speed Horizontal Sliding Doors or Automatic Pro-Door can be opened by pressing the Door Open button. Normally the doors will have opened and already closed automatically. The Door Open button allows the door to be reopened.



**Figure 3**  
Door Open Button

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## 6. EMERGENCY BATTERY LOWERING

This feature allows the lowering of the cab from inside the cab itself, without having to get someone to manually lower it from inside the machine room. This device operates on batteries and is only activated in the event of a main building power failure. The operation is as follows:

- 1 Press any button below the floor where the elevator is located. The elevator will descend and stop at the landing.
- 2 Upon arrival at the desired floor, the automatic doors (if equipped) will open. Exit the cab.

## 7. EMERGENCY LIGHT

In the event of a main power failure, the emergency cab light will light automatically.

## 8. EMERGENCY HANDS-FREE TELEPHONE (OPTIONAL)

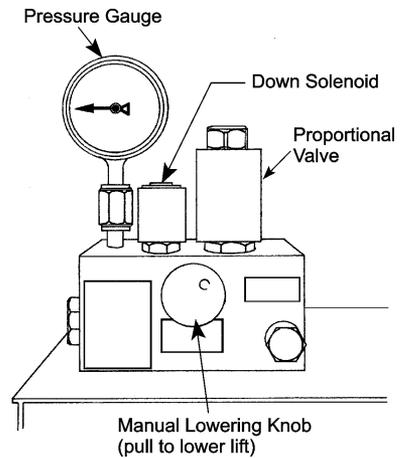
- 1 If your lift is equipped with an Emergency Hands-Free Telephone, press and hold down the button in the telephone box to activate the phone line. A short time delay (adjustable by the installing technician) will occur.
- 2 Release the button once the call is picked up by the telephone line.

The system will automatically dial out to a preprogrammed telephone number as set up by the installing technician.

## 9. MANUAL LOWERING DEVICE (MACHINE ROOM)

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

- 1 Obtain the key to unlock the door to the machine room where the elevator pump unit is located.
- 2 Instruct the person(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 to the "OFF" position for the main power supply to the elevator pump unit.
- 4 Unlock the controller tank and open the lid to locate the red **Manual Lowering Knob** on the pump unit. Pull the Manual Lowering Knob to lower the cab. See Figure 4 at the right. Maintain constant pressure 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 since there will be no further noise as the oil flows to the reservoir.)
- 5 Obtain the special door release key and open the lower landing door. Assist the passenger(s) from the cab.
- 6 After the passenger(s) have exited the cab, make sure the hoistway door is closed, reconnect the disconnect switch inside the machine room, and lock the door behind you.
- 7 Return the machine room key and the special door release key to their original storage areas.



**Figure 4**  
EPV Valve



**Under no circumstances should the pump controls or valve settings be adjusted except by an authorized Savaria dealer.**

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## 10. MAINTENANCE

Regular maintenance will keep your Orion 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.

### NOTE

*Elevator maintenance **must** be performed by an authorized Savaria dealer every 3 months.*

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

To ensure proper operating condition of your unit, the items listed below must be inspected and serviced every 3 months by an **authorized Savaria dealer**. Additional inspections may be required depending on usage.

- 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 a light grease, such as white lithium.
- 4 Inspect the travelling cable for wear. Replace if any cuts or damage to the jacket is 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" (25 mm) 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 Perform the required maintenance to the Pro-Lock (if equipped).
- 12 Activate and test the safety mechanism.





**Authorized Savaria Dealer**

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