# 🕥 savaria.

# **Orion MRL** Commercial Elevator



# **OWNER'S MANUAL**

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

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#### IMPORTANT

Ensure that only an authorized Savaria Dealer installs and services the Orion MRL 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 MRL 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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FOR OWNER'S RECO	ORDS
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Customer Name:
Installing Dealer:
Dealer's Telephone Number:
Date Installed:
Serial/Job Number:

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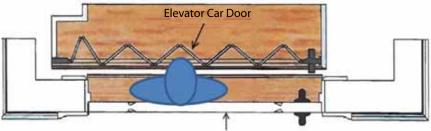
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This product is designed and manufactured to exact specifications. Modifications to this product in any way can be dangerous and will void the warranty.

## 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 equipment.
- To prevent accidents, adhere strictly to the instructions and keep clear of moving parts at all times.
- Be aware of hazardous space between the hall door and car, especially for small children.



Elevator Hoistway Door

- 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.



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

- 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. GENERAL SPECIFICATIONS**

Load capacity	1400 lb (635 kg)		
Rated speed	30 feet per minute (0.15 m/s) nominal		
Power supply	208 volt, three phase, 30 amps, 60 Hz or 240 volt, single phase, 40 amps, 60 Hz		
Lighting supply	110 volts, 60 cycle, 15 amps		
Drive system	Counterweight traction with slack cable safety device Geared motor, 1:1 sheave Two 3/8" diameter steel cables Rope wedge sockets		
Operating temperature	-10 degrees C to +40 degrees C (+14 degrees F to +104 degrees F)		
Cab sizes	42" wide x 54" deep (1067 mm x 1372 mm) 48" wide x 54" deep (1219 mm x 1372 mm) 42" wide x 60" deep (1067 mm x 1524 mm) 51" wide x 51" deep (1295 mm x 1295 mm)		
Cab panel finish	Steel panel cab with optional laminates		
Maximum travel	25 ft (7.6 m)		
Control system	Automatic user interface; Programmable Logic Controller (PLC)		
Distance between 2 landings	18" (457 mm) minimum		
Noise level (typical installation)	54 dBA (up direction); 53 dBA (down direction) Measured at a height equal to motor, distance of 1m, in front of motor, no hoistway		
Daily cycle	Normal: 200 Maximum starts in 1 hour on standard installation: 45		
Levels serviced	Up to 6 stops		
Pit depth required	14" (356 mm) minimum, 96" (2438 mm) maximum		
Overhead clearance (minimum)	108″ (2743 mm) – existing building 134″ (3404 mm) – new building		
Control system	Single automatic push button		
Floor selection	Magnetic selector		
Hall station and control panel finish	Rectangular stainless steel (standard) or brass (optional)		

	8 lb/ft T-rail system		
	Anti-creep device		
	Architectural white ceiling		
	Automatic cab ON/OFF lighting		
	Car top stop switch		
	Data plates, capacity tags and rope tags		
	Digital floor and directional indicator		
	Stop key switch and alarm buttons		
	Emergency battery back-up for lighting, alarm and		
	emergency lowering		
	Floor specific battery lowering		
Chan dand factures	Illuminated cab operating buttons		
Standard features	Magnetic floor selection, stopping and re-leveling		
	Slack rope safety switch (manual reset)		
	Pit prop (for maintenance)		
	Car top prop (for maintenance)		
	Car top safety rail (for maintenance)		
	Pit switch (emergency stop)		
	LED lights in stainless steel		
	Recessed plywood floor		
	Upper and lower terminal limits		
	Overspeed governor		
	Two-speed sliding doors for drywall or masonry hoistway		
	finish		
	Two-speed steel doors with infrared closing sensors in		
	black, architectural white or stainless steel		
	Steel panels with plastic laminate in a variety of colors		
	90 degree entry/exit cab		
	Automatic cab operator and automatic hoistway door		
	operator		
	Automatic home landing to pre-selected floor		
	Brass COP, hall call stations, handrail and recessed down		
Options	lights		
	Firefighter service - phase 1 and 2 (dependable on		
	applicable code year)		
	Hands-free telephone		
	Recessed stainless steel or brass telephone cabinet		
	Savaria Link remote monitoring		
	Counterweight safeties		
	Independent service key (door close button will be		
	constant pressure and hall calls will be disabled)		
	constant pressure and nan cans will be disabled		

#### 2. DESCRIPTION



Figure 1 Keyed COP

stop at the next landing.

#### 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.

#### Run/Stop Keyswitch (Figure 1-D)

In the **STOP** position, the cab stops and the alarm buzzer is activated. This key switch must be in the **RUN** position for normal operation.

#### Phase 2 Fire Service Keyswitch - Optional (Figure 1-E)

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 2; when pressed, this button cancels all registered calls. The cab will

#### Help (Phone) Button - Optional (Figure 1-F)

This button can be pressed at any time to activate the optional hands-free phone in case of an emergency. The red light above the speaker will come on when two-way communication has been established. For units that have a standard hand-held phone, it is located in a separate phone cabinet in the cab.

#### Emergency Light (Figure 1-G)

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 below the COP.

#### 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 Lock

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

#### **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 automatically recharging.

Figure 2 Hall Call Station



## **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 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.



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

### **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 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.



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).

When the elevator is at a landing level, the doors 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

## 6. PHONE MONITORING (IF APPLICABLE)

Depending on what code your elevator was ordered and inspected under, there may be a phone monitor.

If provided, the phone monitor will be located at the main landing. There is a small red Elevator Communications Failure light and a beeper as shown below.

If the phone line is not functioning, the small red light will flash and the beeper will sound to warn users that the emergency phone in the car is not functioning.

Contact your Authorized Dealer as soon as possible.

NOTE: There is an alarm silence key provided to turn off the beeper.



**Figure 3** Phone Monitor

## 7. EMERGENCY BATTERY 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 Press any Landing button below the floor where the elevator is located. The elevator will descend and stop at the selected landing.
- **2** Upon arrival at the desired floor, the landing doors will open automatically and you can exit the cab.

## 8. EMERGENCY LIGHT

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

## 9. 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.

## **10. MANUAL LOWERING**

In the event of a power failure, the UPS lowers the cab to the next landing and opens the doors. If the UPS fails, use the telephone to call for help. The manual lowering device can then be used from outside the elevator to lower the cab to the closest landing.

- 1 Instruct the passenger(s) in the elevator to stay well back from the elevator door.
- **2** Press the red STOP switch in the door buck cabinet or on the side of the controller cabinet.
- **3** Use the manual lowering device to lower the cab.
  - **a** Open the door buck cabinet or the manual lowering access box.
  - **b** Locate the manual lowering pendant.
  - c Pull and hold the OSG reset handle.
  - **d** Press the up arrow button on the pendant which raises the counterweights causing the cab to lower. Be sure to follow the instructions on the pendant label and continue holding the OSG reset handle.
  - e If lowering action stops during evacuation, press the reset button in the door buck controller or manual lowering access box.
- 4 When the cab reaches the landing, obtain the special elevator door release key and open the landing door. Assist the passenger(s) from the cab.
- **5** After the passenger(s) have exited the cab, make sure the landing door is closed and lock the door behind you.
- 6 Return the special elevator door release key to its original storage area.
- 7 Call your local service provider to inspect the elevator.

#### NOTE

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.

## **11. OVERSPEED GOVERNOR RESET**

In the event of a power failure, the Overspeed Governor (OSG) may trip and will need to be reset. Contact your Authorized Dealer for assistance.

## **12. MAINTENANCE**

Regular maintenance will keep your Orion MRL 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.

**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.

#### NOTE

Elevator maintenance is recommended to be performed by an authorized Savaria dealer every 3 months and must be performed every 6 months. Units installed in adverse environments will require additional maintenance on a monthly basis.



#### Be sure to use all elevator safety features as needed (such as the pit prop, car top prop and car top safety rail) to ensure your safety during maintenance.

To ensure proper operating condition of your unit, the items listed below are recommended to be performed every 3 months and must be performed every 6 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 counterweight rails with a light grease, such as white lithium.
- **3** Inspect the traveling cable for wear. Replace if any cuts or damage to the jacket is evident.
- **4** 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.
- 5 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. Activate 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.
- 6 Inspect the OSG cables for wear or damage and replace if necessary.
- 7 Replace the batteries in the control panel as indicated on the battery label.
- 8 Activate and test the safety mechanism.
- 9 Check that the phone is functioning properly.

### **13. MAINTENANCE RECORD**

Date	Time	Reason for Call	Comments	Dealer

#### **Authorized Savaria Dealer**

## Orion MRL OWNER'S MANUAL

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

DEALER NAME:

DEALER PHONE:

