# Nano Vertical Platform Lift Installation Guide Residential and Commercial

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, inc. 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, inc. 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 only by an authorized AmeriGlide, inc. 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 **Nan**o 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

- 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)

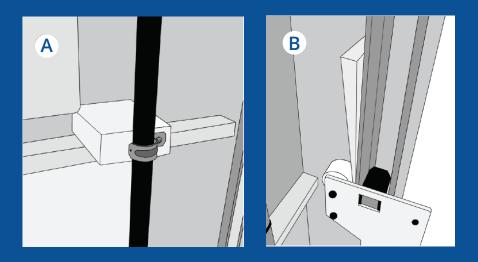
- 1 Round Bipolar Plug
- 20 Aluminum Shims
- 5 Tapcons (3/16" x 1 3/4")
- 1 25' 18G Gray Cable/3 Contacts
- 1 20' Flexible Gray PVC Hose

- 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**

# 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).



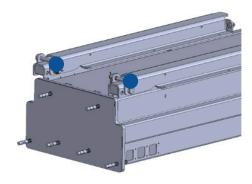
# **2. Preparing Slab** (if no stencil is provided this step is to be skipped)

- Use the provided stencil to find the unit's position on the slab.
- Trace and pre-drill each traced anchoring points.
- Clean any concrete dust from drilling.

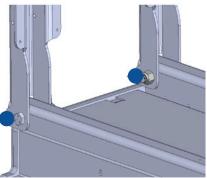


# **3. Deploy Sling Base**

- Remove both top 5/8 bolts of sling bars 1 and 2. They will open at a 90° angle. (keep removed bolts closed)
- Install the removed bolts back into sling bars 1 and 2 in the open position holes.
- Tighten all for four 5/8 bolt with nylon nuts once both bars are in opened position. (if factory nuts are missed placed, can use nuts and pins)









# 4. Installing End-Bar

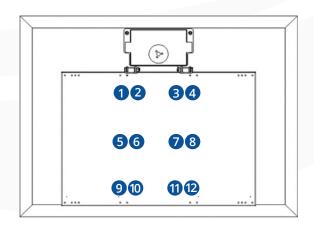
- Install end-bar (3) using (4x) 1/2 hex bolts.
- The bolts must be installed inwards. See image.

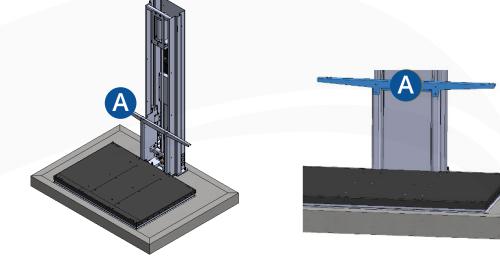
# **5. Start-Up Conditions**

- Stand the tower upright.
- Scan the QR code Troubleshoot on the lower landing side of the tower or on the control panel.
- Turn the main tower key to the on position to power up the unit.
- Complete the voltage tests 1-XX from the troubleshoot guide.

# 6. Raising the Tower

- Stand the tower upright.
- Mount the floor with 12x ¼ Philips screws.
- Install interior wall support  $\triangle$  with 4x ¼ screws.

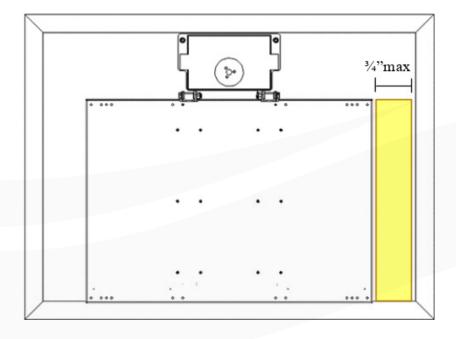


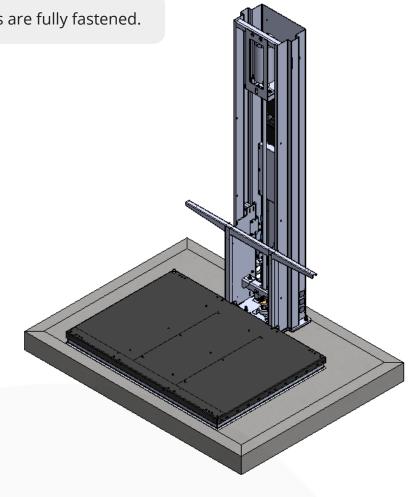


#### **WARNING** Do not step on floor until ALL lagging points are fully fastened.

# **7. Final Tower Placement**

- Move tower on the slab to create a parallel line with the upper landing wall and the platform.
- Per ASME 18.1 the max clearance between the platform and the upper landing is <sup>3</sup>/<sub>4</sub>".

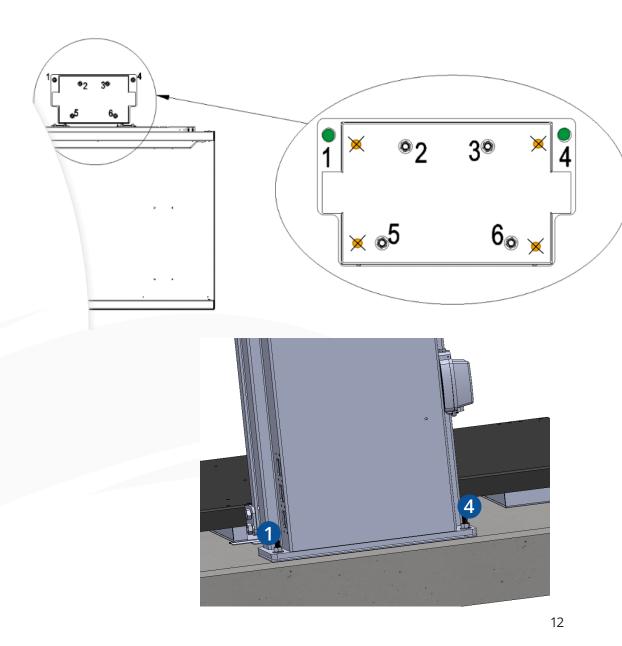




**WARNING** Do not step on floor until ALL lagging points are fully fastened.

# 8. Pre-Anchoring Tower

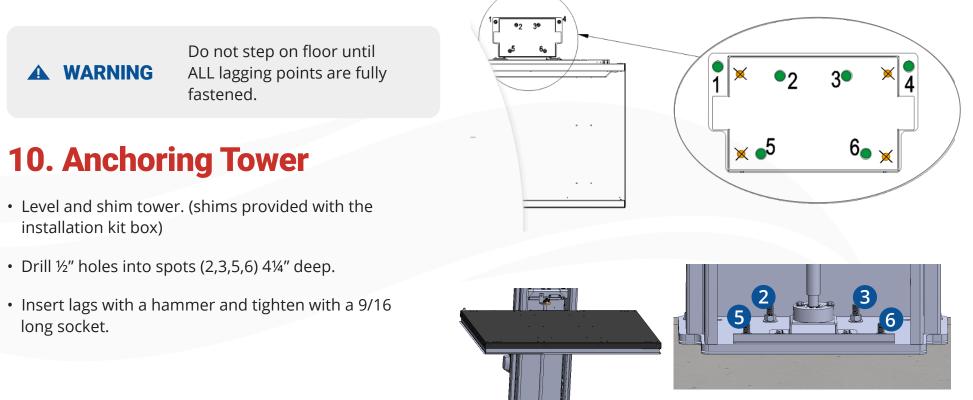
- Drill ½" into holes (#1 and 4) 4¼" deep.
- Insert lags with a hammer and tighten with a 9/16 long socket.



#### **WARNING** Do not step on floor until ALL lagging points are fully fastened.

# 9. Anchoring Tower

- Lift platform and make sure the code required distance of <sup>3</sup>/<sub>4</sub>" for a residential or <sup>1</sup>/<sub>2</sub>" for a commercial unit.
- This distance must be maintained though out the hole travel and the floor must always be parallel with the upper landing wall.
- If the platform is not in the correct position, louse the lags 1 and 4 to correct it.



# **10.1 Install Protection Wall**

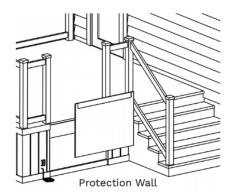
#### **Materials**

 Protection Wall (provided by contractor) DANGER

The area between the floor (where the lift is anchored) 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.



# **10.2 Install Upper Landing Gate**

#### **Materials**

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

#### Install

- 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.

- Level the latch-side upright and use #12 Wooden Screws to fasten firmly into place.
- Level the platform (use shims) and fasten #12 Wood Screws into the remaining holes on the sill angle bracket. (fig 3)
- 7. Drill a 1-inch hole into the floor on the Interlock side for Call Station and Interlock wiring.

# **10.3 Wire Upper Landing Call Station and Interlock**

#### Install

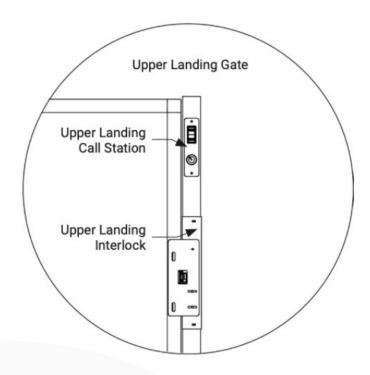
- 1. Unravel the wiring from the Upper Gate and thread the wiring through the tubing, run the wire and tubing to the Tower Controller.
- 2. Connect the Call Station (and Interlock if applicable) to the Tower Control using the appropriate Quick Connects (3-PIN for the Call Station and 4-PIN for the Upper Interlock.)
- 3. Remove the interlock no i4 jumper cable on the Tower Controller. Refer to the previous page.

DANGER

**A** DANGER

It is **VERY IMPORTANT** to remove the jumper cable labeled **INTERLOCK NO i4** before proceeding with the installation.

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



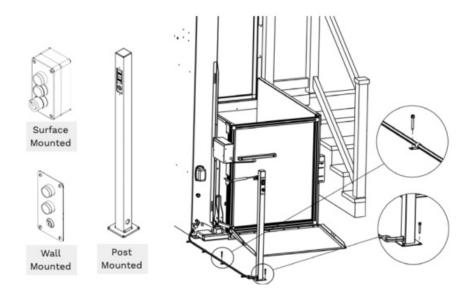
# **10.4 Install Lower Landing Call Station**

#### **Materials**

- Lower Landing Call Station
- 4 Tapcons 1/4 inch x 1 3/4 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.

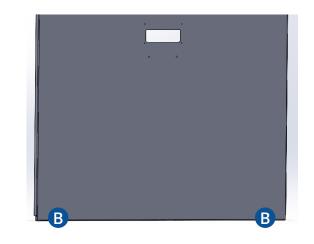


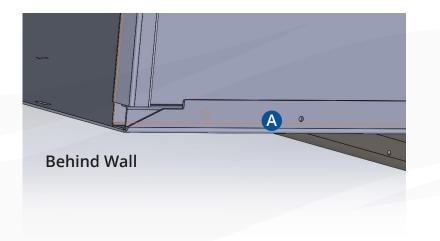
DANGER

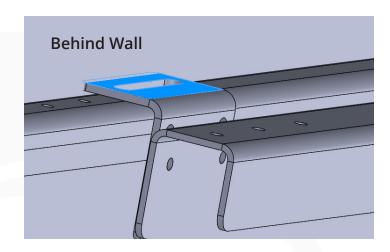
In the event that the Lower Landing requires a custom door or the door is being provided by an installer/client, remove the Jumper Cable (CN16, 15-16) on the Cab COP 16-PIN Terminal Block (NOT ON THE TOWER CONTROLLER).

# **11. COP Guard Panel**

- Insure the correct placement of the traveling cable behind interior wall and on the car sling.
- Install the COP in the wall only with 2 lower screws.
- Install the COP cover behind the wall and screw both upper screws.
- Install the interior wall flush with upper landing by attaching the 2x B angle supports to the A bracket already installed on the car sling.
- Screw both lower bolts from inside the cab into the lips of the floor.







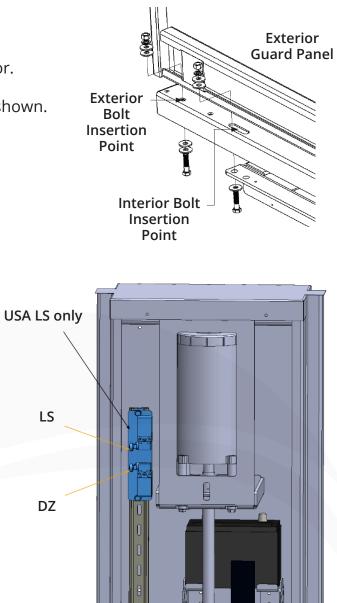
#### **WARNING** This wall is tightened from underneath the platform and from the upper outside of the wall.

### **12. Exterior Guard Panel**

- Place the exterior panel flush with the upper landing side of the floor.
- Bolt the (4x) 3/8"x1"<sup>1</sup>/<sub>2</sub> bolts through the sling base and the floor as shown.

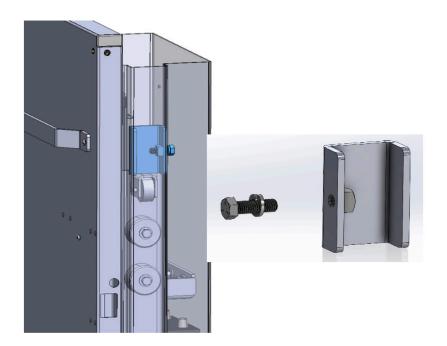
# **13. Landing Adjustments**

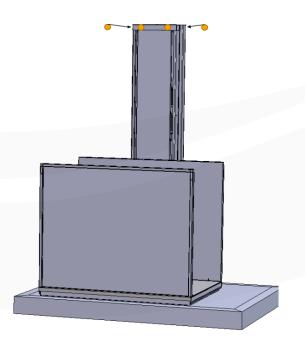
- Position the platform level with upper landing.
- Slide the upper switch assembly down until the Landing switch activates and you hear it's click then tighten in place.
- Lower unit and come back up stopping with the newly placed switch to confirm the levelness with the upper landing.
- Micro adjust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



# **14. Mechanical Stops**

- Once upper landing is set the mechanical stop will be will be installed 2" above the car sling at the upper landing.
- Place the mechanical stop inside the rail with the 2" above the car sling.
- Trace the hole towards the backside of the tower.
- Drill a  $\frac{1}{2}$ " hole into the backside of the tower.
- Insert the bolt from outside to in screwing into the mechanical stop inside the rails in the tower.





# **15. Closing the Tower**

- Position the cab at the lower landing.
- Lift and slide the facial panel behind the interior wall.
- Attention to wires when sliding down.
- Screw on the tower cover.

# **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.
- 4. Record all required details per the Owner's Manual.



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