

# Titan Inclined Platform Lift

# Installation Guide

**Residential and Commercial** 

Please read this installation guide carefully to ensure correct installation of your Titan Inclined Platform Lift.



# **Table of Contents**

Disclaimers and Important Information	2
Before you Get Started - Checklist	7
Staircase Blueprint	8
Installing Your Titan Inclined Platform Lift	9
Step 1: Unboxing	9
Step 2: Create Jig for the Rails	9
Step 3: Rail Installation	10
Step 4: Tower Installation	11
Step 5: Middle Rail Installation	11
Step 6: Lower Platform Floor	12
Step 7: Cab Preparation	12
Step 8: Cab Installation	13
Step 9: Landing Switch Adjustment	15
Step 10: Arms and Flaps Adjustment	16
Step 11: Floor Adjustments	17
Step 12: Reinstall Covers	18
Step 13: Emergency Lowering Device Procedure	18
Before Leaving the Job Site	19

# **Prepare Your Tool Bag**

### **Electrical Tools**



**Tester -** AC/DC Clamp On Power Meter (100 A dc Min)



Impact Driver - 1/4" Hex Drive Impact Driver



**Drill -** 1/2" Max Diam Drill with Impact Function to Drill Concrete

### **Screwdrivers**



- Philips (PH1) (PH2) (PH3)
- Tork Bo
- **Slotted -** (0.4 X 2.5) (0.6 X 3.5) (0.8 X 4.0) (1 X 5.5)
- Hexagon (3MM) (3/32") (7/64") (1/8") (9/64") (5/32") (3/16") (7/32") (1/4")



Square - (#1) (#2) (#3)

### 1/4" Drive Hex Bits



Philips - (PH2) (PH3)



**Square -** (#2)

Extension



Adapter - 1/4" Hex Shank to 3/8" socket Square drive

### **Rachet**



1/4" DR X 5" LONG 1/2" DR X 8" LONG 3/8" DR X 7" LONG

### 1/4" Drive Hex Socket



Hexagon - (13MM)

### 3/8" Drive Hex Socket



Hexagon - (7/16") (1/2") (9/16")

### 1/2" Drive Hex Deep Socket



Hexagon - (9/16") (3/4")

### **Drill Bits and Taps**

	<b>Drill Bits -</b> (9/64") (5/32") (13/64") (17/64") (5/16") (3/8")
C.C.C. CLEVILLAN	<b>Concrete Drill Bit -</b> (1/4") (3/8")
	<b>Taps -</b> (8-32) (10-24) (1/4-20) (5/16-18) (3/8-16)
	<b>Taps Holder -</b> Tap Holder or Driver Attachment for Drill
	Punch Set - Kit

Dolly





### **Hand Tools**



# **AmeriGlide Titan Inclined Platform Lift**

This guide describes how to install the AmeriGlide Titan Inclined Platform Lift.

The AmeriGlide **Titan** Model offers a smoother and more stable ride due to it's unique c-shaped rail system design. The platform fits most staircases and can be folded when not in use. Additionally, it doesn't require a mechanical room - everything fits into the sleek and slim upper landing column.

Refer to the AmeriGlide **Titan Inclined Platform Lift** Owner's Manual for details regarding operation and maintenance. The Owner's Manual can be found on our website: **www.ameriglide.com** 

### **Technical Specifications**

Load Capacity	550 lbs (249 kg)
Rated Travel Speed	15 fpm (0.08 m/s)
Drive Type	Sprocket & Chain
Motor	24 VDC
Maximum Travel	Custom Travel
Codes and Standards	CSA B613-00, B355-15, & ASME 18.1
Advantages	Compact and Quiet

# **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 Titan Inclined Platform Lift (IPL) design. No person or company is authorized to change the IPL design without authorization and the express written consent of AmeriGlide, Inc.

### 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 www.ameriglide.com

### Warning

Read all instructions contained in this installation guide before installing the AmeriGlide VPL. 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**.

Know how to obtain emergency medical and fire fighting assistance.

Be sure to follow all the precautions below 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.
A WARNING	Failure to follow any of WARNING is likely to result in such grave consequences as death or serious injury.
<b>A</b> CAUTION	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.

### **Installation Disclaimer**

The AmeriGlide **Titan Inclined Platform Lift** shall be installed and serviced only by an authorized AmeriGlide dealer only. The authorized dealer should refer to this guide for installation and servicing. For Care & Troubleshooting, please refer to the **Titan Inclined Platform Lift** Owner's Manual.

Please carefully read and follow the instructions found in this guide BEFORE installing and/or operating the AmeriGlide **Titan Inclined 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.

### **Installation Precautions**

### 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 Titan Inclined Platform Lift to lift freight or other materials than intended by design.
- Read and understand the installation guide prior to installing the AmeriGlide Titan Inclined 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.
- Lock the wheels of any mobility device riding on the platform.
- Use only recommended anchor fasteners.
- Check and verify for applicable local codes and regulations.

#### NOTE:

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.

### **Codes and Regulations**

The **Titan Inclined Platform Lift** has been designed to meet CSA B613-00 & B355-15 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 before installing the **Titan Inclined Platform Lift**.

### **Site Requirements**

The **Titan** must be installed on a Supporting Wall, Supporting Posts and Floor that is capable of supporting the minimum load and standards as laid out in the Technical Drawings. Please refer to and verify with the Technical Drawings before beginning the installation of the **Titan**.

### **Electrical Requirements**

The **Titan Inclined Platform Lift** requires a 110VDC-15 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 TITAN UNTIL IT HAS BEEN ANCHORED TO AN APPROVED PAD
 OR FLOOR.

# **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 Titan Inclined Platform Lift, verify the lift for shipping damage immediately. Report any discrepancies or damage claims to your dealer.
- 4. Verify all the site parameters, technical drawings and all preparatory work prior to installation.
- 5. Plan and prepare for all electrical requirements.

# **Installing Your Titan Inclined Platform Lift**

### **Step 1: Unboxing**

- Remove box cover.
- Inspect for damage (ie. take damaged photos)
- Remove boxes and cabin parts and set them aside.

### **Step 2: Create Jig for the Rails**

TIP: Use a plywood to cut a jig to sit on the top of the staircase to make ensure your bottom rail is located as per measurement A of your installation drawings.



### **Step 3: Rail Installation**

### Procedure

### 1a. Lower section of the bottom rail installation

- Referring to the measurement (A) from 1 of 2 in the installation drawings
- Use the plywood jig to sit on the top of the staircase.
  (Plywood width = measurement (A))
- Sit the lower section inside of the bottom rail on top of the plywood then slide it down until it hits the ground.
- Once the rail is touching the ground and is sitting on top of the plywood drill, thread and screw into place.
- Drill bit (13/54) and tap 1/4 20 are provided in equipment box.
- Use the proper bolts to lag rails. Either flat head wood screws or a 1/4-20 counter sunk bolts.
- The minimum number of screws is at least each 16 inches. Top and bottom of the same rail.

### 1b. Upper section of the bottom rail installation

- Place the plywood at the top of the staircase.
- Sit the upper section of bottom rail on top of the plywood then slide it down until both rails joint together.
- Once both sections are jointed together, and both sections are in a straight-line, screw it into place as before.





Rail Installation (0:06 - 1:04)



### Scan to watch!

more videos can be found at youtube.com/ameriglide

### 1c. Upper section of the top rail installation

- Install the top section of the top rail parallel with the bottom rail. It must finish equal with the lower rail.
  - Top and bottom rails must be PARALLEL and have 18" between.
  - Top rail must finish aligned with the lower at the upper landing to receive the tower 90° from bottom.

### 1d. Lower section of the top rail

- Install the lower section of the top rail parallel with the bottom rail.
- Top and bottom sections must be perfectly joined.

### **Step 4: Tower Installation**

### Procedure

### 1. Mount the tower by sitting it over the rails and screwing into place.

- Screw both rails to the tower and the 1/4 20 bolts into the prepared holes
- Secure the tower to the wall by screwing through the most holes of the back of the tower possible witch aligns with the wall studs. The minimum of screw is (xx).





Tower Installation (1:05 - 2:12)



#### Scan to watch!

more videos can be found at youtube.com/ameriglide

### **Step 5: Middle Rail Installation**

### 1. Install the middle rail using the (B2) measurement.

- Using the (B2) measurement install the middle rail parallel with the 2 other rails.
- The top of the middle rail needs to sit flush under the middle hole of the tower. (traveling cable entry)
- Middle rail may not go as far down as the top and bottom.

## **Step 6: Lower Platform Floor**

### Procedure

- 1. Stick the 8x adhesive flint pads on to the underpan. (11)
- Locate loose wire behind the carriage (floor motor leads)
- Bring voltage to these wires to lower floor (tip: use one of the batteries to do it)
- If it doesn't lower, switch polarity.

### **Step 7: Cab Preparation**

### Procedure

- 1. Remove covers by unscrewing Philips screws (4) on each side
- 2. Remove the top wheel assemblies 2x
- Remove the (½?) bolts of both wheel assemblies from the cab.
- Install the top wheel assembly on the top rail setting it on its brake about 3 feet up the rail. (13)



#### Middle Rail Installation (2:13 - 2:29)

#### Scan to watch!

more videos can be found at youtube.com/ameriglide



Lowering the Platform Floor (2:30 - 2:52)

### Scan to watch!

more videos can be found at youtube.com/ameriglide

### ATTENTION: DO NOT manually open.



### **Step 8: Cab Installation**

### Procedure

### 1a. Emergency Stop Button in Cab

- The stop button needs to be bypassed for installer to set panel cover aside to not damage it.
- Install jumper wire from CN21-5 and CN21-6 to install the two red wires from the stop button).

### 1b. Cab installation

- Bring the cab to the bottom landing.
- Set the lower wheel assemblies under the lower rail, then pull cab until both assemblies are fully touching and are parallel with the lower rail. (14) Refer to measurement (c).
- Lower the Mount B to reattach it to the cab and screw it into place. (15)
- Install mount A on the upper rail and screw it into place. (16)

### 1c. Traveling Cable

- The traveling cable comes attached with a plastic chain.
- The bottom of the plastic chain loops up and attaches under mount B.
- The top end of chain will follow up the middle rail and attaches to the center of the rail with a self-tapping screw.
- The plastic chain will only partially cover the middle rail's length.
- A plastic wire conduit is sent to passe the traveling cable to the tower. (note it wont cover the whole trail it shall be installed close a possible to the tower.)
- Pass the wire into the tower and wire into cn16 terminals.
- There are already wires plugged in cn16 terminals is to show you the proper wire combination. (Remove / Rewire)



**Cab Installation** 

#### Scan to watch!

more videos can be found at youtube.com/ameriglide

**TIP:** Ensure cab is leveled when tightening mounts.



#### **1d. Connecting Batteries**

• Wire the 2 batteries in series for 24vdc.

#### 1e. Start Up Conditions

- Start up conditions are performed with 2 safety bypasses the brake switch and cab emergency stop button. (BS) and (ESC).
- Perform the start up conditions test. Verify voltages from start up points they must all have at least 24v.



1 - Tower CN16-2	Main Disconnect	10 - CN20-23	Platform Down Security Line
2 - Tower CN25-5	Handwheel	11 - CN20-13	Lower Safety Flap
3 - CN16-1	Travel Cable Wire	12 - CN20-15	Upper Safety Flap
4 - CN16-2	Travel Cable Wire	13 - CN20-5	Upper Landing Switch
5 - CN20-10	Extreme Limit Switch	14 - CN20-25	Safety Underpan
6 - CN20-12	Brake Switch	15 - CN20-2	Lower Landing Switch
7 - CN21-6	Emergency Stop Button Cab	16 - Tower CN16-4	Up Line
8 - CN21-13	Lower Arm Down Security Line	17 - Tower CN16-5	Down Line
9 - CN21-21	Upper Arm Down Security Line		

### 1f. Every test must be complete and have the right voltage for the unit to start.

- Start up conditions are done when the cab is between landings (not on landing switches)
- Arm and floor must be in the down position. ALL DOWN switches (LAD, UAD, PFD) must be in the groove and the UP switches (LAU, UAU, PFU) must be activated.

Refer to step 10 for more information.



1g. Lower chain with call button once start-up conditions are met.

1h. Once the chain is lowered, attach it to the top wheel assembly and slightly lift cabin off the floor.

### **Step 9: Landing Switch Adjustment**

### Procedure

#### 1a. Adjusting landing switches

- Sit one cam on the rail below the lower landing switch and the other above the upper switch.
  - Using this procedure will ensure the perfect height for the switches and it also positions them perfectly parallel.
  - See image.

### **1b. Lower Landing**

- Lift must only stop on the one lower landing switch.
- The cab must not be touching the ground.
- Chain must always stay tight.
- Engage the lower switch with the cam to stop platform.



Landing Switch Adjustment (7:56 - 9:07)



Scan to watch!

more videos can be found at youtube.com/ameriglide



### **1c. Upper Landing**

- Lift must only stop on the upper landing switch.
- The platform should be level with the top landing floor or just above.
- Engage the upper switch with the cam to stop platform.

### 1d. Once upper landing SET, add the mechanical stop on the upper rail 2" above the upper wheel assembly.

• Drill through the center of the rail and bolt the mechanical stop into place.

### **Step 10: Arms and Flaps Adjustment**

- The 1st part of the flap adjustment is adjusted with the arms. The arm positioning affects the flap.
- Only minor flap adjustments are needed.
- Remove the pin taking the adjustable screw arm off the flap.
- Loosen the ¼-20 nut on the adjustable screw arm and rotate the head to adjust.



**Flaps and Arms Adjustment** 

(9:08 - 10:47)

Scan to watch!

more videos can be found at youtube.com/ameriglide





### **Step 11: Floor Adjustments**







### **Step 12: Reinstall Covers**

### Procedure

- 1. Mount Upper Tower and Carriage Covers
- Mount the upper tower cover and the two carriage covers the #10-24 screws from steps 5 and 6 respectively.
- Remove all Philips-head screws holding cover and remove it for the tower.



**Reinstall Covers** (10:48 - 12:32)

Scan to watch!

more videos can be found at youtube.com/ameriglide



### Step 13: Emergency Lowering Device Procedure

### **Recovery Mode**

Is used when unit has been manually moved out of sequence and the unit no longer responds to calls.

If impossible signals are sent to the PLC and the unit is not in a fault, holding the button for 5 seconds will either reset to running or closed position. Depending on which call is pressed.

### **Manual Emergency Lowering Device**

Insert handwheel on motor shaft and turn in the wanted position.

# **Before Leaving the Job Site**

### 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