# Nano Vertical Platform Lift Installation Guide

Please read this installation guide carefully to ensure correct installation of your Nano Vertical Platform Lift.



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# **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 **Nano** design. No person or company is authorized to change the **Nano** design without authorization and the express written consent of AmeriGlide 120v / 20a outlet (do not connect supply through the GFCI outlet)

#### 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 AmeriGlide **Nano** Vertical Platform Lift. 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**.

| A 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. |
|          | Failure to follow any of CAUTION may in some cases result in grave consequences.                            |
| A NOTE   | Provides information such as reminders and guidelines and do not fit into the preceding text.               |

#### Important for the Installer

The AmeriGlide **Nano** Vertical Platform Lift 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 **Nano** Vertical Platform Lift Owner's Manual.

Please carefully read and follow the instructions found in this guide **BEFORE** installing and/or operating the AmeriGlide **Nano** Vertical Platform Lift. 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**

Your **Nano** Vertical Platform Lift 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 **Nano** Vertical Platform Lift.

#### **Site Requirements**

The **Nano** 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 pit lighting as well as sufficient headroom above the lift. Please refer to and verify with the Technical Drawings before beginning the install.

#### **Electrical Requirements**

The **Nano** Vertical Platform Lift 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.

### **WARNING**

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

### **Installation Safety Instructions**

# **WARNING** 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 AmeriGlide **Nano** Vertical Platform Lift to lift freight or other materials than intended by design.
- Read and understand the installation guide prior to installing the AmeriGlide **Nano** Vertical Platform Lift.
- 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 **Nano** Vertical Platform Lift, 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.

### **Hardware List**

Before beginning installation, please inspect and check the box contents. Report any missing or damaged parts to your dealer. All **Nano** Vertical Platform Lifts come with a Standard Hardware Box. Unassembled units will contain additional hardware. If ordered, your lift will also come with an additional box containing the AmeriGlide Installation Kit.

#### Nano Installation Kit

#### Nano Kit

- 2 Mechanical Stops
- 6 Anchor Bolts (3/8 x 3 3/4")
- 4 Hole Plugs (7/8")
- 4 Phillips Screws (10/24" x 1/2")
- 2 Flat Angle Brackets

#### Nano Documentation

1 Gray Envelope (contains Nano labels)

- Folding Ramp 10 Carriage Bolts (1/4" -20 x 5/8")
- 10 Split Lock Washers (1/4")
- 10 Hex Nuts (1/4")
- 4 Phillips Screw (10/24" x 1/2")
- 2 Flat Angle Brackets
- 1 EMERGENCY LOWERING WHEEL

### 1 Yellow Envelope (Contains Nano Installation Guide and Owner's Manual)

#### Unassembled Nano Kit (+ hardware kit)

#### Safety Underpan

- 4 Hex Bolts (1/4"-20 x 5/8")
- 6 Anchor Bolts (3/8 x 3 3/4")
- 4 Hole Plugs (7/8")
- 4 Phillips Screws (10/24" x 1/2")
- 2 Flat Angle Brackets

- Interior Guard Panel Hardware
- 10 Hex Bolts (1/4"-20 x 1 1/2")
- 10 Hex Bolts (1/4"-20 x 3/4")
- 10 Flat Washers (1/4")

#### AmeriGlide Installation Kit (Optional)

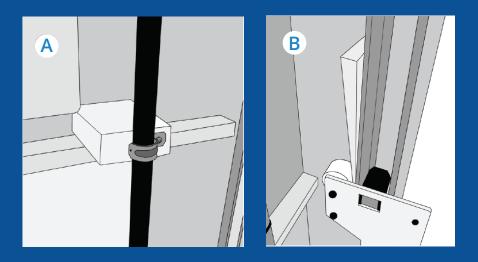
- 1 Round Bipolar Plug
- 20 Aluminum Shims
- 5 Tapcons (3/16" x 1 3/4")
- 1 25' 18G Gray Cable/3 Contacts
- 1 20' Flexible Gray PVC Hose

- 5 90° Connectors
- 20 Flat Head Wood Screws (1/4" x 1 1/4")
- 1 15' 16G Black Cable/3 Contacts and 4 End Connectors
- 1 25' 18G Gray Cable/7 Contacts

### **Remove Shipping Blocks and Fasteners**

Your **Nano** vertical platform lift is shipped with load securing blocks and fasteners. Before beginning installation or operating the **Nano**, remove the wooden block (A) and shims (B) located inside of the tower.

A Remove the tower front panel cover to gain access to the inside of the tower.



### **Installing Your Nano Vertical Platform Lift**

# **Step 1: Unboxing**

- Remove box cover.
- Inspect for damage (ie. take damaged photos).
- Remove boxes and cabin parts and set them aside.
- Move tower near the installation area (bottom section nearest to the concrete slab).



### **Step 2.1: Install Protection Wall**

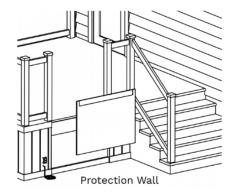
### **Materials**

 Protection Wall (provided by contractor) DANGER

The area between the concrete pad and the top landing must be covered with a protection wall. This is done to eliminate any pinch points and shearing hazards.

### Install

- 1. Ensure the protection wall is the same width as the upper landing threshold.
- 2. Level the protection wall and fasten into place.
- 3. Make a pocket cut with a router at the top of the protection wall to allow the upper landing to sit flush when installed.



### **Step 2.2: Stand Tower**

- Move the tower base close to where it shall be installed.
- Stand the tower upright. (if the tower is on a leveled surface the unit will stand on its own.)
- Move the tower approximately in place.
- Stand the tower.

### **Step 2.3: Install Car Sling**

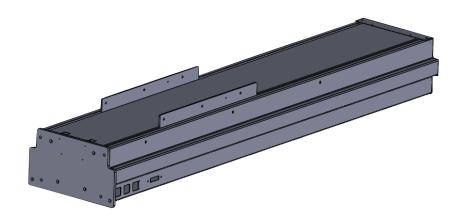
#### **Materials**

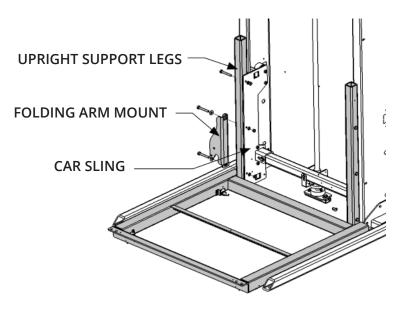
Hardware is already attached to the Upright Support Legs, keep the same bolt order and configuration when installing.

#### Install

- 1. Align the Upright Support Legs with the Car Sling.
- 2. Align the Car Sling mounting holes with those of the Upright Support Legs.
- 3. Using the same bolt configuration, attach together the Upright Support Legs & Folding Ramp Mount with the Car Sling.

**TIP:** Secure traveling cable on the side of the car sling.





### **Step 3: Start-Up Conditions**

- Plug the C.O.P into travel cable (16pin quick-connector).
- Turn the tower key to the ON position (located on the side of the tower) and the COP key lock as well.
- If the platform doesn't move, scan the QR Code "start-up cpnditions" and process with the start up conditions.
- Complete the voltage tests 1-XX from the troubleshoot guide.

#### Start-Up Conditions Video (15 minutes)



#### Scan to watch!

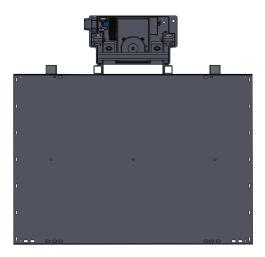
more videos can be found at youtube.com/ameriglide

Stepping on the floor before lagging the tower will tilt tower forward. The car sling will prevent the tower to fall but it is preferable to keep it off. Keep the weight on the tower, not the car sling.

### **Step 4: Screw Floor In**

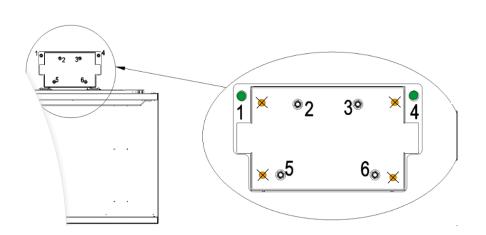
- Mount the floor centered on base with 3x ¼ Philips screw.
- Move tower to create a parallel line with the upper landing wall and the platform.

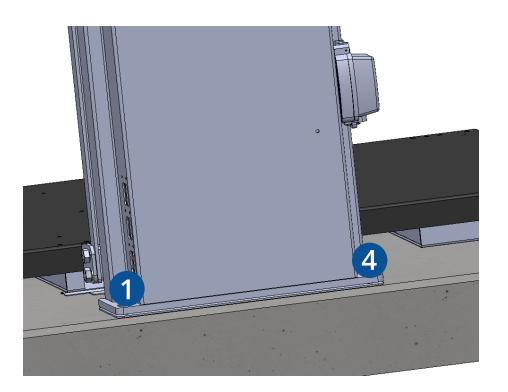
**TIP:** Make sure the floor is leveled and respects the required clearances.



# **Step 5: Pre-Anchoring Tower**

- Position the tower so the floor respects the landing and runway clearances required as per code and level the tower with given shims and proceed with drilling and lagging.
- Drill ½" into holes (#1 and #4).
- Insert lags with a hammer and tighten with a 9/16" long socket.

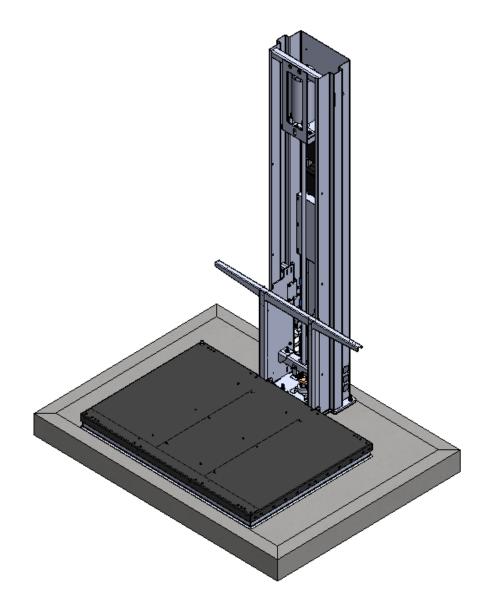




### **Step 6: Anchoring Tower**

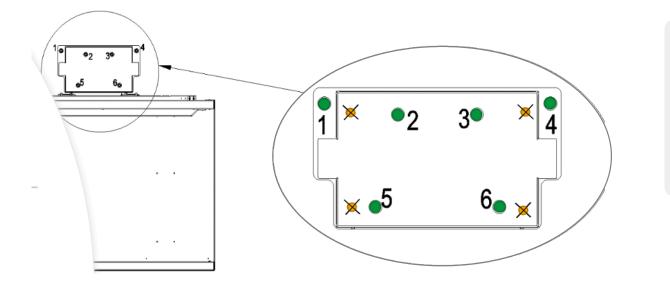
- Lift platform and confirm the landing and runway clearances are respected (¾" for a residential or ½" for a commercial unit)
- This distance must be maintained through out the whole travel and the floor must always be parallel with the upper landing wall.
- If the platform has moved position loosen lags 1 and 4 to correct it.
- Then re-tighten them.

**TIP:** Use supplied shims underneath the tower to level the platform floor and ensure to respect the landing and running clearances.

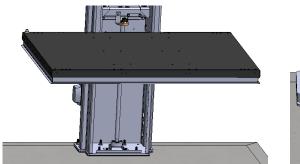


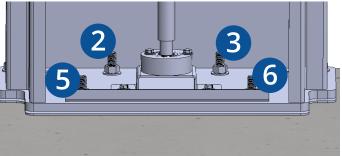
### **Step 7: Anchoring Tower**

- Raise tower to work under the platform.
- Drill ½" into holes into spots (2, 3, 5, 6) 4¼" deep.
- Insert lags with a hammer and tighten with a 9/16 long socket. The tower must stay level after tightening the lags.



**TIP:** Hide the acme screw bearing when drilling holes and clean dust after the drilling to avoid having dust inside the bearing which could cause noise when using the platform.





# **Step 8.1: 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. How to Adjust Gate Video



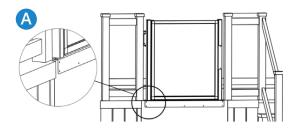


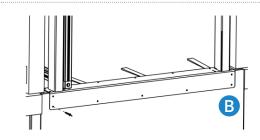
#### Scan to watch!

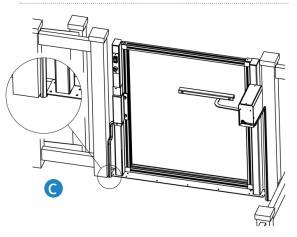
more videos can be found at youtube.com/ameriglide

- 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.

#### INSTALL UPPER LANDING GATE CONT.







**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 8.2: 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.)
- 3. Remove the interlock i2 jumper cable on the Tower Controller. Refer to the previous page.

**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.

**DANGER** 

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



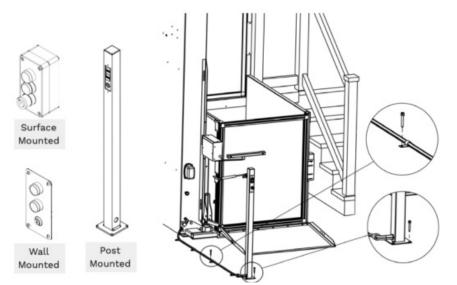
### **Step 8.3: Install Lower Landing Call Station**

### **Materials**

- Lower Landing Call Station
- 4 Tapcons ¼ inch x 1¾ inch (if applicable)

### Install

- 1. Wire according to the provided Electrical Diagram(s).
- 2. Mount or fix the Call Station to the floor or pad with 4 Tapcons when applicable.
- 3. The Lower Landing Call Station wires must be protected and/or anchored to the ground or buried.



### **Step 9: Mount Exterior Guard Panel**

### **Materials**

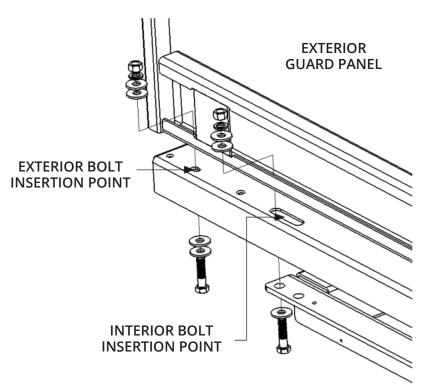
- 4 Hex Bolts (¾" x 1½")
- 18 Flat Washers (%")
- 4 Split Lock Washers (¼")
- 4 Nylon Nuts (%")

### Install

- 1. Using 1 Hex Bolt (¾" X 1½"), 4 Flat Washers (¾"), 1 Split Lock Washer (¼") and 1 Nylon Nut (¾') attach the Exterior Guard Panel at the Exterior Bolt Insertion Point.
- 2. Using 1 Hex Bolt (¾" X 1½"), 3 Flat Washers (¾"), 1 Split Lock Washer (¼") and 1 Nylon Nut (¾') attach the Exterior Guard Panel at the Interior Bolt Insertion Point.
- 3. Repeat steps 1 and 2 on the other side of the Exterior Guard Panel.

**CAUTION** Keep the same hardware configuration as shown in the image.

**IMPORTANT** For anti-corrosion models, use 3 flat washers on top and 4 below.



# **Step 10: Landing Adjustments**

- Position the platform level with upper landing.
- Slide the upper switch assembly down until the Landing switch activates and you hear it's click then tighten in place.
- Lower unit and come back up stopping with the newly placed switch to confirm the levelness with the upper landing.
- Micro adjust up or down to get the perfect platform placement.
- Lower landing is already set only micro adjustments may be needed.

### **Step 11: Under-Pan installation**

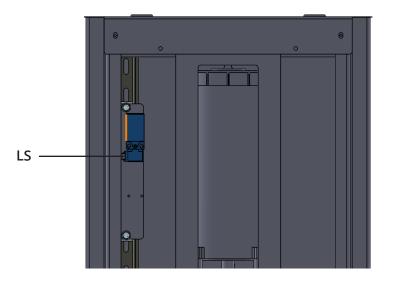
**TIP:** Verify the underpan micro-switches condition and connections before installing the underpan. Test each of them and make sure to hear the "click" for each.

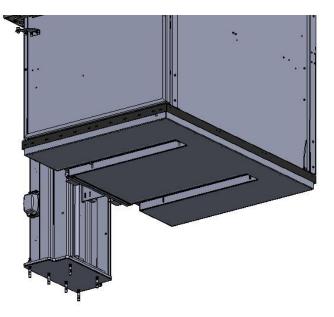
### **Materials**

• 4 Hex Bolts (¼" - 20 x 1½")

### Install

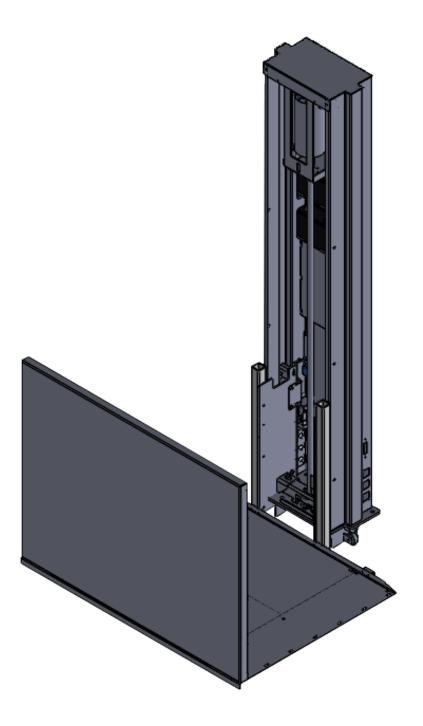
Attach one side of the Safety Underpan using 2 Hex Bots ( $\frac{1}{2}$ " - 20 x 1½"). Repeat this step on the other side of the Safety Underpan.





### **Step 12: Closing the Tower**

- Position the cab at the lower landing.
- Install the facial cover.
- Attention to wires when sliding down.
- Screw on the tower cover.



### **Step 13: Attach Interior Guard Panel**

### **Materials**

- 2 Angled Brackets
- 2 Hex Bolts (¼" 20 x ¾")
- 2 Flat Washers (¼")
- 2 Split Lock Washers (¼")

### Install

Fasten the Interior Panel to each Upper Leg Support using 2 Hex Bolts ( $\frac{1}{2}$  - 20 x  $\frac{3}{4}$ ) with 2 Split Lock Washers ( $\frac{1}{2}$ ) and Flat Washers ( $\frac{1}{4}$ ).

### **Materials**

- 2 Hex Bolts (¼" 20 x 1½")
- 2 Flat Washers (¼")
- 2 Split Lock Washers (¼")
- 2 Domed Capped Nuts

### Install

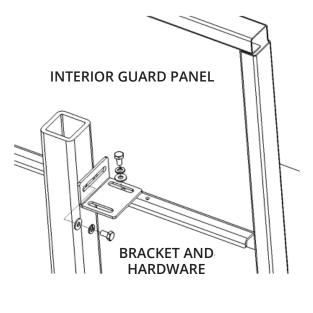
Align Interior Guard Panel bottom and attach using 2 Hex Bolts (¼" - 20 x 1½") with 2 Split Lock Washers (¼"), 2 Flat Washers (¼") and 2 Domed Capped Nuts.

#### Securing the Travel Cable Video (1 minute)

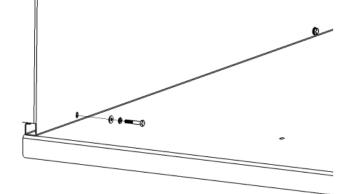


#### Scan to watch!

more videos can be found at youtube.com/ameriglide



#### **INTERIOR GUARD PANEL**



# **Step 14: Install the Folding Ramp**

### **Materials**

- Folding Ramp Kit
- 1 Hex Bolt (3/8" x 21/2")
- 1 Hex Bolt (3/8" x 1")

- 4 Flat Washers (3/8")
- 1 Spacer
- 2 Nylon Nuts (3/8")

### Install

- 1. Attach Folding Ramp to Piano Hinge using Carriage Bolts, Split Washers and Nuts located in the Folding Ramp Kit.
- 2. Locate and loosen Folding Ramp Arm (it is tightened for shipping).
- 3. Unscrew Folding Ramp Arm bolt from the Folding Arm. 🔥
- 4. Using 1 Hex Bolt (3/8" x 2½"), 2 Flat Washers (3/8"), 1 Spacer and 1 Nylon Nut (3/8") attach the base of the Folding Arm to the platform.
- 5. Using 1 Hex Bolt (3/8" x 1"), 2 Flat Washers (3/8"), and 1 Nylon Nut (3/8") attach the Folding Arm to the Folding Ramp. **B**

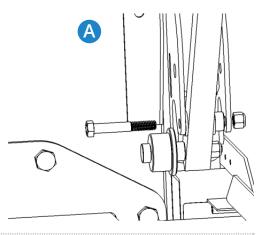
Keep the same hardware configuration as shown in the image.

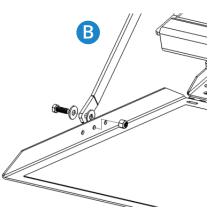
How to Install Folding Ramp Video (2 minutes)



#### Scan to watch!

more videos can be found at youtube.com/ameriglide





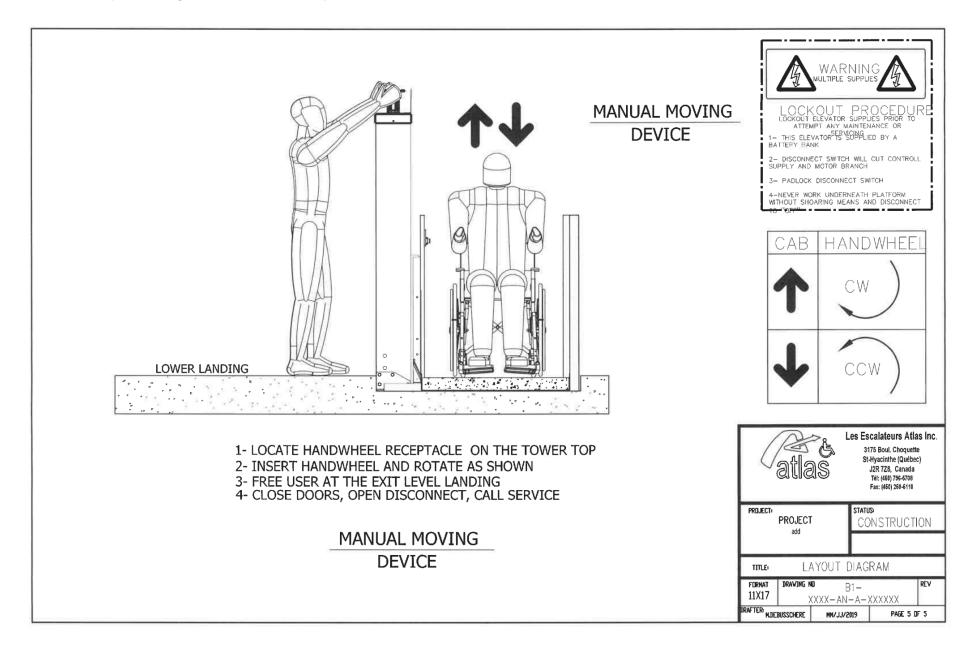
### **Before Leaving the Job Site**

Before leaving the job site, make sure to explain in full detail the operation of the elevator to the customer.

#### Procedure

- 1. Clean the work site.
- 2. Make sure all hardware has been tightened to specifications.
- 3. Explain the safe operation of the elevator and emergency procedures to the operator and owner.
- 4. Assist the operator and 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.
- 7. Record all required details per the Owner's Manual.

### **Emergency Lowering Device**





5110 Atlantic Ave. Raleigh, NC 27616 AmeriGlide.com