# **INSTALLATION GUIDE**

## **Dealer Edition**

**Victorian WD Residential Elevator** 2024

All information found in AmeriGlide's Elevator Planning Guide reflects information at the time of printing. AmeriGlide reserves the right to change information without notice.



## **Installation Guide**

#### Victorian WD Residential Elevator

This planning guide is designed to assist in the installation of a home elevator that meets the requirements of ASME A17.1 Part V Section 5.3.

We strongly recommend that you contact the codes authority having jurisdiction in the area(s) where the elevator will be installed. Become familiar with all requirements governing the installation and use of elevators in private residences. It is extremely important for you to know and adhere to all regulations concerning installation and use of elevators.

Elevator configurations and dimensions are in accordance with our interpretation of the standards set forth by ASME A17.1 Part V Section 5.3. Please consult AmeriGlide or an authorized dealer in your area for more specific information pertaining to your project, including any deviation between referenced standards and those of any local codes or laws. Always contact local code authorities for any variation to standards.

#### **IMPORTANT NOTICE:**

Documents contained in this guide are intended for use by trained any certified elevator technicians only.

Only trained elevator technicians shall service this elevator.

Elevator systems contain multiple complex electrical and mechanical systems.

The elevator controller contains multiple high and low voltage circuits. Disconnect all power sources including lowering batteries (when equipped) prior to servicing.

Serious injury or death may result from untrained installation or service of this elevator system.

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## **Getting Ready**

For the installation to go as smoothly as possible, and prevent delays when you get to site, there are a few things we should be aware of.

The sliding gate on all models is designed to recess towards the rail wall, allowing us to efficiently utilize hoistway space.

Since the gate collapses in the direction of the recess / rail wall, the opening will be on the opposite side of the rail wall.

It is recommended to try to align the opening of the landing door with the opening of the gate. A good rule of thumb is to have the hinges of your landing door on the same side as the rail wall.

## **Inspect the Shipment**

Thoroughly inspect the shipment for damage and confirm everything is present via the packing list before you load the elevator and head to site.

## **Tools Required**

To complete the installation are listed below. You may find that there are situations when other tolls may be required or tools that are better suited, but this list should give you a good place to start.

- · Quality battery operated drill
- · Level 4 Foot long
- Plumb bob with chalk and string
- Wrench imperial set 5/16 to 3/4
- Wrench set Metric 8mm to 18mm
- Socket set imperial 5/16 to ¾
- Socket set metric 8mm to 18mm
- Pencil
- Drill index
- · Hammer drill
- Drill bits for concrete fasteners used
- Flashlight
- Scaffold material
- Personal Protective Equipment
- Appropriate safety equipment and supplies for type of work and job site conditions (barricades, signage...)
- Installers remote
- Knife
- Funnel for oil
- · Allen keys, imperial

- · Allen key, standard
- · Rags/ towels
- Broom
- Dustpan
- Vacuum
- Cleaning products for stainless, wood and painted surfaces
- Wire strippers
- Side cutters
- · Pipe wrench medium
- · Tools for installing conduit
- Tools for making holes in cabinet for conduit entry may be required
- Multimeter (volts AC/Dc and continuity required, clamp on AC current advisable
- Generator, Although not required, having a generator with enough power t to run the elevators 3hp Motor will allow you to proceed with jobs where power is not yet available
- Chain or electric hoist and what you need to safely mount it in the top of the hoist-way
- · Scaffolding material
- Safety supplies, (signage, hoarding, PPE, lockout tagout kits, safety harnesses...)
- Tachometer to measure the cab speed
- Test weights

## **Material Not Supplied**

- Fasteners for mounting the rail wall to concrete or block can be included if we are informed, they are required, but wood lags are sent by default
- Clips, clamps and ½ inch all round strapping for securing cables and hoses
- Electrical conduit, raceway, fittings, and hardware
- The wiring (and conduit if required) between the electrical disconnects and the control panel is not included
- The wiring between the control panel and the motor for the winding drum is not included
- Plywood backboard for behind the controller, if desired or required
- Screws or lags for attaching the controller and plywood (if used) to the wall
- Tie wraps of various sizes
- Stick on tie wrap anchors
- Electrical connectors, various marrettes and crimp on connectors
- Spare battery for your multimeter

## **Working Safely in the Hoistway**

Working safely in (and around) the hoistway takes planning and communication. We strongly recommend everyone installing an elevator receive elevator specific safety training and refer to and follow the procedures in the Elevator industry field employee's handbook (www.elevator-world.com), their companies safety program, and local codes and standards.

This manual is written for qualified and trained elevator installers and will not describe safety related procedures in this document. Wear appropriate PPE for the environment and task you are performing.

## **Site Conditions**

It is important to verify that the actual site conditions match the latest site specifications provided to AmeriGlide. Discrepancies may result in changes to the equipment or the job site. Failure to report discrepancies to AmeriGlide in a timely manner can result in significant installation delays.

#### **Site Measurements**

Prior to the crew arriving, a site check is recommended. If it is not possible to conduct in advance, it should be performed as soon as the install crew arrives on site.

Confirm site measurements of the elevator shaft match the final site drawings provided. If you are unsure if the difference is significant, contact technical support. A site measurement sheet is provided in the appendix of this guide for your reference.

When surveying the site, plan how you will get the cylinder, sling, and other large components into the hoistway.

#### True and Plumb

Using a level and a plumb bob, determine if the rail wall is true and plumb. If it is not, you will need to shim the rail system to correct it. Your package will come with some metal rail shims but if more are required, they must be provided by you or the builder.

### **Machine Room**

Wire and hose lengths are determined based on the machine room location and the shaft measurements provided to AmeriGlide. If the machine room is to change from the planned location, the provided lengths may be insufficient. Confirm location for the controller and power unit and that the 220 and 120 power has been provided.

#### **Power**

The power provided to the panel, the main disconnect and the lighting circuit must all be verified by confirming the following criteria are met:

#### **Power Provided** to Panel

- is single phase
- is between 208 & 240 vac
- is supplied from two 30A breakers

#### **Main Disconnect**

- is located close to the equipment
- is fused with two (2) 30A time delay fuses
- is lockable
- has an auxiliary contact for disconnection of the backup power supply

#### **Lighting Circuit**

- is 240vac / 15amp
- is dedicated (not used for anything else)
- · has a disconnect that is adjacent to the equipment, fused and lockable

## **Tips and Tricks**

Installers like you have taught us many great ideas over the years and we will pass many along in this manual. Here are a few general tips.

#### Make a Plan

Your two-, three-, or four-person team needs to have a plan as to who is doing what and when. Teams work in small spaces and often you can not accomplish two tasks at the same time.

Chart out what you need done and assign tasks in advance to avoid these situations.

#### Where You Need It

Have everything you need for that day's work moved to the appropriate place. For example, if a part will be installed on the 3rd floor, move it from the truck directly to the 3rd floor. This can often be done by another person while you are starting the rail wall, for example.

#### **Loss and Theft**

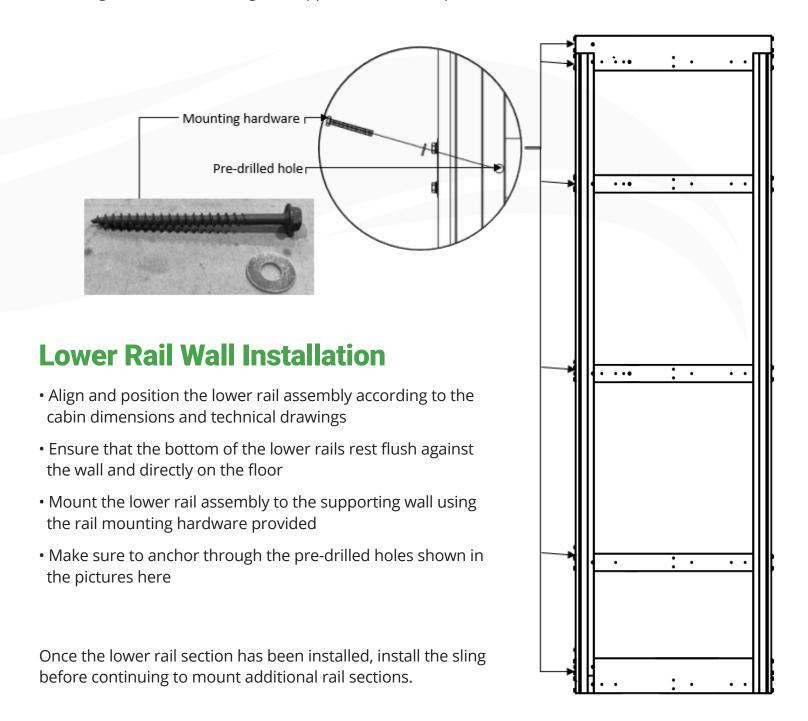
If you do not have a good storage plan loss and theft are inevitable. A box of elevator parts left unattended will be used as a garbage can and then thrown out because it looked like a box of garbage. Lock it up, keep it in the truck, take it back to the shop, put it on top of the car, put it in the pit, or lose it.

## **Rail Sections and Sling**

Start with assembling the rail wall. Use the drawings to establish your centerline of the rail wall and locate with your laser to ensure your first section of rail is centered accordingly.

It is very important to ensure that the rails are plumb and level.

Depending on the construction of the rail wall, you may need to shim the rail sections when attaching to the rail wall using the supplied shims as required.

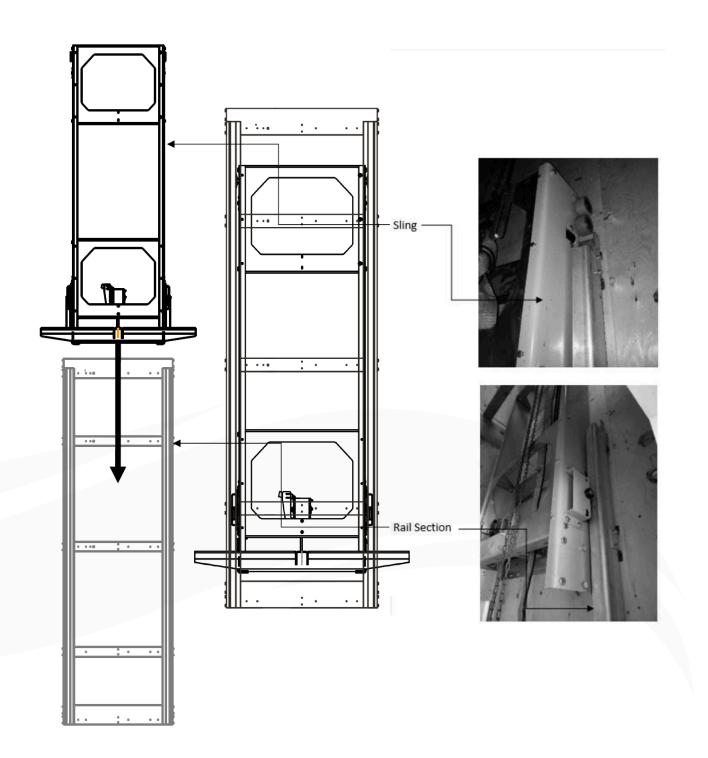


## **Sling Installation**

The shipment includes a pre-assembled sling, and there are two methods for its installation:

#### First Method (install as received)

Using the chain hoist, lift the sling and carefully lower it into the rail assembly. Ensure that the rollers ride on the inside surface of the rails, gently lowering the car frame to the bottom of the rail section.



#### **Second Method** (recommended)

1. Remove the 4- wheels assembled on each corner of the sling (see Figure 1a).



Figure 1a

2. Remove the L-bracket for the brake located on the left lower side of the sling (see Figure 1b).

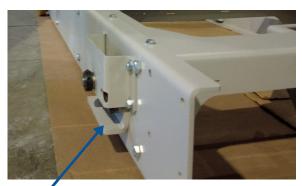


Figure 1b

- Remove
- 3. Lift the sling safely and align it with the lower rail section (see Figure 1c).



Figure 1c

- 4. Reassemble the upper two wheels back on the sling.
- 5. Reassemble the L-Bracket for the brake back on the sling.
- 6. Using a ratchet strap or a similar lifting tool, safely lift the sling approximately 10 inches and then install the lower two wheels back on the sling (see Figure 1d).

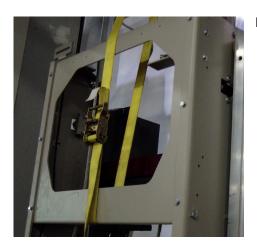


Figure 1d

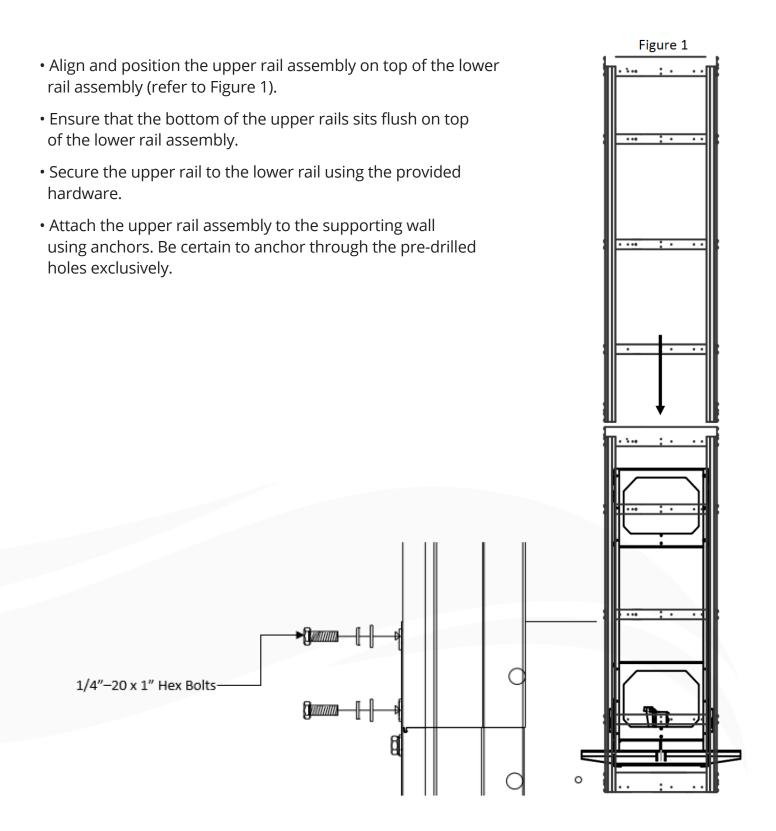
With the sling lifted to about platform height, this is an ideal moment to install the platform:

- 1. Align the platform at the bottom of the sling and slowly slide the sling into the platform until it aligns with the pre-drilled holes for platform-sling assembly.
- 2. Once the holes are aligned, secure the platform using the provided hardware (eight bolts). Refer to Figure 1e for guidance.



## **Installation of Upper Rail Wall**

For units with more than two rail sections, it is advisable to utilize the full sets of rail lengths for the middle section, given their tongue and groove alignment mechanism.



## **Installation of Drive System**

The shipment includes the pre-assembled motor and drum assembly, and there are two methods for installing the drive system.

#### First Method (install as received)

Using the chain hoist, lift the pre-assembled drive system on top of the rail sections, securing it with the provided hardware.

#### **Second Method** (recommended)

The most efficient way to install the drive assembly is to disassemble the top rear bracket, motor assembly, and the brake mechanism. To disassemble:

- 1. Remove the six bolts from the top rear bracket to detach it.
- 2. Remove the four bolts from the motor assembly to separate the motor.
- 3. Remove the two bolts from the brake mechanism.
- 4. Loosen the set screw of the shaft from the drum, remove the shaft key from the drum shaft, take out the shaft, and remove the drum.

With all the parts disassembled, proceed with the Drive System installation:

1. Assemble the Top rear bracket to the pre-drilled holes on top of the upper rail wall using the provided hardware (refer to Figure 3).

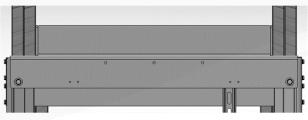


Figure 3

2. Install the gear mechanism back onto the top rear bracket using the six bolts (refer to Figure 4).

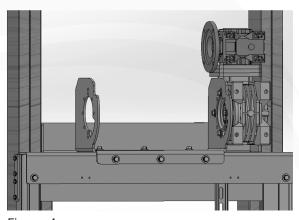
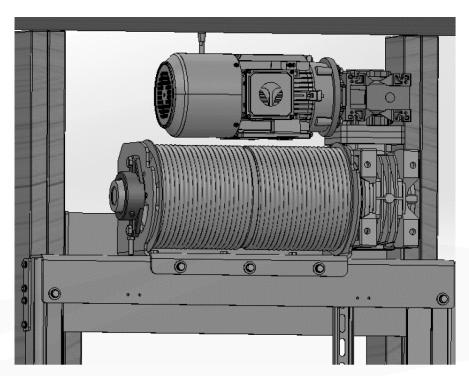


Figure 4

- 3. Before installing the motor, ensure that the motor shaft is securely tightened
  - 3. 1: Assemble the motor back to the gear mechanism using the four bolts.
- 4. Before installing the drum, ensure that the drum shaft is clean, properly greased, and the drum has the correct groove. Critical: Proper grease for shaft and proper cleaning for drum and shaft needs to done to avoid the creaking noise during the travel for the elevator.
  - 4.1: Align the drum with the shaft to the gear mechanism.
  - 4.2: Place the drum shaft key back with the shaft (DO NOT USE A HAMMER TO ALIGN THE SHAFT).
  - 4.3: Once the shaft is aligned, tighten the shaft set screw.
  - 4.4: Route the motor and brake wires to the controller.
- 5. Assemble the brake mechanism back using the two bolts.



After the drive system is installed, refer to Figure 5 to confirm that the drive system is assembled correctly.

Figure 5

### **Installation of Shackles**

During the shackle installation process, please consult Figure 6 and Figure 7 for reference:

- 1. Affix the provided shaft collar or one nut on top of each shackle to prevent shackle rotation.
- 2. Securely attach the two shackles to the platform.
- 3. Attach the springs to the bottom of each shackle.
- 4. Attach a washer followed by two supplied nuts to the bottom of the springs on each shackle.
- 5. Thread the nuts just above the cotter pin at the end of the shackles.

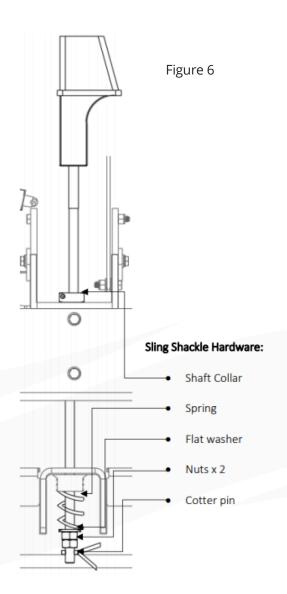




Figure 7

By following this method of shackle installation, you ensure ample space for adjusting rope tension when weight is applied.

## **Controller Installation**

- 1. Install the controller according to the specifications outlined in the engineering drawings.
- 2. Connect the main power (L1, L2, N) to the upper left corner of the controller (refer to Figure 8).
- 3. Connect the lighting power (120VAC) from the lighting disconnect to terminals 110 and N2, both located in the upper left corner of the controller (see Figure 8).
- 4. Connect the AUX Switch to SW1 and SW2, positioned in the top right corner on the Main Controller Board (refer to Figure 9).

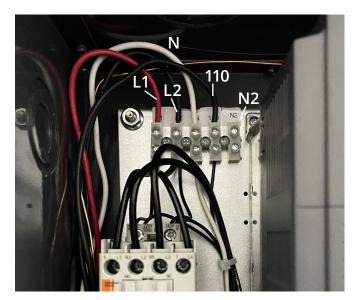


Figure 8

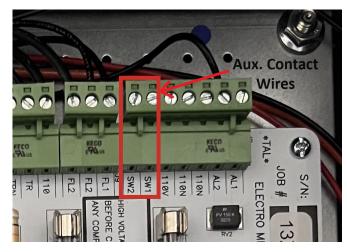


Figure 9

## **Motor Wire and Motor Brake Wire** Connection

Reference Figure 10 for the Motor Power and Motor Brake wires location, and consult wire sheet package for the termination details of the motor power wire and motor brake wires.

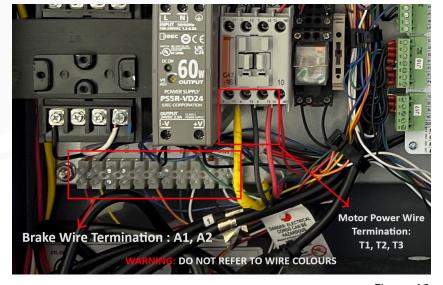


Figure 10

## **Temporary Run Mode Operation**

The temporary run mode is designed to facilitate the gradual movement of the platform during the installation process. During this mode, safety features are temporarily bypassed. However, if the Motor overload connection PT1 and PT2 opens, the platform will not move.

Before initiating platform movement, ensure the following electrical connections are made:

- Motor Overload
- L1, L2 & N
- SW1 & SW2

Required Jumpers:

- TLC to UT
- TLC to LT
- 24V to HDL

If the Aux. contact in the main disconnect is not yet installed, jumper between SW1 and SW2 on the main controller board is necessary.

## **Preparing for Movement**

Use the P-TOOL to initiate temporary mode through either of the following methods:

- 1. Hold keys 1, 5, and 0 on the P-TOOL, then power up.
- 2. Main controller board inputs P1, P4, and DOB tied to REF, then power up.

#### **Platform Movement**

Use the P-TOOL to initiate temporary mode through either of the following methods:

The platform will travel UP with constant pressure from either:

- 1. "A" key on the P-TOOL.
- 2. Main board input 4C tied to REF.

The platform will travel DOWN with constant pressure from either:

- 1. "D" key on the P-TOOL.
- 2. Main board input 1C tied to REF.

\*Note: The platform moves at a low speed during Temporary Run Mode.\*

To return to normal operation, cut power, then power up without the initiating conditions.

## **Rope Installation**

By this time, the motor and controller connected and should be able to run it on the temporary mode to do the roping installation.

- 1. Before starting make sure the drum is super clean and ropes are super clean to avoid the creaking noise on the unit.
- 2. To wind the rope onto the drum, designate one individual to guide and tension the rope simultaneously, while another person operates the P-TOOL to engage the motor in both forward and backward motions, assisting the designated individual.
- 3. Do not cross the ropes, the left rope goes into/ the left shackle and right rope goes into right shackle, the rope should be free of twists and knots, refer to ideal rope installation shown in Figure 11.
- 4. Install each rope down into the back of its shackle, around the heart and back into the shackle.
- 5. Now is an opportune moment to increase the tension by elevating the cable. Strive to achieve uniform tension on both ropes, to ensure the proper setting of the shackles.
- 6. Install 2 wire clips on each sides of the ropes, One 2.25 inches above the shackle, and the another one 2.25 inches above the first one.
- 7. Wire tape the lose end of each ropes.
- 8. Take this time to ensure that sling with platform is leveled with rails, we can achieve this leveling by adjusting the black pressure rollers, located on the sling, Refer to the red highlighted section in Figure 12.

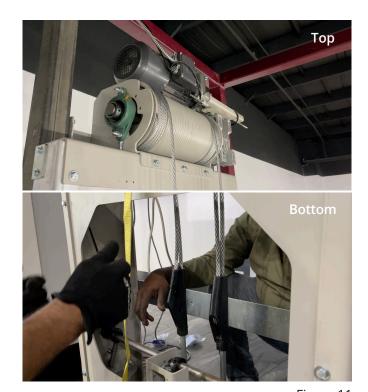


Figure 11



Figure 12

### **Test the Drive System and Inspect Platform Clearance**

• Move the lift up and down on the shaft to confirm the operation.

Before proceeding with the additional installation steps, it is advisable to examine the clearance between the cab floor and each landing. Follow the steps below:

- 1. Place the cab floor on the sling, align it according to the shop drawings, and loosely attach it to the platform. Using the P-TOOL, elevate the sling through the Hoistway (Pit) while ensuring the following:
  - Confirm that there are no obstructions, and the cab is not colliding with any walls.
  - Record the clearance at each level, comparing it to the drawings, and document any variances.
  - Validate the overtravel alignment as specified in the drawings.
  - Ensure that the travel clearance between the cab floor and landing falls within the range of 1/2 to 1 and 1/4 inches.
- 2. Depending on the cab style and any deviations from the plans in the shaft, you may need to employ shims for leveling. Find the optimal position for the floor, considering the style of the cab and the extent of shaft deviations. In cases of extreme deviations, modifications to either the shaft or the cab may be necessary.

#### **Install Toe Guard**

With the cab base now assembled, it is an opportune moment to proceed with the installation of the toe guard.

- 1. Install the Toe Guard beneath the platform.
- 2. Align the Toe Guard with the top of the finished floor and secure it using the provided hardware. Please refer to Figure 13 for guidance.



Figure 13

#### **AT-LOCK Interlock Installation**

Prior to commencing the installation of the interlock, it is crucial to verify the Door Lock (DL), Door Close (DC), and Solenoid contacts on your interlocks. Please refer to the installation video for a comprehensive guide on verifying your interlock contacts before proceeding with the following steps:

- 1. Unscrew the front cover plate by removing the four screws to gain access inside the interlock.
- 2. Document the verified DL, DC, and solenoid wire connections, including wire colors, for future reference and to preemptively address any potential issues.
- 3. Disconnect the quick connector inside the interlock to ease the mounting of the lock itself.
- 4. Mount the base box of the interlock on the landing door frame, as detailed in Figure 13 for further guidance.



Figure 13



Figure 14

- 5. Mount the latch from the interlock to the door itself.
  - 5.1: Align the latch of the interlock with the interlock base box to ensure a smooth open / close operation of the door. Refer to Figure 14 for additional guidance.
- 6. Ensure to create a through hole on the door itself for inserting the manual key in case of emergencies.
- 7. Reconnect the quick connect harness inside the interlock base box.
- 8. Route the interlock wires to the controller and consult the wire sheet package for proper termination of the interlock wires.
- 9. Perform above steps for all remaining floors Interlock Installation.

### **Installation of Hall Call Stations**



Hall call stations can be permanently installed once the door installation is complete. Alternatively, for temporary purposes, you can install them inside the hoistway.

Route the wires from the hall call stations back to the controller, and for the proper termination of the hall call stations, consult the wire sheet package.

### Installation of DoorZone and Extreme High S/W

DoorZone and Extreme High switches will come pre-wired as follows:

1. Each floor's package should include one DoorZone switch, as depicted in Figure 15.



Figure 15

2. The package contains the combination of pre-wired DoorZone switch with a manual re-settable switch, specifically wired for the top floor only, as illustrated in Figure 16a.



Figure 16a

### **Mounting the DoorZone Switch**

- Confirm the estimated doorzone location for each floor near the unistrut to ensure the switch hits the Doorzone Cam (Located on the Sling). If not, adjust the doorzone switch location to guarantee the Doorzone Cam activates the switch during each travel.
- This is a temporary estimated location for the doorzone switch; you can make adjustments once the tape reader and magnet placements and have marked location for each floors are complete.

### **Mounting the Extreme High Switch**

- Install the extreme high switch 2 inches above the top-floor DoorZone switch.
- Route all DoorZone switch and Extreme High switch wires back to the controller. Refer to the wire sheet package for the termination details of DoorZone and Extreme High switches.

### **Installing Mechanical Stops**

Mount the mechanical stops 2 inches measuring down from top of the rail, as illustrated in Figure 16b.

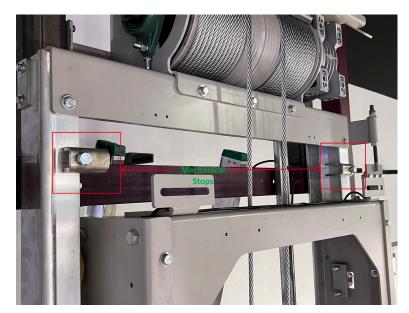


Figure 16b

### **PIT E-STOP and Safety Pins Installation**

- Optimal placement for both of these components is where service personnel can access them before entering the hoistway.
- Additionally, ensure that safety pins are installed at a height visible and accessible to the average person. Refer to Figure 16a for guidance.
- Refer the wire package for guidance on the wire termination of the Pit E-Stop. Please note that there is no separate wire included in the package for wiring the Pit E-Stop. You can use any 2-conductor wire for this purpose.



Figure 16a

## **Looping the Travel Cable**

The preferred technique for looping the travel cable may differ based on specific considerations. It is advised to loop the travel cable at the midpoint of the shaft, guaranteeing ample slack for seamless travel in both upward and downward directions.

- Guide the travel cable through the wall and connect it to the controller.
- Fine-tune the wall-to-cab section of the cable, ensuring it nearly touches the pit floor when the cab is in the pit.
- Utilize the provided travel cable clamps for secure mounting. Refer to Figure 21 and Figure 21a to refer the part.



Figure 21



Figure 21a

## **Cab Assembly Procedure**

The cab platform has been previously assembled, ensuring proper clearance with landings and all the walls.

• Align the railside cab wall with the rails and secure it in place using the top 4 bolts.

The installation of the remaining cab walls is straight forward. We recommend starting with the railside wall and proceeding in a clockwise direction walls.

• Finally, install the top section of the cabin.

After completing the cab assembly, proceed to install the COP on the COP wall.

Our COP comes pre-wired, and to see termination of the switch and the quick connectors, refer to Figure 22 and the wiring package for the unit.

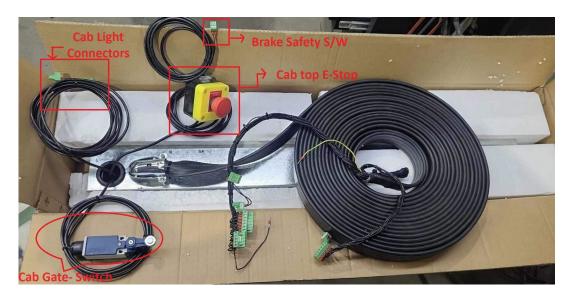


Figure 22

Refer to Figure 23 and Figure 23a for Cable switch assembly.







Figure 23a

## Wiring Within the Hoistway

Please note that multiple approaches can be employed to route wiring from different landing devices to the main controller. Local codes and site conditions may influence your decisions, and the most common methods include:

- 1. Running a cable directly from each landing device back to the controller. (HOME RUN METHOD)
- 2. Running a cable to a call station and utilizing it as a junction box to extend wiring to the lock and other devices.
- 3. A combination of the above methods.

It is important to highlight that our units come with pre-wired components, making the "Home run" method the most efficient approach in this context.

## **Tape Reader Installation Process**

## **Tape Head Installation**

- The tape and reader can be mounted on either side (right or left) of the rail walls. Depending on site conditions, you may need to drill holes to install the L-bracket for the tape head.
- Mount the L-Bracket for the Tape Head at the top right of the sling using the provided hardware, as depicted in Figure 17.

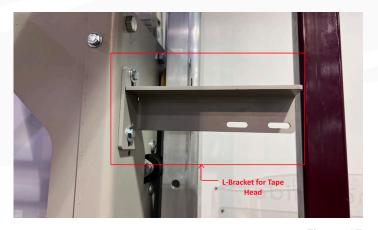


Figure 17

Figure 18



 Once the bracket for the tape head is installed, mount the tape head in the two slotted holes of the bracket using the provided hardware, as shown in Figure 18.

## **Top Bracket for Tape Mount**

- Using the hardware included in the EMI Box:
  - 1.1: Insert the threaded rod portion into the top bracket.
  - 1.2: Install two nuts on the top portion of the rod, going about 1 inch down from the top.
  - 1.3: Install the clamping plate loosely with two outside bolts for now. (Refer to figure 18a for the assembly but DO NOT PLACE THE MIDDLE BOLT AS SHOWN **IN** Figure 18a.)
- Install the Top tape bracket, ensuring it is above the highest point the tape head will travel to, including the overtravel.
  - 2.1: Use the provided hardware and bolt it to the rails, as shown in Figure 19.





Figure 18a

Figure 19

## **Bottom Bracket for Tape Mount**

- 1.1: Insert the rod down through the bracket.
- 1.2: Install a flat washer.
- 1.3: Install a spring.
- 1.4: Install another flat washer.
- 1.5: Install the two nuts.
- 1.6: Install the clamping plate loosely with two outside bolts for now. (Refer to figure 18b for the assembly but DO NOT place the middle bolt as shown in Figure 18b.)



Figure 18b

- Install the bottom tape bracket, ensuring it is below the lowest point the tape head will travel to, including the overtravel into the bottom shaft.
  - 2.1: Use the provided hardware and bolt it to the rails, as shown in Figure 20.



Figure 20

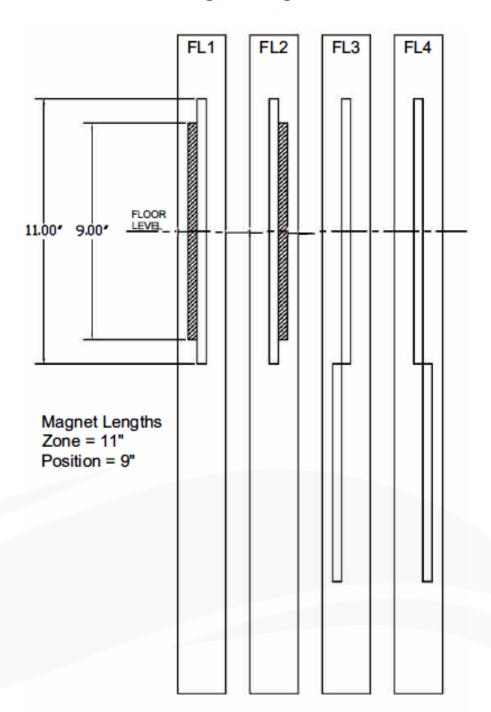
## **Tape Installation**

- Insert the tape at the top tape bracket between the mount and the plate, leaving a small amount of extra tape.
- Ensure the tape is centered and tighten it in place.
- Drill a center hole through the tape and install the third bolt, tightening all three bolts for the top tape bracket.
- Pass the tape through the tape reader head and down to the lower tape mount.
- Insert the tape at the lower bracket, between the mount and the plate.
- Ensure the tape is centered and tighten it in place.
- Tighten the two outside bolts for the bottom tape mount sufficiently to prevent tape rattling, vibrating, or flopping around.
- Drill a third hole for the tape at the bottom mount and install the third bolt.

Once the tape is installed, ensure that it remains straight throughout the entire travel.

## **Magnet Configuration**

For the magnet placement refer to the following magnet configuration image:



**4M2 Magnet Configuration** 

# **Install the Cab Gate (Good Gate)**

Refer the **Good Gate Installation** manual section 4 for installing the cab gate.



If it's not attached, please download it at: https://goodgate.ca/documentation/

Installation video of Good gate upper Track:



https://www.youtube.com/watch?v=E\_QHCLG\_qi4

Installation video of Good Gate Lower Track:



https://www.youtube.com/ watch?v=mNq110BHPaU

Installation video of good gate panels:



https://www.youtube.com/watch?v=i9jbPu37IIM

Installation video of Gate Panel Stop Setting:



https://www.youtube.com/ watch?v=oMVZDe5we2g

Installation of Upper track tilt adjustment video:



https://www.youtube.com/ watch?v=wV8Yghat9F8



#### Saber Gate operator:

Refer the Saber Gate operator installation and set up manual, section 5 for installing the saber gate operator.

If it's not attached please download it from here: https://goodgate.ca/documentation/



#### 4M2 Controller Manual:

https://www.emiporta.com/\_files/ugd/ ec5728\_01a2b3085974438d8149b979debf4529.pdf

## **Preparation for Automatic Mode**

Before proceeding to the next steps, ensure that all hoistway components, including the travel cable, are correctly wired. If not, consult the wire package, and once all wiring is completed, return to this step and follow the steps below:

- 1. Remove the Temporary Jumper from 24V to HDL.
- 2. Add a Jumper from MSC2 to MSC3.
- 3. Restore all E-Stops to their normal position (Out).
- 4. Close all landing doors and the cab gate.
- 5. Plug the two cords inside the main controller that will connect to the UPS (Battery Backup Side). Ensure the UPS is fully charged before plugging in.
- 6. Turn on the Main Power in temporary mode and confirm the following inside the controller:
  - 6.1: Confirm that the 24V DC supply is ON.
  - 6.2: Confirm the 24V DC supply between 24V DC and REF on the Main board.
  - 6.3: Confirm the 24V DC at the 24V DCM terminal.
  - 6.4: Confirm the 24V DC at MSC1.
  - 6.5: Confirm that the 24V DC Power RED LED is "ON" for the following terminals:
    - MSC - UT - GC - TLC
    - HDC - LT
    - HDL - PT1
    - PT2 - LPS

## **Programming Job-Specific Parameters Before Automatic Mode**

Before transitioning to automatic mode, program the following job-specific parameters for the controller using the P-TOOL:

- 1. Number of stops.
- 2. Drive System [Always set to Drum (0)]
- 3. If you have a gate operator, program the following:
  - 3.1: Automatic Gate
  - 3.2: Floor 1 gate location
  - 3.3: Floor 2 gate location
  - 3.4: If applicable, Floor 3 & Floor 4 gate locations

Note: The parameters listed above are fundamental, but depending on the units, additional parameters may need to be programmed.

Additionally, this is an opportune time to review the guidelines for Pre-operational Safety Check, Temporary Mode Running Test, and Programming Job Parameters from the EMI 4M2 Installation Manual (Refer to Section 6-1, 6-2, and 6-3).

## Finishing Up

## **Testing**

- 1. Test each floor level, and record any variances for proper adjustment of tape reader magnets.
- 2. Test Hall Calls, DPIs, and Interlocks for each landing.
- 3. Conduct safety tests for the entire unit.
- 4. Test cab lights.
- 5. Test for COP Calls, COP DPI, COP Buzzer, and Emergency Light.
- 6. Ensure the car does not take a call and stops if in motion under the following conditions:
  - 6.1: Car E-Stop
  - 6.2: Pit E-Stop
  - 6.3: Cab Top E-Stop
  - 6.4: Open Cab Gate
  - 6.5: Open Landing Gate
  - 6.6: Low Pressure Switch (LPS) Activated
  - 6.7: Slack Rope Switch Engaged
- 7. Verify that the system turns OFF when the Main Disconnect is OFF.
- 8. Conduct a Power Failure test:
  - To perform this, place a jumper between terminals SW1 and SW2.
    - A. While the car is running UP in response to a call, turn off the main disconnect, and it should:
      - Stop and run down to the next landing
      - Respond to calls made to lower landings.
      - Confirm the Emergency light on COP remains illuminated for 30 seconds after the car reaches the lower landing.
    - B. Remove the jumper from SW1 and SW2.
- 9. Confirm the telephone operates correctly.

## **Signage Installation**

- 1. Capacity
- 2. no step
- 3. Emergency Operation
- 4. Manual lowering
- 5. Cab Light power
- 6. Main Disconnect
- 7. Serial number for Atlas Job

## **Clean Up**

- Remove protective films
- Clean main controller
- Clean elevator cab
- Place Manual and Electrical drawings at the controller

## **Training the End User**

We recommend you have the following ready before training the end user:

- Owner's Manual
- Service Contract
- Door Unlock Key
- Your Business Card

#### Demonstrate and explain the following:

- Calling the elevator
- What if a gate is open?
- What if a door is open?
- What if there is a power failure?
- Riding the elevator
- · What if it stops while im in it
- What if there is a power failure while im riding it?
- How to get out in an emergency
- · How to let someone out in an emergency
- Call station Fault flash codes
- When to call for service
- Importance of regular maintenance
- Registering your warranty
- Scope of the warranty
- Location of customer manual and electrical drawings
- Location of emergency key

