



**BY ACCESSIBILITY PROFESSIONALS**

# **FREEDOM JOURNEY LIFTS INSTALLATION GUIDE**



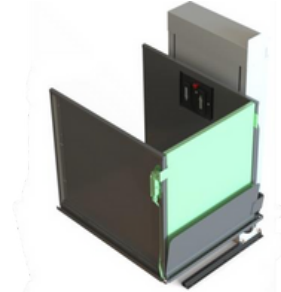
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- For additional instructions on installing a Carriage Gate or Safety Pan, please see ***“Manual #1 – Carriage Gate”***.



- For additional instructions for installing landing devices such as an interlock or an upper landing gate, please see ***“Manual #2 – Landing Devices”***.

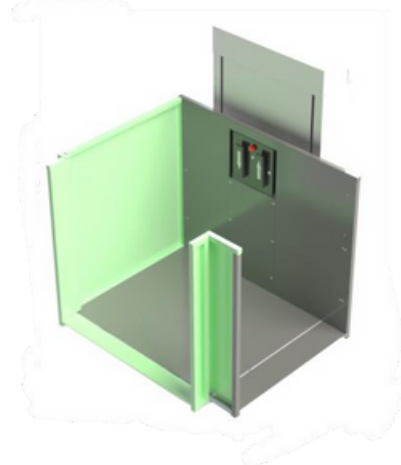


For additional instructions for installing emergency operation devices such as a UPS or a Tower of Power, please see

- “Manual #3 – Emergency Operation Devices”***.



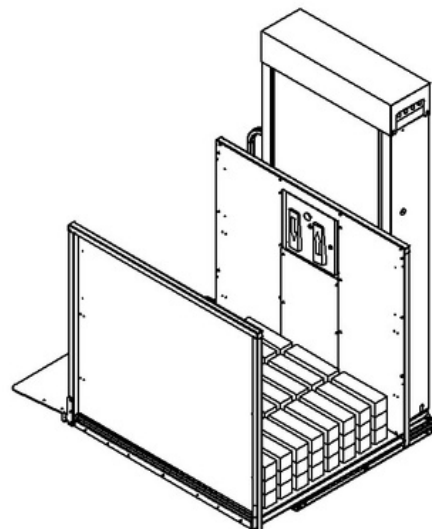
- For additional instructions on installing a 90-degree access lift, please see ***“Manual #4 – 90-Degree Access”***

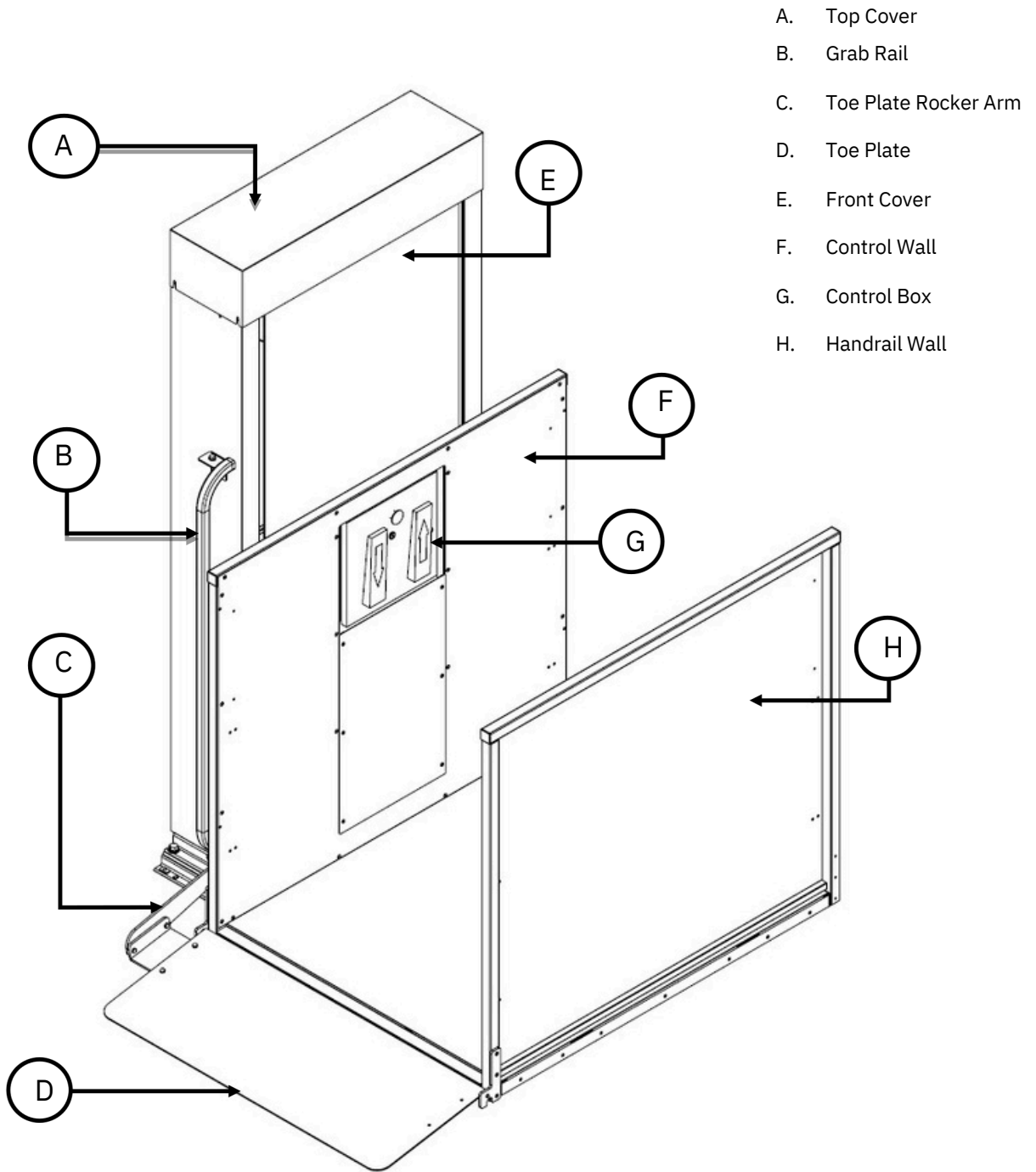


- For quick installation instructions, please see ***“Manual #5 – Quick Start Installation Guide”***

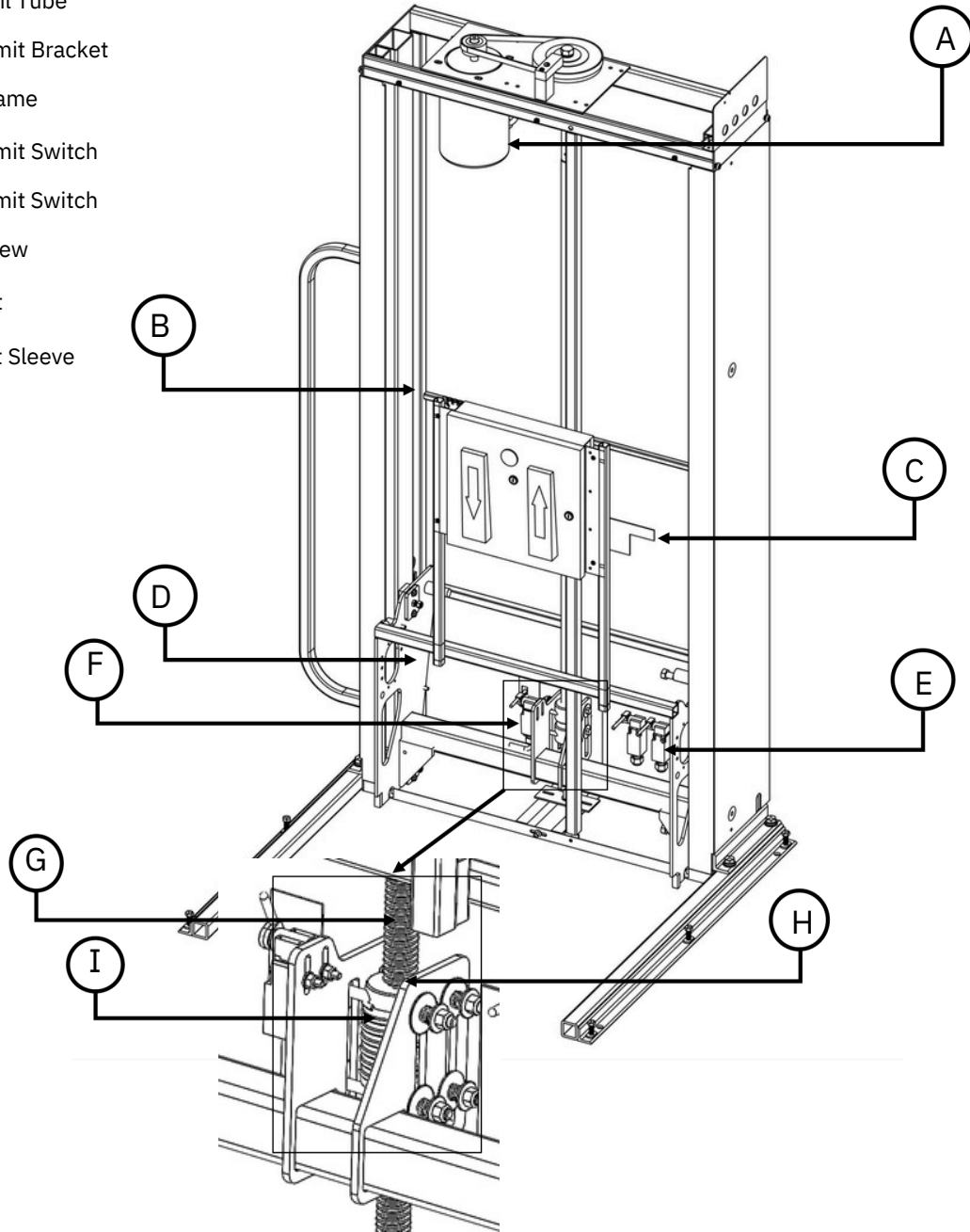


- For additional instructions on testing the VPL during installation, please see ***“Manual #6 – Mid-Assembly Testing Guide”***





- A. Lift Motor
- B. Guide Rail Tube
- C. Upper Limit Bracket
- D. Guide Frame
- E. Upper Limit Switch
- F. Lower Limit Switch
- G. Drive Screw
- H. Drive Nut
- I. Drive Nut Sleeve



Thank you for selecting the Journey VPL™. When operated properly, the Journey VPL™ is designed to provide years of trouble-free service. This manual is provided to walk you through installation safely and efficiently. Please read this manual thoroughly before installing and operating your lift for the first time. We recommend your lift be installed and serviced by a qualified technician.

### 1.1: Online Resources

Additional resources for install such as product updates and installation videos, are available online on our website [freedomliftsystems.com](http://freedomliftsystems.com).

### 1.2: Installer Contact Information

Affiliated Company:
Phone Number:
Street Address:



### 2.1: Safety Symbols and Definitions

The following notations will be used through this manual to indicate areas that may present special risks or consideration.

DANGER
Danger messages indicate an imminently hazardous situation, which, if not avoided, could result in serious injury or even death.
Caution!
Caution messages indicate a potentially hazardous situation which, if not avoided, could result in serious injury, death, or damage to equipment.
Note
Note messages provide information, such as reminders, general information or additional guidelines that may provide guidance to the installer.

### 2.2: Additional Symbols

The following are additional symbols and conventions used through the manual:

	<b>Detail callout</b> , used to call attention to a detailed mentioned in the body of the instructions.		<b>Step Callout</b> , labels which step the given diagram relates to
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### 2.3: Safety Notes

#### Caution!

Read all instructions thoroughly before installation or use of this lift. Failure to following the instructions in this manual and the associated manuals for testing and operation could result in serious injury or death. In addition, it will render Freedom Lift Systems' warranty null and void. Do not override any of the safety devices provided with the lift. Doing so will likely lead to serious injury or even death.

Ensure there is a minimum of 2in (50mm) and a maximum of 3in (75mm) clearance between any part or edge of the carriage that could possibly be used as a supporting handhold and any part of the fixed installation to prevent the trapping of a hand during the travel of the carriage. See Freedom installation drawings for details.

The lift is intended for use by people and not to be used for cargo or other purposes. Lifting capacity is up to a maximum of 750 lb. unless otherwise noted on the lift and in Freedom Lift Systems' supplied documentation. **(DO NOT OVERLOAD THE LIFT)**. Overloading the lift will render Freedom Lift Systems' warranty null and void. Ensure that there is nothing obstructing the carriage travel before operating the lift. Freedom Lift Systems' disclaims any and all liability for any personal injury or property damage resulting from the operation of a product that has been modified from the original design. No person or company is authorized to change the design of the product without written authorization by Freedom Lift Systems'.

Failure to observe and complete the required maintenance for your lift product will render the warranty null and void and may present significant risk that could lead to injury or death.

This list of warnings may not be exhaustive, due care around equipment should be observed.

### 3.1: Tools

The following is the list of tools that must be provided by the installer to complete the installation.

Tools (Customer to Provide)
<ul style="list-style-type: none"> <li>Claw Hammer</li> </ul>
3/8" Socket Ratchet
<ul style="list-style-type: none"> <li>6" Socket Ratchet Extension</li> </ul>
<ul style="list-style-type: none"> <li>Side Cutters</li> </ul>
<ul style="list-style-type: none"> <li>Combination Screwdriver</li> </ul>
#2 Phillips and #2 Robertson Bits
Combination Screwdriver
<ul style="list-style-type: none"> <li>#2 Phillips and #2 Robertson Bits</li> <li>Large Flathead Screwdriver</li> </ul>
<ul style="list-style-type: none"> <li>Utility Knife</li> </ul>
<ul style="list-style-type: none"> <li>Concrete Drill With 3/8" Bit</li> </ul>
<ul style="list-style-type: none"> <li>Tape Measure</li> </ul>
<ul style="list-style-type: none"> <li>Screwdriver With 5/32" Hex Bit</li> </ul>
<ul style="list-style-type: none"> <li>Level</li> </ul>

Sockets
<ul style="list-style-type: none"> <li>7/16"</li> </ul>
<ul style="list-style-type: none"> <li>1/2"</li> </ul>
<ul style="list-style-type: none"> <li>9/16"</li> </ul>
<ul style="list-style-type: none"> <li>3/4"</li> </ul>

Combination Wrenches
<ul style="list-style-type: none"> <li>7/16"</li> </ul>
<ul style="list-style-type: none"> <li>1/2"</li> </ul>
<ul style="list-style-type: none"> <li>9/16"</li> </ul>
<ul style="list-style-type: none"> <li>3/4"</li> </ul>

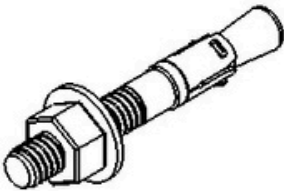
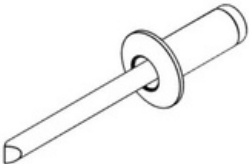
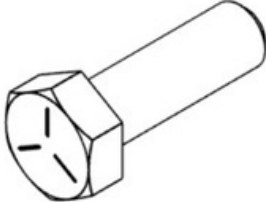
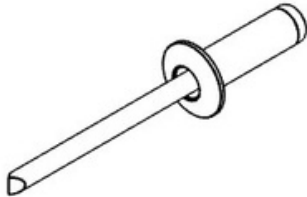
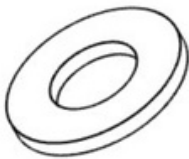

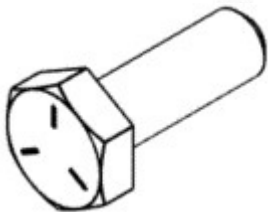

Tools Included
<ul style="list-style-type: none"> <li>Rivet Gun With 3/16" Head</li> </ul>


Manual Crank Components (These come with your lift)	
<ul style="list-style-type: none"> <li>3/8" Socket Ratchet</li> </ul>	<ul style="list-style-type: none"> <li>15/16" Socket</li> </ul>

#### Note

Keep the manual crank components in a safe place near the lift, as in the event of an emergency, you may need them to manually lift or lower the platform.

### 3.2: Table of Provided Fasteners

<b>Concrete Anchor</b> 2-3/4" Long Galvanized Steel (1 : 1.5 S cale)		<b>3/16" – 0.325" Black Blind Rivet</b> 0.325" Stem Length	
<b>5/16"-18 Hex Head Bolt</b> 1" Long Zinc Finish Steel		<b>3/16" – 0.575" Black Blind Rivet</b> 0.575" Stem Length	
<b>5/16" Washer</b> 0.688" Outer Diameter Zinc Finish Steel		<b>5/16"-18 Nylon Insert Lock Nut</b> Zinc Finish Steel	
<b>1/4"-20 Hex Head Bolt</b> 3/4" Long Zinc Finish Steel		<b>1/4"-20 Nylon Insert Lock Nut</b> Zinc Finish Steel	

For detailed list of provided fasteners see assembly drawings.

**All figures to scale unless otherwise noted.**

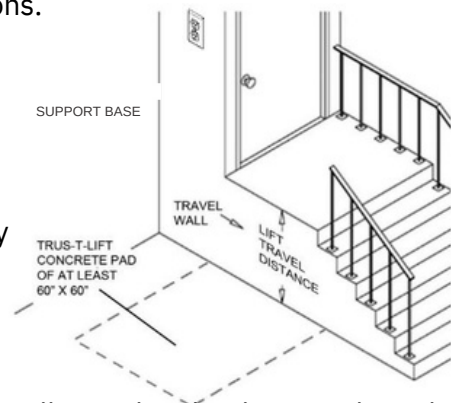
### 3.3: Site Preparation

When preparing to install a Journey VPL, there are a few things that you should consider. The support base for the Journey VPL must be solid and capable of anchoring and supporting the base frame. We recommend a 60 by 60-inch concrete pad approximately 4 inches thick. The pad should be level within 1/2" and smooth with no projections.

The travel distance of a Journey VPL is measured from the support base to the upper landing sill. Journey VPL is available in 2 different maximum lifting heights from 28" to 52". Each tower can travel a maximum distance indicated by the model number. The model shown in this manual is a 52" tower and can be easily set to automatically stop at any point up to a maximum of 52 inches lifting height.

The travel wall is a barrier that extends from the upper landing sill to the support base and helps to keep the user secure on the platform while operating the lift. This wall must be plumb, smooth, and solid with no projections.

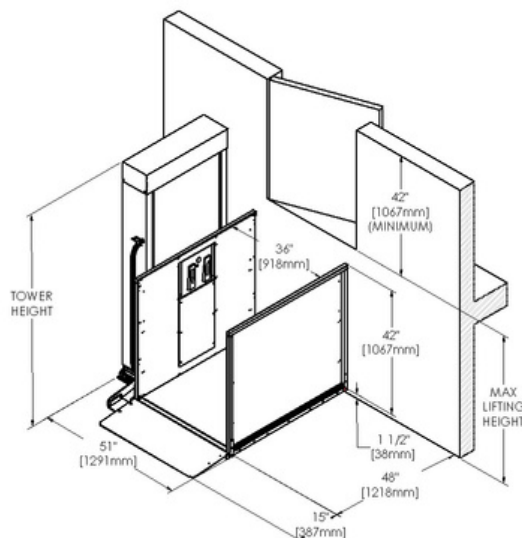
Another consideration is the power source for the lift. Make sure there is a standard 15A/110VAC outlet within 6 feet of the tower location.



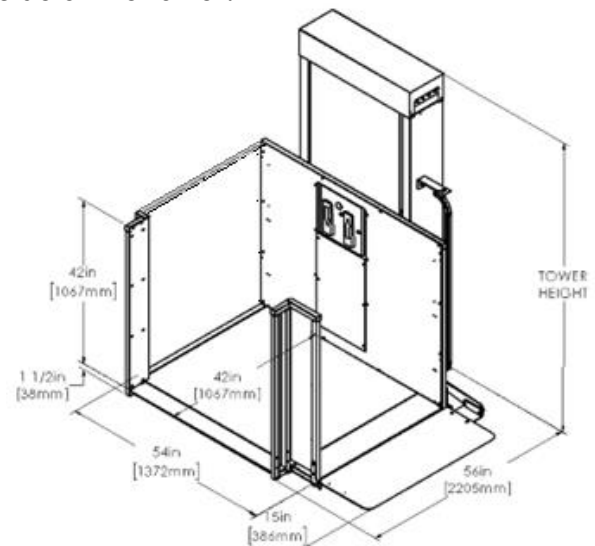
### **DANGER**

If the travel wall is not prepared in compliance with the above statement, possible crushing or shearing hazards may be present and this will likely cause serious injury or harm.

The Journey VPL is available in six different platform configurations: 3 sizes of straight through and 3 sizes of 90-degree access. The straight through model has its entrance and exit on either side of the lift with platform sizes of 36"x48", 36"x54", and 36"x60". The 90-degree access model allows the user to exit 90-degrees opposite the tower on the upper level with platform sizes of 42"x48", 42"x54", and 42"x60". Note that the lower entrance side with the toeplate ramp can be changed from the left or right side of the tower.



**Straight Through (36x48 shown)**



**90-Degree Access (42x54 shown)**

### 3.4: Unpacking

#### Materials

Tools		Components	
Name	#	Name	#
• Claw Hammer	1	• Packaged Lift	1
• Utility Knife	1		
• 3/8" Socket Ratchet	1		
• 7/16" Socket	1		
• 7/16" Combination Wrench	1		

#### Instructions

##### Note

When you receive your Journey VPL, be sure to carefully inspect the packaging for any damage. Note any potential damage on the waybill from the shipper and take photos.

- 1) Retrieve the plastic bag on the front of the unit containing the following:
  - a. Fastener and parts bag
  - b. Manual crank ratchet and socket
  - c. An envelope containing the following:
    - i. the installation manual,
    - ii. electrical diagrams,



Note: The Rivet Gun is contained within the complete lift packaging assembly

#### Caution!

Take care to not damage the protective powder coating on the components, as unprotected metal can corrode causing the paint to lift and separate from the metal.



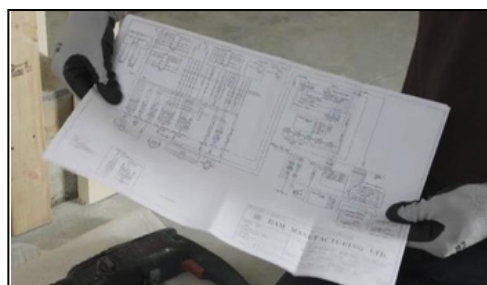
Fastener and Parts Bag



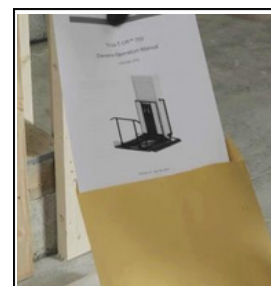
Installation Manual



Manual Crank Bag



Electrical Diagrams



Owner's Manual

**DANGER**

DO NOT remove the lift from the shipping pallet until the contents between the platform and tower have been removed, and the platform has been lowered following the procedure below. The tower is unstable in the upright shipping position, which can result in tipping and serious injury.

2) After removing outer black plastic wrap, carefully remove **ONLY ONE** shipping strap as shown below. This will keep the platform held from rotating down, but will allow the contents between the tower and platform to be removed from the side

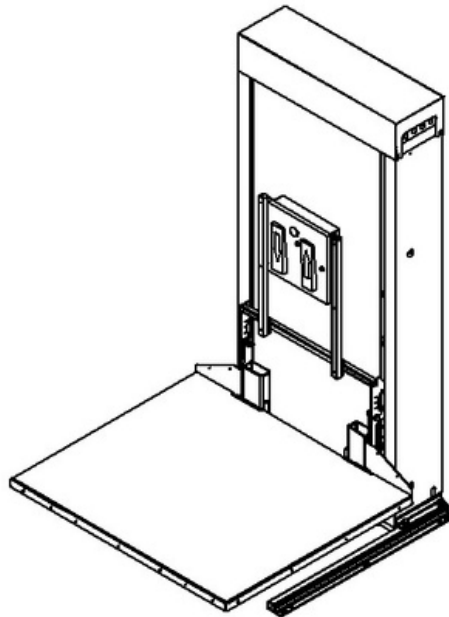


3) Remove the contents including toeplate, walls, extensions, and any other components from between the tower and the platform





- 4) When all contents are moved, **have one person hold the weight of the platform** while another undoes the second shipping strap. Carefully allow the platform to rotate down until it rests against the guide frame.



- 5) **Only after the platform has been rotated down**, remove the 4 lag bolts fastening the tower base legs to the pallet using the 7/16" socket and combination wrench.
- 6) Carefully move the lift off of the pallet, move it near the final installation location.

**Caution!**

Use best lifting practises when moving the lift. Not doing so can lead to serious injury.

- 7) Check that the ½" bolts connecting the base legs to the tower are tight and did not become loose during shipping. Tighten with a ¾" socket as required.

## 4.1: Base Legs

### Materials:

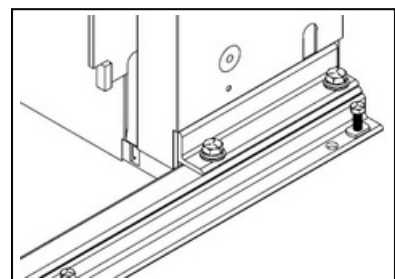
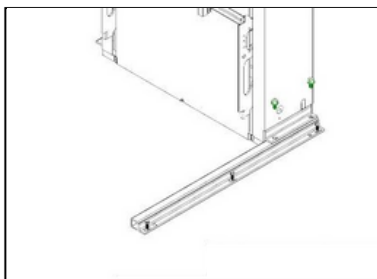
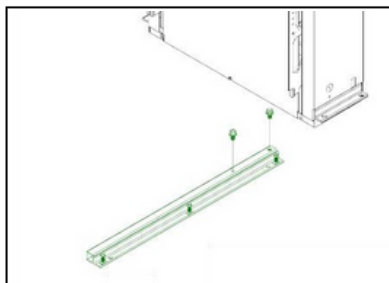
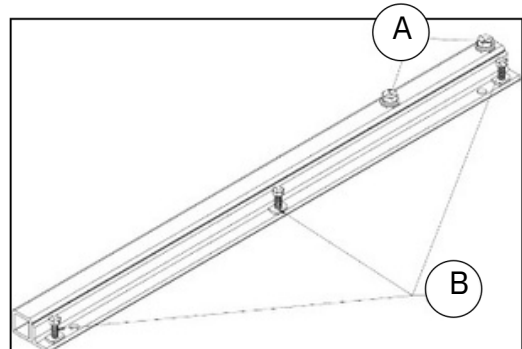
Tools	#	Components	#
• 3/8" Socket Ratchet	1	• Base Legs	2
• 3/4" Socket	1	• Tower	1

### Note

Base legs come pre-attached on most towers, specifically 28" and 52" travel lifts. Check that the mounting bolts are tight on these preassembled units. In the following instructions, steps 2, 3, and 4 apply only to lifts with a 72" travel or more (which we do not offer). Step 1 applies to all lifts.

### Instructions

- 1) Retract each leveling bolt (3/8" Bolt) (**A**) so the legs will sit completely flat on the floor, with no support from the bolts.
- 2) Remove each mounting bolt (1/2" Bolt) with its washers (**B**) and slide the legs into place.
- 3) Reinstall the mounting bolts.
- 4) Repeat for the other base leg.





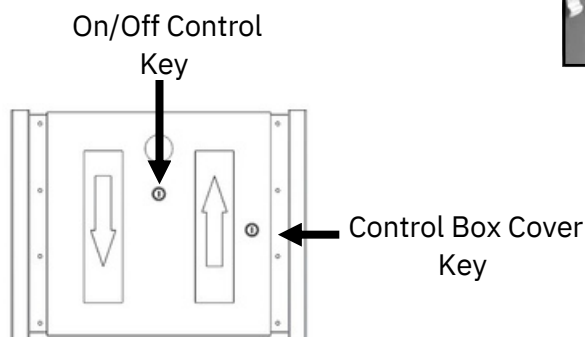
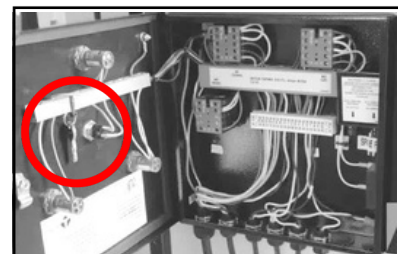
## 4.2: Locating Lift Keys

### Materials

<b>Tools</b>		<b>Components</b>	
• Side Cutters	1	• Tower and Base Leg Assembly (4.1)	1

### Instructions

- 1) On the front of the tower, you will find the power cord zip-tied to the guide frame. Cut this tie.
- 2) Locate the control box key zip tied to the end of the power cord. Cut the tie and retrieve the key.
- 3) Insert the control box key retrieved in the last step into the keyhole on the right of the control box and apply a small amount of pressure on the lid as you turn the key to open the box.
- 4) Retrieve the on-off keys zip tied to the inside of the front of the control box, and close and lock the box.
- 5) Put the on-off key into the center key slot on the front of the control box and turn it to the right.



### 4.3: Ensuring Platform-to-Guideframe Connection

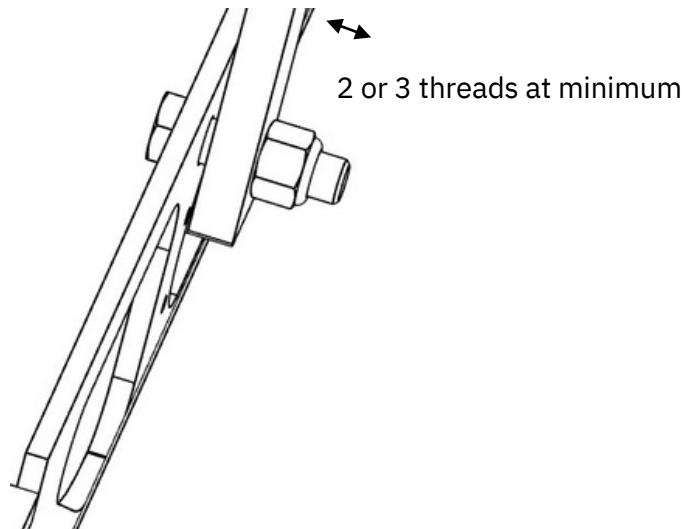
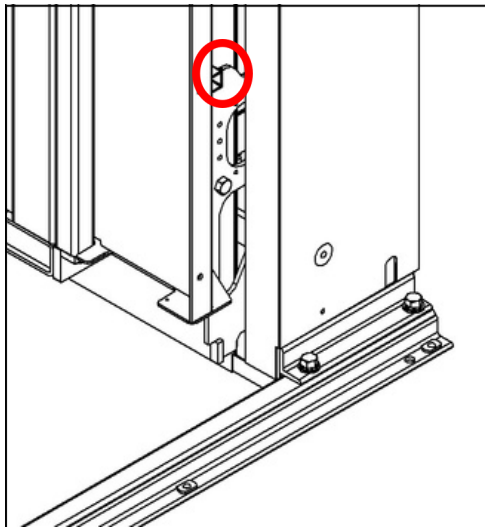
#### Materials

#### Tools

Name	#
• 3/8" Socket Ratchet	1
• 3/4" Socket	1

#### Instructions

- 1) As described above, the Journey Lift is conveniently shipped with the platform already attached to the guide frame. However, it is important to ensure the platform is properly connected to the guide frame before proceeding with the installation. The platform should freely pivot about the bolts.
- 2) Check that the platform mounting bolts (1/2" bolts) are tightened. These will likely not require tightening, but if necessary use 3/4" socket to tighten them properly. Whether or not they require tightening, ensure that at minimum 2-3 threads are showing past the nut.



#### Caution!

Over-tightening the bolts in the next step can compromise the operation of the lift, so make sure they are only tightened to the specified amount

#### 4.4: Plug in and Test Operation

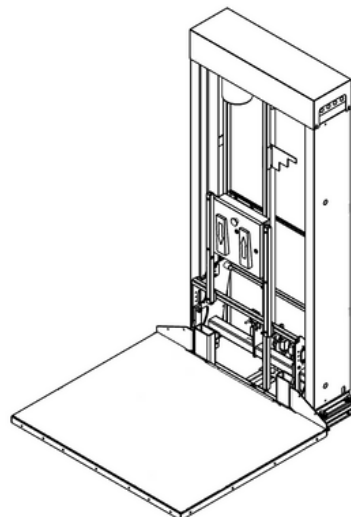
##### Materials

<u>Tools</u>		<u>Components</u>	
Name	#	Name	#
		• Lift Assembly (4.3)	1

##### Instructions



- 1) Remove the top cover, remove the front panel, and then reinstall the top cover:



- 2) Plug the lift into the wall (standard 110V 15A outlet).
- 3) If assembling a basic lift unit without interlocks, test the lift's operation by pressing the up and down paddles. If the unit has locks with either an upper gate or car gate, the lift will not function at this stage as the "safety circuit" is open. To proceed with testing, refer to ***"Manual #7 – Mid-Assembly Testing Guide"***.

## 4.5: Platform Extension Weldments

For the 90-degree configuration where the entrance and exit are adjacent to each other, refer to **“Manual #5 – 90-Degree Access”**.

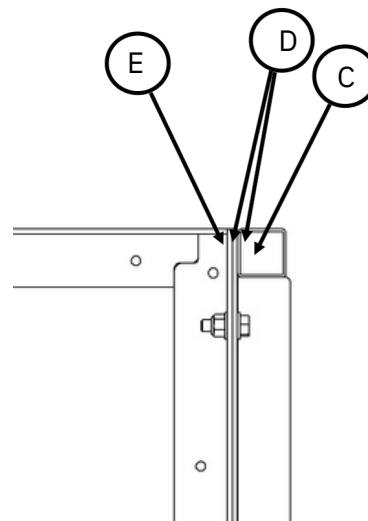
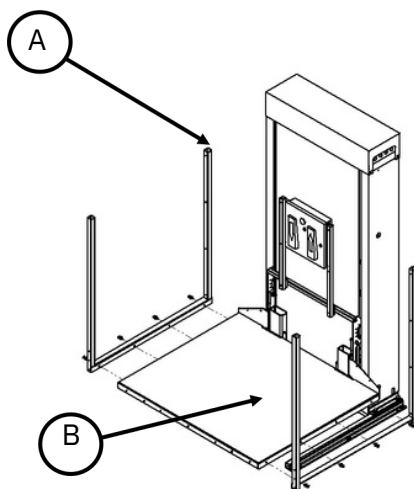
For the straight through configuration where the entrance and exit are opposite from each other, follow these instructions for installing the platform extension weldments:

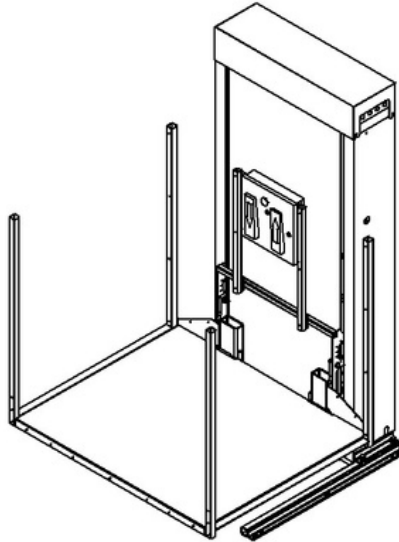
### Materials

<b>Tools</b>		<b>Components</b>		
<b>Name</b>	<b>#</b>	<b>Name</b>	<b>Label</b>	<b>#</b>
• 1/2" Wrench	1	• Lift Assembly (4.4)	A	1
• 1/2" Socket Wrench	1	• 1.5" Platform Extension Weldments	B	2
		• 5/16"-18 Hex Head Bolt	C	8
		• 5/16" Washer	D	16
		• 5/16"-18 Nylon Insert Lock Nut	E	8

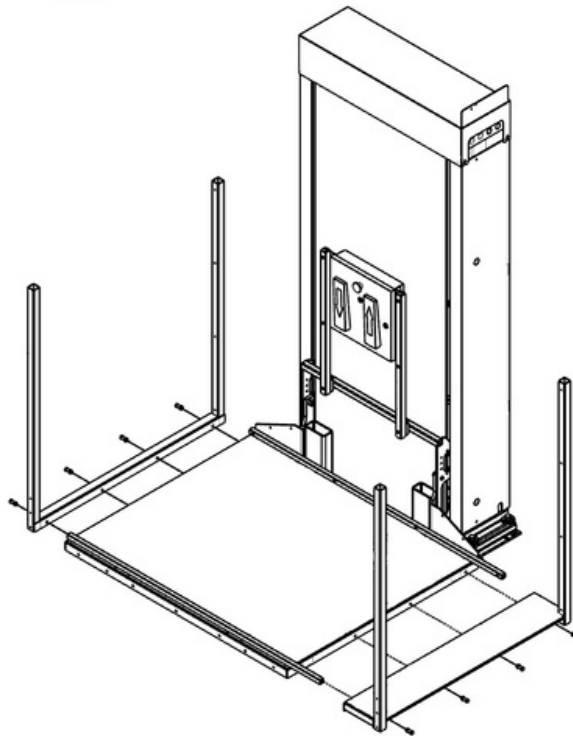
### Instructions

- 1) Attach 1.5" platform extension weldments to the platform frame base weldment using 5/16"-18 hex head bolts, washers and nylon insert lock nuts with washers on either side





- 2) The lift assembly shown for reference is 36" x 48" with 1.5" platform weldment extensions. For clarity, a lift assembly with a 36" x 54" platform that uses a 1.5" and 7.5" platform weldment extension is shown below:



**Note**

Regardless of configuration, a 54" platform must have the 7.5" extension attached to the lower entrance side. The preassembled walls have been made with this in mind.

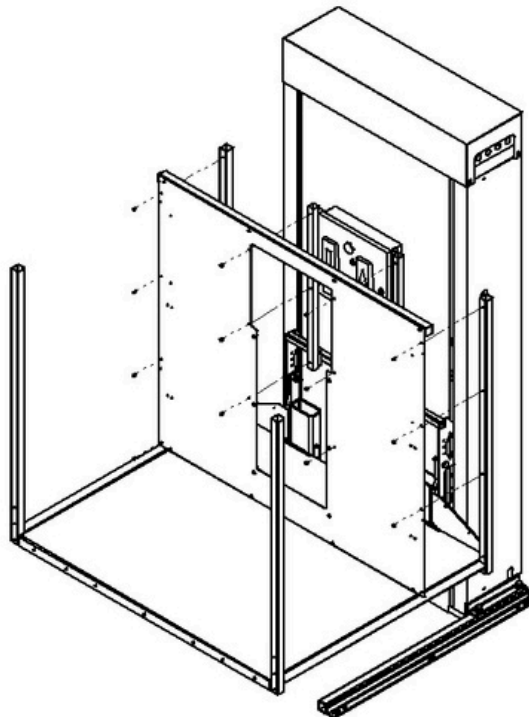
### 4.6: Attaching the Platform Control Wall

#### Materials

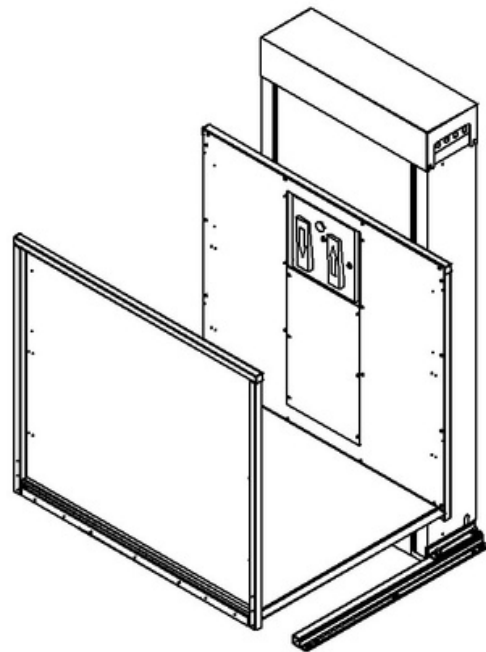
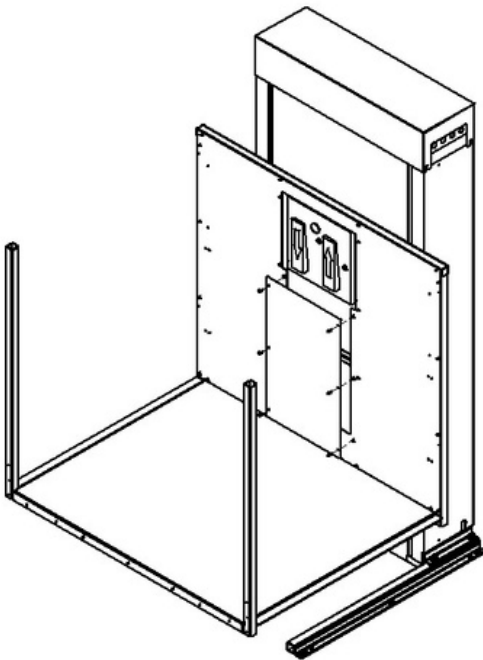
<b>Tools</b>		<b>Components</b>	
<b>Name</b>	<b>#</b>	<b>Name</b>	<b>#</b>
• Screwdriver With 5/32" Hex Bit	1	• Lift Assembly (4.5)	1
• Rivet Gun With 3/16" Head (Included)	1	• 48" Platform Control Wall	1
		• Inspection/Maintenance Panel	1
		• 3/16" – 0.325" Black Blind Rivet	28
		• 10-24 x 1/2" Hex Drive Screw	6
		• 48" Handrail Wall	1

#### Instructions

- 1) Attach the platform control wall to 1 1/2" extension weldment posts and the guide frame using the 3/16" – 0.325" Black Blind Rivets.



- 2) Attach the inspection/maintenance panel to the platform handrail control wall using the 10-24 x 1/2" Hex Drive Screws. Connect the Handrail Wall Opposite the Control Wall using the 3/16" – 0.325" Black Blind Rivets.

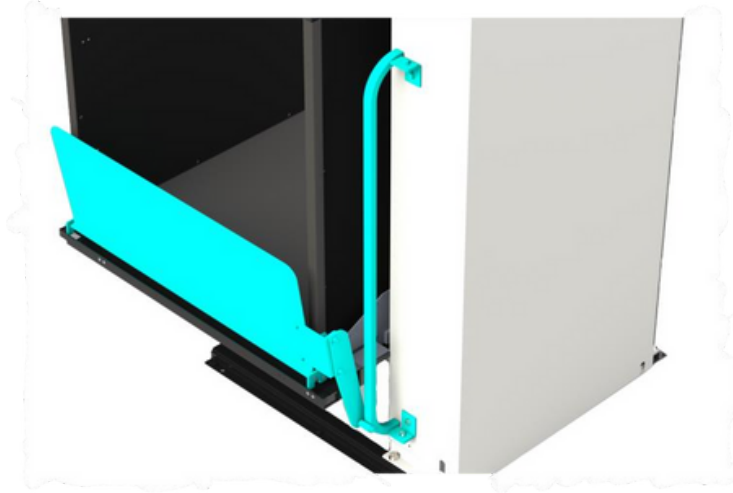


The lift assembly shown for reference is straight through model 36" x 48". The procedure is the same for all straight access configurations.

**Note**

If your model is 90-degree access, please refer to ***"Manual #5 – 90-Degree Access"***.

#### 4.7: Toe Plate

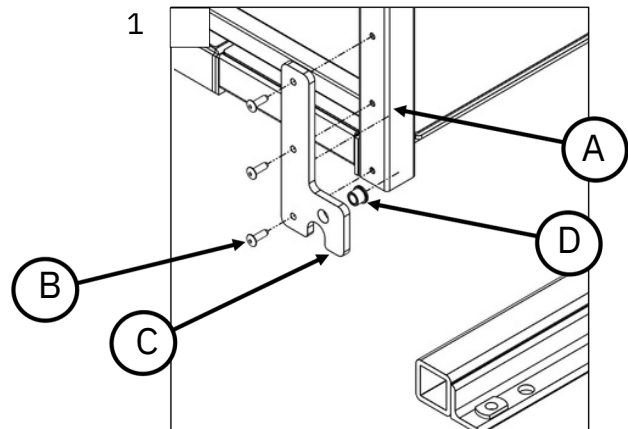


#### Materials

Tools		Components		
Name	#	Name	Label	#
• Rivet Gun With 3/16" Head (included)	1	• Lift Assembly (4.6)	A	1
• 1/2" Wrench	1	• 3/16" – 0.575" Black Blind Rivet	B	6
• 1/2" Socket Wrench	1	• Pivot Plate	C	2
• 7/16" Wrench	1	• Oil-Embedded Bearing	D	2
• 7/16" Socket Wrench	1	• Toe Plate Assembly	E	1
		• Rocker Arm Assembly	F	1
		• 1/4"-20 Hex Head Bolt	G	2
		• 1/4"-20 Nylon Insert Lock Nut	H	2
		• 5/16"-18 Hex Head Bolt	I	2
		• 5/16" Washer	J	2
		• Grab Bar Assembly	K	1

#### Instructions

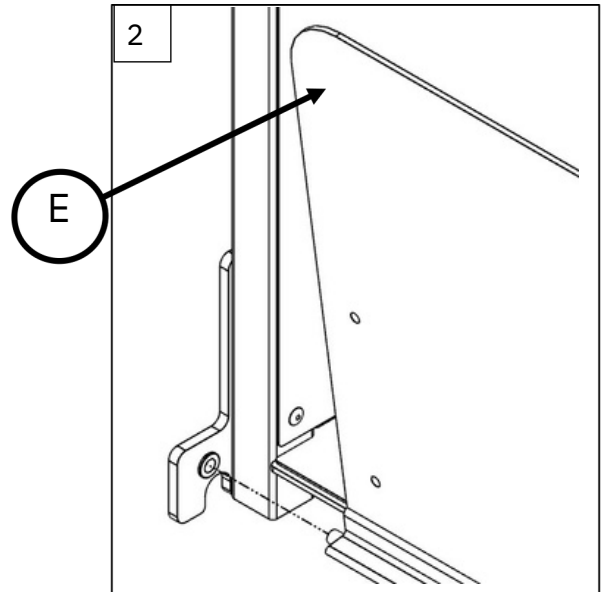
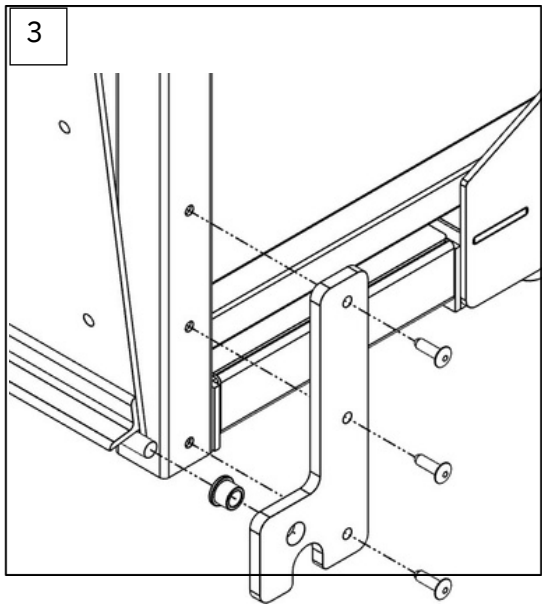
1) Rivet a pivot plate into the vertical tube opposite from the tower using the 3/16" – 0.575" Black Blind Rivets. Insert one of the bearings into the largest pivot plate hole.





## Section 4: Installation

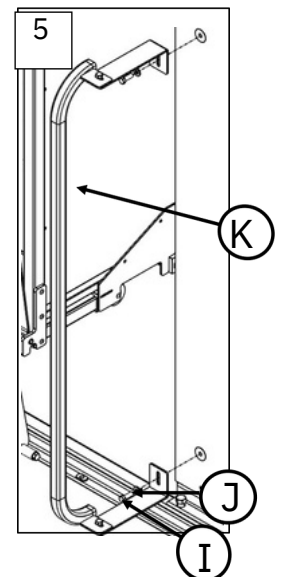
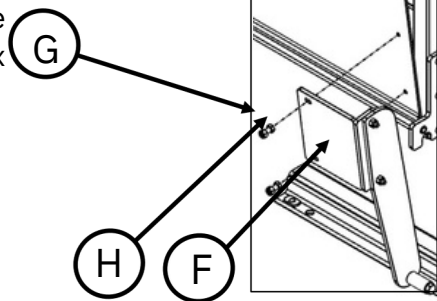
- 2) Insert the rod on one end of the Toe Plate Assembly into the bearing connected to the Pivot Plate. Ensure that the Toe Plate is in the desired orientation.



- 3) Repeat the process in step (1) on the side of the Toe Plate closest to the tower.

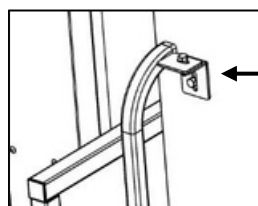
- 4) Connect the Rocker Arm Assembly to the Toe Plate Assembly using the 1/4"-20 Hex Head Bolts and 1/4"-20 Nylon Lock Nuts.

- 5) Connect the Grab Bar Assembly to the Tower using the 5/16"-18 Hex Head Screws and 5/16" Washers.



### Note

The Grab Bar Assembly has two different extensions for 1-1/2" and 7-1/2" platform extensions.



1-1/2" Extension

#### 4.8: Safety Pan



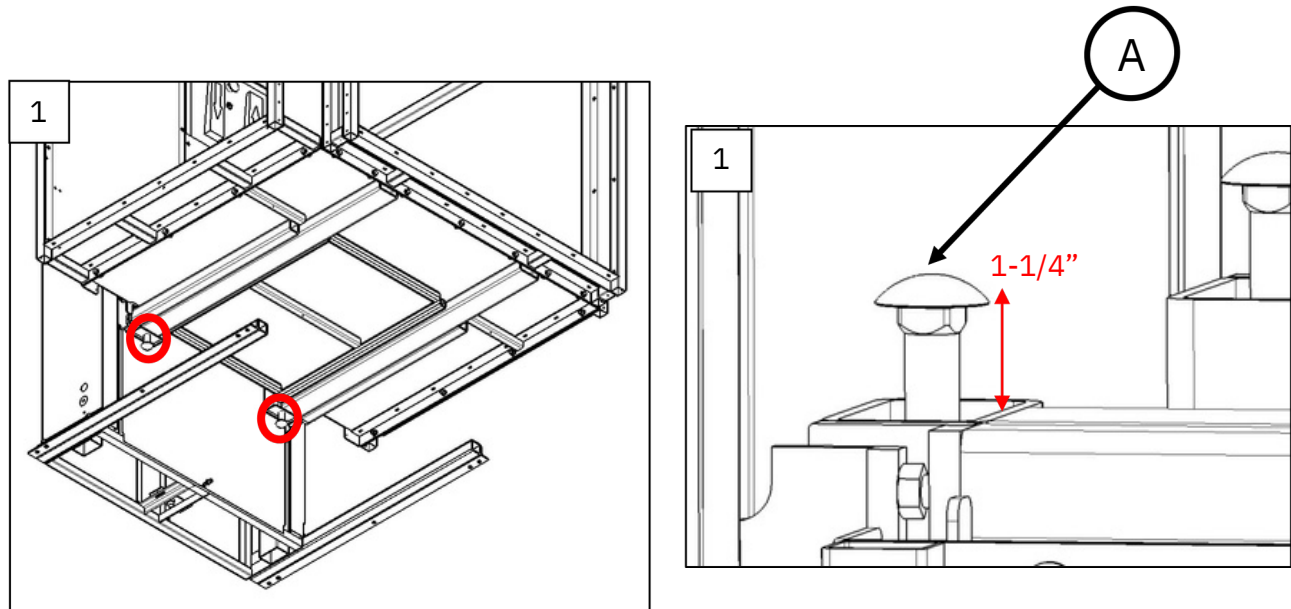
#### **Materials**

Tools		Components	
Name	#	Name	#
• Combination Screwdriver	1	• Lift Assembly	1
• Wire Strippers	1	• Preferred Wire Terminators	1

#### **Instructions**

**Note that if your lift has a toe plate, these steps are to be carried out after installing the toe plate.**

- 1) Double check that the mechanical stops are set to the correct length (See next page for figure).
  - a. The platform's mechanical stops (**A**) are set in the factory at 1 ¼" below the bottom of the platform. They are set at this distance so that they will stop the platform on the ground prior to the safety pan being activated.
  - b. The mechanical stops should only be adjusted to compensate for uneven ground.
  - c. To ensure proper function, test the position of the mechanical stops by lowering and raising the lift from the ground and checking that both stops hit the ground evenly at the same time.



**Note that the platform in the right image is inverted/upside down**

2) Hanging the safety pan:

- a. Starting with the short side of the platform closest to a wall, lift the plastic safety pan up so that one of the straps comes through the large strap holes. If the straps do not hang down straight, you may need to reach through the hole and fish the strap through the hole.
- b. Using the provided #10 x 1/2" screws, attach the end of the strap to the underside of the safety pan. There are 3 holes in the end of the strap and 1 predrilled hole in the safety pan. Use the hole in the strap that was marked with white pen from the factory. The other two holes can be used to adjust the hanging position of the safety pan later if required.
- c. Proceed with hanging the safety pan from the straps, starting with the edges, and finishing with the center. **The safety pan should hang level, about 3" below the floor of the platform.**

Should the safety pan hang unevenly or at a height other than 3" below the platform floor, mount the safety pan using different holes on the strap.

- d. Test that the safety pan will engage the switches by manually lifting its edges upwards on one side at a time. The safety pan will cause a clicking sound from the switches when lifted if it is hung properly. Additionally, run the lift downwards to ensure the safety pan is not triggered without hitting anything. The lift should run without problem if so.

## 4.9: Final Positioning & Leveling

### Materials

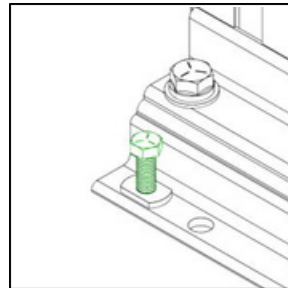
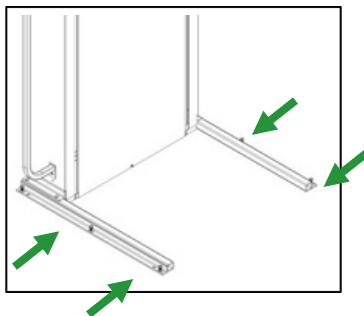
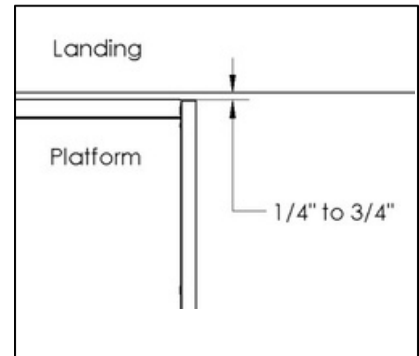
<u>Tools</u> Name	#	<u>Components</u> Name	#
• 3/8" Socket Ratchet	1	• Lift Assembly (4.6)	1
• 9/16" Socket Large	1		
• Flathead	1		
• 6" Extension	1		

### Instructions

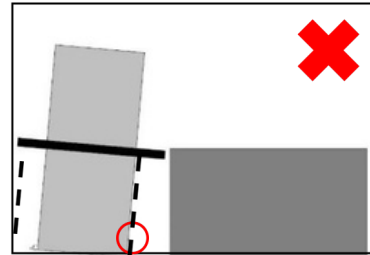
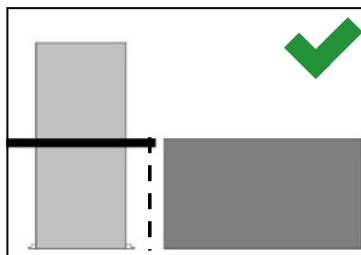
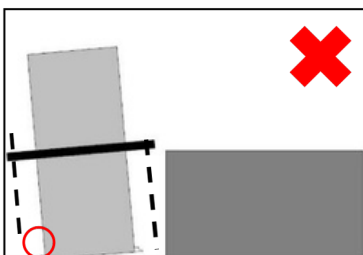
#### Caution!

Use best lifting practises when moving the lift. Not doing so can lead to serious injury.

- 1) Carefully move the lift into its final position. When the lift is close, use the large flathead to fine-tune the position by using it as a lever to nudge the legs. Note that there should be a gap between the platform and the travel wall of 1/4" to 3/4".
- 2) Lower the corner leveling bolts on each leg using the 9/16" socket and 6" extension until the legs **rest only on the bolts, with none of the base touching the ground.**



- 3) Adjust the levelling bolts so that the travel line of the platform is parallel with the travel wall.

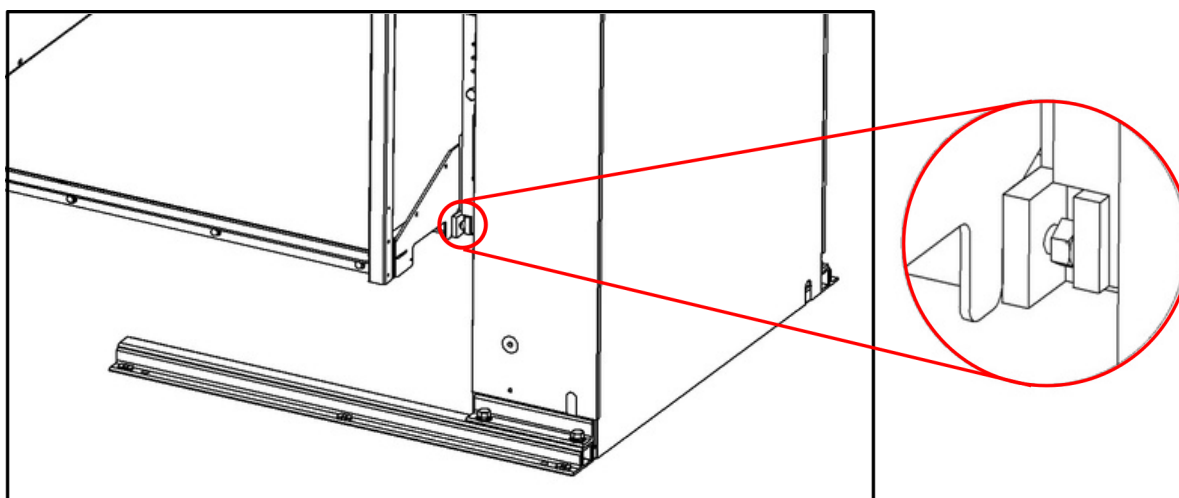


#### 4.10: Platform Tilt

<b>Materials</b>	<b>Tools</b>	<b>#</b>	<b>Components</b>	<b>#</b>
	<b>Name</b>		<b>Name</b>	
• 9/16" Wrench		1	• Lift Assembly (4.7)	1

#### Instructions

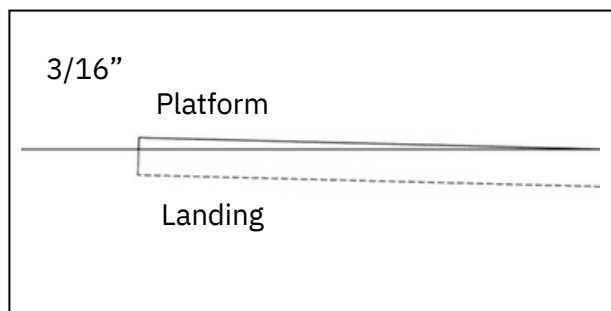
- 1) Locate the platform's tilt bolts. There is one on either side of the tower.



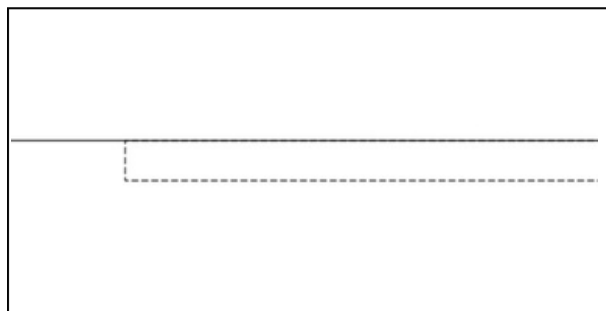
- 2) Equally adjust both tilt bolts until the edge of the platform opposite the tower lifts slightly higher than the top landing (1/8" to 3/16"). This way, when the lift is loaded, it will be level to the landing.

#### Note

Ensure that the tilt bolts are adjusted equally, as unequal tilt bolts will make the platform bounce like a spring.



**Un-Loaded**



**Loaded**

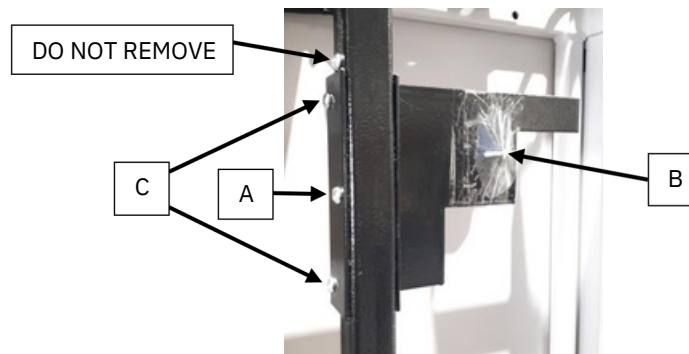
### 4.11: Setting the Upper Limit Bracket

#### Materials

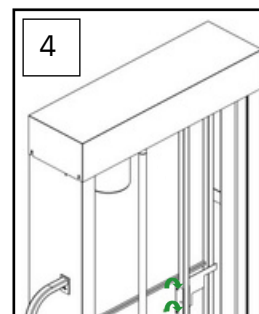
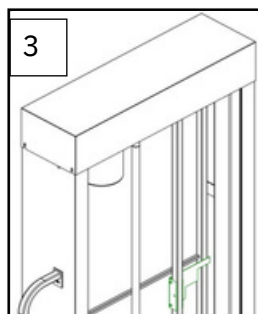
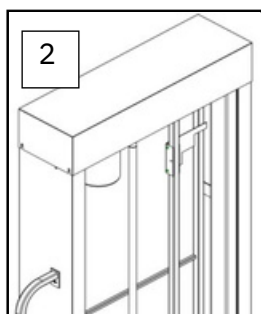
<u>Tools</u>		<u>Components</u>	
Name	#	Name	#
• Tape Measure	1	• Lift Assembly (4.8)	1
• Combination Screwdriver	1		

#### Instructions:

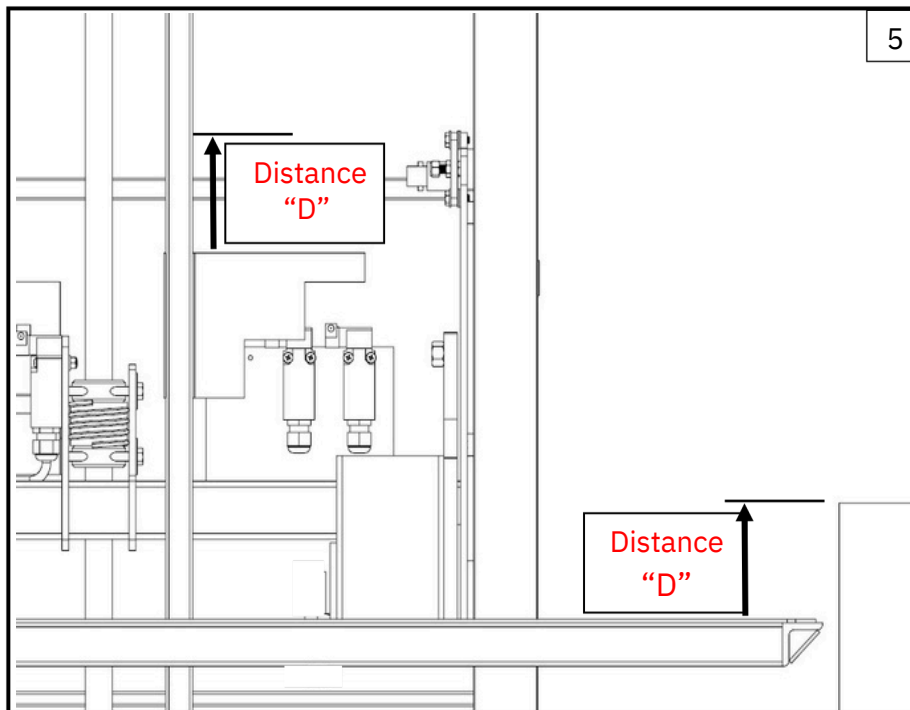
- 1) The bracket is set to the maximum travel and pinned in place at the factory with a self tapping locking screw to prevent movement during shipping. With the platform positioned at the bottom, remove the **existing** self tapping locking screw (A) from the upper limit bracket and discard. The **new** self tapping locking screw (B) is taped to the bracket. Leave the new screw taped in place until adjustment is complete.



- 2) Loosen the two clamping screws (C) on the upper limit bracket. The bracket should now slide freely.
- 3) Slide the bracket down to a position **slightly lower** than required to activate the upper limit switch when the platform is raised to the upper landing (i.e. the lift should stop short of the upper landing when run upwards). Final adjustments will be made later.
- 4) Tighten the two clamping screws on the upper limit bracket so that it does not move, but **do not insert the self tapping locking screw yet.**



- 5) Run the lift upwards with a moderate load (approx. 200lbs) until it stops automatically and measure the vertical distance “D” from the platform to the upper landing (the platform should stop below the upper landing). Translate this measurement to the tube that the upper limit bracket slides on.



- 6) Adjust the upper limit bracket by moving it up distance “D”.
- 7) Run the platform down and back up again to confirm the lift stops level with the upper landing automatically.

**Note**

After the next step, fine adjustment is more difficult, so make sure that you are happy with the position of the bracket at this point.

- 8) Use the **new** self tapping locking screw that is taped the bracket to pin the upper limit bracket securely in place.

## 4.12: Anchoring

### Materials

<u>Tools</u>		#	<u>Components</u>		#
Name			Name		
•	Concrete Drill & 3/8" Bit	1	•	Lift Assembly (4.9)	1
•	Claw Hammer	1	•	Anchors	4
•	9/16" Wrench	1	•	Front Cover	1
•	Phillips Head Screwdriver	1	•	Front Cover Screws	3

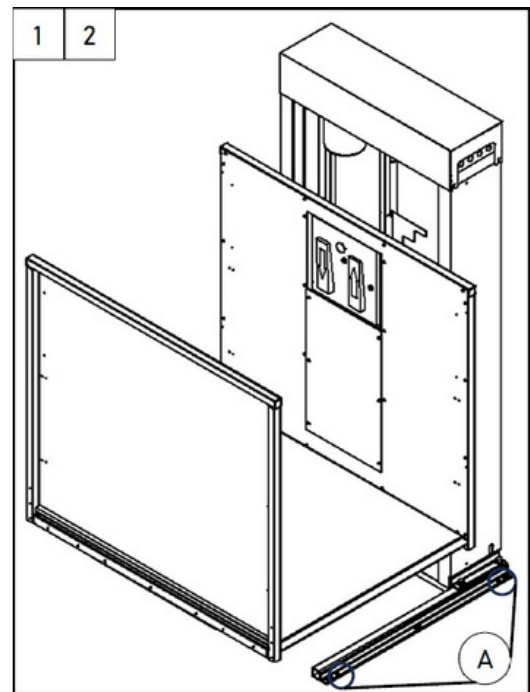
### Instructions

#### Note

Once the base legs are anchored into place, it is very difficult to change the lift's location, so it is important that you are happy with its position before continuing the installation.

Provided with your lift are four **concrete** anchors. If you are anchoring the lift into another material, please use anchors specifically for that material.

- 1) Drill **four** holes using the holes - 2 in each base leg (**A**) - up to the mark you put on the bit.
- 2) Insert the anchors into the holes threaded side-up, and hammer in. Tighten the nut on the anchors with the 9/16" wrench to set them in place.



#### Note

The front cover of the lift will not be reinstalled until after testing has been carried out (**5.6: Reinstalling the Front Cover**).

## 4.13: Installing Additional Components

If you ordered your lift with an additional component that is not referred to in this manual, proceed to the additional manuals for such add on now (ex. Call Station, UPS, etc.)

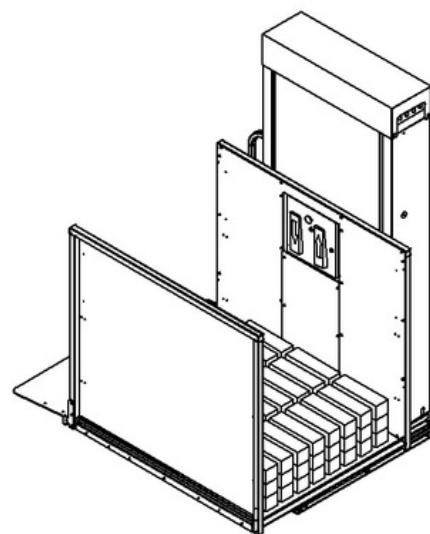


### 5.1: Full Load Testing

Every lift should be weight tested once the installation for mechanical and electrical items is complete to ensure that the lift is operating correctly. All lifts are tested at the factory, but they are then disassembled and shipped to sites across North America.

Weight testing is comprised of 2 elements:

1. Maximum Lifting capacity – apply full load (750 lb) to the lift in the center of the platform, the lift should travel to the upper landing without hesitation and stop within 3/8" of the upper landing - repeat two or three times.
2. Overload braking - North American Safety code requires that a lift is capable of braking and holding 125% of the rated load. To test this, start with the lift at the upper landing and apply 125% of rated working load (950 lb). Lower the lift and stop several times to ensure that the lift will brake without unintentional movement. **The lift is not required to lift 125% (950 lb) of working load.**



### 5.2: Upper Limit and Upper Final Limit Switch

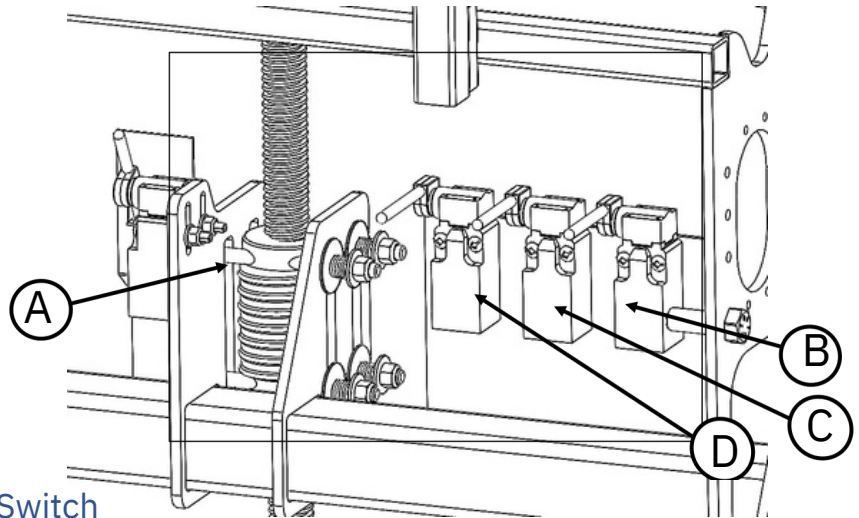
Each lift is equipped with an “upper limit switch” and an “upper **final** limit” switch.

The upper limit switch indicates to the control circuitry that the lift has reached the upper landing and stops the lift. This is set during the installation process.

The upper **final** limit switch is a safety feature which indicates to the control circuitry that the lift has gone **higher** than the upper limit switch. It should not engage under normal operation and indicates that there is a problem with the lift and stops the lift from moving either up *or* down.

To test the upper final limit switch, raise the lift to the upper landing (where the upper limit switch engages, and the lift automatically stops). Using the manual crank, continue to raise the lift above the upper landing (approximately 2”) until the upper final limit switch engages. Attempt to run the lift up **and** down. **The lift should not run in either direction.** When the test is complete, use the manual crank to lower the lift until the upper final limit switch disengages and the lift can once again be lowered and raised.

- A. Lower Limit/ Nut Failure Switch
- B. Upper Final Limit Switch
- C. Upper Limit Switch
- D. Bypass Switch



### 5.3: Lower Limit / Nut Failure Switch

Verify that as the mechanical stops contact the support base, the limit switch is engaged with the red safety bracket and that this cuts power to the motor.

Also verify that the drive screw stops spinning prior to the drive nut bolts hitting the end of the slots in the guide frame.

### 5.4: Bypass Switch

The bypass switch is intended to bypass the upper/lower landing gate and car gate interlocks as the lift approaches the landings. Verify that the landing and car gates are unlocked as the lift nears the upper/lower landings but locked during travel.

### 5.5: Additional Testing Notes

#### **Toe Plate**

If your lift has a toe plate ramp you should verify that the ramp deploys properly and makes full contact with the lower landing. The action should be smooth and consistent without binding or jerking of the motion.

When the toeplate ramp is in the up position both the ramp and the linkage mechanism should resist up to 125lb of force without deforming.

#### **Emergency Stop**

Verify that is the E-stop button is pressed then the lift will not operate.

#### **Key Switches**

Verify that when a key switch at each landing or on board the lift is turned to the off position the corresponding buttons and control paddles do not operate the lift.

#### **Top Cover Switch**

Verify that when the top cover is removed that the lift will not operate.

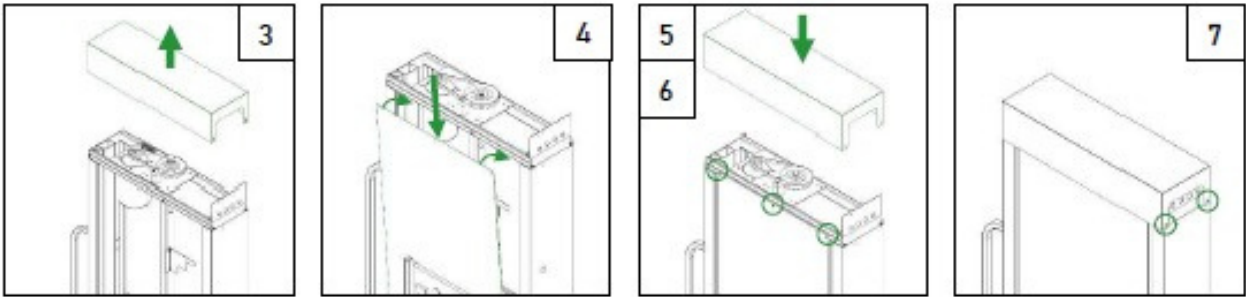
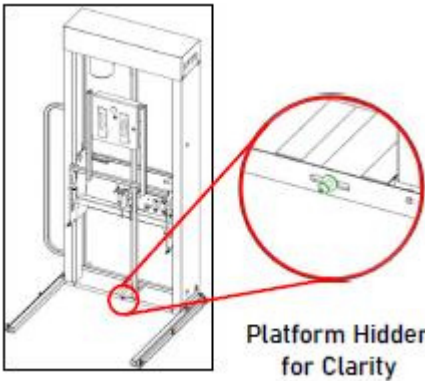
Materials		Tools		Components	
Name		#		Name	
• Phillips Head Screwdriver		1		• Front Cover	1
				• Front Cover Screws	3

### Instructions

- 1) Remove the top cover.
- 2) Slide the front cover back into place.
- 3) Once the tab is in the slot, line up the three screw holes and snap-together pads and snap into place.
- 4) Reinstall the three front cover screws.
- 5) Slide the top cover on again, making sure that the smaller plastic washer is on the inside of the cover, and tighten the four top cover screws. Be careful to not over-tighten these.

### Note

There is a small alignment tab in the center at the bottom of the panel that will help seat the panel.



Problem	Possible Solution
Lift runs up but not down	<ul style="list-style-type: none"> <li>• Check lower limit switch is resting inside the red safety bracket, and not activated.</li> <li>• <b>If you have a safety pan</b>, check that it is free floating and that the switches in each corner and the center are not tripped.</li> <li>• <b>Check that the main drive nut has not failed, and you are riding on the backup drive nut. If this is the case cease use immediately and replace both main and backup drive nuts</b></li> </ul>
Lift will not run up or down	<ul style="list-style-type: none"> <li>• Check that the lift is plugged in to the outlet and test and that there is power to the outlet using another plugin device (lamp or small electrical appliance).</li> <li>• Ensure that the power key is turned clockwise to the horizontal “on” position</li> <li>• Check that the emergency stop button is pulled out by pushing and pulling the button to test that it is operating properly. It should snap when pushed in and pulled out.</li> <li>• Check that the top cover switch is properly depressed when the top cover is on.</li> <li>• <b>If you have any interlocks</b>, check that they are in the “locked” position, see “Landing Devices” supplementary manual.</li> </ul>
Lift runs normally, but interlocks will not unlock	<ul style="list-style-type: none"> <li>• Check that floor limit switches are activating. Note that the lower limit switch only activates when the load is removed from the drive.</li> </ul>
Lift won’t raise full capacity and is vibrating and/or squealing when going down	<ul style="list-style-type: none"> <li>• <b>If you have a UPS</b>, check that the UPS is turned on. Clean the guide rail surfaces using Simple Green cleaner</li> <li>• Clean and grease screw using Mobilith SHC 460PM</li> </ul>

### Monthly Inspection (by owner or technician)

1. Inspect all gates/doors and ensure they are locked when the lift is not at the landing. Also check that the lift will not run unless the gates / doors are fully closed and locked once the platform is more than 2" (50mm) from the landing.
2. Inspect under pan safety device for correct operation
3. Verify E-Stop button is working
4. Inspect the toe plate and ensure it is operating smoothly and moving into the up position when the lift leaves the lower landing. Also test that it will resist load being applied to it (up to 125lb).

### Annual Maintenance (by technician):

The following is a non-exhaustive list items of that should be checked as part of an annual maintenance in order to maintain safe operation of your lift. All previous monthly items + the following:

#### 1. Inspect the Drive Nuts

Compare the amount of movement in the drive nuts from side to side and up and down without rotating the drive nut. If they feel overly sloppy or as though threads may be missing, then they need to be replaced.

#### **DANGER**

When replacing drive nuts, **BOTH** drive nuts must be replaced at the same time. Replacing only one drive nut may result in serious injury or death. Never replace the main drive nut without replacing the backup drive nut as well.

#### 2. Inspect the Drive Screw

Inspect the drive screw for any irregularities, sharp edges or foreign objects and dirt caught in the threads. Be sure no damage exists to the drive screw and that it is entirely clean of debris. Replace screw if damaged, and if the screw is corroded, replace it as well as the drive nuts.

#### 3. Clean and Re-Lubricate the Drive Screw

In order to lubricate the drive screw you must remove the main front panel and a carriage guide frame panel. Use a clean rag to wipe all the grease off the screw. Liberally apply Mobilith SHC-460PM grease on the drive screw. Additionally, fill the drive nut sleeve pocket with grease using a grease gun needle adapter.

#### 4. Inspect the Drive Belt

Remove the top cover and inspect the drive belt for wear. A small amount of black rubber bits below the belt is normal. If there is any significant sign of wear to the belt, replace it.

**5. Inspect for Surface Damage and Complete Touch Ups to Coatings** Wear and tear may occur on powder coated steel surfaces resulting in scratches. Small points of damage can be wire brushed and touched up with the small touch up paint containers that come with each lift that ships out. This will extend the life and cosmetic look of you lift and is particularly important in any environments that are coastal or potentially corrosive.

### **6. Inspect Cables**

Tears in insulation should be patched where possible and if bare wire is present new replacement cables should be purchased and installed by a qualified technician. Consult your Freedom Lift Systems dealer for spare parts should they be required.

### **7. Inspect for Correct Functioning of Toe Plate – If Applicable**

The toe plate actuation mechanism may be critical to access and both the mechanism and the toe plate itself should be examined. If there are any concerns adjust the mechanism or repair/ replace it.

### **8. Re-Check Platform Alignment and Clearances**

Buildings and construction “settles” over time and adjustments may be required to ensure good clearances and alignment of the lift. Consult the appropriate sections of the installation manual or Freedom Lift Systems technical support team for guidance.

### **9. Carry Out the Testing Detailed in the Section 5 Above**