Coastal Outdoor Elevator

Installation Guide

Please read this installation guide carefully to ensure correct installation of your Coastal Outdoor Elevator.



Table of Contents

Discla	aimers and Important Information	3
Befor	e you Get Started - Checklist	7
Instal	lling Your Coastal Outdoor Elevator	8
	Step 1: Unboxing	8
	Step 2: Install Upper Support Brace	9
	Step 3: Install Rail Support Brackets	9
	Step 4: Position and Align Sill Plate and Car Sling	10
	Step 5: Attach Upper Rail Section Joining Plate	11
	Step 6: Install Lower Rail	12
	Step 7: Properly Align Rail Assembly	13
	Step 8: Attach Upper Rail Sections	14
	Step 9: Disassemble Motorized Unit	15
	Step 10: Attach Motor Plate	16
	Step 11: Reattach Motor Block	17
	Step 12: Install the Batteries	18
	Step 13: Battery Chargers	18
	Step 14: Wire the Batteries	19
	Step 15: Level and Secure the Winding Drum	20
	Step 16: Wire Motor and Power Supply Cable	21
	Step 17: Winding Drum Cable Installation	22
	Step 18: Winding Drum Cable Wedge Sockets	23
	Step 19: Traveling Cable Installation	24
	Step 20: Tighten Wheels	25
	Step 21: Check and Activate Emergency Break	26

Table of Contents

Cab Assembly	
Step 1: Install the Floor on the Car Sling	27
Step 2: Install the Cabin Gate Bottom Track	27
Step 3: Install Wall Brackets for the COP Wall	28
Step 4: Install the COP Wall	28
Step 5: Install the Carriage Top Cover	
Step 6: Install the Opposite Wall	29
Step 7: Install the Roof	29
Step 8: Install the Rear Lexan Wall	
Step 9: Install the Underpan	30
Installing Your Coastal Outdoor Elevator, cont.	
Step 22: Upper Limit Switch Cam	31
Step 23: Install Upper Landing Gate	32
Step 24: Install Cabin Gate Floor	33
Step 25: Wire Upper Landing Call Station and Interlock	33
Good Gate Installation	34
Step 1: Panel Insertion	34
Step 2: Install Mid-Panel Slot Catches	36
Step 3: Install the Screws that will Allow the Doors to Slide in Accordion	37
Step 4: Setting Travel Stops	37
Before Leaving the Job Site	 38

Disclaimers and Important Information

AmeriGlide shall not be held responsible or liable for any personal injury or property damage caused by or resulting from inappropriate operation of original product or of a product that has been modified or altered from the original design. No person or company is authorized to change the Coastal Outdoor Elevator design without authorization and the express written consent of AmeriGlide.

Important

Do not throw away, destroy, or lose this installation guide. The instructions included in this guide must be followed to prevent product malfunction, property damage, injury, or death to the user or other people. Incorrect operation due to ignoring instructions found in this guide can cause harm, damage, injury or death. A summary of safety precautions is found below.

For more technical materials such as drawings and specification, end user support, and manuals, visit AmeriGlide.com

Warning

Read all instructions contained in this installation guide before installing the Coastal Outdoor Elevator. It is highly recommended to observe and adhere to all governing codes and ordinances in the job site locale. This includes ensuring all work and materials comply and conform with all authorities having jurisdictions. Proper installation is the responsibility of the installer and failure to follow all instructions renders the AmeriGlide Limited Warranty null and void.

Safety Precautions

Safety of personnel is the primary concern during all procedures. Before beginning installation, read and understand the installation guide and containing procedures carefully to ensure correct and safe installation. Use the appropriate tools and accessories during installation. Plan your work and do not work alone, if possible. Know how to obtain emergency medical and fire fighting assistance.

Be sure to follow all the precautions on the next page as they are important for ensuring safety. This installation guide classifies the safety precautions into **DANGER**, **WARNING**, **CAUTION** and **NOTE**.

▲ DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
▲ WARNING	Failure to follow any of WARNING is likely to result in such grave consequences as death or serious injury.
A CAUTION	Failure to follow any of CAUTION may in some cases result in grave consequences.
▲ NOTE	Provides information such as reminders and guidelines and do not fit into the preceding text.

Important for the Installer

The Coastal Outdoor Elevator shall be installed and serviced by an authorized AmeriGlide dealer only. The authorized dealer should refer to this guide for installation and servicing. For maintenance, please refer to the Owner's Manual.

Please carefully read and follow the instructions found in this guide **BEFORE** installing and/or operating the Coastal Outdoor Elevator. Improper installation, adjustment, service, use or maintenance can cause personal injury or property damage. If you have any problems or need assistance please contact your dealer immediately.

Codes and Regulations

The Coastal Outdoor Elevator has been designed to meet CSA B613/B355 and ASME 18.1 standards. Code requirements and standards for vertical platform lifts vary depending on location and region. It is the installer's responsibility to contact their local code enforcement office and determine all of the regulations they are subject to. You must do this before installing the Coastal Outdoor Elevator.

Site Requirements

The Coastal Outdoor Elevator must only be installed on an approved pad or floor that has adequate drainage and meets local codes, standards and regulations. In addition, there must be adequate lighting and sufficient headroom above the lift. Please refer to and verify with the Technical Drawings before beginning the install.

Electrical Requirements

The Coastal Outdoor Elevator requires a 110VAC-20 AMP grounded electrical circuit and a GFCI protected circuit. Depending on local codes and regulations, this connection may need to be routed in electrical conduit and hard-wired.



DO NOT OPERATE OR RIDE ON THE LIFT UNTIL IT HAS BEEN ANCHORED TO AN APPROVED PAD OR FLOOR.

Installation Safety Instructions



To reduce the risk of fire, electric shock, personal injuries, and/or death, obey the following precautions:

- Never exceed the maximum rated lift capacity.
- Never use the Coastal Outdoor Elevator to lift freight or other materials than intended by design.
- Read and understand the installation guide prior to installing the Coastal Outdoor Elevator.
- Wear appropriate safety protection equipment for your head, eyes, hands and feet during all phases of the installation.

- Use extreme caution when lifting components into position to avoid personal injury and damage to the equipment.
- Keep panels and protective coverings in place to avoid potentially fatal injury.
- Disconnect power from the unit before performing any electrical or mechanical service operations.

- Never bypass sensor switches which prevent accidental start up when protective panels are removed.
- Be aware of the location of others in the work zone.
- · Do not wear jewelry or loose clothing.

- Use only recommended anchor fasteners.
- Lock the wheels of any mobility device riding on the platform.
- Check and verify for applicable local codes and regulations.



Failure to comply the these Installation Safety Instructions could render the AmeriGlide Limited Warranty null and void. If you have any question or concerns that are not covered in this installation guide, please contact your dealer immediately.

Before You Get Started - Checklist

- 1. Understand your client's intended use of the lift.
- 2. Determine the local code and regulations requirements.
- 3. Upon receipt of the Coastal Outdoor Elevator, verify the lift for shipping damage immediately. Report any discrepancies or damage claims to your dealer.
- 4. Verify site parameters, technical drawings and all preparatory work prior to installation.
- 5. Plan and prepare for all electrical requirements.
- 6. Get proper equipment to install safely (scaffolding / scissor lift)

Installing the Coastal Outdoor Elevator

Step 1: Unboxing

- Remove box cover.
- Inspect for damage (ie. take damaged photos).
- Remove boxes and cabin parts and set them aside.
- Move components to the installation area.

Step 2: Install the Upper Support Brace

Materials

- Large Triangle Support Bracket
- 6 x 3/8" 16 Bolts

Install

- Attach the Large Triangle Brace to the upper landing with 6 X 3/8" - 16 Bolts provided.
- Install the brace with the longest straight side 14 3/16" from the side of the upper landing entrance door/gate.
- Make sure it's leveled.



Step 3: Install Rail Support Brackets

(Normally pre-installed)

Materials

- Small Triangle Rail Support Brackets
- 2 x 1/2" 13 Flathead

Install

 Attach the Small Triangle Rail Support Brackets to the main Triangle Support Bracket with 2x 1/2 - 13 Flathead Bolts.



Step 4: Position and Align Sill Plate and Car Sling

Materials

- · Bottom Sill Plate
- Car Sling Assembly

Install

- Position the Bottom Sill Plate below the car sling assembly. DO NOT ATTACH SILL PLATE AT THIS TIME.
- Position the Car Sling Assembly approximately 6" over the Bottom Sill Plate using blocks or a jig in order to leave space to attach Bottom Rails to the Sill Plate.
- Once car sling assembly is in place, add bolts to temporarily support the rails and car sling assembly.

Remove front cover to not damage it.







Step 5: Attach Upper Rail Section Joining Plate

Materials

- Joining Plates
- 8 x 1/2" 13 Bolts, 8 x Ea. 1/2" Washers, Lock washers 8 x 1/2" Nuts

- This step should be completed with the rails on the ground for ease of installation, as the Rail Sections are quite heavy.
- One side at a time, attach Joining Plates to each Upper Rail Section with supplied hardware, as shown. Properly tighten bolts.





Step 6: Install Lower Rail

Materials

- · Bottom Sill Plate
- Car Sling Assembly
- Bottom Rail Sections
- 8 x 1/2" 13 Bolts, 8 x Ea. 1/2" Washers, Lock washers, 8 x 1/2" Nuts

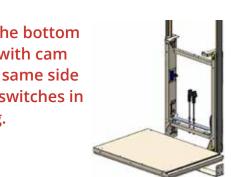
Install

- Insert the T rail into the car sling assembly fitting it in between the two wheels. Make sure the cam switch is facing in the direction as the COP.
- One side at a time, slide the Bottom Rail Sections on each side of the Car Sling Assembly.
- Tighten bolts to the Bottom Sill Plate using the supplied 1/2" bolts, washers and lock washers as shown.

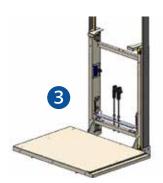


HEAVY PARTS

The Rail Sections are quite heavy. Use Caution.

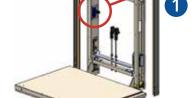












Make sure the bottom rail section with cam goes on the same side as the limit switches in the car sling.

Step 7: Properly Align the Rail Assembly

Materials

• 8 x Anchor Bolts; 1/4" - 2"

Install

- Using a long level, ensure that both rails are plumb, level and have remained parallel.
- Mark the position of the Bottom Sill Plate and pre-drill bolt locations into the concrete pad.
- Use **Proper Hardware** to Attach the Sill Plate to the concrete pad.



TIP: To gain proper access for the drill, lift the Car Sling, and support with a scrap piece of 2x4.



TIP: Use a pry bar and a mallet to gently move the rail assembly into the correct position.



Step 8: Attach Upper Rail Sections

A DANGER

USE PROPER AND SECURE SCAFFOLDING. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

Materials

- Upper Rail Sections
- Mounting Hardware

Install

- One side at a time, attach Upper Rail Section to Lower Rail Section with supplied hardware, as shown. Properly tighten bolts.
- Attach each Upper Rail Section to the corresponding Small Triangle Support Bracket.
- Ensure that all Triangle Brackets are level before final tightening the bolts.
- After the Rail Sections are attached, use a tape measure to confirm Rails are in parallel.

Make sure the rails are perfectly aligned, otherwise it will create bumps during travel.



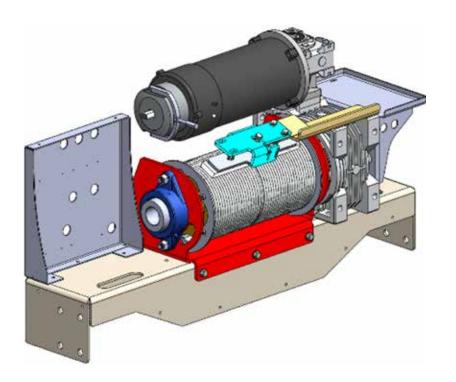


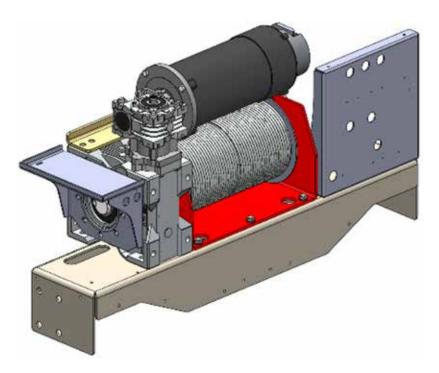


Step 9: Disassemble Motorized Unit

TIP: the motor assembly is very heavy and to ease the installation process we **strongly recommend** removing some components.

- Unscrew the 6 bolts holding the motor block to the Top Plate (3 bolts on the front and 3 on the back).
- Remove the motor block (motor, drum, gearbox) to make this piece lighter.





Step 10: Attach Motor Plate

A DANGER

USE PROPER AND SECURE SCAFFOLDING. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

Materials

- · Bottom Rail Sections
- 8 x 1/2" 13 Bolts, 8 x Ea. 1/2" Washers, Lockwashers, 8 x 1/2" Nuts

Install

 Attach the Motor Plate to the Upper Rail Sections using the 8 supplied 1/2" Bolts, Washers, Lock Washers and Nuts (4 per side).



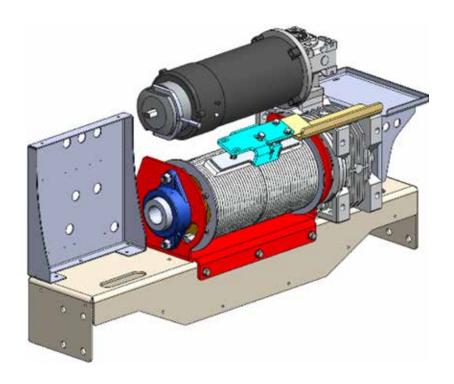
Step 11: Reattach Motor Block

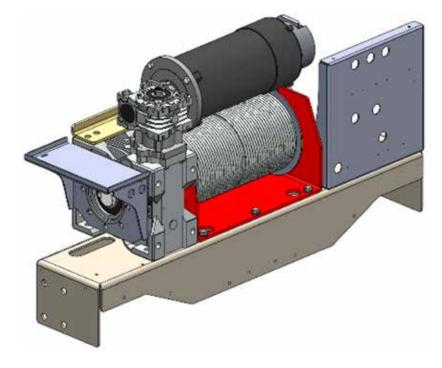
A DANGER

USE PROPER AND SECURE SCAFFOLDING. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.

Install

• Reattach the Motor Block to the Motor Plate with the 6 bolts previously removed.





Step 12: Install the Batteries

Install

• Install both Batteries with the Terminals facing the outside of the unit, as shown.



Step 13: Battery Chargers

Install

• Plug In the chargers to the appropriate terminals, and attach (stick) the charger bodies to the front face of the batteries, as shown.



Step 14: Wire the Batteries

Install

• Wire the batteries as labeled, and Connect the Cable Safety Microswitch.



Step 15: Level and Secure the Winding Drum

- Ensure the Drum and Motor are level.
- Tighten the Jack Bolt.



Step 16: Wire Motor and Power Supply Cable

- · Connect the Motor wiring.
- Connect, Secure and Properly Route the Power Supply Cable.







Step 17: Winding Drum Cable Installation

- Remove the Steel Cable Wrap, and drop them down to the Carriage.
- Ensure the Cables are fully protected inside the drum before proceeding to the next step.



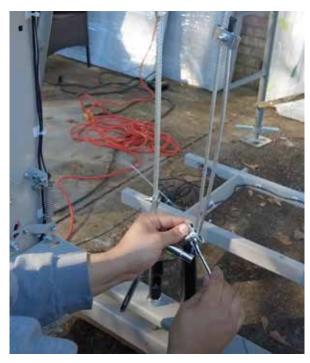




Step 18: Winding Drum Cable Wedge Sockets

- Route the cables through the wedge sockets, insert the wedge, making sure that the cables are of equal tension.
- You should wind the cables around the drum to remove any slack.
- Put on cable connectors a minimum 2 in. apart from each other.

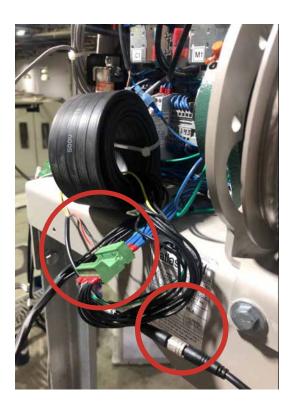






Step 19: Traveling Cable Installation

- Unwind and Connect the Travel Cable Connector (Green) at the top, and properly secure to the top bracket as shown.
- Connect the Interlock cables (black, top and bottom), **check all underpan microswitch connections**, and connect the COP in order for the Carriage to operate.
- Lean COP to plug in traveling cable into the connector.
- Once connected, re-attach and bolt the front panel.





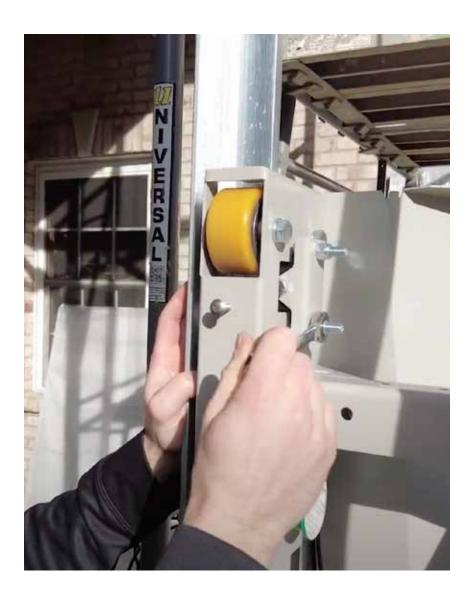


Step 20: Tighten Wheels

Install

- Make sure that wheel and carriage are evenly aligned the entire length of the carriage.
- Tighten bolts around the wheel to secure them.

Wheels must have equal distance apart on each side. This ensures a complete vertical travel with no swaying to the left and right.



Step 21: Check and Activate Emergency Break

- Make sure cab is about half way up the travel
- Use 2x4 block slab and place it upward under the cab.
- Send cab down enough to hit wood slab to activate emergency break and see if cables lose tension.





Cab Assembly Installation

NOTES The screws are already placed in the correct locations for ease of installation.

Step 1: Install the Floor on the Car Sling

Use the ¼-20 Truss screws 9 bolts



Step 2: Install the Cabin Gate Bottom Track on the Floor

Leave the bottom cabin gate track protruding from the side of the car sling because the other side must be flush with the side of the cabin (use counter sunk screws)



Step 3: Install Wall Brackets for the COP Wall (wall A)

COP = Control Operating Panel

Place brackets and line the holes up with the COP. Once in place, screw bolts in to prepare for installation of the wall.





Step 4: Install the COP Wall (wall A)

- a) Unscrew the COP first
- b) Connect brackets loosely so it can be adjusted once everything is in place.
- c) Before tightening the wall, take off film.
- d) Screw in panel from the bottom.



Step 5: Install the Carriage Top Cover

The shorter screws are placed where the wheels are located.



Step 6: Install the Opposite Wall *(wall B)*

Route cable through the hole of the bottom of the floor through the bottom of Wall B. This step is very important to make sure connections are correct because it will activate the atlock.





Step 7: Install the Roof

- a) Install the top cross bars to link the A and B wall
- b) Install the aluminum roof (Use ¼-20 Truss screws)
- c) Attach roof with supplied hardware.



Step 8: Install the Rear Lexan Wall of the Cabin (if straight trough configuration skip this step)

a) Use ¼-20 Truss screws

Step 9: Install the Underpan

- a) Make sure all wires are fed through appropriate holes and everything fits seamlessly.
- b) Before the Underpan goes on, make sure all microswitches are securely connected and positioned for proper activation. Listen for it to be activated.
- c) Secure with provided hardware.
- d) Once the underpan is installed, manually check that each microswitch is activated when the underpan is compressed. If not, you will need to remove the underpan and check the microswitch alignment again, then reinstall the underpan.



Step 22: Upper Limit Switch Cam

Materials

• Upper Limit Cam, Provided 3/16" Screw

Install

- Move the Carriage is necessary in order to gain access to the inside of the rail.
- Align the Limit Switch Cam where the flat side will activate the limit switch when the floor of the Car Sling is level with the Top Landing.
- Using the hole in the center of the cam, mark the location for drilling.
- Drill a hole through the rail and attach the Upper Limit Switch Cam to the inside of the rail using the provided hardware.

A NOTE

The Lower Limit Switch Cam will already be installed, for the height of the floor to be 4" above the concrete pad. This is the height of the supplied ramp.





Step 23: Install Upper Landing Gate

Materials

- Landing Gate
- 18 Wood Screw, Flat, #12
- Shims (if necessary) upper screws.

Install

- 1. Place the upper gate into position. Ensure the sill angle bracket rests flush with the foundation.
- 2. Use a #12 Wood Screw to temporarily fasten upper landing gate into place.
- 3. Level the hinge side of gate upright and use #12 screws to fasten into place.
- 4. Using a #12 Wooden Screw, temporarily fasten the latch side of the gate into place.
- 5. Level the latch-side upright and use #12 Wooden Screws to fasten firmly into place.
- 6. Level the platform (use shims) and fasten #12 Wood Screws into the remaining holes on the sill angle bracket.
- 7. Drill a 1-inch hole into the floor on the Interlock side for Call Station and Interlock wiring.

TIP: You can install the upper gate later during the install process because you have to make sure it is aligned with the platform side walls.



Step 24: Install the Cabin Gate Floor

Secure cabin gate floor with provided hardware.





Step 25: Wire Upper Landing Call Station and Interlock

Install

- 1. Unravel the wiring from the Upper Gate and thread the wiring through the tubing, run the wire and tubing to the Tower Controller.
- 2. Connect the Call Station (and Interlock if applicable) to the Tower Control using the appropriate Quick Connects (3-PIN for the Call Station and 4-PIN for the Upper Interlock.)

TIP: If you need to shim the upper landing gate, which could cause a little bump, we suggest adding a stainless steel plate as a threshold ramp.

TIP: 3-PIN quick connect is for the Call Station and the 4-PIN quick connect is for the interlock.





It is **VERY IMPORTANT** to remove the jumper cable labeled **INTERLOCK i2** before proceeding with the installation.

Good Gate Installation

Step 1: Panel Insertion

Each track has a machined slot for insertion of a single wheel of the appropriate panel in to the track. The process for doing this is as follows:

a) Place the lower edge of the panel in to the appropriate groove of the lower track / sill

Panel Installation Video (4 minutes)

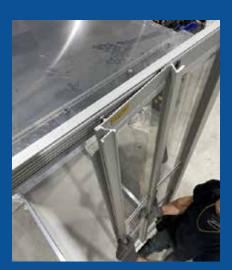


Scan to watch!





b) Move the panel in to position so that the wheel on the left side of the panel (looking at it from the landing side) is inserted first by simply pushing it in to the slot.







- c) Move the panel to the left and then insert the other wheel
- d) Move the panel back to the right so that the full panel is now on the other side of the groove before proceeding with the next panel.

Panels should be inserted in the order of #1, #2, #3, #4.









Step 2: Install Mid-Panel Slot Catches

The panels are equipped with slots to secure each gate panel to the subsequent one. For the sliding action to perform properly and deflection requirements to be maintained slot screws must be installed.



a) Insert #10 pan head screws at mid-height of panels from the landing side through the the slots. The screws are located in the small parts bag sent with your gate.

There are 6 screws for each gate and they have tamper-proof heads. An appropriate screw bit is shipped with each gate for installation of the screws. The screws are compatible with most tamper proof #10 screw drivers.

The panels are equipped with slots to secure each gate panel to the subsequent one. For the sliding action to perform properly the screws should have a light pink film on them. This is a thread locker compound intended to harden once they are installed. If you remove them after a short time then new thread lock compound should be applied.

b) Tighten the screws so the shoulder is snug against the upright of the next gate panel. This should position the screws such that the head does not touch the panel in which it slides and it also does not contact any other panel as it opens and closes such that binding is avoided.







WARNING

Failure to insert these screws or installing screws that do not have a thread locking compound on them could cause serious injury or death.

Step 3: Install the Screws that will Allow the Doors to Slide in Accordion

- a) Slide the door #1 and #2 so we can see both sliding holes.
- b) Use the proper screwdriver bit (provided with the unit) to tighten the special screws.
- c) Tighten the screws until they don't go down anymore (they are not supposed to press against the other sliding door)
- d) Repeat the last step for the door #2 and #3 and also the door #3 and #4

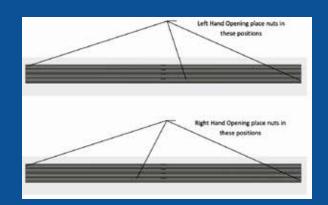




Panel Stop Setting Video (3 minutes)



Scan to watch!



Step 4: Setting Travel Stops

The gate upper track assembly comes with three flange nut/ set screws installed in the top track to stop the panels from moving beyond points that would allow for openings that compromise the safety function is provides.

The position for the third flange nut/set screw will vary depending on the gate opening direction but they are easy to install and adjust with a standard hex key. On the bottom track one of the set screws prevents the gate from coming out of the end of the track.

The second set screw on the bottom track must be adjusted to stop the trailing edge of panel 1 from traveling past the interior wall of the car on the pocket side. If this is not set properly panel 1 can travel to far in the closed direction creating a gap between the trailing edge of the gate and the wall on the pocket side of the elevator.

WARNING

Failure to properly set the mechanical travel stops could cause serious injury or death.

Before Leaving the Job Site

Before leaving the job site, make sure to explain in full detail everything there is to know about the lift to the customer.

Procedure

- 1. Clean the work site.
- 2. Make sure all hardware has been tightened to specifications.
- 3. Explain and demonstrate the safe operation of the lift and emergency procedures to the operator / owner.
- 4. Assist the operator / owner on an orientation ride.
- 5. Write the Serial Number and record all required details per the Owner's Manual.
- 6. Provide the copy of the Owner's Manual and Warranty to the owner.



5110 Atlantic Ave. Raleigh, NC 27616 AmeriGlide.com