

Double- and Triple-Wide Parking Lifts

Installation and Operation Manual

Manual Revision A — October 2017 — Manual P/N 5900056

Models:

- PL-6KDT
- PL-6KDTX
- PL-6KT



Model PL-6KDT shown.

Designed and engineered by BendPak Inc. in Southern California, USA. Made in China.



Read the entire contents of this manual before using this product. Failure to follow the instructions and safety precautions in this manual can result in serious injury or death. Make sure all other operators also read this manual. Keep the manual near the product for future reference. By proceeding with setup and operation, you agree that you fully understand the contents of this manual.

Manual. Double- and Triple-Wide Parking Lifts, *Installation and Operation Manual*, Manual P/N 5900056, Manual Revision A, Released October 2017.

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Limitations. Every effort has been made to ensure complete and accurate instructions are included in this manual. However, product updates, revisions, and/or changes may have occurred since this manual was published. BendPak reserves the right to change any information in this manual without incurring any obligation for equipment previously or subsequently sold. BendPak is not responsible for typographical errors in this manual.

Warranty. The BendPak warranty is more than a commitment to you: it is also a commitment to the value of your new product. Contact your nearest BendPak dealer or visit www.bendpak.com/support/warranty for full warranty details. Go to bendpak.com/support/register-your-product/ and fill out the online form to register your product (be sure to click **Submit**).

Safety. Your new product was designed and manufactured with safety in mind. However, your safety also depends on proper training and thoughtful operation. Do not install, operate, maintain, or repair the unit without reading and understanding this manual and the labels on the unit.

Owner Responsibility. In order to maintain your product properly and to ensure everyone's safety, it is the responsibility of the product owner to read and follow these instructions:

- Follow all installation, operation, and maintenance instructions.
- Make sure product installation conforms to all applicable local, state, and federal codes, rules, and regulations, such as state and federal OSHA regulations and electrical codes.
- Read and follow all safety instructions. Keep them readily available for operators.
- Make sure all operators are properly trained, know how to safely operate the unit, and are properly supervised.
- Do not operate the product until you are certain that all parts are in place and operating correctly.
- Carefully inspect the product on a regular basis and perform all maintenance as required.
- Service and maintain the unit only with approved replacement parts.
- Keep instructions permanently with the product and make sure all labels are clean and visible.

Unit Information. Enter the Model Number, Serial Number, and the Date of Manufacture from the label on your unit. This information is required for part or warranty issues.

Model: _____

Serial: _____

Date of Manufacture: _____



BP BendPak		Santa Paula, CA USA www.bendpak.com	
MODEL NUMBER			
DESCRIPTION			
LIFT CAPACITY		DATE OF MFG.	
VOLTAGE		SERIAL NUMBER	
<input type="checkbox"/> 110-240V, 50-60 Hz, 1 Ph			
<input type="checkbox"/> 208-240V, 50-60 Hz, 1 Ph			
<input type="checkbox"/> 380-415V, 50-60 Hz, 3 Ph			
<input type="checkbox"/> 208-440V, 50-60 Hz, 3 Ph			
		UPC	
 DANGER! Disconnect Power Before Servicing			
WARRANTY VOID IF DATA PLATE IS REMOVED PN 5905951			
			

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Introduction

This manual describes the PL-6K Series of parking lifts, which let you park double or triple the number of vehicles in a parking area. Each platform supports up to 6,000 lbs (2,722 kg).


There are three models in the PL-6K Series:

- **PL-6KDT**: Parking lift with two independent Platforms
- **PL-6KDTX**: *extra wide* parking lift with two independent Platforms
- **PL-6KT**: Parking lift with three independent Platforms

All three models are similar, so if no distinction is made in this manual, then the information applies to all three models. If information applies to only one model, that distinction is mentioned in text.

More information about the full line of BendPak products can be found at bendpak.com.

This manual is mandatory reading for all users of PL-6K Series lifts, including anyone who installs, uses, maintains, repairs, or wants to know more about them.

 **DANGER** Be extremely careful when installing, operating, maintaining, or repairing this equipment; failure to do so could result in property damage, product damage, injury, or (in very rare cases) death. Make sure only authorized personnel operate this equipment. All repairs must be performed by an authorized technician. Do not make modifications to the unit; this voids the warranty and increases the chances of injury or property damage. Make sure to read and follow the instructions on the labels on the unit.

Keep this manual on or near the equipment so that anyone who uses or services it can read it.

If you are having issues, refer to the **Troubleshooting** section of this manual for assistance.

Technical support and service is available from your dealer, on the Web at bendpak.com/support, by email at techsupport@bendpak.com, or by phone at **(800) 253-2363**, extension 196.

You may also contact BendPak for parts replacement information (please have the model and serial number of your unit available) at **(800) 253-2363**, extension 191.

Shipping Information

Your equipment was carefully checked before shipping. Nevertheless, you should thoroughly inspect the shipment **before** you sign to acknowledge that you received it.

When you sign a bill of lading, it tells the carrier that the items on the invoice were received in good condition. **To protect yourself, do not sign until after you have inspected the shipment.** If any of the items listed on the bill of lading are missing or are damaged, do not accept the shipment until the carrier makes a notation on the bill of lading that lists the missing and/or damaged goods.

If you discover missing or damaged goods **after** you receive the shipment and have signed the bill of lading, notify the carrier at once and request the carrier to make an inspection. If the carrier will not make an inspection, prepare a signed statement to the effect that you have notified the carrier (on a specific date) and that the carrier has failed to comply with your request.

It is difficult to collect for loss or damage after you have given the carrier a signed bill of lading. If this happens to you, file a claim with the carrier promptly. Support your claim with copies of the bill of lading, freight bill, invoice, and photographs, if available. Our willingness to assist in helping you process your claim does not make us responsible for collection of claims or replacement of lost or damaged materials.

Safety Considerations

Read this manual carefully before installing or using your new product. Do not install or operate the product until you are familiar with all operating instructions and warnings. Do not allow anyone else to operate it until they are familiar with all operating instructions and warnings. Keep this manual on or near the product for future reference.

Read and follow the warnings and instructions on the labels on the product. Contact BendPak at **(800) 253-2363** or techsupport@bendpak.com if you need replacement labels or a replacement manual.

Safety Information

The following safety information applies to all three models in the PL-6K Series:


- The product is a parking lift. Use it only for its intended purpose. If you are looking for a service lift, visit the [Bendpak website](http://Bendpak.com).
- The product must be operated by authorized, trained persons only. Keep children and untrained personnel away from the product.
- When the product is in use, keep people and especially body parts away from it.
- Do not make any modifications to the product; this voids the warranty and increases the chances of injury or property damage.
- Make sure all operators read and understand this *Installation and Operation Manual*. Keep the manual near the lift at all times.


-
- Make a visual inspection of the product before using it. Check for damaged, worn, or missing parts. Do not use the product if you find any of these issues. Instead, contact an authorized repair facility, your dealer, or BendPak at **(800) 253-2363** or techsupport@bendpak.com.
 - BendPak recommends making a **thorough** inspection of the product at least once a year. Replace any damaged or severely worn parts, decals, or warning labels.

Symbols

Following are the symbols used in this manual:

 **DANGER** Calls attention to an immediate hazard that **will** result in death or severe injury.

 **WARNING** Calls attention to a hazard or unsafe practice that **could** result in death or severe personal injury.

 **CAUTION** Calls attention to a hazard or unsafe practice that could result in minor personal injury, product damage, or property damage.



Tip

Calls attention to information that can help you use your product better.

Liability Information

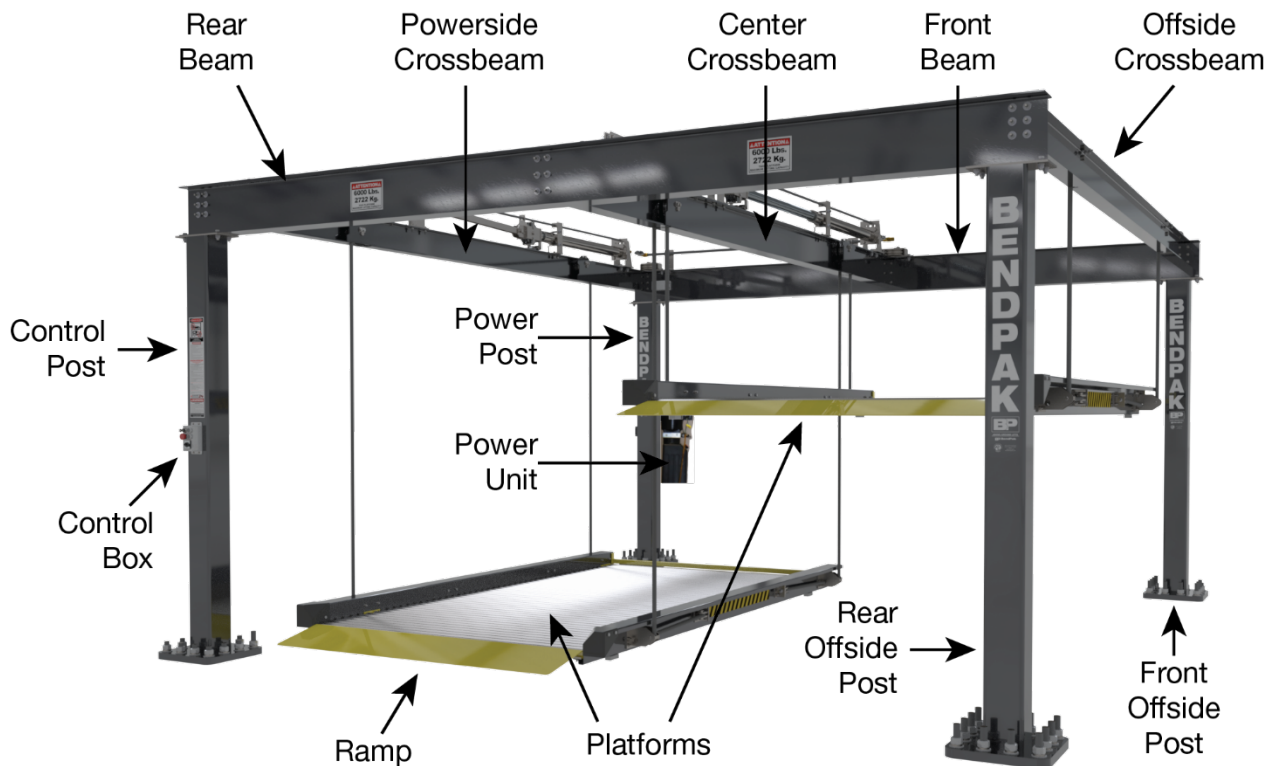
BendPak Inc. assumes **no** liability for damages resulting from:

- Use of the equipment for purposes other than those described in this manual.
- Modifications to the equipment without prior, written permission from BendPak.
- Damage to the equipment from external influences.
- Incorrect operation of the equipment.

Components

The components of your lift include:

- **Control Box.** Houses the controls that raise and lower Platforms.
- **Control Post.** The post on which the Control Box is mounted.
- **Power Unit.** Provides hydraulic power to the Hydraulic Cylinders that raise and lower Platforms.
- **Power Post.** The Post on which the Power Unit is mounted.
- **Ramps.** One for each Platform. Use them to drive onto and off of Platforms.
- **Platforms.** The metal surface that holds raised vehicles.
- **Front and Rear Beams.** Part of the structure of the lift. The Front Beam is on the opposite side from the ramps. The Rear Beam is above the ramps.
- **Crossbeams.** Also part of the structure of the lift. The Powerside Crossbeam and the Center Crossbeam(s) both support a Hydraulic Cylinder and Safety Lock on top. The Offside Crossbeam is part of the structure of the lift.
- **Offside Posts.** All four posts are part of the structure of the lift. The Control Post and the Power Post have special functions, mentioned above; the Offside Posts are part of the structure.



Note: Model PL-6KDT shown; the PL-6KDTX is wider. The PL-6KT has a third Platform and a second Center Crossbeam.

Frequently Asked Questions

Question: What kinds of vehicles can I park on my PL-6K Series lift?

Answer: Cars, light trucks, and SUVs; up to 6,000 lbs (2,722 kg) each.

Q: How long will it take to raise or lower my vehicle?

A: About 30 seconds.

Q: Does the lift have to be anchored in place?

A: Yes. The posts must be anchored.

Q: Can I install my lift outside?

A: Parking lifts are not intended for outdoor use. However, outdoor installations can be accommodated in certain regions **if** optional moisture preventative devices are ordered and installed. Go to bendpak.com/support or email techsupport@bendpak.com for additional information.

Q: Can I use my lift to store boxes of stuff instead of a vehicle?

A: No. This is not the intended use of the lift; you should not use it this way.

Q: How high does my garage ceiling have to be to park my vehicles?

A: It depends on the height of the vehicles you are putting on the Platforms. If you are parking low-slung vehicles, then your ceiling does not have to be as high as it would need to be if you are parking taller vehicles. Refer to [Will My Car Fit?](#) for additional information.

Q: Does the Control Box have to be on the Control Post?

A: Yes. That location gives the operator a clear view of the Platforms as they are raised and lowered.

Q: Does it matter if I drive my vehicles in front first or back them in?

A: No. Your parking lift works great either way.

Q: Will the 'cables' really hold my vehicles?

A: Yes. PL-6K Series lifts use 3/8 inch, aircraft-quality **wire rope** that runs through oversized sheaves, reducing friction on them and extending their life with minimal maintenance.

Q: How long can I leave a vehicle on a raised Platform?

A: As long as you want. The locking system is based on gravity and intelligent engineering. Once the Safety Lock is engaged, gravity holds it in position, so a loss of power does not impact it. Your vehicle is going to stay exactly where you left it, for as long as you want. Remember to always leave your lift either on the ground or on the Safety Lock.

Q: How many Safety Lock positions does my lift have?

A: One. Your lift can either be on the ground or on the Safety Lock. Do not leave your lift any other way.

Will My Car Fit?

Your parking lift accommodates a wide variety of cars, light trucks, and SUVs. This section describes how to safely park your vehicles on a Platform.

Width

Considerations for vehicle width include:

- **Platform width.** The usable width of the Platform is 86 inches (7.1 feet, 2184 mm); your tires cannot be wider than this. ***All four tires must be fully on the Platform***; they cannot be on the side structure or on the Ramp.
- **Mirrors.** Mirrors and other accessories may mean that some parts of a vehicle are much wider than the rest of the vehicle. Parking lifts are designed to have lots of open space, but if you are parking two vehicles next to each other that both have wide mirrors or other accessories, make sure they do not hit each other.
- **Car doors.** Opening car doors makes the vehicle wider while they are open. Generally you want to avoid opening the doors of multiple cars parked next to each other at the same time. You cannot open a car door while the vehicle is raised, so this is not an issue for raised vehicles.

Length

Considerations for vehicle length include:

- **Platform length.** The usable length of the Platform is 154.6 inches (12.9 feet, 3927 mm); your wheelbase cannot be longer than this. ***All four tires must be fully on the Platform***; they cannot be on the Ramp or the Tire Stop.
- **Overhang.** If a vehicle's tires are fully on the Platform, then the parts of the vehicle hanging over the front Tire Stop or the Ramp are not a concern, as long as they do not hit anything.

Height

Considerations for vehicle height include:

- **Ceiling height.** The height of your ceiling determines how much space you can allocate to the two vehicles. If you want to park a tall vehicle on a Platform and under the Platform, your ceiling is going to have to be higher than if you want to park two low-slung vehicles.
- **Formula.** There's a formula for figuring out how much height you need, based on the vehicles you want to park.

Height of vehicle on Platform + 9.5 inches + height of Safety Lock

Add these together; your garage height needs to be higher than the sum of these values.



Tip

To find the “height of Safety Lock”, raise a Platform and lock it on its Safety Lock position, then measure from the ground to the bottom of the raised Platform. Note that the maximum rise height listed in **Specifications** is how high the mechanism can go before stopping; the Safety Lock height is not the same as maximum rise.

Safety Lock Positions

Each PL-6K Series lift Platform has one Safety Lock position.

During installation, you can set the height of that one Safety Lock position to either the High or the Low setting, on a per-platform basis. The height setting of one Platform does not impact the height setting of the other Platform(s).

The two settings are:

- **High setting:** Moves the Platform higher, leaving **more room under** the Platform (but less room above the Platform) when it is on the Safety Lock. The High setting is generally the best choice for parking higher-profile vehicles under the Platform; SUVs, large trucks, or other high-profile vehicles, for example.
- **Low setting:** Leaves **less room under** the Platform (but more room above the Platform) when it is on the Safety Lock. The Low setting is generally the best choice for parking lower-profile vehicles under the Platform; passenger vehicles or small trucks, for example.

The High or Low setting is set during the installation process, so you need to decide which one you want no later than the installation of the crossbeams.

Important: Installers, you need to have the lift owner make this decision no later than the installation of the crossbeams.

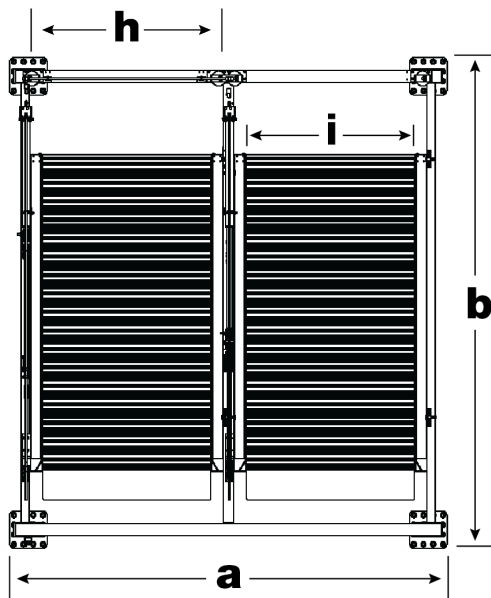
The method for setting a Platform to the High or Low setting is found in **Prepare the Center Crossbeam(s)**.



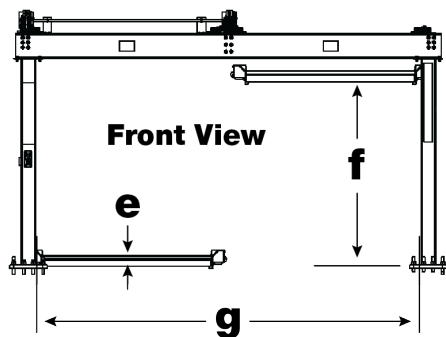
Tip

Once your Platforms are installed, raise each one and leave it on its Safety Lock position. Measure from the ground to the underside of the Platform. The vehicles you park under the Platform must fit into this amount of space.

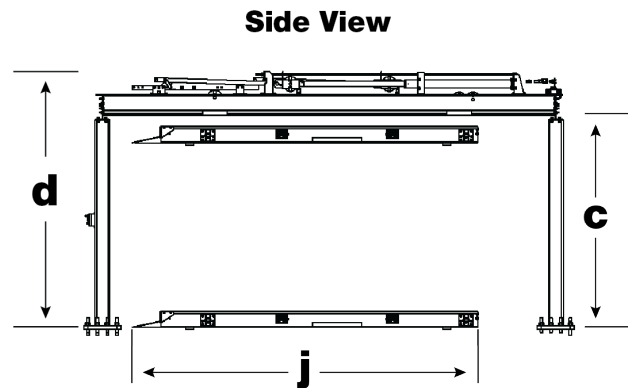
Specifications



Top View

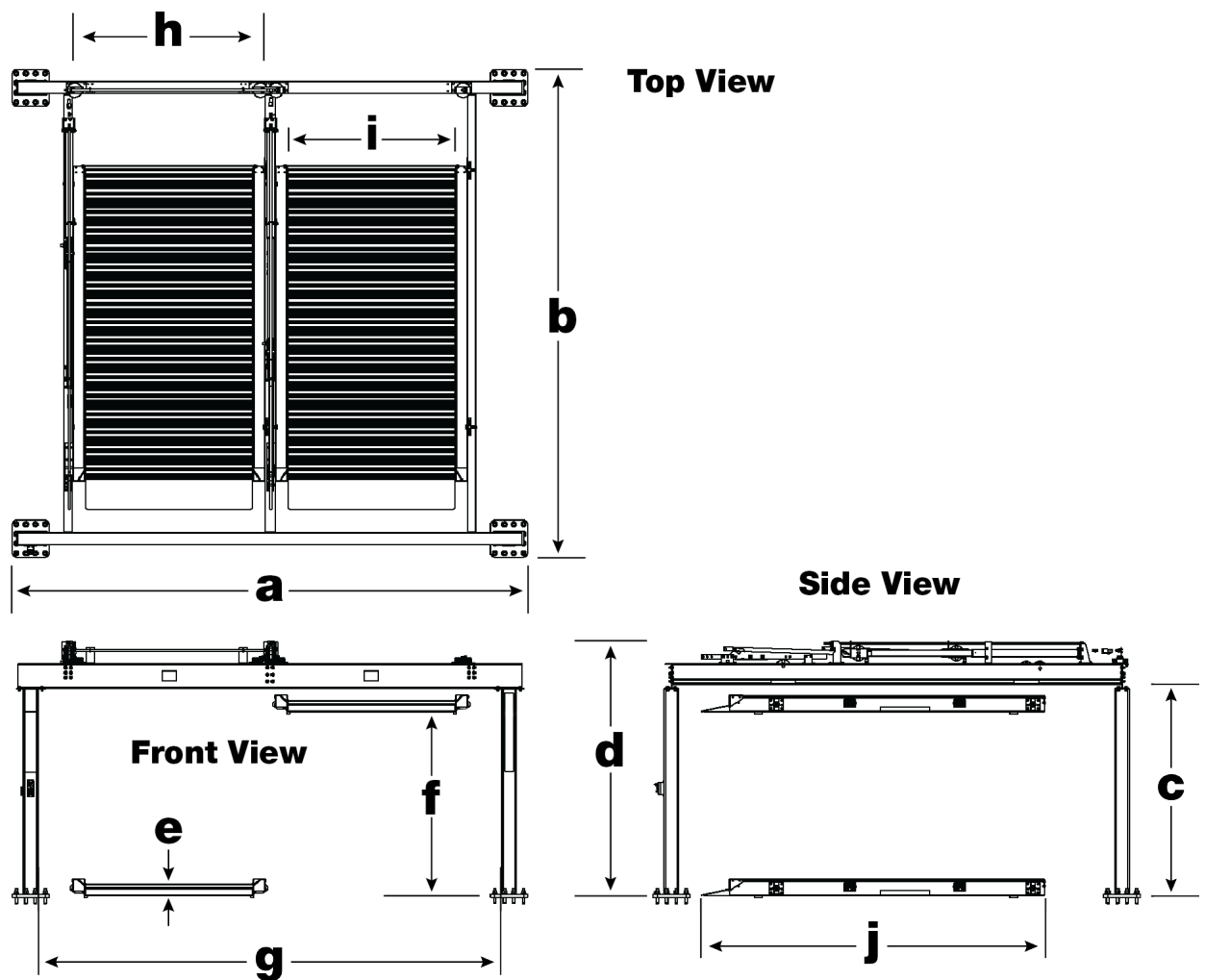


Front View

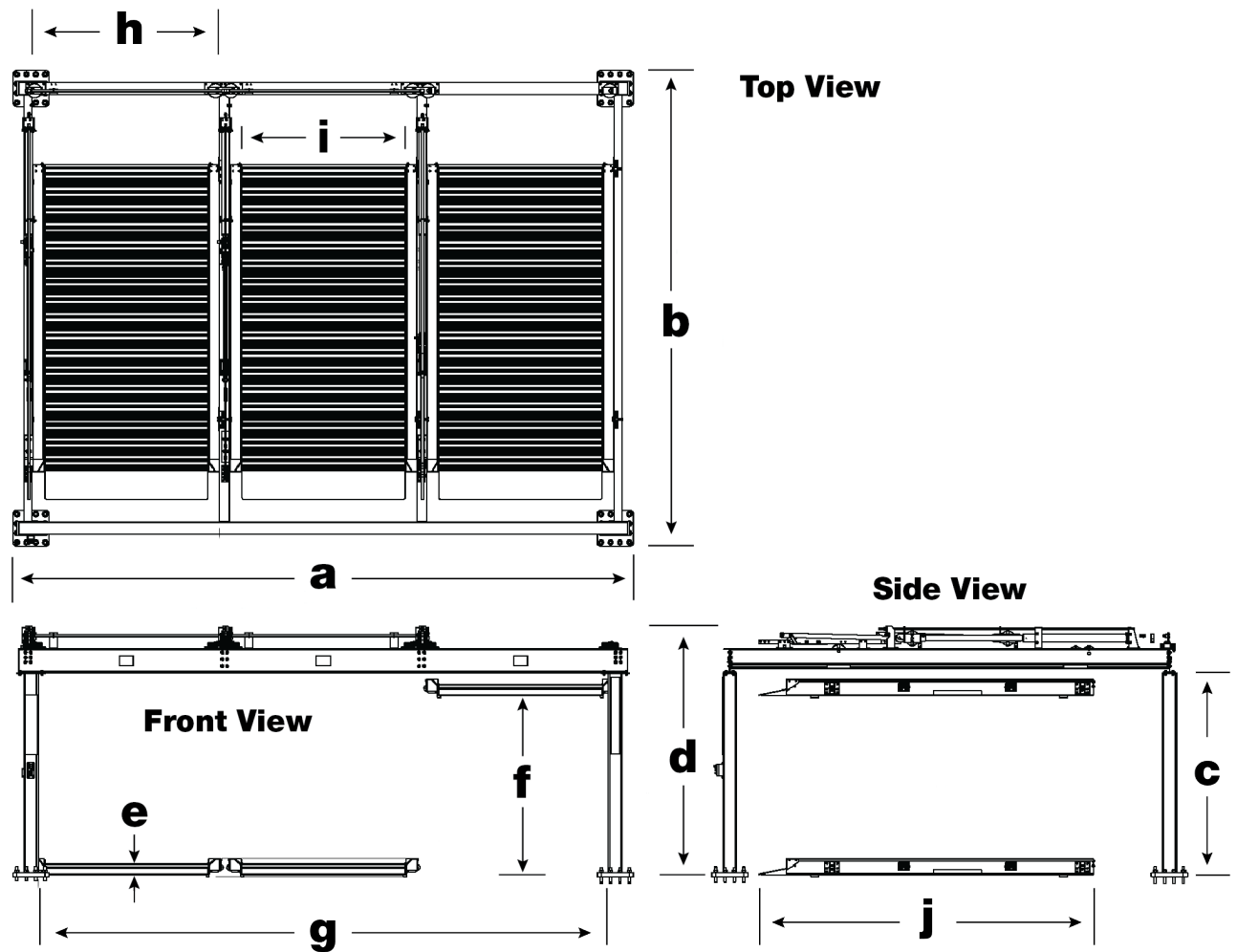


Side View

Model	PL-6KDT
Platforms	2 Platforms
Lifting capacity per Platform	6,000 lbs / 2,722 kg
a Total width	210.7" (17.5 feet) / 5,352 mm
b Total depth	236.5" (19.7 feet) / 6,008 mm
c Post height	103.3" (8.6 feet) / 2,625 mm
d Total height	123.6" (10.3 feet) / 3,140 mm
e Minimum runway height	4.5" / 115 mm
f Maximum rise	89" (7.4 feet) / 2,261 mm
g Width between posts	185.6" (15.4 feet) / 4,715 mm
h Platform width	93.5" (7.75 feet) / 2,374 mm
i Usable Platform width	86" (7.1 feet) / 2,184 mm
j Platform length (with ramp)	166.6" (13.9 feet) / 4,232 mm
Lifting time	30 seconds
Motor	220 VAC, 50/60 Hz, 1 Ph



Model	PL-6KDTX
Platforms	2 Platforms
Lifting capacity per Platform	6,000 lbs / 2,722 kg
a Total width	250" (20.8 feet) / 6,350 mm
b Total depth	236.5" (19.7 feet) / 6,008 mm
c Post height	103.3" (8.6 feet) / 2,625 mm
d Total height	123.6" (10.3 feet) / 3,140 mm
e Minimum runway height	4.5" / 115 mm
f Maximum rise	89" (7.4 feet) / 2,261 mm
g Width between posts	225" (18.7 feet) / 5,713 mm
h Platform width	93.5" (7.75 feet) / 2,374 mm
i Usable Platform width	86" (7.1 feet) / 2,184 mm
j Platform length (with ramp)	166.6" (13.9 feet) / 4,232 mm
Lifting time	30 seconds
Motor	220 VAC, 50/60 Hz, 1 Ph

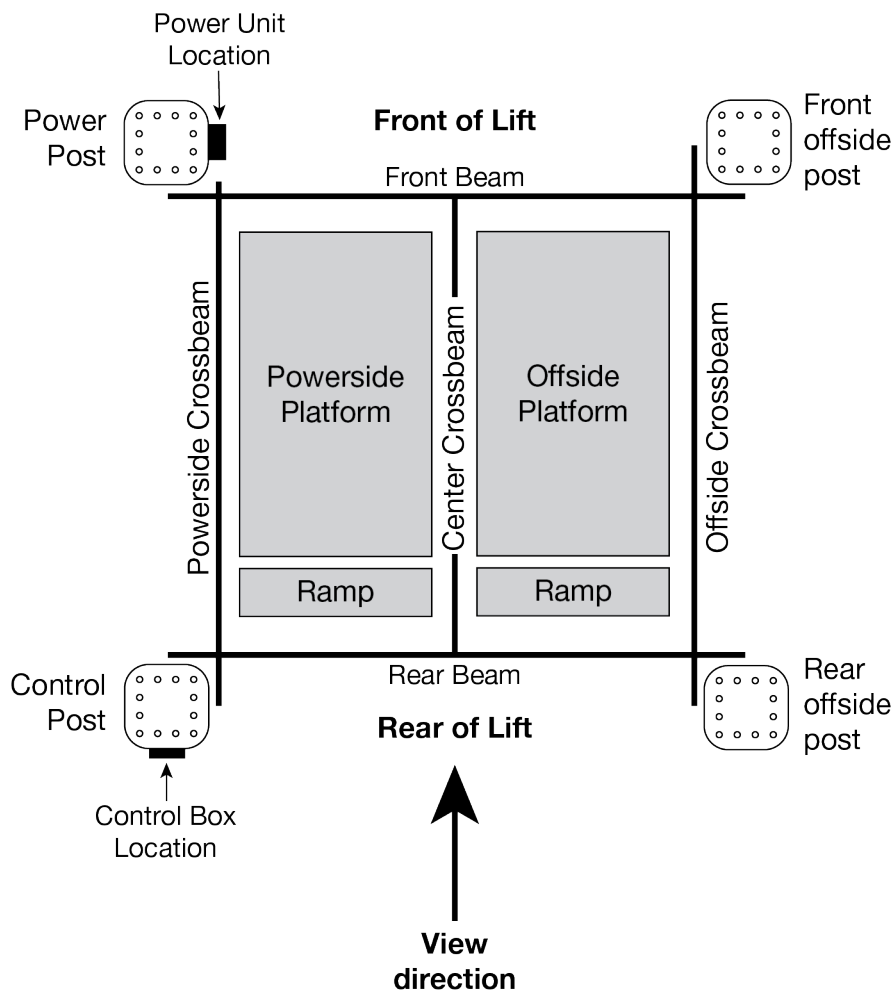


Model	PL-6KT
Platforms	3 Platforms
Lifting capacity per platform	6,000 lbs / 2,722 kg
a Total width	308.4" (25.7 feet) / 7,834 mm
b Total depth	236.5" (19.7 feet) / 6,008 mm
c Post height	103.3" (8.6 feet) / 2,625 mm
d Total height	123.6" (10.3 feet) / 3,140 mm
e Minimum runway height	4.5" / 115 mm
f Maximum rise	89" (7.4 feet) / 2,261 mm
g Width between posts	283.3" (23.6 feet) / 7,197 mm
h Platform width	93.5" (7.75 feet) / 2,374 mm
i Usable platform width	86" (7.1 feet) / 2,184 mm
j Platform length (with ramp)	166.6" (13.9 feet) / 4,232 mm
Lifting time	30 seconds
Motor	220 VAC, 50/60 Hz, 1 Ph

Orientation

The front of your lift, as with many lifts, is the end **opposite** the ramps.

In the case of the PL-6K Series, the Power Unit and Power Post are at the front, while the ramps, the Control Post, and the Control Box are at the rear.



Drawing is not to scale; it is for orientation only. The PL-6KT has a second Center Crossbeam and a third Platform called the Center Platform.


Installation Checklist

Following are the steps needed to install a PL-6K series lift. Perform them in the order shown.

- ☐ 1. Review the installation Safety rules.
- ☐ 2. Make sure you have the necessary Tools.
- ☐ 3. Plan for electrical work.
- ☐ 4. Select the installation Location.
- ☐ 5. Unload and unpack the Lift Components.
- ☐ 6. Review the installation Orientation.
- ☐ 7. Create Chalk Line Guides for the Posts.
- ☐ 8. Move the Posts into position.
- ☐ 9. Set up and install the Front Beam.
- ☐ 10. Set up the Rear Beam.
- ☐ 11. Set up the Offside Crossbeam.
- ☐ 12. Set up the Center Crossbeam(s).
- ☐ 13. Set up the Powerside Crossbeam.
- ☐ 14. Install the Power Unit.
- ☐ 15. Install and Connect the Hydraulic System.
- ☐ 16. Understand the Flow Control Valve.
- ☐ 17. Contact the Electrician.
- ☐ 18. Connect the Power Supply.
- ☐ 19. Install the Power Disconnect Switch and the Thermal Disconnect Switch (electrician required).
- ☐ 20. Connect the Controls (electrician required).
- ☐ 21. Anchor the posts.
- ☐ 22. Assemble the Platform Structures.
- ☐ 23. Bleed the Hydraulic Cylinders.
- ☐ 24. Assemble the Platform pieces.
- ☐ 25. Lubricate the lift.
- ☐ 26. Perform an operational test.
- ☐ 27. Review the final checklist.
- ☐ 28. Leave the manual for the owner/operator.


Installation

The installation process includes multiple steps. Perform them in the order listed.


 **WARNING** *Only use the factory-supplied parts that came with your lift.* If you use parts from a different source, you void your warranty and compromise the safety of everyone who installs or uses the lift. If you are missing parts, visit bendpak.com/support or call **(800) 253-2363**, extension 191.

Safety

While installing this equipment, your safety depends on proper training and thoughtful operation.

 **WARNING** Do not install this equipment unless you have automotive lift installation training. Always use proper lifting tools, such as a forklift or crane, to lift heavy components. Do not install this equipment without reading and understanding this manual and the safety labels on the unit.

Only fully trained personnel should be involved in installing this equipment. Pay attention at all times. Use appropriate tools and lifting equipment. Stay clear of moving parts.

 **WARNING** You must wear appropriate protective equipment: gloves, steel-toed work boots, eye protection, back belts, and hearing protection.

Tools

You may need some or all of the following tools:

- Rotary hammer drill (or similar)
- ¾ inch carbide bit (conforming to ANSI B212.15-1994)
- Hammer and crow bar
- Four-foot level
- Open-end wrench set, SAE and metric
- Socket and ratchet set, SAE and metric
- Hex key wrench set
- Medium crescent and pipe wrenches
- Torque wrench
- Chalk line
- Medium-sized flat screwdriver
- Tape measure, 25 feet or above
- Needle-nose pliers
- Forklift, crane, or heavy-duty rolling dolly
- Sawhorses
- 12-foot ladder

Electrical Work

You will need to have a licensed, certified electrician available at some point during the installation.

Notify your electrician in advance so that they come prepared with an appropriate cables for connecting to the power source, a Power Disconnect Switch, a Thermal Disconnect Switch, and the wiring for the Control Box, Junction Box, and solenoids. Refer to **Contact the Electrician** for more information.

 **DANGER** All wiring *must* be performed by a licensed, certified electrician.


The electrician needs to:

- **Connect a 220 VAC power source to the Power Unit.** A power source is required.
- **Install a Power Disconnect Switch.** Ensures that you can quickly and completely interrupt electrical power to the lift in the event of an electrical circuit fault, emergency situation, or when equipment is undergoing service or maintenance. You must put it within sight and easy reach of the lift operator. Refer to **Install a Power Disconnect Switch** for more information.
- **Install a Thermal Disconnect Switch.** Ensures the equipment shuts down in the event of an overload or an overheated motor. Refer to **Install a Thermal Disconnect Switch** for more information.
- **Connect the Controls.** The Control Box houses the Controls that raise and lower each Platform. The Controls must be wired appropriately; refer to **Connect the Controls** for more information.


Select a Location

When selecting the location for your lift, consider:


- **Architectural plans.** Consult the architectural plans for your desired installation location. Make sure there are no contradictions between what you want to do and what the plans show.
- **Available space.** Make sure there is enough space for the lift: front, back, sides, and above. Refer to **Specifications** for measurements.
- **Overhead obstructions.** Check for overhead obstructions such as building supports, heaters, electrical lines, low ceilings, hanging lights, and so on. ***You do not want your vehicles hitting obstructions.***
- **Power.** You need a 220 VAC power source available for the lift's Power Unit.
- **Outdoor installations.** PL-6K Series lifts are not designed to be installed outdoors. However, they can be accommodated in certain regions *if* optional moisture preventative devices are used. Go to **bendpak.com/support** or email **techsupport@bendpak.com** for more information.
- **Floor.** Only install the lift on a flat, concrete floor; do not install on asphalt or any other surface. The surface must be level; do not install if the surface has more than three degrees of slope.

 **WARNING** Installing your lift on a surface with more than three degrees of slope could lead to injury or even death. Only install PL-6K Series lifts on a level floor (defined as no more than 3/8 of an inch difference over the installation area). If your floor is not level, consider making the floor level or using a different location.

- **Concrete specifications.** Do not install the lift on cracked or defective concrete. Make sure the concrete is at least 4.25 inches thick, 3,000 PSI, and cured for a minimum of 28 days.

 **CAUTION** BendPak lifts are supplied with installation instructions and concrete anchors that met the criteria set by the American National Standard “Automotive Lifts – Safety Requirements for Construction, Testing, and Validation”, ANSI/ALI ALCTV-2011. You are responsible for any special regional structural and/or seismic anchoring requirements specified by any other agencies and/or codes such as the Uniform Building Code (UBC) and/or International Building Code (IBC).


Be sure to check your floor for the possibility of it being a post tension slab. In this case, contact the building architect before drilling. Using ground penetrating radar may help you find the tensioned steel.


 **WARNING** Cutting through a tensioned cable can result in injury or death. Do not drill into a post tension slab unless the building architect confirms you are not going to hit tensioned steel or you have located it using ground penetrating radar. If colored sheath comes up during drilling, stop drilling immediately.

Unload and Unpack

Try to have the components of the lift unloaded near the location where you will be installing it.

Once the components are unloaded, they are your responsibility to move around. As the lift includes a number of heavy pieces, the closer you unload them to the installation location, the better off you are.

 **WARNING** Some lift components are very heavy; if handled incorrectly, they can damage materials like tile, sandstone, and brick. Try to handle the lift components just twice: once when delivered and once when moved into position. You must have a forklift or crane to move them into position. Use extreme care when moving them around.

 **WARNING** The posts and beams are delivered with stabilizing structures on each end. Be very careful when removing these stabilizing structures; the posts and beams could shift or even fall.

Put in Chalk Line Guides

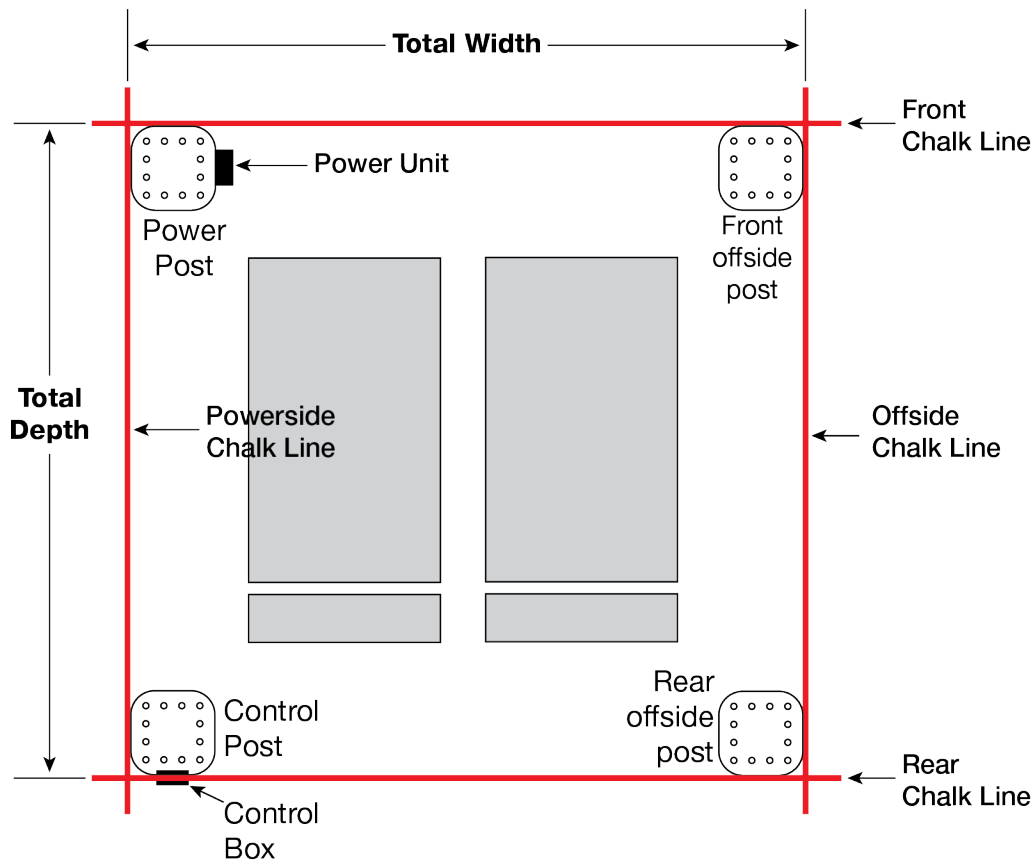
Using chalk line guides helps ensure your posts get installed correctly.

Refer to **Specifications** to determine the Total Width and Total Depth values for your lift model.

Your lift has four posts:

- **Control Post:** Located on the rear left (the ramp end). The Control Post holds the Control Box used to control the Platforms. ***The Control Post is unique; it has drilled holes that hold the Control Box.*** Make sure to orient the Control Post so that the drilled holes face the rear of the lift. The image in **Orientation** shows the correct orientation of the Control Post.
- **Power Post:** Located on the front left of the lift. The Power Post holds the Power Unit (which provides power for the lift). ***The Power Post is unique; it has a mounting bracket on one side that holds the Power Unit.*** The Power Post must be oriented so the mounting bracket is on the inside. The image in **Orientation** shows the correct orientation of the Power Post.
- **Front offside post:** Located on the front right of the lift. Not unique. Interchangeable with the rear offside post.

- **Rear offside post:** Located on the rear right of the lift. Not unique. Interchangeable with the front offside post.




To create the four chalk line guides:

1. Create the Front Chalk Line where you want the front of the lift.
Make the Front Chalk Line longer than the Total Width setting for your lift model.
2. Create the Powerside and Offside Chalk Lines at 90° angles to the Front Chalk Line and parallel to each other.
Make the Powerside and Offside Chalk Lines longer than the Total Depth setting for your lift model.
The Powerside and Offside Chalk Lines must also be exactly **x** distance from each other, **at both ends**, where **x** is the Total Width setting for your lift model. Measure to verify that this is true.
3. Create the Rear Chalk Line parallel to the Front Chalk Line.
Make the Rear Chalk Line longer than the Total Width setting for your lift model.
The Front and Rear Chalk Lines must also be exactly **x** distance from each other, **at both ends**, where **x** is the Total Depth setting for your lift model. Measure to verify that this is true.
4. Before moving the posts into position, measure diagonally to make sure the two diagonals are the same. This ensures your layout is correct. **Do not forget to check the diagonals.**
5. When you move the posts into position, put the corners of the base plates inside the corners created by the four chalk lines.

Move the Posts into Position

BendPak strongly recommends using a forklift or crane to move the posts. You need to have at least three people work together to stand the posts up.

 **DANGER** The posts are extremely heavy; be very careful when handling them.

To move the posts into position:

1. Using a forklift, crane, or heavy-duty rolling dolly, move the four posts, one at a time, to the chalk line guides you created.

Important: The Power Post and the Control Post are different from the Offside Posts. Make sure to position them at their **required** locations and orientations. Refer to the images in **Orientation** and **Components** for the locations and orientations of the Power and Control Posts. The Offside Posts are interchangeable; put them at either of the remaining post locations.

2. Stand up each post. You must have at least three people work together to stand up a post.



Tip

You can shim and plumb the posts now or later. Doing it now means that the weight of the beams and crossbeams is *not* on the posts (which makes it harder to shim). Doing it later means you have some play in the posts when you install the beams and the crossbeams.

3. ***Do not anchor the posts at this point.***

About the Beams

The next several sections describe how to prepare and install the lift's beams, crossbeams, and cabling.

There are two methods that are generally used to prepare and install the beams/crossbeams and route the cables:

- Prepare each beam/crossbeam and raise them into place ***separately***.

In other words, prepare the Front Beam and raise it into place, prepare the Rear Beam and raise it into place, and so on until all the beams and crossbeams are in place. Most people who use this method route the cables, as much as they can, for each beam on the ground as they prepare it.

This method is generally best when you are tight on space. It requires some additional work on ladders.

- Prepare the beams/crossbeams on the ground ***all at one time*** before raising them, including routing the cables, then raise the entire structure into place all at once.

This method works if there is adequate space to raise the entire structure into place at one time. The advantage is that it reduces the amount of work you have to do on ladders at the end. This method requires at least one crane and one forklift; your installation may require additional lifting devices.

Choose the method that is best for your particular installation.



Tip

BendPak recommends putting the beams/crossbeams on a raised platform, like sawhorses, when preparing the beams/crossbeams, no matter which method you choose. This generally makes them easier to prepare, compared to if they were on the actual ground.

The procedures in the next several sections assume the first method, preparing each beam/crossbeam separately, but they can be easily adapted to the second method.

Set Up and Install the Front Beam

Set up and install the Front Beam first.

To set up the Front Beam, you need to install sheaves and Hydraulic Line brackets.

To set up and install the Front Beam:

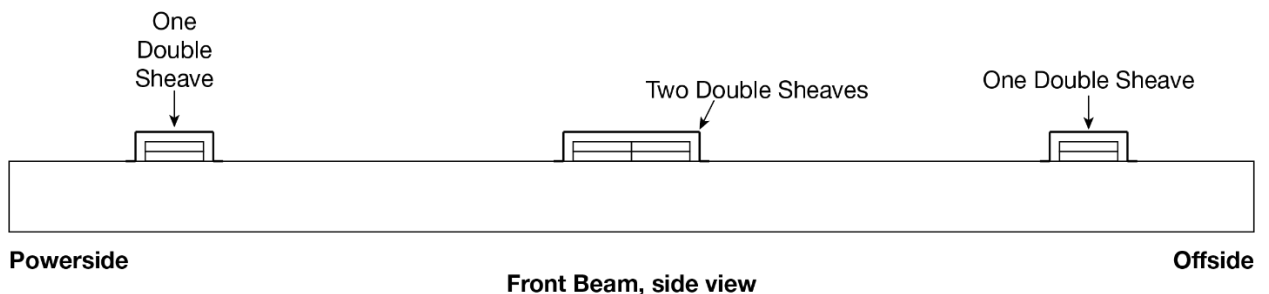
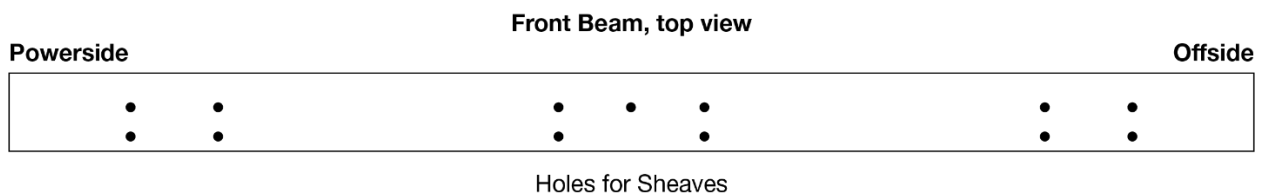
1. Using a forklift or crane, put the Front Beam onto a heavy-duty rolling dolly and move it, on the ground, into location between the two posts at the front of the lift.

Make sure to orient the Front Beam correctly. The holes for the Hydraulic Line brackets (shown on the next page) must be on the Powerside.

2. Bolt the sheaves at the correct locations on the top of the Front Beam.

Two sheaves on the Powerside, four sheaves in the center (two double sheaves), and two more sheaves on the Offside.

This drawing shows where the sheaves go on the Front Beam. Note that the Front Beam also holds the Hydraulic Line and its brackets, but they are not shown here for clarity.



Model PL-6KDTX shown. The sheaves and sheave covers come assembled. This drawing is not necessarily to scale and does not contain all components. The view is from the rear of the lift, looking towards the front.

3. When the sheaves are bolted, you can raise the Front Beam and bolt it in place.

Do not torque the bolts at this point.

Install the Rear Beam

Install the Rear Beam after installing the Front Beam.

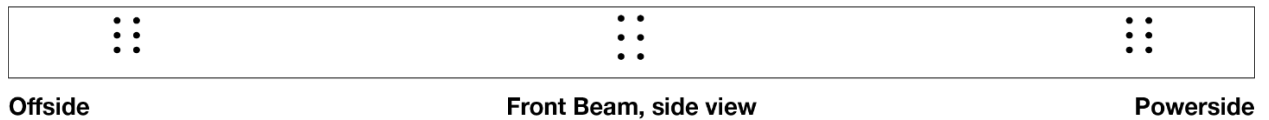
There are no components that go on top of the Rear Beam; you simply need to raise it into position and put the bolts in place so that it stays in place.

Make sure the orientation is correct, the labels on the Rear Beam need to be facing out so they can be seen as vehicles drive onto the Platforms. They are an additional reminder that there is a weight limit for the vehicles on each Platform.

To install the Rear Beam:

1. Using a forklift or crane, put the Rear Beam onto a heavy-duty rolling dolly and move it, on the ground, into location between the two posts at the rear of the lift.

Make sure to orient the Rear Beam correctly.



Model PL-6KDTX shown. This drawing is not necessarily to scale. The view is from the ***front*** of the lift, looking towards the ***rear***.

2. Raise the Rear Beam into position on top of the two posts, then bolt it into place.

3. Do not torque the bolts at this point.

About the Crossbeams

Crossbeams connect to the Front Beam on one end and to the Rear Beam on the other end.

Your lift will have either three or four crossbeams:

- **PL-6KDT** and **PL-6KDTX**. Three crossbeams: one Powerside, one Center, and one Offside.
- **PL-6KT**. Four crossbeams: one Powerside, ***two Center***, and one Offside.

Prepare and Install the Offside Crossbeam

Prepare and install the Offside Crossbeam after installing the Rear Beam.

Before you can raise the Offside Crossbeam into place, you must prepare it by adding two sheaves.

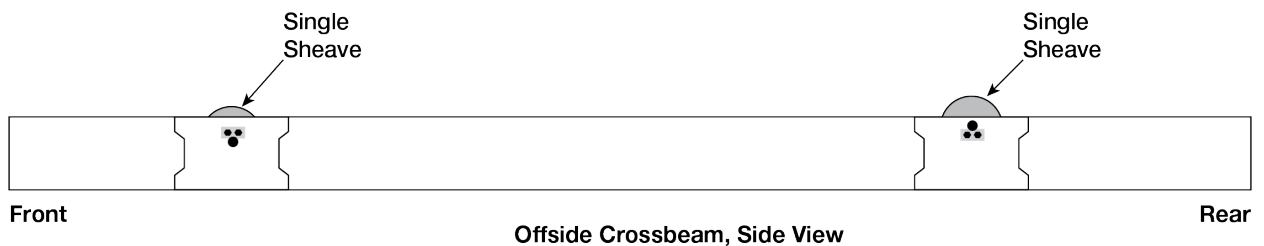
Note: Unlike the sheaves on the top of the Front Beam, the sheaves in the crossbeams do not come installed; you must remove the sheave cover and put the sheave in place. Also, they are installed on the side of the beam, not on the top.

To prepare the Crossbeam Sheaves:

1. Using a forklift or crane, put the Offside Crossbeam onto a heavy-duty rolling dolly and move it, on the ground, into location between the Front Beam and the Rear Beam.

Make sure to orient the Offside Crossbeam correctly. The sheaves go on the inside.

This drawing shows the sheave locations on the Offside Crossbeam.



This drawing is not necessarily to scale. The view is from the Center Crossbeam looking towards the Offside Crossbeam.

Note: The sheave covers and sheaves are not interchangeable; they are similar but not the same.

2. Remove a sheave cover, put a single sheave into place, replace the sheave cover.

Note: Put the wider spacer closer to the outside of the beam, nearer to the sheave cover, and the narrower spacer closer to the middle of the beam.

3. Remove the other sheave cover, put a second single sheave into place, and replace the sheave cover.
4. When both sheaves are installed, raise the Offside Crossbeam into the space between the Front Beam and the Rear Beam.
5. Attach the front end of the Offside Crossbeam to the Front Beam; put the nuts and bolts into position, but do not torque them yet.

Insert the bolts from the outside; put on the nuts on the inside.

6. Attach the rear end of the Offside Crossbeam to the Rear Beam; put the nuts and bolts into position, but do not torque them yet.

Insert the bolts from the outside; put on the nuts on the inside.

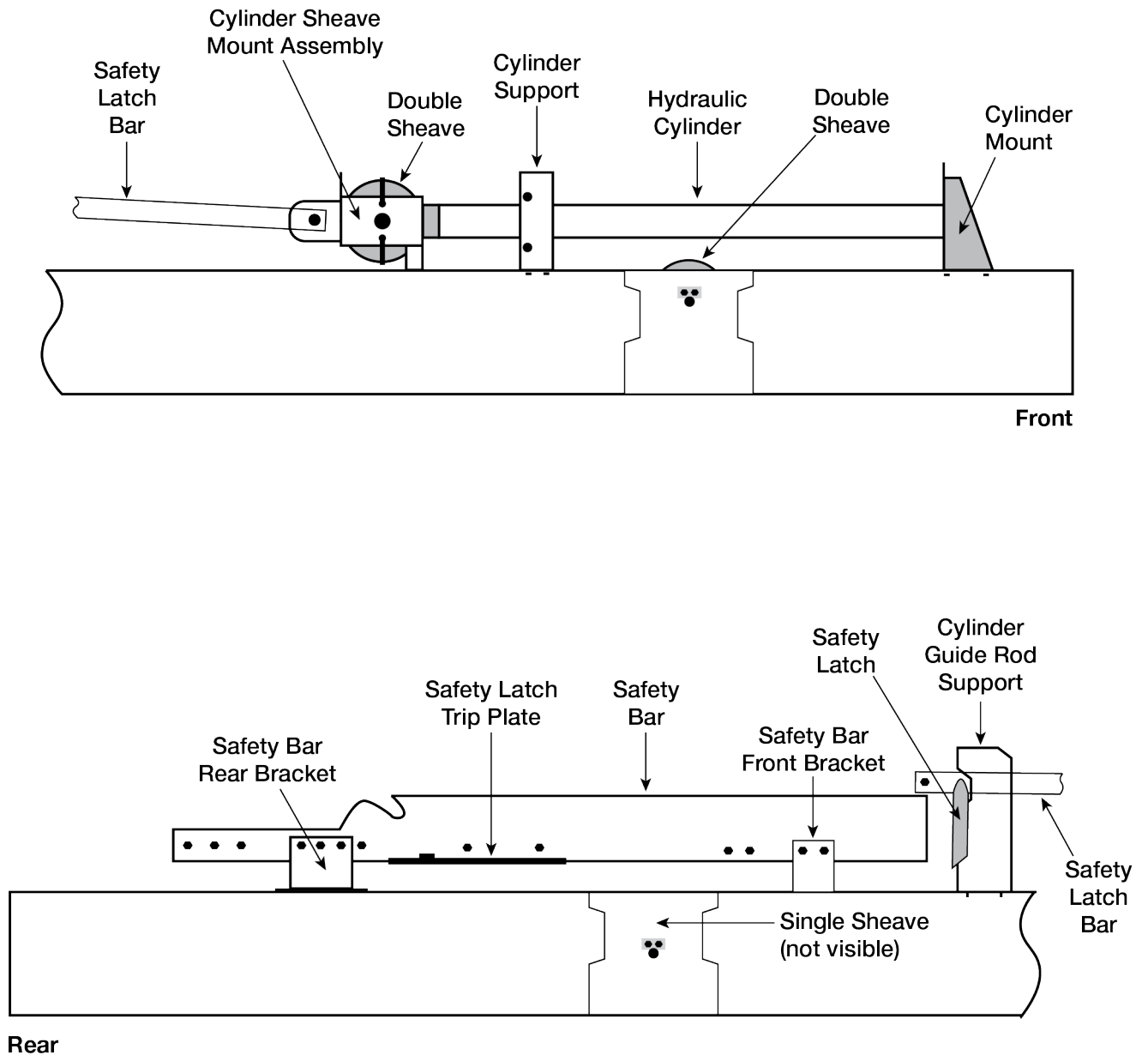
Prepare the Center Crossbeam(s)

The PL-6KDT and the PL-6KDTX each have one Center Crossbeam.

The PL-6KT has **two** Center Crossbeams, so you will be preparing and installing two Center Crossbeams. The process is the same for the second Center Crossbeam.

Note: Center Crossbeams are taller than the other crossbeams.

The following drawing shows the Center Crossbeam and its components. The view is from the Offside Crossbeam looking towards the Center Crossbeam.

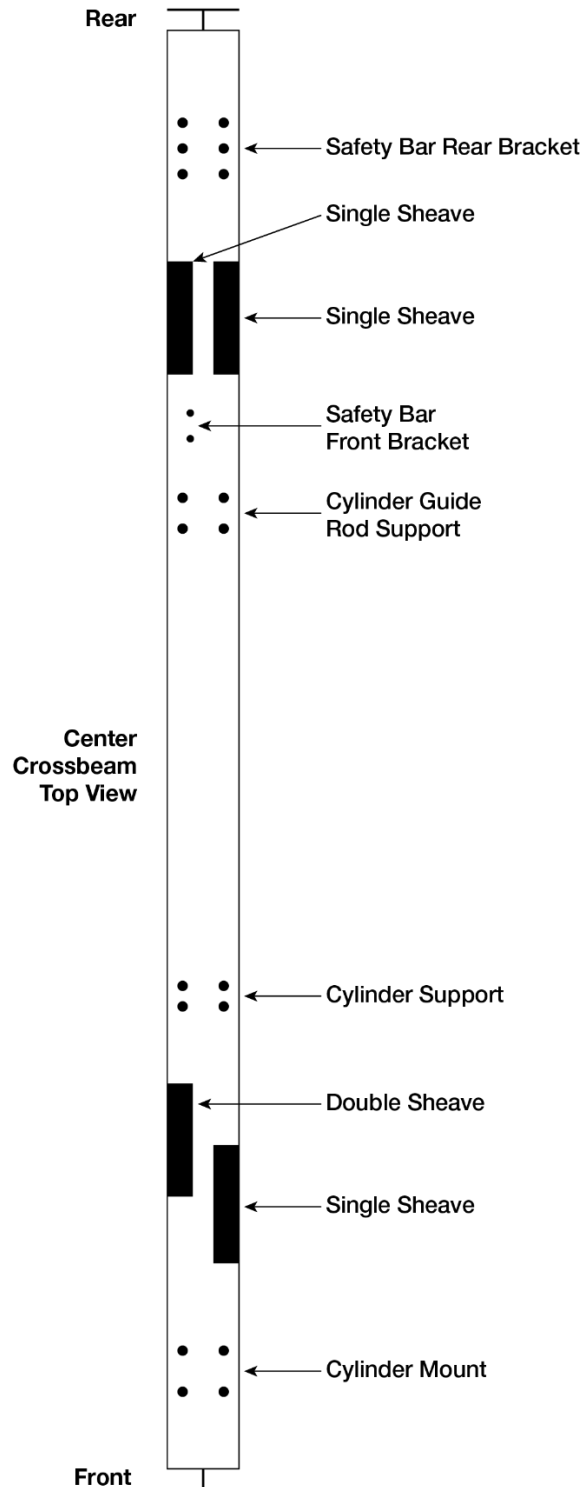


To install components on a Center Crossbeam:

1. Using a forklift or crane, put the Center Crossbeam onto a heavy-duty rolling dolly and move it, on the ground, into location between the Front Beam and the Rear Beam.

Make sure to orient the Center Crossbeam correctly.

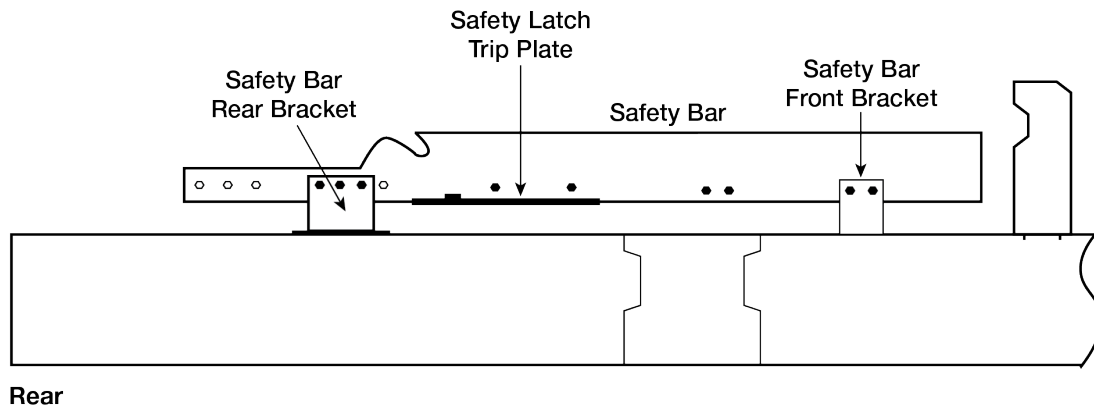
This drawing shows a Center Crossbeam from above.



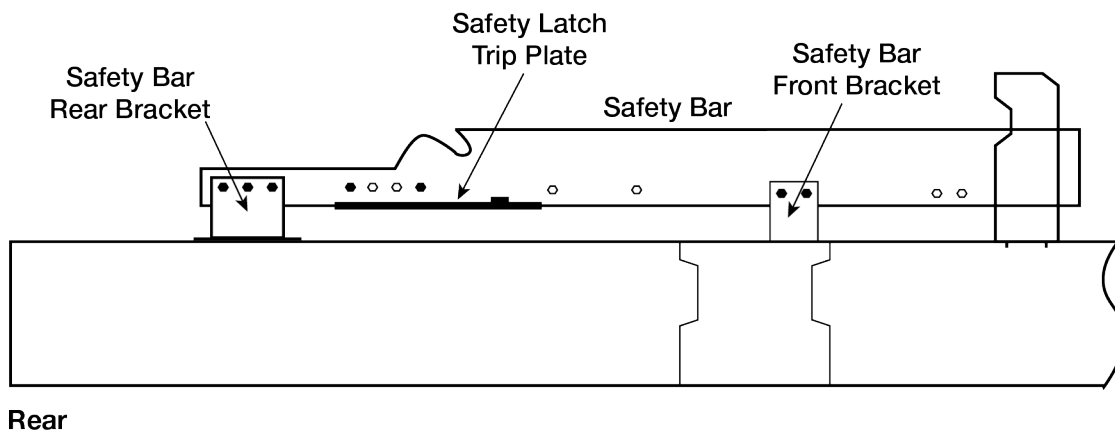
2. Locate the Cylinder Mount, then take four nuts and bolts and connect it to the Center Crossbeam.

3. Locate the Cylinder Support, then take four more nuts and bolts and connect it to the Center Crossbeam.
4. Locate the Cylinder Sheave Mount Weldment and move it into position.
The Cylinder Sheave Mount Weldment does not get connected to the Center Crossbeam. Rather, it connects to the Cylinder Rod on one end and the Safety Latch on the other end.
5. Find the Hydraulic Cylinder and move it into position, then connect it to the Cylinder Mount using four nuts and bolts.
6. Rest the Hydraulic Cylinder on the Cylinder Support, then install the horseshoe to hold it in place.
7. Connect the Cylinder Rod to one end of the Cylinder Sheave Mount Weldment using a single screw.
8. Locate the Safety Bar; the Safety Bar Front Bracket, the Safety Bar Rear Bracket, and the Safety Latch Trip Plate come installed.
9. Attach the Safety Bar to the top of the Center Crossbeam in either the High or the Low setting.
Refer to **Safety Lock Positions** for more information about the High and Low settings.

The following diagram shows the Safety Bar in the High setting.



The following diagram shows the Safety Bar in the Low setting.



Important: If you have to switch from one setting to the other, unbolt both brackets from the Safety Bar (not from the beam), reverse the orientation of the Safety Latch Trip Plate, adjust the location of the Safety Bar as needed, then bolt both brackets in their new locations on the Safety Bar.

-
10. Locate the Safety Latch Bar and attach one end to the circular end of the Cylinder Sheave Mount Weldment using a cotter pin.
 11. Put the other end of the Safety Latch Bar through the inside of the Cylinder Guide Rod Support and rest it on the end of the Safety Bar.
 12. Make sure that both Safety Latches are swinging freely.
 13. Install the sheaves on the Center Crossbeam. There are five, three on the offside and two on the powerside of the beam.

The sheave on the offside in the front is a double sheave; the other three are single sheaves.

When installing the sheaves, put the wider spacer closer to the outside of the beam, nearer to the sheave cover, and the narrower spacer closer to the middle of the beam.

Route the Cables on the Center Crossbeam(s)

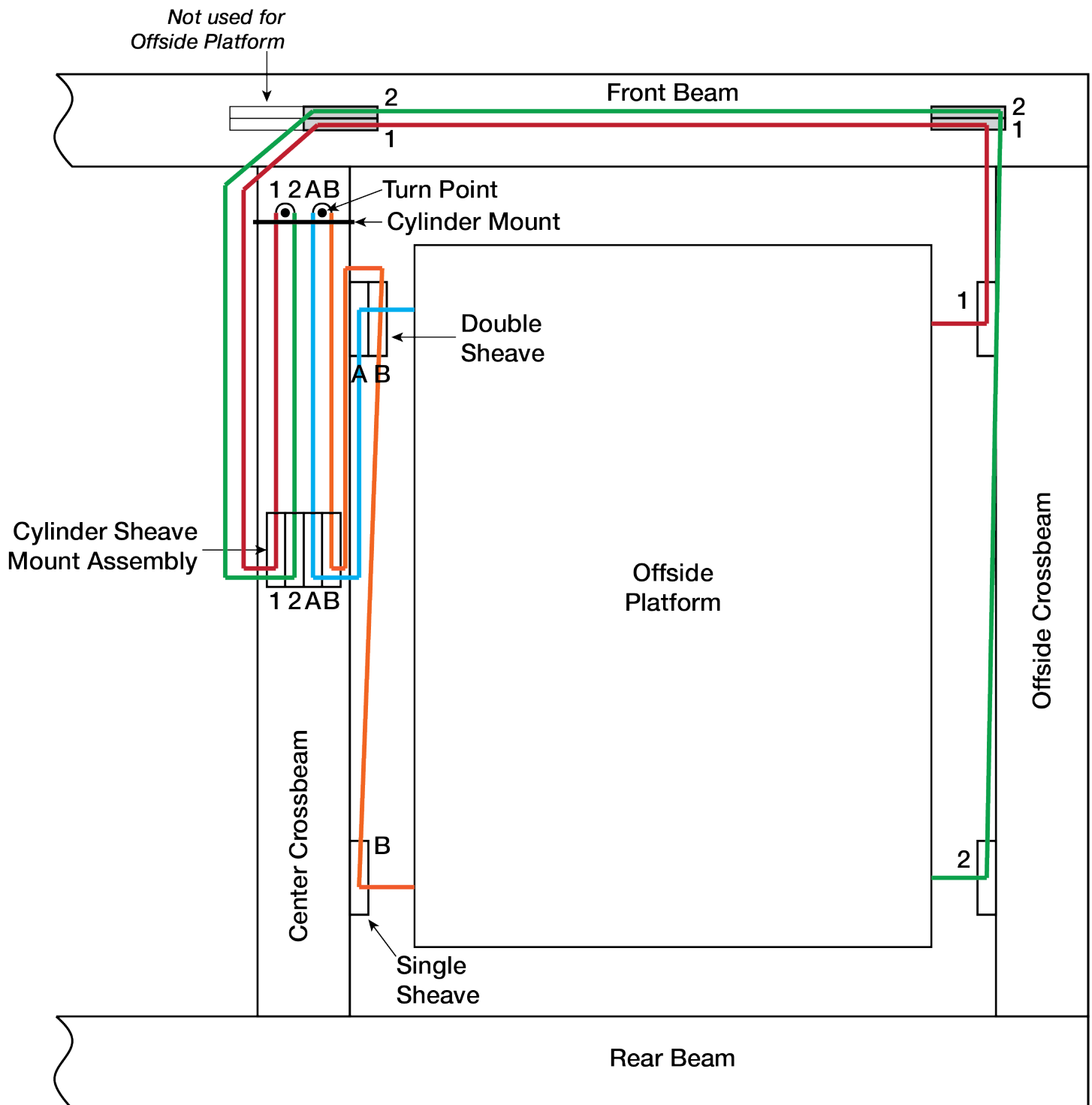
This section describes how to route the cables on the Center Crossbeam.

If you are installing a PL-6KDT or PL-6KDTX, this cabling is done once for the Offside Platform.

If you are installing a PL-6KT, you will be performing this procedure twice: once for the Offside Platform and once for the Center Platform.

Note: If you are installing and raising each beam separately, you cannot finish routing the Center Crossbeam cables until after it is raised into position.

The following drawing shows all four cable routes in one drawing. Refer to **Cable Routing Diagrams** for additional drawings.



This drawing shows the components involved in routing the cables for the Offside Platform. Some components have been moved slightly to enhance understanding. It does not include all lift components. It is not to scale. It includes both side and top views. Use for cable routing only.

⚠ CAUTION BendPak strongly recommends wearing leather gloves specifically designed for cable handling while you are routing the cables.

To route the cables on a Center Crossbeam:

1. Take one long cable (90 feet / 27,584 mm) and one short cable (60 feet / 18,085 mm) and stretch them out on the ground.



Tip BendPak recommends taping off the ends of the cables; if they fray, they are much harder to route and more likely to cut your hands.

2. Clearly mark the Long Cable at 50 feet (15,240 mm).

You can use spray paint or tape; when you start routing the cables, you will need to be able to find the marked location, which is where you must wrap the Long Cable around the Turn Point.

The Long Cable has two sections: one is 50 feet long, the other is 40.5 feet long (12,344 mm).

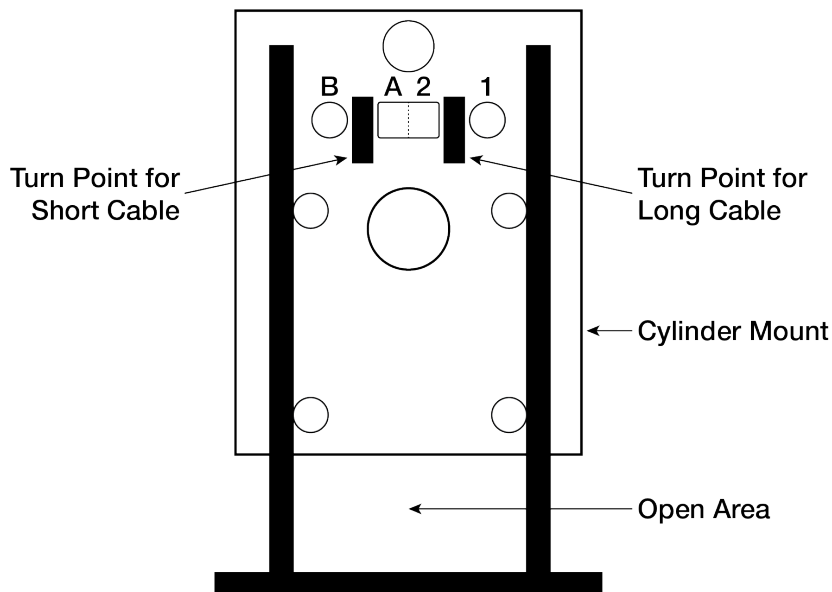
3. Clearly mark the Short Cable at 35 feet (10,668 mm).

The Short Cable now has two sections: one is 35 feet, the other is 24.25 feet (7,417 mm).

4. There are now four cable lengths, designated in the drawings in this section as:

- **1**: 40.5 feet (12,334 mm) of the Long Cable (we're going to call this the "40 foot" section)
- **2**: 50 feet (15,240 mm) of the Long Cable
- **A**: 24.25 feet (7,417 mm) of the Short Cable (we're going to call this the "25 foot" section)
- **B**: 35 feet (10,668 mm) of the Short Cable

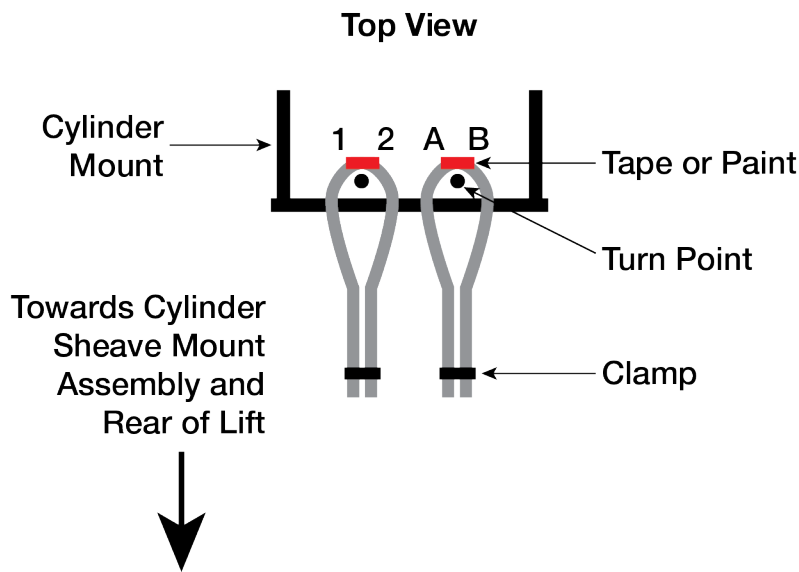
5. Take the Long Cable and route the 40 foot section through **1** of the Cylinder Mount and route the 50 foot section through **2**.



This drawing is a side view of the Cylinder Mount, from the Front Beam looking towards the Rear Beam. The Hydraulic Cylinder is on the other side of the Cylinder Mount. This is the side you will be pushing the cables in from. Note that the location identifiers appear backwards, as this view is from the opposite direction of the views in most of the other drawings.

Make sure the 40 foot section ends up as 1 and the 50 foot section ends up as 2. If you reverse them, the lift will not work correctly.

6. Once each section is through the Cylinder Mount, route them to **1** and **2** on the Cylinder Sheave Mount Assembly, going over the top of the sheave and then down under the sheave, on the way back towards the Cylinder Mount.
7. Pull both sections of the Long Cable through the Open Area at the bottom of the Cylinder Mount.
 - If you are installing and raising each beam separately, put the Long Cable sections off to the side; you cannot route them any further until the Center Crossbeam is raised into position.
 - If you are installing and raising all of the beams at the same time, route **1** and **2** first through the double sheave on the Front Beam next to the Cylinder Mount, then through the double sheave near the Offside Crossbeam, then to the appropriate sheaves on the Offside Crossbeam, then down. After that, put them off to the side, as you cannot do anything else with them until you have the Offside Platform structure assembled.
8. Return to the Cylinder Mount and make sure the location you marked with spray paint or tape on the long cable is at the Turn Point, as shown in this drawing.



If the paint or tape mark is not at the Turn Point, adjust the Long Cable until the mark is at the Turn Point. **Do not proceed with cable routing until the mark is at the Turn Point.**

9. When the mark is at the Turn Point, take a clamp and clamp the two sections of the Long Cable together so that the mark will stay at the Turn Point.
10. Take the Short Cable and route the 25 foot section through **A** of the Cylinder Mount and route the 35 foot section through **B**.

Make sure the 25 foot section ends up as A and the 35 foot section ends up as B. If you reverse them, the lift will not work correctly.
11. Once each section is through the Cylinder Mount, route them to **A** and **B** on the Cylinder Sheave Mount Assembly, going first over the top of the sheave and then under the sheave, heading back towards the Cylinder Mount.
12. Before getting to the Cylinder Mount, route them to the double sheave on the Offside Platform side of the Center Crossbeam:
 - Route **A** over the sheave closest to the Center Crossbeam and then down.
 - Route **B** over the sheave furthest from the Center Crossbeam and then over to the single sheave near the Rear Beam.

-
13. Pull both sections of the Short Cable as far as you can towards their destinations and then put them off to the side. You cannot do anything more with them until you have the Offside Platform structure assembled.
 14. Return to the Cylinder Mount and make sure that the location you marked with paint or tape on the Short Cable is at the Turn Point.

If the paint or tape mark is not at the Turn Point, adjust the Short Cable until the mark is at the Turn Point. ***Do not proceed with cable routing until the mark is at the Turn Point.***

15. When the mark is at the Turn Point, clamp the two sections of the Short Cable together so that the mark will stay at the Turn Point.
16. Find a Threaded Stabilizing Rod and run it from the hole at the top of the Cylinder Mount, through the Cylinder Support, the Cylinder Sheave Mount Assembly, and finally through the Cylinder Guide Rod Support; secure it in place with washers and nuts at each end.

The Threaded Stabilizing Rod goes through the holes at the top of each of these components.

Raise the Center Crossbeam(s) into Position

This procedure assumes the Center Crossbeam has all components in place, including as much cable routing as can be done to this point.

To raise a Center Crossbeam into position and secure it:

1. Raise the Center Crossbeam into the space between the Front Beam and the Rear Beam.
2. Attach the ***front end*** of the Center Crossbeam to the Front Beam; put the nuts and bolts into position, but do not torque them yet.
Insert the bolts from the outside; put on the nuts on the inside.
3. Attach the ***rear end*** of the Center Crossbeam to the Rear Beam; put the nuts and bolts into position, but do not torque them yet.
Insert the bolts from the outside; put on the nuts on the inside.
4. Route the **1** and **2** cables through the double sheaves on the Front Beam and then through the single sheaves on the Offside Crossbeam (or the other Center Crossbeam, if you are working on the second Center Crossbeam on a PL-6KT).

Note: There are two sets of double sheaves on the Front Beam next to the Cylinder Mount. Do not use the double sheaves on the left; instead, use the double sheaves on the right, closest to the Offside Platform.

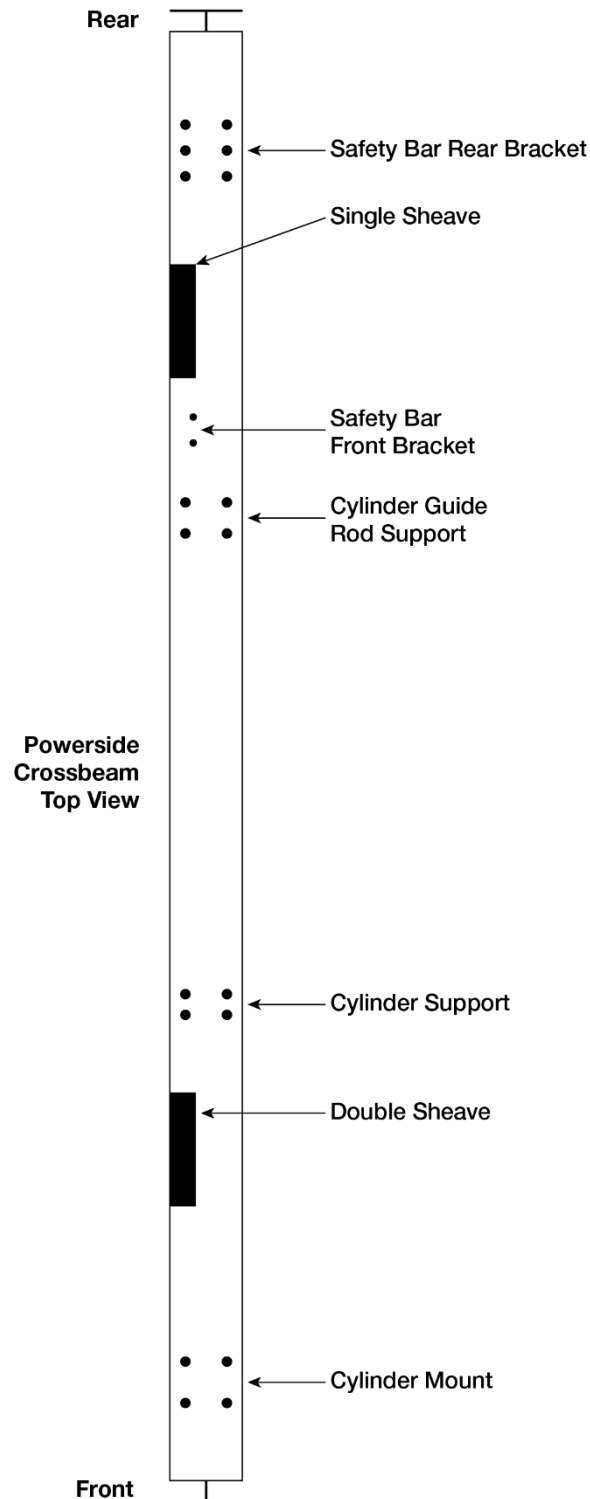
5. Route the **A** and **B** cables through their respective sheaves on the Center Crossbeam.
6. Secure the cables that are hanging down; you will not need to use them again until the Platform structures are assembled.
7. Torque the bolts that hold the Center Crossbeam to the Front Beam and the Rear Beam.

Prepare the Powerside Crossbeam

The components on the top of the Powerside Crossbeam are exactly the same as the components on the top of the Center Crossbeam(s).

Because they are exactly the same, simply repeat the same process for the Powerside Crossbeam as you performed for the Center Crossbeam(s).

There are a couple of small differences in the Powerside Crossbeam itself, so it is shown below, but those differences involve the sheaves and have no impact on this part of the installation.

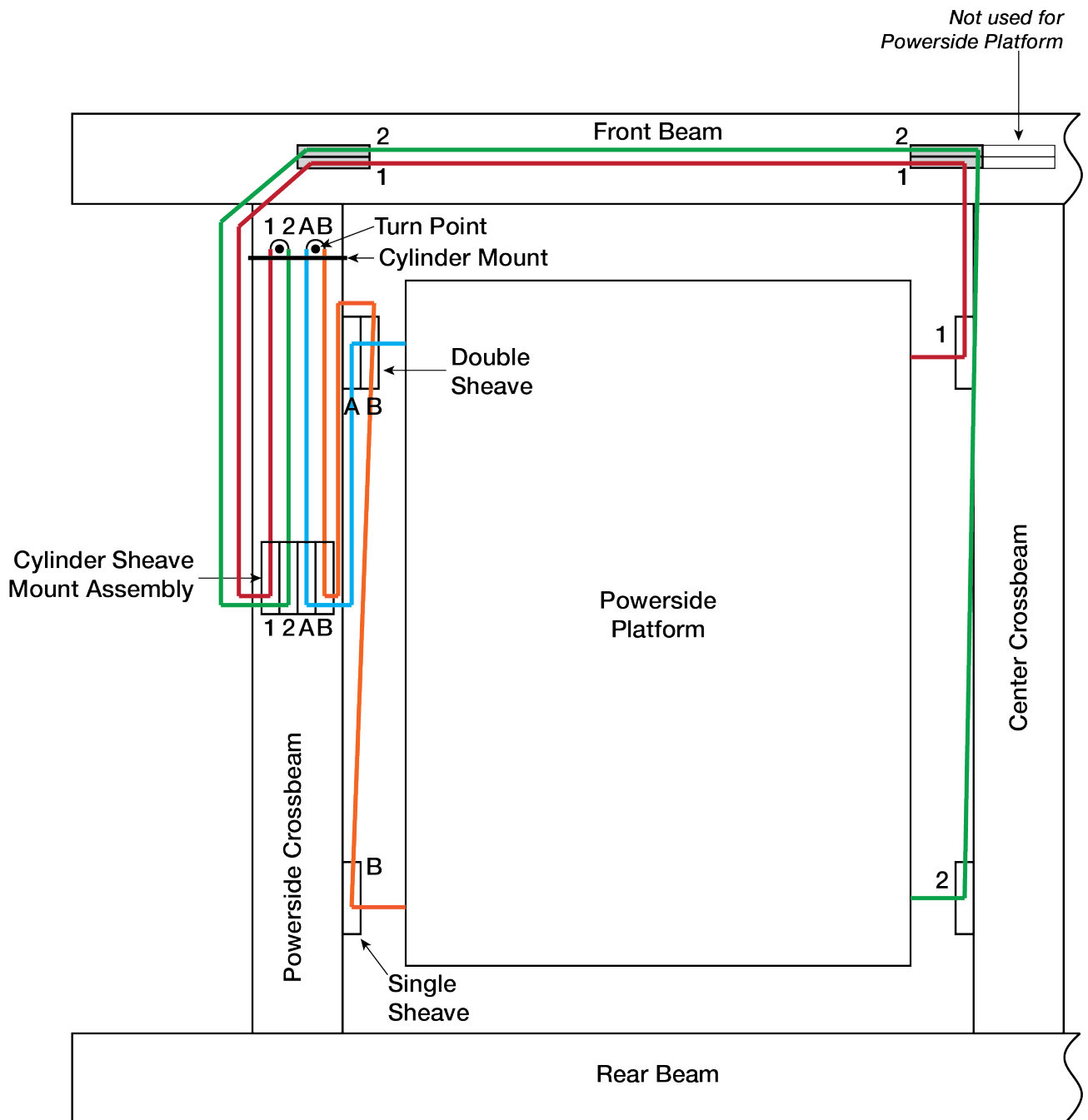


Routing the Cables on the Powerside Crossbeam

Routing the cables on the Powerside Crossbeam is almost exactly the same as routing the cables on the Center Crossbeam(s); the sheave locations on the Front Beam are the only differences

Because they are almost exactly the same, simply repeat the same process for the Powerside Crossbeam as you performed for the Center Crossbeam(s) noting the slightly different sheave locations shown below.

The following drawing shows all four cable routes in one drawing. Refer to [Cable Routing Diagrams](#) for additional drawings.



Raise the Powerside Crossbeam into Position

This procedure assumes the Powerside Crossbeam has all components in place, including as much cable routing as can be done to this point.

To raise the Powerside Crossbeam into position and secure it:

1. Raise the Powerside Crossbeam into the space between the Front Beam and the Rear Beam.
2. Attach the **front end** of the Powerside Crossbeam to the Front Beam; put the nuts and bolts into position, but do not torque them yet.
Insert the bolts from the outside; put on the nuts on the inside.
3. Attach the **rear end** of the Powerside Crossbeam to the Rear Beam; put the nuts and bolts into position, but do not torque them yet.
Insert the bolts from the outside; put on the nuts on the inside.
4. Route the **1** and **2** cables through the double sheaves on the Front Beam and then through the single sheaves on the Center Crossbeam.
5. Route the **A** and **B** cables through their respective sheaves on the Powerside Crossbeam.
6. Secure the four cables that are hanging down; you will not need to use them again until the Platform structures are assembled.
7. Torque the bolts that hold the Center Crossbeam to the Front Beam and the Rear Beam.

Install the Power Unit


This section describes how to install (but not connect) the Power Unit for your lift. An electrician is **not** required to just install the Power Unit.

The Power Unit **must** be installed on the Power Post, attached to the Mount Plate.

 **DANGER** Risk of explosion: This equipment has internal arcing or parts that may spark and should not be exposed to flammable vapors. Never expose the motor to rain or other damp environments. Damage to the motor caused by water is not covered by the warranty.

The Power Unit's Hydraulic Fluid reservoir must be filled with Hydraulic Fluid or automatic transmission fluid before you begin operation of the lift. ***When you receive the lift, the oil reservoir is empty.*** The Power Unit will not work correctly until it is filled with approved Hydraulic Fluid.

Approved fluids are any general purpose ISO-32, ISO-46, or ISO-68 hydraulic oil or approved automatic transmission fluids such as Dexron III, Dexron VI, Mercon V, Mercon LV, or any synthetic multi-vehicle automatic transmission fluid.

 **WARNING** Do not run your Power Unit without Hydraulic Fluid; you will damage it. Keep the Power Unit dry; damage to the Power Unit caused by water, detergents, acid, and other liquids is **not** covered by the warranty.

To install the Power Unit:

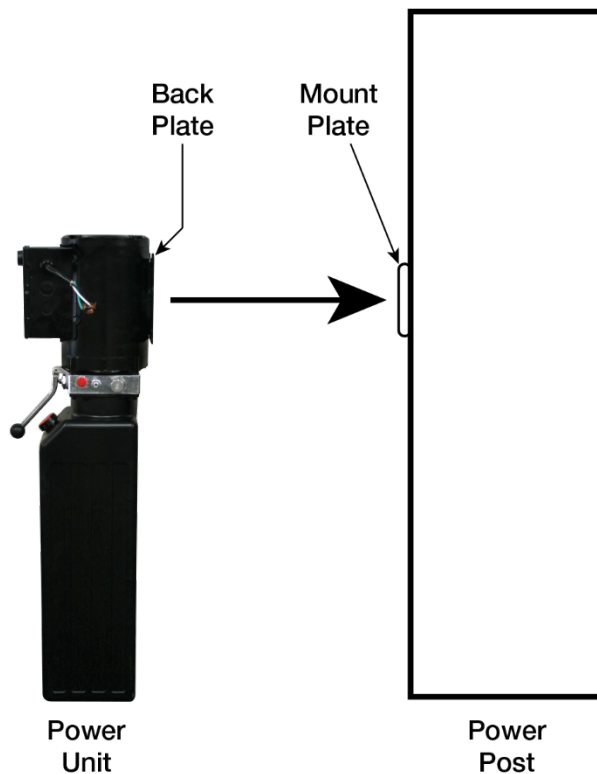
1. Find the four supplied nuts and bolts.
2. Line up the holes on the Power Unit Back Plate with the four holes in the Power Post Mount Plate.

There are multiple locations on the Power Unit Back Plate you can use to attach to the Mount Plate. Choose the ones that best center the Power Unit on the Mount Plate.



Tip

The Power Unit is heavy. BendPak recommends having one person hold the Power Unit while another person bolts it into place.



3. Connect the Power Unit to the Power Post using the four nuts and bolts.
4. Fill the Hydraulic Reservoir on the Power Unit with approved fluids.

The Hydraulic Reservoir holds approximately 3.7 gallons (14 litres). Use care to keep the fluid clean when filling the reservoir.

Approved fluids are any general purpose ISO-32, ISO-46, or ISO-68 hydraulic oil or approved automatic transmission fluids such as Dexron III, Dexron VI, Mercon V, Mercon LV, or any synthetic multi-vehicle automatic transmission fluid.

Do not connect the Power Unit to a power source at this point.

Install and Connect the Hydraulic System

The Hydraulic System moves hydraulic force from the Power Unit to the Hydraulic Cylinders, which use that force to raise and lower the Platforms.

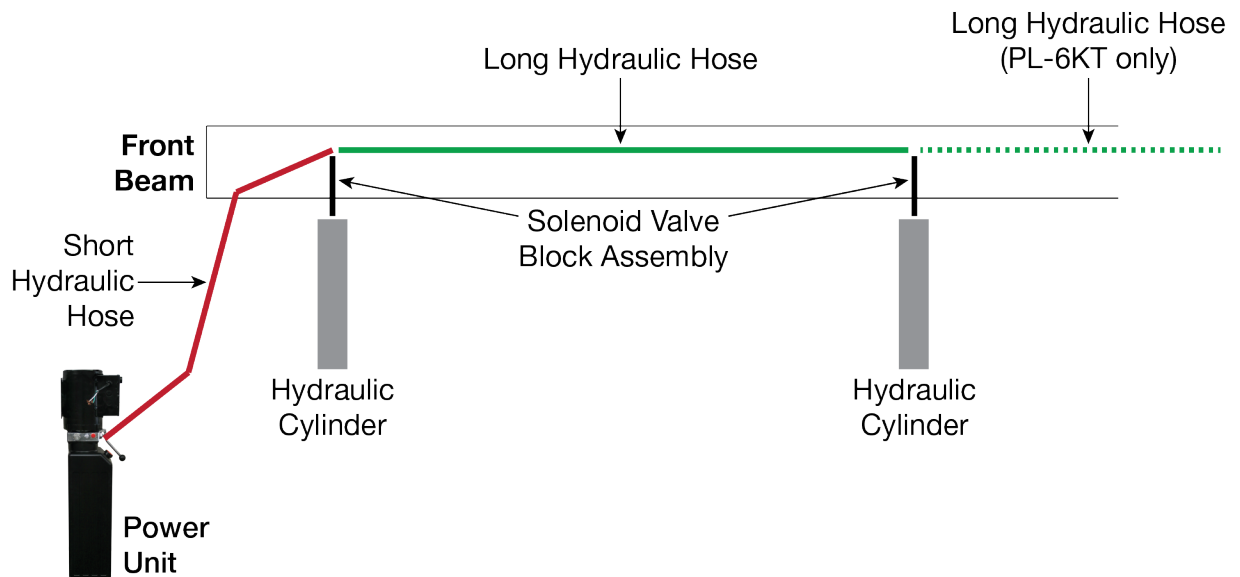
The Hydraulic System includes:

- **Power Unit.** Creates the hydraulic force that needs to be moved to the Hydraulic Cylinders.
- **One Short Hydraulic Hose.** Connects the Power Unit to a tee fitting at the closest Hydraulic Cylinder.
- **One or two Long Hydraulic Hoses.** For a PL-6KDT or PL-6KDTX, there is one Long Hydraulic Hose. It connects the first Hydraulic Cylinder to the Power Unit to the furthest (and last) Hydraulic Cylinder.

For a PL-6KT, there are two Long Hydraulic Hoses. One connects the first Hydraulic Cylinder to the second Hydraulic Cylinder; the second connects the second Hydraulic Cylinder to the furthest (and last) Hydraulic Cylinder.

- **Two or three Solenoid Valve Block Assemblies.** One per Hydraulic Cylinder. The Assembly includes a Flow Control Valve (to control speed of Platform descent) and a Solenoid (to control which Platform is the active Platform). There is a drawing of the Solenoid Valve Block Assembly on the following page.

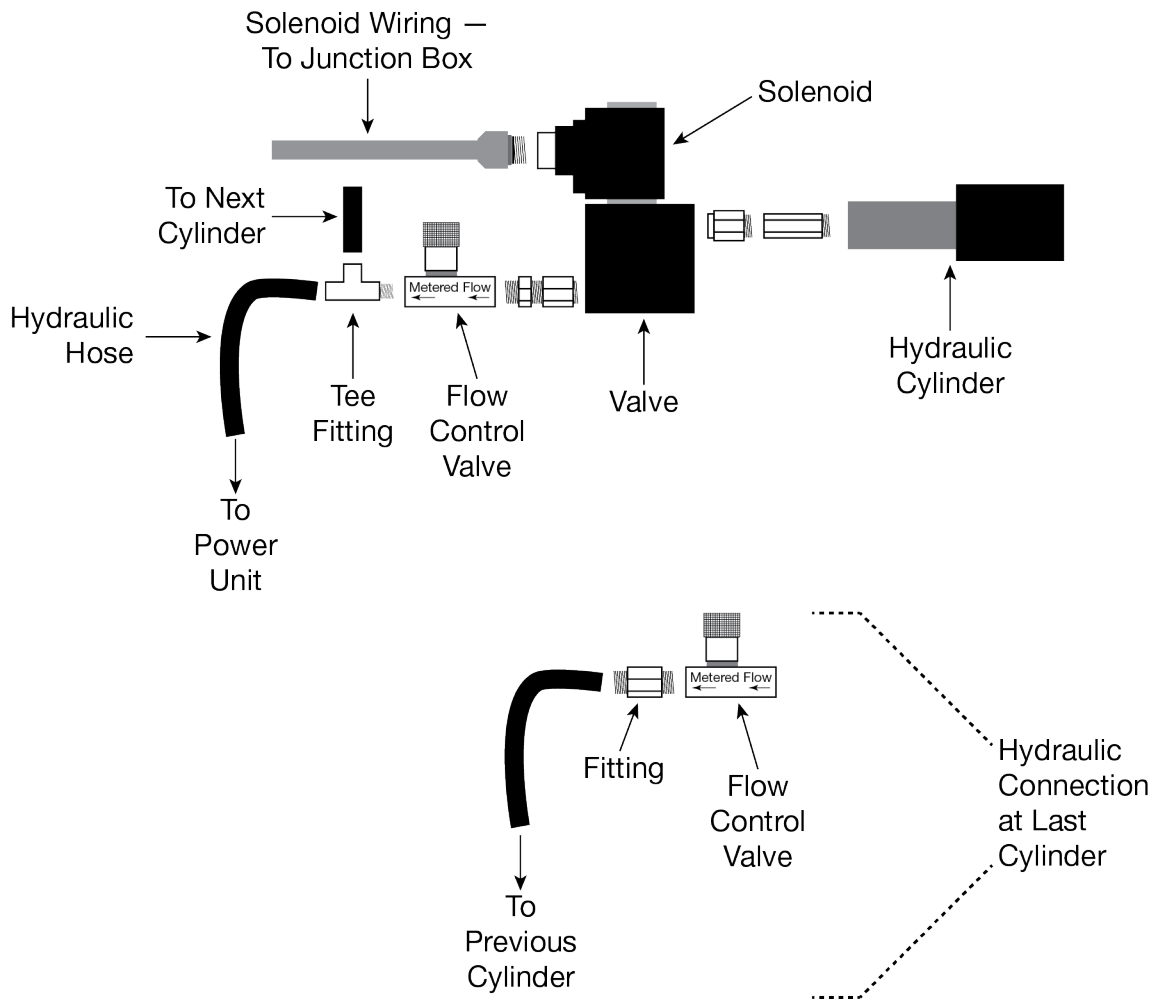
The following drawing shows the components of the Hydraulic System.



Drawing not to scale. Not all components shown. Includes both top and side views. A detailed drawing of the Solenoid Valve Block Assembly is shown on the following page.

To connect the Hydraulic System:

1. Locate the components for the Solenoid Valve Block Assembly, shown in the following drawing.



Drawing not to scale. Components that are not part of the Solenoid Valve Block Assembly (Hydraulic Hose and Cylinder) shown to enhance understanding.

2. Prepare two or three Solenoid Valve Block Assemblies, depending on what model you are installing; connect one to each Hydraulic Cylinder just above the Front Beam.
3. Connect the Short Hose to the Hydraulic Power Out port on the Power Unit on one end and the tee fitting on the Flow Control Valve on the closest Solenoid Valve Block Assembly.

There is a drawing of the Power Unit that shows the Hydraulic Power Out port in Connect the Power Supply.


4. Connect a Long Hydraulic Hose between the tee fitting on the closest Solenoid Valve Block Assembly to either the fitting/Flow Control Valve on the last Solenoid Valve Block Assembly (for models PL-6KDT and PL-6KDTX) or to the tee fitting on the next Solenoid Valve Block Assembly (for model PL-6KT).
5. Model PL-6KT only: Connect the second Long Hydraulic Hose to the final Solenoid Valve Block Assembly.

Important: Do not forget to adjust the Flow Control Valve for each Platform during the Operational Test of the lift.

Flow Control Valve

The Flow Control Valve lets you control the speed at which your Platforms come down. Each Platform has its own Flow Control Valve, which is individually settable.

Flow Control Valves provide an additional advantage; if the Hydraulic Hose is accidentally cut between the Power Unit and the Hydraulic Cylinder (an extremely rare occurrence), the Hydraulic Fluid will leak out of the line, causing any Platform not on its Safety Lock to lower extremely quickly. The Flow Control Valve moderates how quickly these Platforms come down.

 **WARNING** Make sure each Flow Control Valve is installed so that the arrows denoting the flow direction being monitored are pointing back towards the Power Unit. Do not leave a Platform in a raised position unless it is on its Safety lock.

To adjust the Flow Control Valve during Operational Test:

1. Make sure the arrows on the Flow Control Valve are pointing towards the Power Unit.
A Flow Control Valve regulates flow in one direction; since we want to control lowering speed, the arrows must be pointing towards the Power Unit, the direction the Hydraulic Fluid is going when lowering a Platform.
2. Turn the top of the Flow Control Valve to adjust the setting, then test the Platform's lowering speed at that setting.
3. Continue adjusting the setting and lowering the Platform until you find the best lowering speed.
What you are looking for is a nice, steady lowering of each Platform. Not too fast, not too slow.
4. Perform the same procedure for the other Flow Control Valve(s).

Contact the Electrician

As mentioned previously, there are four installation tasks that require a certified electrician.

 **DANGER** All wiring *must* be performed by a licensed, certified electrician.

The electrician needs to:

- **Connect a 220 VAC power source to the Power Unit.** A power source is required. Refer to [Connect the Power Source](#) for more information.
- **Install a Power Disconnect Switch.** Ensures you can quickly and completely interrupt electrical power to the lift in the event of an electrical circuit fault, emergency situation, or when equipment is undergoing service or maintenance. You must put it within sight and easy reach of the lift operator. Refer to [Install a Power Disconnect Switch](#) for more information.
- **Install a Thermal Disconnect Switch.** Ensures the equipment shuts down in the event of an overload or an overheated motor. Refer to [Install a Thermal Disconnect Switch](#) for more information.
- **Connect the Controls.** The Controls are used to raise and lower the Platforms. The Controls must be wired appropriately; refer to [Connect the Controls](#) for more information.

These installation tasks are described in detail in the following four sections.

The electrician is responsible for providing:

- an appropriate cable for connecting to the power source
- a Power Disconnect Switch
- a Thermal Disconnect Switch
- wiring for the Controls

All wiring for the Controls must be minimum of #16 AWG (note that local codes may require heavier gauge). BendPak recommends encasing all wiring to protect it from the elements and anchoring it so that it stays in place.

The wiring for the Controls requires:

- **Control Box to Junction Box:** 7 or 8 wires, depending on model. PL-6KDT/X requires 7 wires, PL-6KT requires 8 wires. The wires are: one per button (Up, Down, Emergency Stop, Key) and one wire per Platform plus Off (on the Selector Switch).
- **Motor to Junction Box:** 6 wires; see [Wiring Diagrams](#) for details.
- **Junction Box to Solenoids:** 2 wires per solenoid, so 4 or 6 wires, depending on model. PL-6KDT/X requires 4 wires, PL-6KT requires 6 wires.

Refer to [Wiring Diagrams](#) for additional wiring information.

Additional information is supplied in the section describing these tasks.

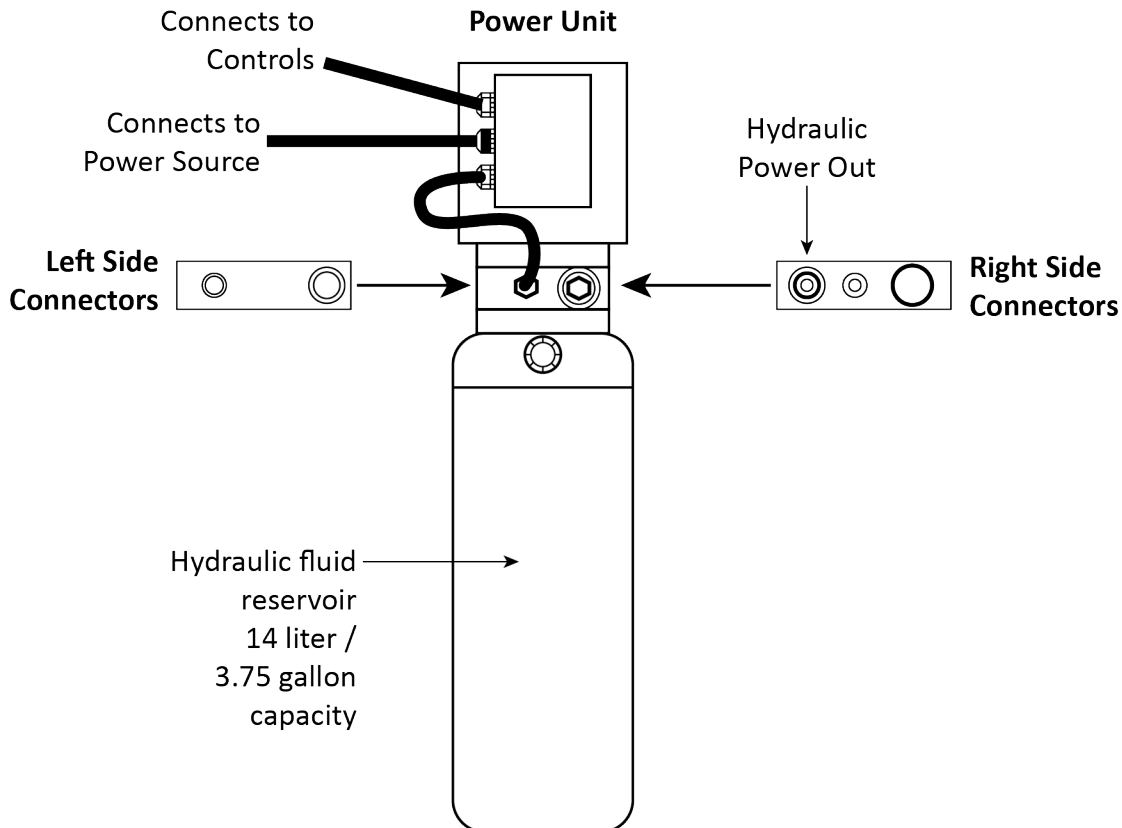
Connect the Power Source

The Power Unit must be connected to an appropriate power source.

The standard Power Unit for your lift is 208-240 VAC, 50/60 Hz, single phase.

Refer to **Wiring Diagrams** for wiring information.

⚠ DANGER All wiring **must** be performed by a licensed, certified electrician. Do not perform any maintenance or installation on the lift without first making sure that main electrical power has been disconnected from the lift and cannot be re-energized until all procedures are complete.



Important electrical information:

- Improper electrical installation can damage the Power Unit motor; this damage is not covered under warranty.
- Use a separate circuit breaker for each Power Unit.
- Protect each circuit with a time-delay fuse or circuit breaker. For a 220 VAC, single phase circuit, use a 25 amp or greater fuse.
- As you require an electrician on site to connect the Power Unit to a power source, consider having them also install the Power Disconnect Switch, Thermal Disconnect Switch, and the Controls at the same time.

Install a Power Disconnect Switch

⚠ WARNING A main Power Disconnect Switch is **not** provided with this equipment.

Note: Your lift has an Emergency Stop Button, which can stop the lift immediately when pressed. This is a valuable safety tool, but it is not the same thing as a Power Disconnect Switch.

A Power Disconnect Switch is a National Electrical Code (NEC) requirement. They are designed to interrupt electrical power in the event of an electrical circuit fault, emergency situation, or when equipment is undergoing service or maintenance.

BendPak strongly recommends that you install a Power Disconnect Switch that is properly rated for the incoming supply power.

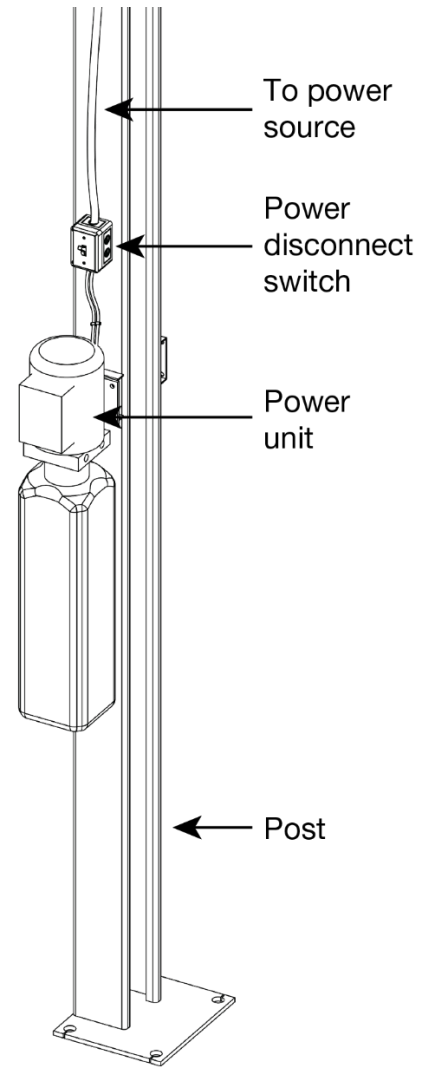
⚠ DANGER All wiring **must** be performed by a licensed, certified electrician.

Your Power Disconnect Switch must be readily accessible and installed so that it is in easy reach of the lift operator. It must be clearly and legibly marked to indicate its purpose.

The figure to the right shows a toggle Power Disconnect Switch between the lift's power source and its Power Unit. A quick flip of the switch immediately cuts power to the lift.

Make sure to have a certified electrician install the Power Disconnect Switch.

Make sure the electrician selects a UL-listed Power Disconnect Switch.



Install a Thermal Disconnect Switch

⚠ WARNING The lift's motor does **not** have thermal overload protection.

Be sure to connect a motor Thermal Disconnect Switch or overload device that will make sure the equipment shuts down in the event of an overload or an overheated motor.

⚠ DANGER All wiring **must** be performed by a licensed, certified electrician.

High running amps that exceed the motor's full load amps (FLA) rating may result in permanent damage to the motor.

BendPak strongly recommends you **not** exceed the rated duty cycle of the lift's motor.

Connect the Controls

The Controls allow the operator of the lift to select the desired Platform and then raise and lower it. Refer to [Wiring Diagrams](#) for wiring information.

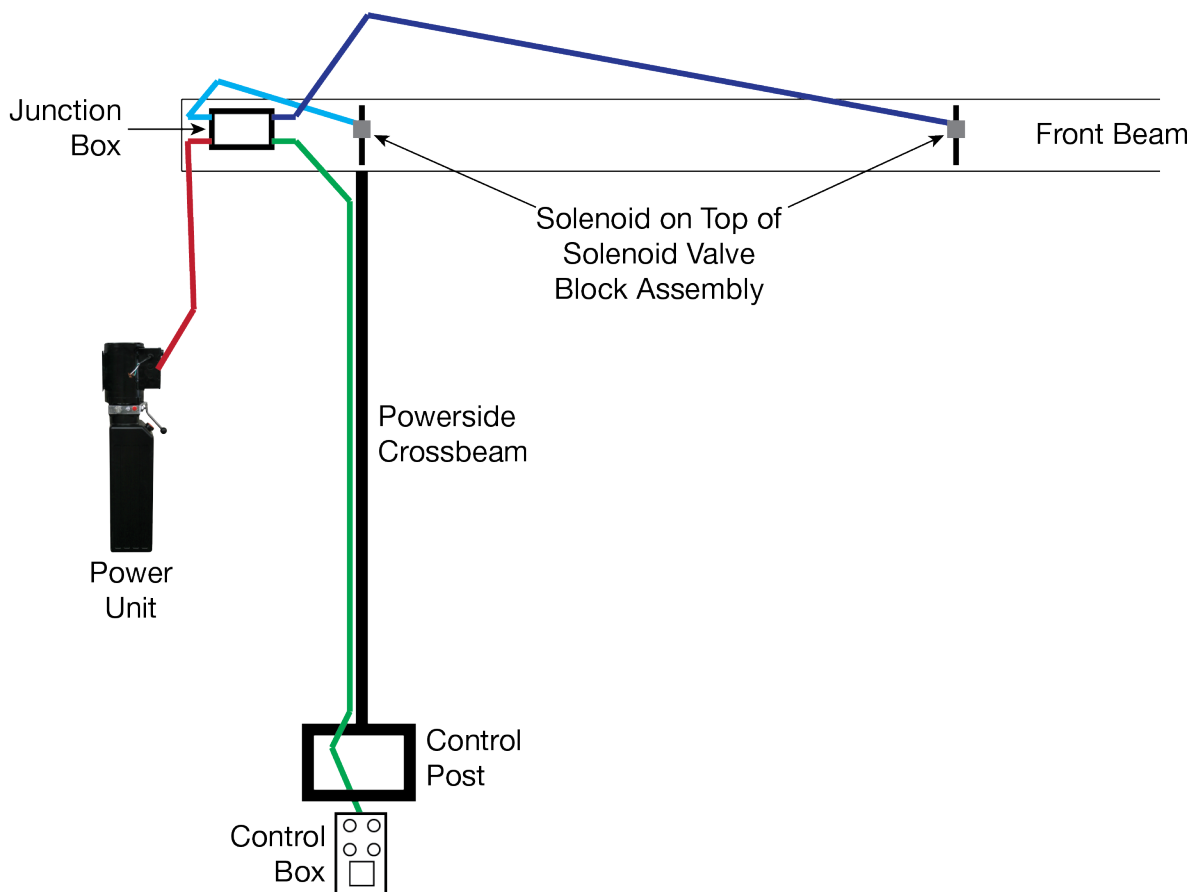
⚠ DANGER All wiring **must** be performed by a licensed, certified electrician.

The Controls on a PL-6K Series lift include:

- **Control Box.** Houses the Controls that raise and lower Platforms. Installs on the Control Post. Connects to the Junction Box on the Front Beam or the side of the Powerside Crossbeam.
- **Power Unit.** Provides power to the controls. Connects to the Junction Box.
- **Junction Box.** Connects the various pieces of the Controls together.
- **Solenoids.** One on each end of the Hydraulic Lines that attach to the Hydraulic Cylinders. Solenoids control when hydraulic force goes to a particular Hydraulic Cylinder and, conversely, when hydraulic force does not go to a Hydraulic Cylinder.

Refer to [Using the Control Box](#) for more information about how to use the Controls on the Control Box to raise and lower the Platforms of the PL-6 Series lift.

PL-6K Series lift Controls are shown in this drawing.



Drawing not to scale. Not all components shown. Includes multiple views. Junction Box can be installed where shown for the PL-6KDTX; for the PL-6KDT and the PL-6KT, install it on the side of the Powerside Crossbeam.

All wires must be a minimum of #16 AWG (note that local codes may require heavier gauge). BendPak recommends encasing all wiring to protect it from the elements and anchoring it so that it stays in place.

The wiring for the Controls requires:

- **Control Box to Junction Box:** 7 or 8 wires, depending on model. PL-6KDT/X requires 7 wires, PL-6KT requires 8 wires. The wires are: one per button (Up, Down, Emergency Stop, Key) and one wire per Platform plus Off (on the Selector Switch).
- **Motor to Junction Box:** 6 wires; see [Wiring Diagrams](#) for details.
- **Junction Box to Solenoids:** 2 wires per solenoid, so 4 or 6 wires, depending on model. PL-6KDT/X requires 4 wires, PL-6KT requires 6 wires.

The following procedure must be done by or in conjunction with your electrician.

To connect the Controls:

1. Mount the Junction box on the side of the Powerside Crossbeam (PI-6KDT and PL-6KT) near the Front Beam or on the end of the Front Beam (PL-6KDTX).
2. At the Control Box, connect the wiring and then route the wires through the back of the box into the Control Post, then up and out through a hole at the top of the Control Post.
3. Run the wires along the Powerside Crossbeam and then into the Junction Box. Encase and secure the wires on the Powerside Crossbeam, if desired.
4. Connect the wiring for the Controls (not the power supply wiring) from the Power Unit to the Junction Box.
5. Connect the wiring from the Solenoids to the Junction Box.

Anchor the Posts

If you have not done so already, you need to anchor the four posts. Install one Anchor Bolt in each corner of each Base Plate, so 16 Anchor Bolts total.

Concrete specifications are:

- **Depth:** 4.25 inches thick
- **PSI:** 3,000 PSI, minimum
- **Cured:** 28 days, minimum

Anchor Bolt specifications are:

- **Length:** 7 inches
- **Diameter:** $\frac{3}{4}$ inch
- **Effective embedment:** 3.25 inches, minimum
- **Anchor torque:** 110 – 150 foot pounds

⚠ WARNING Your Concrete and Anchor Bolts must meet these specifications. Only install your lift on a Concrete surface. If you install a lift on asphalt or any other surface, or your Concrete or Anchor Bolts do not meet these specifications, it could lead to product damage, vehicle damage, personal injury, or even loss of life.

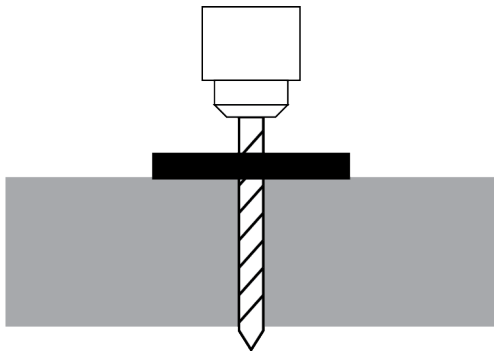
BendPak lifts are supplied with installation instructions and concrete fasteners meeting the criteria as prescribed by the American National Standard “Automotive Lifts – Safety Requirements for Construction, Testing, and Validation” ANSI/ALI ALCTV-2006.

⚠ WARNING Use only the Anchor Bolts that came with your lift. If you use components from a different source, you void your warranty and compromise the safety of everyone who installs or uses the lift.

Lift buyers are responsible for conforming to all regional, structural, and seismic anchoring requirements specified by any other agencies and/or codes, such as the Uniform Building Code and/or International Building Code.

To anchor the posts:

1. Locate the hardware you will need: four Anchor Bolts, four Nuts, and four washers ***per post***.
2. Using the Base Plates as guides, drill the holes for the Anchor Bolts—one hole in each corner of the Base Plate, so four holes total per Base Plate.

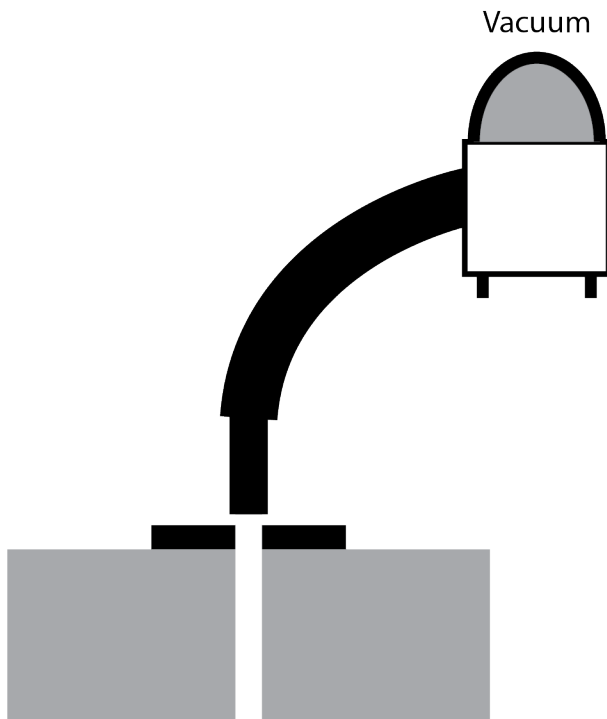


Go in straight, in the center of the hole; do not let the drill wobble.

Use a carbide bit (conforming to ANSI B212.15-1994).

The diameter of the drill bit must be the same as the diameter of the Anchor Bolt. So if you are using a $\frac{3}{4}$ inch diameter Anchor Bolt, for example, use a $\frac{3}{4}$ inch diameter drill bit.

3. Vacuum each hole clean.

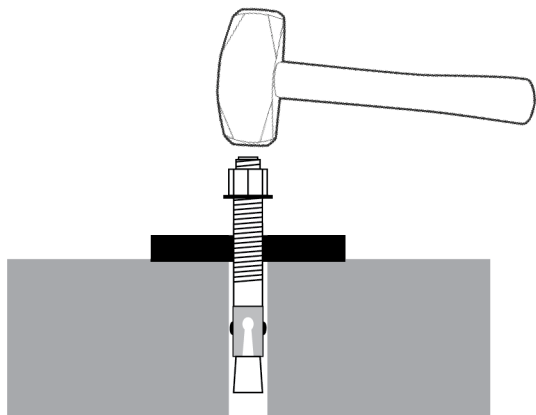


BendPak recommends using a vacuum to get the hole very clean. You can also use a wire brush, hand pump, or compressed air; just ***make sure to thoroughly clean each hole.***

Do ***not*** ream the hole. Do ***not*** make the hole any wider than the drill bit made it.

Important: The holding strength of an Anchor Bolt is partially based on the how cleanly the Expansion Sleeve presses against the Concrete. If the hole is dirty, the Expansion Sleeve does not press as cleanly, which means less holding strength. If the hole is too wide, the Expansion Sleeve does not press against the Concrete with as much force, again resulting in less holding strength.

4. Make sure the Washer and Nut are in place, then insert the Anchor Bolt into the hole.



The Expansion Sleeve of the Anchor Bolt may prevent the Anchor Bolt from passing through the hole in the Base Plate; this is normal. Use a hammer or mallet to get the Expansion Sleeve through the Base Plate and into the hole.

Even using a hammer or mallet, the Anchor Bolt should only go into the hole part of the way; this is normal. If the Anchor Bolt goes all the way in with little or no resistance, the hole is too wide.

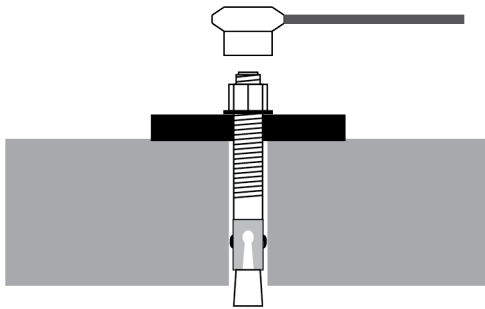
Once past the hole in the Base Plate, the Anchor Bolt eventually stops going down into the hole as the Expansion Sleeve contacts the sides of the hole; this is normal.

5. Hammer or mallet the Anchor Bolt the rest of the way down into the hole.

Stop when the Washer is snug against the Base Plate.

6. Plumb each post; install any needed Shims.

7. Wrench each Nut **clockwise** to the recommended installation torque, 110 – 150 foot pounds, using a Torque Wrench.



Important: Do **not** use an impact wrench to torque the Anchor Bolts.

Wrenching the Nut forces the Wedge up, forcing out the Expansion Sleeve and pressing it tightly against the Concrete.

Assemble the Platform Structures

Platform Structures support the Platform Sections, which together create a Platform.



Tip BendPak recommends assembling the Platform Structure, routing the cables, and testing the Platform **before** putting on the Platform Sections. Adding the Platform Sections is described in a later section.



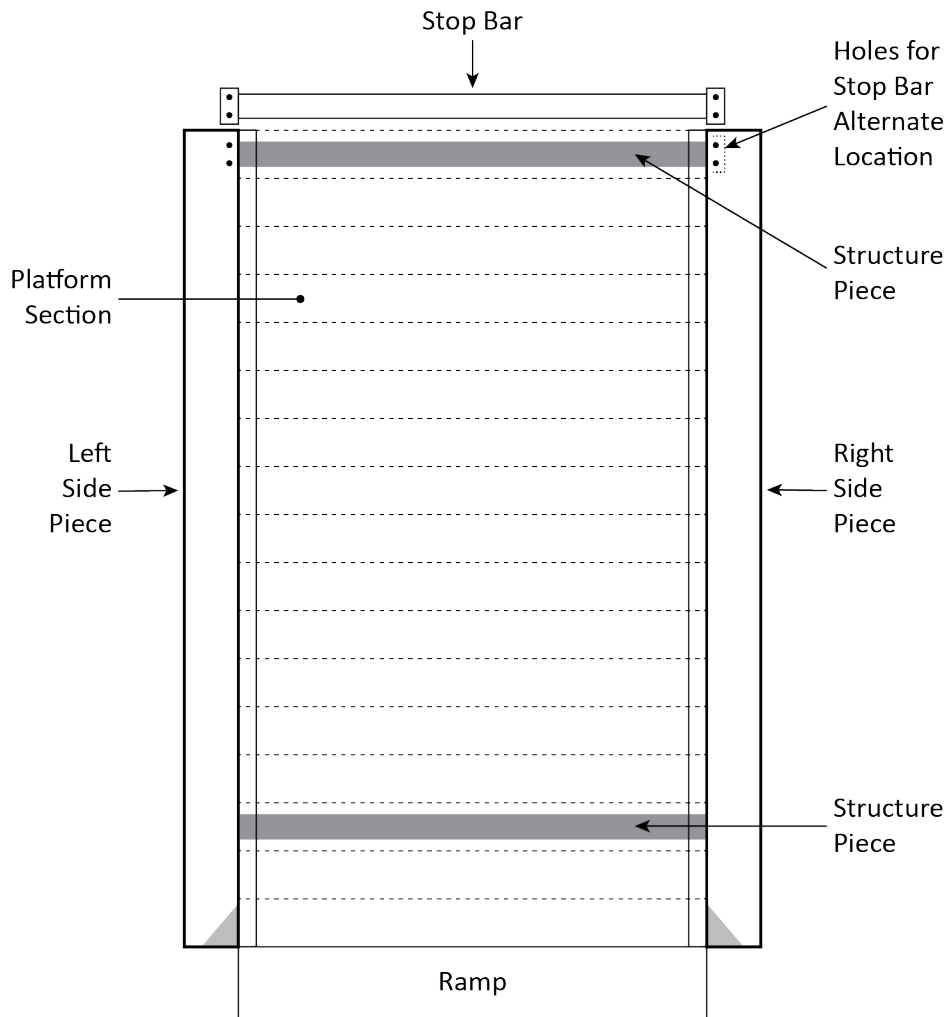
Tip BendPak recommends assembling the Platform Structure **on a raised platform**, such as sawhorses. If the components are on the ground, it is much harder to assemble the Platform Structure.

The following procedure covers assembling one Platform Structure. You will have to perform this procedure twice for the PL-6KDT and PL-6KDTX, three times for the PL-6KT.

To assemble a Platform Structure:

1. Locate the pieces needed for one Platform Structure:
 - Two Side Pieces (one for the left side, one for the right side; they are **not** interchangeable)
 - Two Structure Pieces
 - One Stop Bar
 - Four Platform Cable Turns
 - Four Platform Cable Locks
 - 12 Cable Clamps
 - Necessary nuts, bolts, and washers (including eight black bolts)
2. Arrange all the pieces in their approximate positions.

Note: The Side Pieces are **not** interchangeable. Make sure you have one Left Side Piece and one Right Side Piece, and that they are oriented correctly.



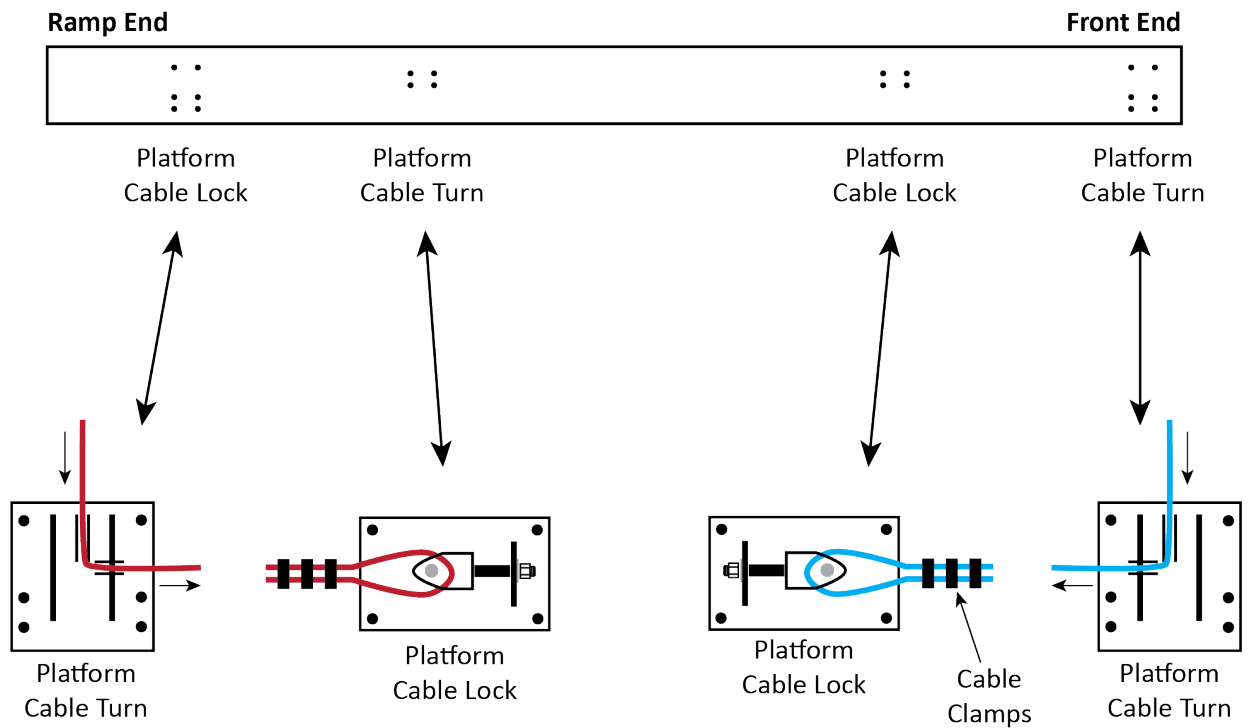
3. Attach the Tire Stop in the desired location.

There are two possible locations for the Stop Bar: between the Side Pieces at the front of the Platform or on top of the Side Pieces. The Side Bar acts as a Tire Stop in both locations.

The bolts/washers go on the outside, the nuts on the inside. Do not torque the nuts yet.

- Attach the four Platform Cable Locks.

The bolts/washers go on the inside, the nut on the outside. Do not torque the nuts yet.



- Attach the four Platform Cable Turns, but using the **top two bolts only** on each one.

Use the black bolts.

Make sure the Platform Cable Turns are oriented correctly (there are two types); when the cable goes through the turn, it must be going towards the Platform Cable Lock.

- Put the Structure Piece that goes closest to the Ramp into position, then connect one end through the Side Piece and the four remaining holes in the Platform Cable Turn.

Put the nuts on but do not torque them yet.

Connect the other end the same way.

- Put the Structure Piece that goes closest to the Stop Bar into position, then connect it through the Side Piece and the Platform Cable lock, the same as the other Structure Piece.


Put the nuts on but do not torque them yet.

- For each of the four cables for a Platform, route each cable through the Platform Cable Turn, towards the Platform Cable Lock, around the pin in the Platform Cable Lock, and back towards the Platform Cable Turn.

- Clamp the cables together using the Cable Clamps; use three clamps per cable.

Bleed the Hydraulic Cylinders

The Hydraulic Cylinders are self-bleeding, which means that in most cases when there is air in the hydraulic system, the air can be removed by raising and lowering the lift a few times; “bleeding” the system of the unwanted air.

 **CAUTION** Before performing any maintenance on your lift (for example, bleeding the Hydraulic Cylinders or adding Hydraulic Fluid), make sure all Platforms are on the ground and the power source has been disconnected.

Symptoms of air in the Hydraulic System include Platforms moving erratically and/or making odd noises. These could be caused by other situations; refer to **Troubleshooting** for more information.

To bleed the Hydraulic System:

1. Raise and lower each Platform up to six times; ***pause for one minute between each cycle.***

The lift’s motor cannot run continuously; it is designed for regular use, but not continuous use.

2. Watch the Platforms as you raise and lower them.

When the lift stops moving erratically or stops squeaking, you can stop the bleeding process.

3. Check the Hydraulic Fluid reservoir on the Power Unit.

Bleeding the Hydraulic System may significantly lower the amount of Hydraulic Fluid in the reservoir.

Add additional Hydraulic Fluid if necessary.

If your lift is still moving erratically or making a lot of noise, refer to **Troubleshooting** for more information.

Assemble the Platform

Each platform is made up of 17 steel Platform Sections and one Ramp.

To install Platform Sections:

1. Assemble the needed Platform Sections, Ramp, bolts, nuts, flat washers, and spring lock washers near the Platform Structure.
2. Put the Platform Sections into place, starting from the front of the lift (at the Tire Stop) and working your way to the back, where the Ramp goes.

Make sure to overlap the Platform Sections as you put them into place.

Do not bolt the Platform Sections yet.



Tip You may find it easier to bolt the Platform Sections into place if you raise the Platform Structure so that you can walk under it. You are not required to do this, but you may find that it makes it easier to bolt the platform pieces together. Make sure to leave the lift on the Safety Lock.

3. Take one bolt, spring lock washer, flat washer, and nut, and install them into the holes in the Platform Sections.

Make sure to put the bolt and the spring lock washer on one side of the hole, with the flat washer and the nut on the other side.

4. When all of the platform pieces are in place, attach the Ramp to the last Platform Sections.

Lubrication

The only lubrication needed for the PL-6K Series lifts is for the bushings on the sheaves that are on the sides of the crossbeams.

Put a small amount of white lithium grease or similar on those bushings prior to using the lift.

Operational Test

BendPak recommends doing an operational test of your lift with a typical vehicle before starting normal usage (a vehicle is not required, but is recommended).

Performing an operational test will help you get a feel for how to operate it and helps get any residual air out of the hydraulic system.

During the operational test, observe operating components and check for proper installation and operation. If you run into an issue that will not go away, refer to **Troubleshooting** for more information.

Note: Residual air in the hydraulic system can cause the lift to shake, move erratically, or squeak; this is normal. If it happens to you, do not worry; it will go away quickly as the lift is a self-bleeding system.

To test your PL-6K Series lift:

1. Check the area around and above the lift for obstructions; move them if you find any.
2. If you are going to run the test with a typical vehicle, drive it onto the desired Platform.
3. Insert the key, turn it to **On**, then select the desired Platform.
4. Press and hold **Up**. The Platform starts rising.
5. When the Platform is about a foot off the ground, release **Up**. The Platform stops rising.
6. Press and hold **Down**. The Platform starts lowering.
7. When the Platform gets to the ground, it will stop lowering automatically. Release **Down**.
8. Wait for one minute.

 **CAUTION** The Power Unit's motor is **not** constant duty; it cannot be run continuously.

9. Repeat the process, this time raising the Platform to the Safety Lock.
10. If the Platform is working without shaking, moving erratically, or squeaking, there is no need to repeat the procedure.

If the Platform is shaking, moving erratically, or squeaking, this is perfectly normal during the start-up period. Repeat the procedure a couple more times, with a one-minute break between.

11. Perform the same test with the next Platform.

If you continue to have issues, refer to **Troubleshooting** for more information.

Final Checklist Before Operation

Make sure these things have been done before using your PL-6K Series lift:

- Review the **Installation Checklist** to make sure all steps have been performed.
- Make sure the Power Unit is getting power from the power source.
- Check the Power Unit Hydraulic Fluid reservoir; it must be full of approved Hydraulic Fluid or automatic transmission fluid. ***You can harm the motor by running it without enough fluid.***
- Check the Hydraulic System for leaks.
- Make sure posts are properly shimmed and stable.
- Make sure all cables are properly positioned in their sheaves.
- Make sure that all Safety Locks are cleared and free.
- Make sure a copy of the *Installation and Operation Manual* is left with the equipment.
- If it hasn't been done already, perform an operational test of the lift with a typical vehicle.

During the operational test, observe all operating components and check for proper installation and operation. Do not put the lift into normal service until a thorough operational test has been performed with a typical vehicle.

Operation

This section describes how to operate your lift.

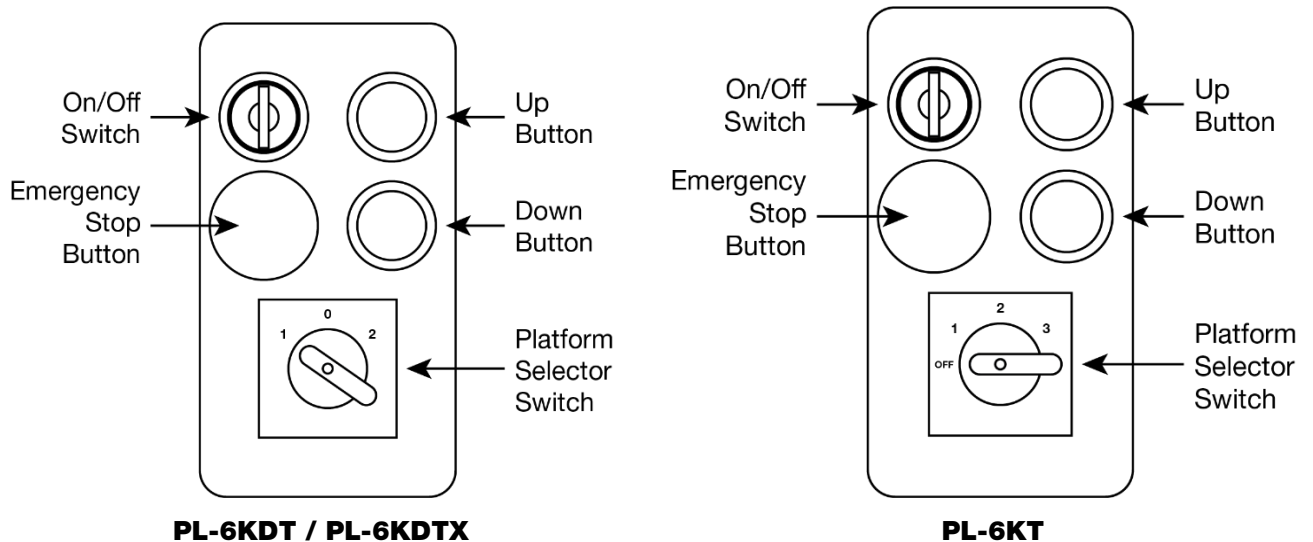
Safety Considerations

Do the following before you raise or lower a vehicle:

- **Check the lift.** Check the lift for any missing, heavily worn, or damaged parts. Do not operate the lift if you find any issues; instead, take it out of service, then contact your dealer, email techsupport@bendpak.com, or call **(800) 253-2363**.
- **Check the area.** Keep the area around the lift clean and free of obstructions; anything that could cause a problem for the lift. Do not forget to check **above** the lift. If you find an obstruction, move it out of the way. Do not allow any people or animals within 30 feet of the lift while it is in motion.
- **Check the operators.** Make sure that everyone who is going to operate the lift has been trained in its use, has read the labels on the unit, and has read the manual. Only the operator at the console should be within 30 feet of the lift when it is in motion. Do not allow children to operate the lift. Do not allow anyone under the influence of drugs or alcohol to operate the lift.
- **Check for safety.** Make sure everyone who is going to be walking near the lift is aware of its presence and takes appropriate safety measures. Only put vehicles on the arms. **When raising a vehicle, do not leave it until it is on the Safety Lock.** When lowering the lift, do not leave it until it is on the ground.
- **Check the vehicle.** Never exceed the lift's weight rating. Do not allow people inside a vehicle you are going to raise. Make sure the vehicle is not overbalanced on either end. Never raise just one side, one corner, or one end of a vehicle.

Using the Control Box

This section describes how to use the Control Box.



The **Control Box** controls your lift:

- The **On/Off Switch** is a security device; you must have the key in and turned to On to operate the lift.


-
- The **Emergency Stop Button** stops the lift immediately when pressed. Use this if an unexpected and/or dangerous situation arises. When pressed, the button physically goes in and locks. To release the **Emergency Stop Button**, twist it clockwise until it pops back out.
 - The **Up** and **Down** buttons raise and lower the selected platform.
 - The **Platform Selector Switch** selects which platform is raised or lowered. The PL-6KDT and the PL-6KDTX have a three-position switch: select **1** to control the Powerside Platform, select **2** to control the Offside Platform, select **0** when not using the lift.

The PL-6KT has a four-position switch: select **OFF** when not using the lift, select **1** to control the Powerside Platform, select **2** to control the Center Platform, select **3** to control the Offside Platform.

Raising and Lowering Vehicles

Keep the following in mind when operating your lift:

- **Be safe.** Make sure to check for people, pets, and objects that might be in the path of the lift as you raise or lower it. Watch the lift carefully as it raises and lowers.

 **DANGER** Pay careful attention when you are raising or lowering your lift. If a person or pet gets stuck under the lift, they could be injured or, in rare cases, killed.

- **Platforms operate independently.** Each Platform on the lift operates independently; be sure to double check the **Control Box** and make sure you are raising or lowering the desired Platform.
- **The Emergency Stop button is there for a reason.** We hope you never have to use it, but if something unexpected happens, use the **Emergency Stop** button to immediately stop the lift from moving.
- **Get what you need out of the vehicle before lifting it.** It is annoying to raise a vehicle and then realize you left something inside. Believe us, we have done it.

To raise a vehicle:

1. On the **Control Box**, make sure the **On/Off Switch** is **On** and the desired Platform is selected.
2. Make sure the Platform is on the ground. If it is not, move it all the way down to the ground.
3. Drive a vehicle onto the Platform.


Make sure all four wheels are fully on the Platform, not on the ramp or the side structure. Put the vehicle into park and put on the parking brake. If it is a manual transmission, make sure it is in a gear, not in neutral.

4. On the **Control Box**, press and hold **Up**.
5. When the Platform passes the Safety Lock, release **Up** and press **Down** momentarily. The Platform settles onto the Safety Lock.
6. With the Platform on the Safety Lock, check around the vehicle to make sure everything looks good, then set the **Control Box** to **0** or **OFF**, depending on which lift you are using.
7. If you are not going to be using the lift any further, turn the **On/Off Switch** to **Off** and then remove the key.
8. Drive a vehicle under the raised Platform.

To lower a vehicle:


1. Make sure there is nothing under the Platform you are about to lower. If there is, move it out of the way.
2. Insert the key into the **On/Off Switch**, turn it to **On**, and select the desired Platform.
3. On the **Control Box**, press and hold **Down**.
4. When the Platform gets to the ground, release the **Down** button.
5. If you are not going to be using the lift any further, turn the **On/Off Switch** to **Off** and then remove the key.
6. Drive the vehicle off the Platform.

Maintenance


 **DANGER** Before performing any maintenance on your lift, make sure it is completely disconnected from power.

To maintain your lift:

- **Daily:** Keep the lift clean. Wipe up any spills, clean any dirt.
- **Daily:** Make a visual inspection of all moving parts and check for damage or excessive wear. Replace any damaged or worn parts before using the lift.

 **DANGER** Do not use the lift if the cables are damaged or extremely worn. If a vehicle is raised when you notice the damage or extreme wear, very carefully lower the vehicle to the ground. When the lift is on the ground, disconnect it from power and make arrangements to fix the damage or wear.

- **Daily:** Make sure Safety Lock is in good operating condition. Do not use your lift if the Safety Lock is damaged or excessively worn.
- **Weekly:** Check all controls, including Emergency Stop, to make sure they are functioning.
- **Weekly:** Check all labels on the lift. Replace them if they are illegible or missing.
- **Monthly:** Grease the lubrication points on the lift; only the bushings on the sheaves on the sides of the crossbeams need lubrication. Use white lithium grease or similar.
- **Monthly:** Check Power Unit Hydraulic Fluid levels. Refill if low.
- **Monthly:** Check cable connections, bolts, and pins for proper mounting and torque.
- **Monthly:** Check arm adjusting locks for proper operation.
- **Monthly:** Make sure all pivot arm pins are properly secure.
- **Every two months:** Check all Anchor Bolts to make sure they are correctly tightened. If they are not, tighten them.
- **As needed:** Take the lift out of service and then replace the lifting cables if there are signs of damage or extreme wear.

 **WARNING:** Do not operate your lift if you find maintenance issues; instead, take the lift out of service, then contact your dealer, visit bendpak.com/support, email techsupport@bendpak.com, or call **(800) 253-2363**.

Wire Rope Inspection and Maintenance

Your lift's wire rope should be inspected regularly:

- Lifting cables should be replaced when there are visible signs of damage or extreme wear. ***Do not use the lift if it has damaged or worn cables; you must take it out of service!***
- Lifting cables should be maintained in a well-lubricated condition at all times.

Wire rope is only fully protected when each wire strand is lubricated both internally and externally. Excessive wear shortens the life of wire rope.

Use a wire-rope lubricant that penetrates to the core of the rope and provides long-term lubrication between each individual strand, such as 90-WT gear oil or ALMASOL® Wire Rope Lubricant.

To make sure that the inner layers of the rope remain well lubricated, lubrication should be carried out at intervals not exceeding three months during operation.

- All sheaves and guide rollers in contact with the moving rope should be given regular visual checks for surface wear and lubricated to make sure they run freely. This operation should be carried out at appropriate intervals generally not exceeding three months during operation.

For all sheave axles, use standard wheel bearing grease. For all sheaves and/or guide rollers, use 90-WT gear oil or a similar heavy lubricant, applied by any method including pump/spray dispensing, brush, hand, or swabbing.

- How often should you inspect?

Lifting cables should be visually inspected at least once each day when in use, as suggested by American Petroleum Institute's Recommended Practice 54 guidelines.

Any lifting cables that have met the criteria for removal must be immediately replaced.

- When should you replace lifting cables due to broken wires?

Lifting cables should be removed from service if you see six randomly distributed broken wires within any one lay length, or three broken wires in one strand within one lay length.

- Are there other reasons to replace your lifting cables?

Yes:

- Corrosion that pits the wires and/or connectors.
- Evidence of kinking, crushing, cutting, bird-caging, or a popped core.
- Wear that exceeds 10% of a wire's original diameter.
- Evidence of heat damage.

- How do you find broken wires?

- a. Relax your rope to a stationary position and move the pick-up points off the sheaves. Clean the surface of the rope with a cloth — a wire brush, if necessary — so you can see any breaks.
- b. Flex the rope to expose any broken wires hidden in the valleys between the strands.
- c. Visually check for any broken wires. One way to check for crown breaks is to run a cloth along the rope to check for possible snags.
- d. With an awl, probe between wires and strands and lift any wires that appear loose. Evidence of internal broken wires may require a more extensive rope examination.

Troubleshooting

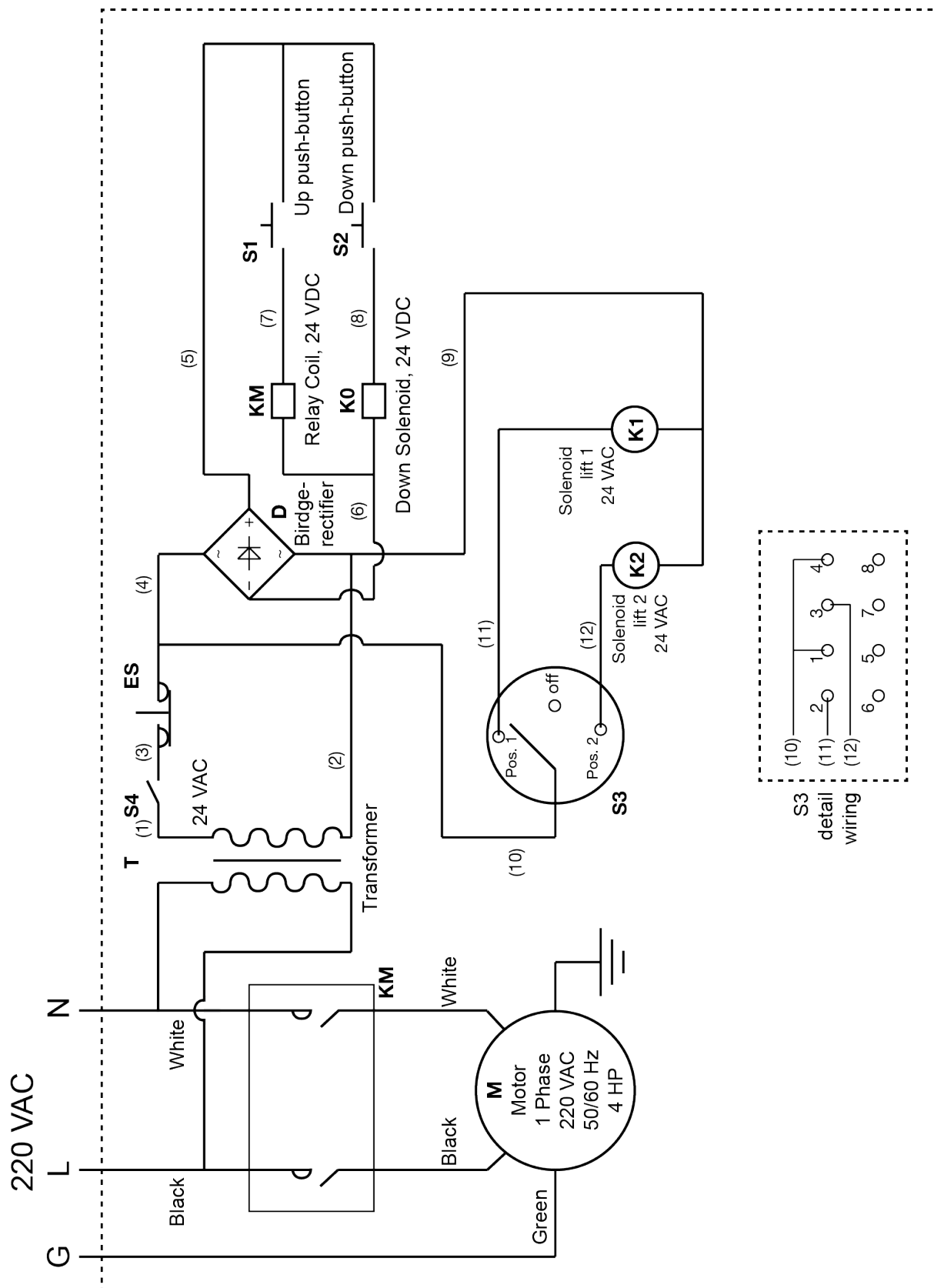
This section describes how to troubleshoot your lift.

Lift does not raise or does not lower, once raised.	Make sure there is sufficient Hydraulic Fluid in the reservoir. Make sure there is no air in the Hydraulic System. Make sure none of the Hydraulic Lines are pinched or leaking. Make sure the Power Unit is getting power. If the Hydraulic Fluid is dirty, replace it with clean fluid. Make sure lift is not overloaded.
Platforms move erratically or squeak when in use.	Move the platforms up and down a few times to flush any residual air from the Hydraulic System.
Lift does not stay up.	Check for leaking Hydraulic Fluid. Make sure the lift is left on its Safety Lock.
Motor not running.	Check the connection to the power source; make sure it is plugged in and of the appropriate voltage. Check the wiring diagram.
Hydraulic Fluid is dirty.	Replace the dirty fluid with clean, approved Hydraulic Fluids, such as Dexron III, Dexron VI, Mercon V, Mercon LV, Shell Tellus S4 / S3 / S2, or comparable.
Lift makes odd noises.	Lubricate the bushings on the sheaves on the sides of the crossbeams using white lithium grease. If the lift is new, a break-in period may be needed; run the lift several times each day. If the noises persist, contact BendPak Support.

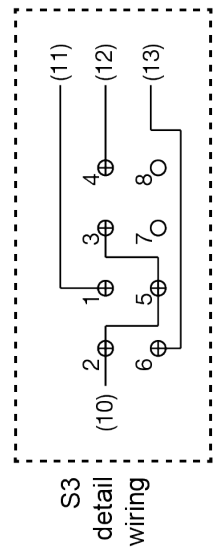
If you continue to have issues with your lift, take it out of service, then contact your dealer, go to bendpak.com/support, email techsupport@bendpak.com, or call **(800) 253-2363**.

Wiring Diagrams

PL-6KDT and PL-6KDTX

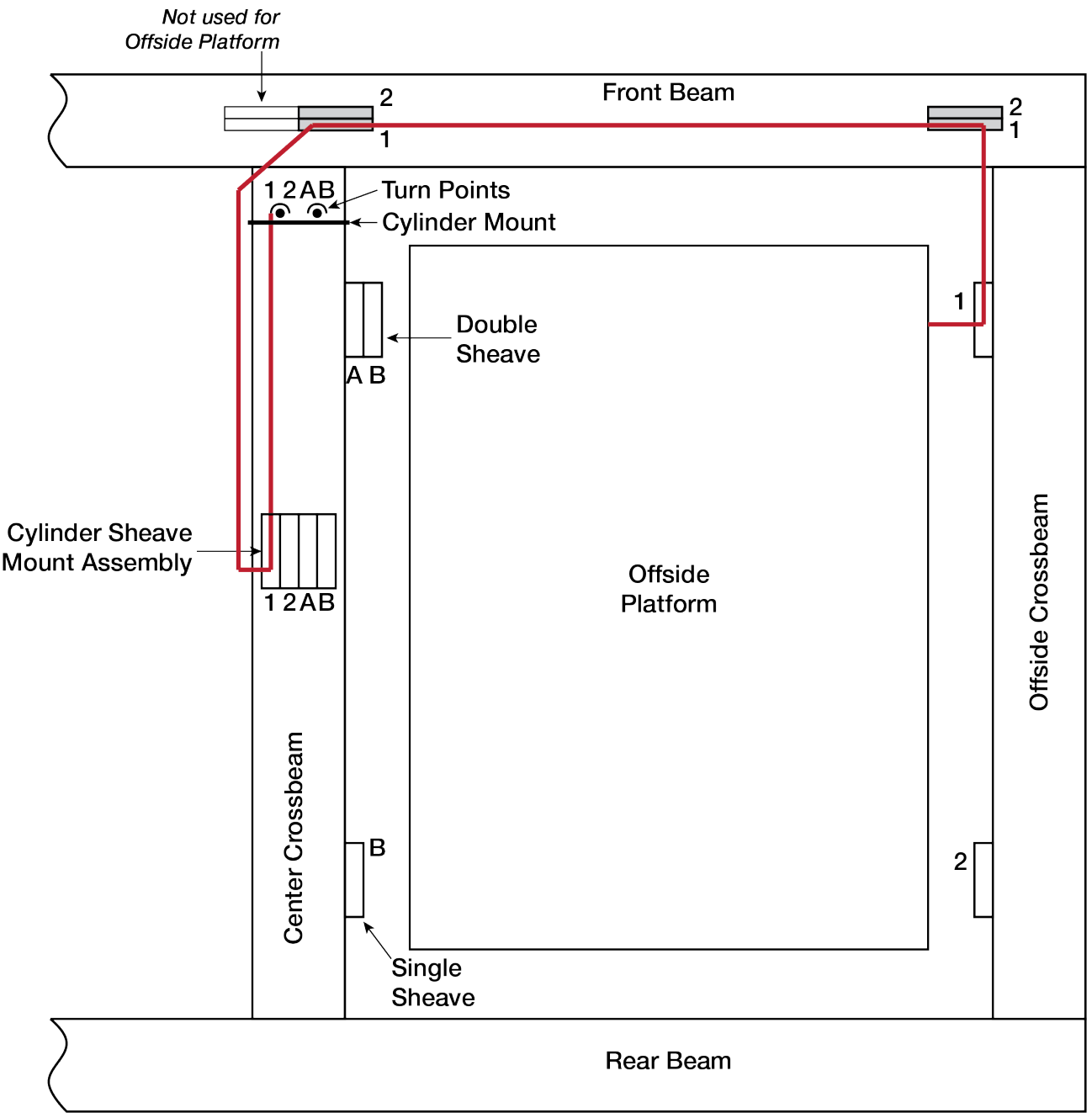


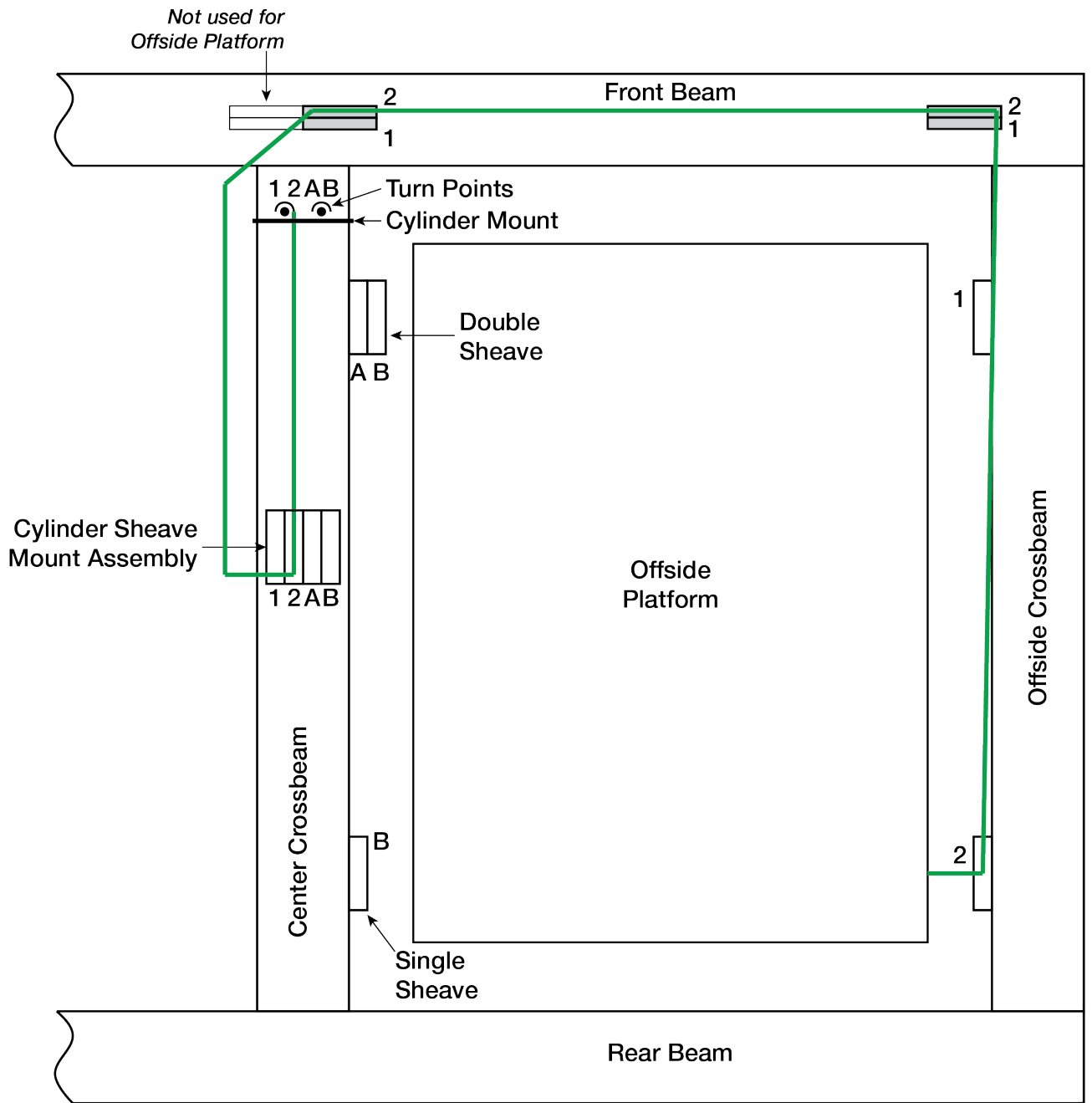
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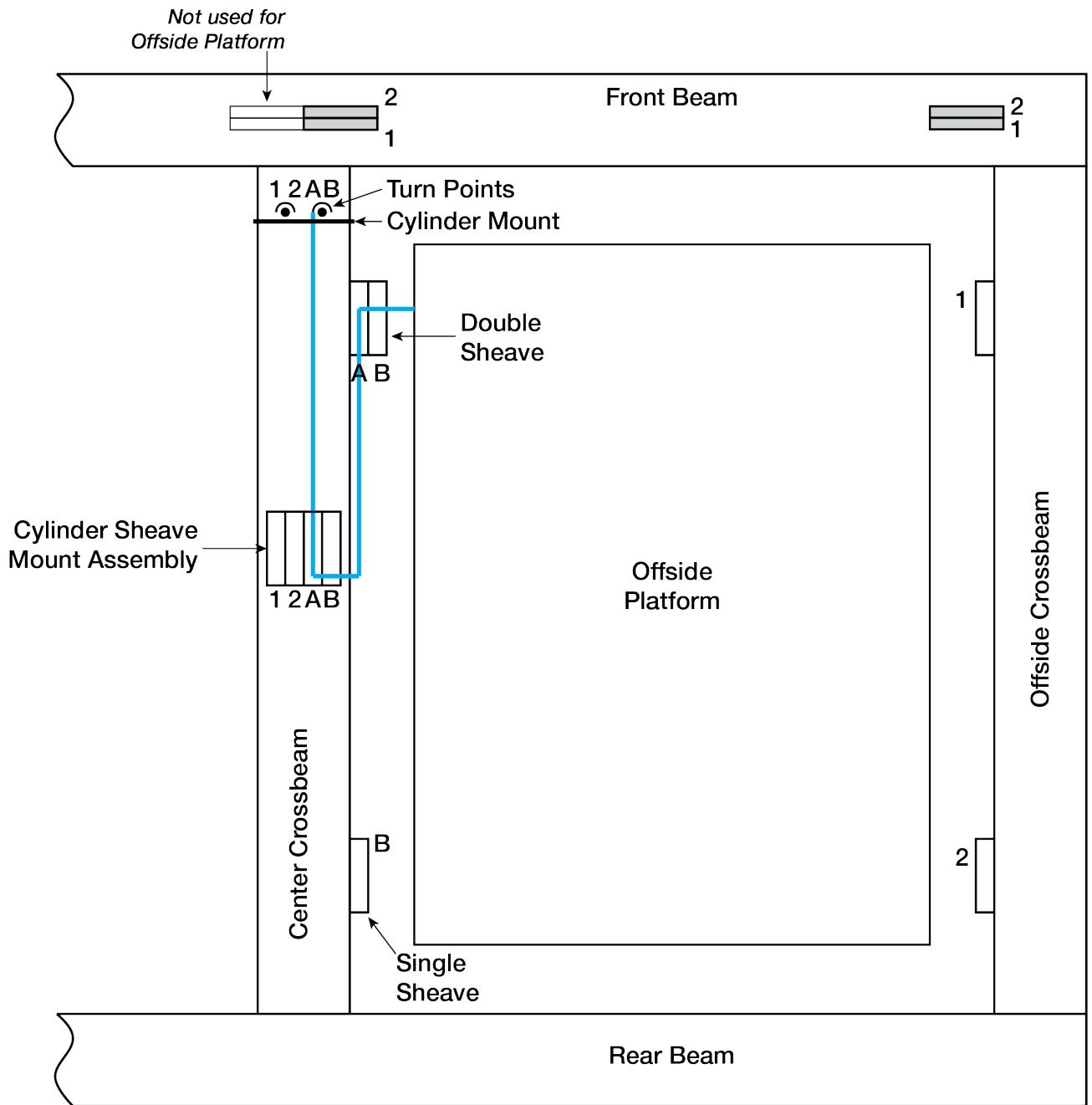


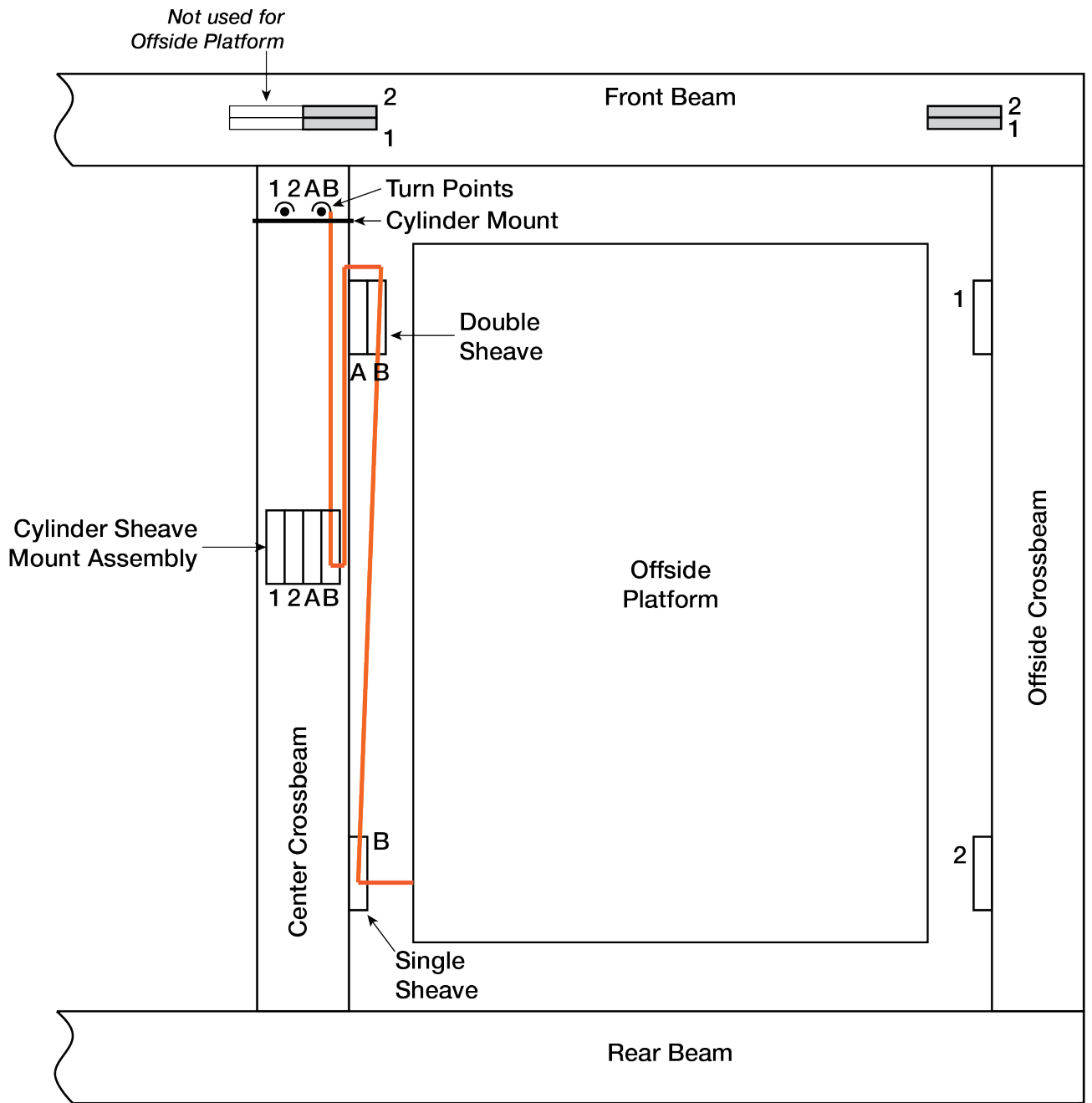
Cable Routing Diagrams

This section shows exploded cable routing diagrams for the Offside Platform. The cable routing for Powerside Platforms and Center Platforms are nearly the same.









Labels

A



B



- ⚠ WARNINGS**
- Read the entire operation manual, warnings and operation instructions before using this lift.
 - If any questions arise as to the safety or operation of the lift, contact your property manager, building engineer, authorized dealer, or authorized service center.
 - NEVER leave the lift unattended while partially raised or lowered.
 - Always use caution when operating this lift. Never allow children or persons under the influence of drugs or alcohol to use or maintain this lift.
 - Serviceperson properly trained and authorized to use this lift is to be used for maintenance.
 - KEEP ALL OBJECTS, HANDS AND FEET CLEAR AT ALL TIMES. Never place hands, arms or feet near any moving parts during operation. Serious injury or death can occur.
 - ADJUST double-check under clearance BEFORE driving under or over lift platform. ADJUST double-check overhead clearance BEFORE raising lift platform.
 - Only trained operators should operate this lift. All trained personnel should be kept away from work area. Never let non-trained personnel come in contact with, or operate lift.
 - Guard against electric shock. This lift must be grounded while in use to protect the operator from electric shock.
 - Risk of explosion. This lift has internal wiring or sparking parts which should not be exposed to flammable vapors.
 - Maintain lift with care. Keep lift clean for better and safe performance. Follow manual for proper lubrication and maintenance instructions. Keep control handles and buttons dry, clean and free from grease and oil.
 - Stay alert - watch what you are doing, the common sense and always be aware.
 - Check for damaged parts. Check for alignment of moving parts, breakage of parts or any condition that may affect safe operation of the lift. Do not use lift if any component is broken or damaged.
 - Never remove safety related components, reduction or warning labels. Do not use lift if safety related components, instruction or warning labels are damaged or missing.

OPERATION INSTRUCTIONS

Read the entire operation manual and warning instructions shown above before operating this parking lift.

IMPORTANT NOTE
The parked and locked position of the lift determines the height of the vehicles that can be safely parked underneath the lift. Make sure that you are using only vehicles that are of the proper height for the parked and locked setting.

PLACEMENT OF UPPER VEHICLE / PRE-LIFTING PROCEDURE

- Drive up vehicle onto the viewing platform. Vehicles may be driven in, rear first or backed in.
- Be sure that all of the vehicle's tires are resting securely on the platform surface. Never leave a vehicle with its tires partially on the platform or on the raised portion of the platform or curbs.
- Turn off car engine, engage safety brake, and place the vehicle's gear selector in Park. If vehicle is manual transmission, place the transmission in first gear.
- Walk around the lift to ensure no obstructions will interfere with the vehicle being lifted.
- Position yourself within reach of the operator controls and clear of all moving parts and pinch points.

LIFTING PROCEDURE

- With the vehicle positioned on the lift platform, check the lift perimeter to ensure that no objects are in the platform's way, and that no persons except for lift operator are within 10 feet.
- During operation, observe the safety perimeter of the lift to ensure there are no obstructions that may damage vehicle and/or lift.
- Position the see switch on the control panel to ON.
- Position the see switch on the control panel to 1 or 2 (if double wide model) or 1 thru 3 (if triple wide model). NOTE: Station 1 will always be closest to control panel.
- Press and hold the **UP** button until the lift platform reaches the parking position. NOTE: When the parking position is reached, you will visually see the safety lock bar drop down into the stationary lock rail.
- WARNING - NEVER accidentally raise the lift beyond the parking position. If the lift platform is raised too far, the safety release device will engage which would disengage the lock system.
- After reaching the parking position, release the **UP** button then press and activate the **DOWN** button to lower and park the platform firmly and fully onto the stationary lock rail. Once downward movement stops, release the **DOWN** button.
- ADJUST when the platform is in the parking position. Never step or place the lift midway between the floor and parking position.
- Never purposely work under the raised platform - always walk around and stay clear at all times.

IMPORTANT NOTE - Activate the RED EMERGENCY STOP button to stop lift operation at any time.

LOWERING THE LIFT

- Walk around the lift to make sure nothing is below or near the lift platform's entire lower area to prepare for descent.
- Be certain that no persons except the lift operator are within 10 feet of the lift area.
- Press and activate the **UP** button for lift to rise enough to disengage the lift platform(s) enough to allow activation of the mechanical lock release device.
- Release the **UP** button then press and activate the **DOWN** button to lower and park the platform to the floor. Once downward movement stops, release the **DOWN** button.
- When lowering lift platform always be watchful for objects, persons or animals that may wander under the lift platform during operation.
- Maintain visual contact with lift platform during all operations.

WARNING - Immediately cease operation if platform becomes unlevel or if area becomes obstructed.

- Platform will continue to lower as long as you have the **DOWN** button activated.
- Continue lowering the platform until downward movement stops and the lift settles on the floor.
- Release the **DOWN** button.
- Constantly drive out the vehicle off the lift platform only after making sure all is clear before exiting the lift area.

**MOVING MACHINERY
KEEP HANDS AND FEET
CLEAR AT ALL TIMES**
MANTENGA LAS MANOS Y LOS
PIES ALEJADOS EN TODO MOMENTO

⚠ WARNING

PARKING LIFT WIRE ROPE INSPECTION AND MAINTENANCE

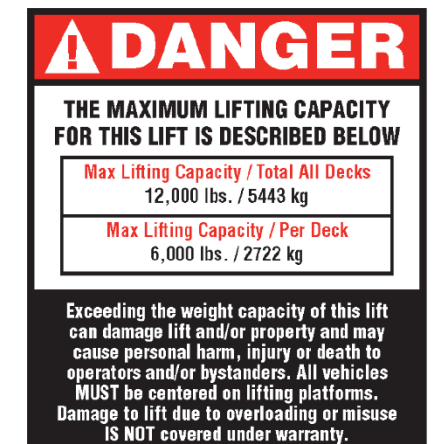
- Lifting cables should be replaced every (3) years or when visible signs of damage are apparent. DO NOT USE LIFT WITH DEFECTIVE OR WORN CABLES.
- Wire rope should be maintained in a well-lubricated condition at all times. Wire rope is only fully protected when each wire strand is lubricated both internal and external. Excessive wear will shorten the life of the wire rope. The factory suggests wire rope lubricant that penetrates to the core of the rope remains well lubricated. Lubrication should be carried out at intervals not exceeding three (3) months during operation.
- All sheaves and guide rollers in contact with the moving wire rope should be given regular visual checks for surface wear and lubricated to make sure that they run freely. This operation should be carried out at appropriate intervals generally not exceeding three (3) months during operation. The factory recommends applying wheel bearing grease or similar heavy lubricant, through the use of a grease gun, to the zerk fittings of the sheave sides and showers.

Failure to read, understand and follow these instructions may cause death or serious injury. Read and understand these instructions before using lift.

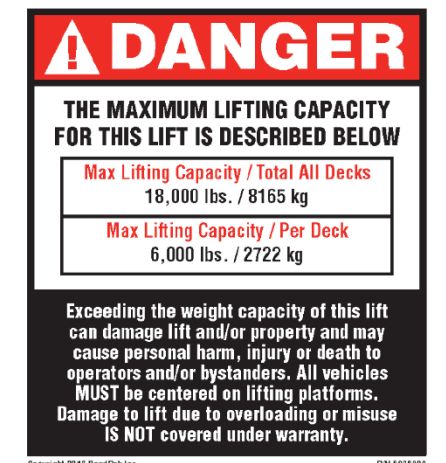
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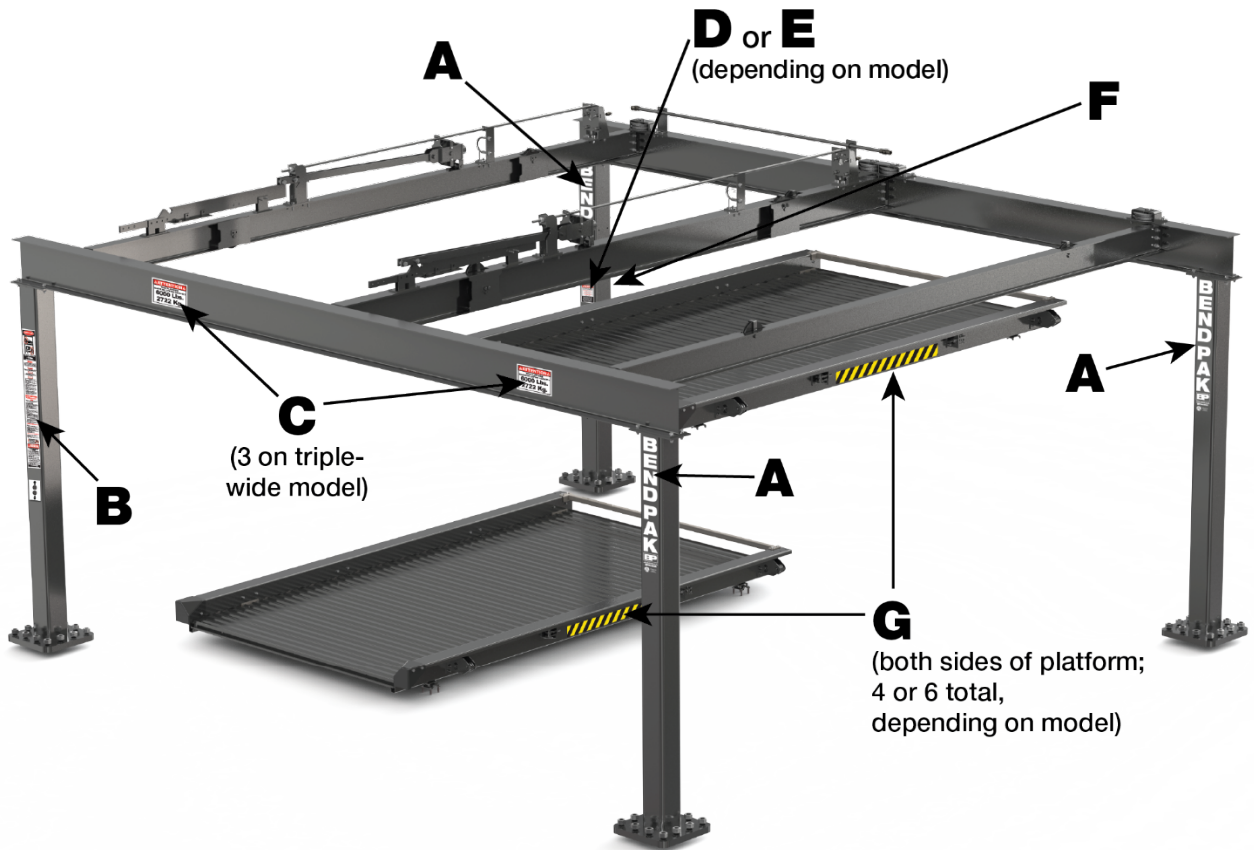


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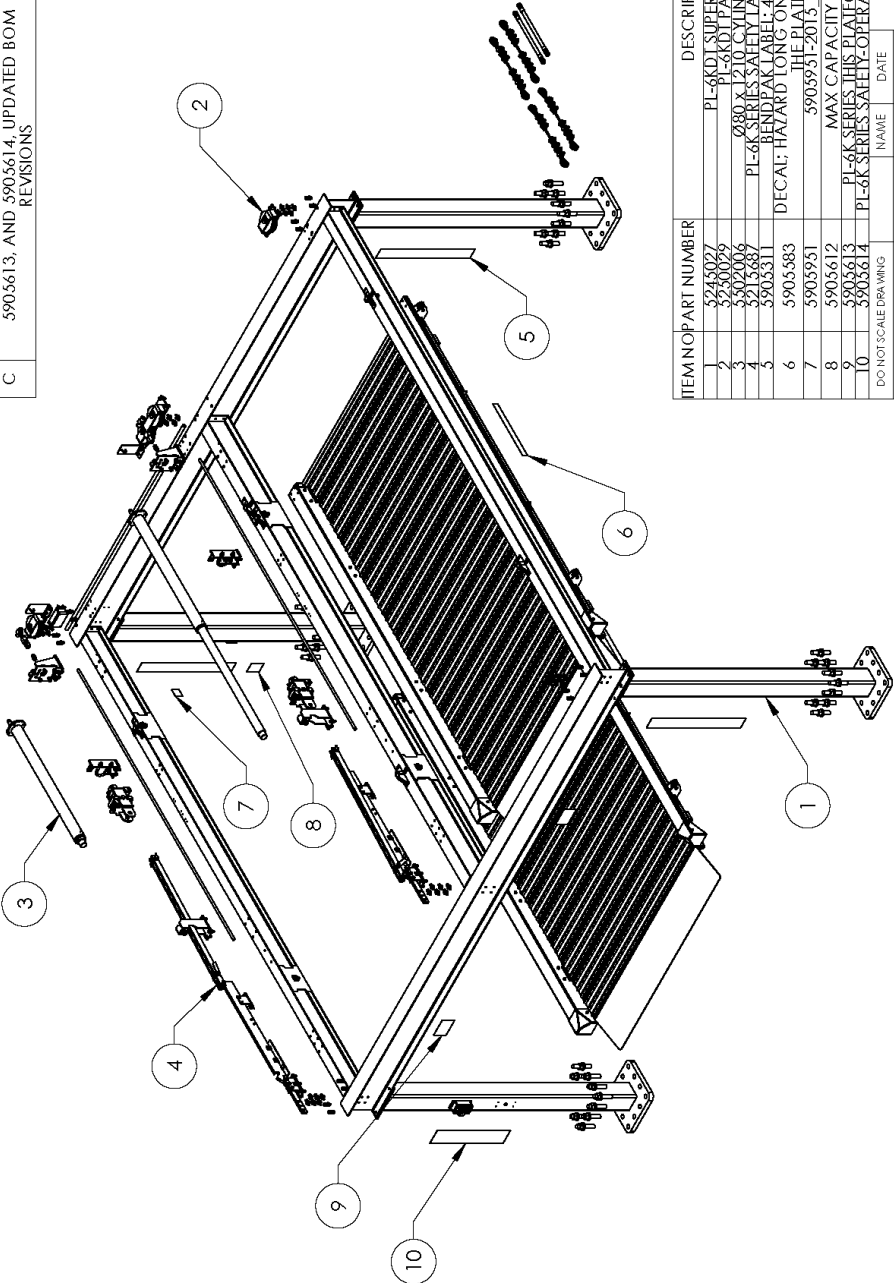
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BP BendPak		Santa Paula, CA USA www.bendpak.com	
MODEL NUMBER			
DESCRIPTION			
LIFT CAPACITY		DATE OF MFG.	
VOLTAGE		SERIAL NUMBER	
<input type="checkbox"/> 110-240V, 50-60 Hz, 1 Ph <input type="checkbox"/> 208-240V, 50-60 Hz, 1 Ph <input type="checkbox"/> 380-415V, 50-60 Hz, 3 Ph <input type="checkbox"/> 208-440V, 50-60 Hz, 3 Ph		UPC	
DANGER! Disconnect Power Before Servicing WARRANTY VOID IF DATA PLATE IS REMOVED PN 5905951			
		ERC	

G

Parts Drawings

REV	DESCRIPTION	REVISION	DATE	EDITED BY	ECO#
A	PRODUCTION RELEASE		04/07/2015	TM	00681
B	UPDATED BOM REVISIONS		10/01/2015	HG	00733
C	ADDED 5905311, 5905583, 5905951, 5905612, 5905613, AND 5905614. UPDATED BOM REVISIONS		01/17/2017	TM	00802



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5245027	PL-6KDT SUPERSTRUCTURE	1	C
2	5250079	PL-6KDT PARTS BOX	1	C
3	5202006	Ø80 X 1210 CYLINDER ASSEMBLY	2	B
4	5215687	PL-6K SERIES SAFETY LATCH BAR ASSEMBLY	2	B
5	5905311	BENDING BAR Ø41MM AND RIGHT SIDE OF DECK	3	-
6	5905583	THE PLATFORMS	4	-
7	5905951	5905951-2013 Serial 09-8	1	-
8	5905612	MAX CAPACITY LABEL-2 DECK	1	-
9	5905613	PL-6K SERIES THIS PLATFORM MAX CAPACITY	2	-
10	5905614	PL-6K SERIES SAFETY-OPERATION-WARNING LABEL	2	-

DO NOT SCALE DRAWING

DRAWN

TM

03/16/2015

CHECKED

DB

2/7/2017

DATE


03/16/2015

NAME


TM

DATE


03/16/2015




THIRD ANGLE PROJECTION




DIMENSIONS ARE IN MM




THIRD ANGLE PROJECTION




DIMENSIONS ARE IN MM




THIRD ANGLE PROJECTION



DIMENSIONS ARE IN MM



THIRD ANGLE PROJECTION



DIMENSIONS ARE IN MM

BP BendPak.

1645 LEMONWOOD DR.
SANTA PAULA, CA 95060

TITLE:

PL-6KDT PRODUCTION LIFT
VER A

SIZE

DWG. NO.

REV

A

5260109

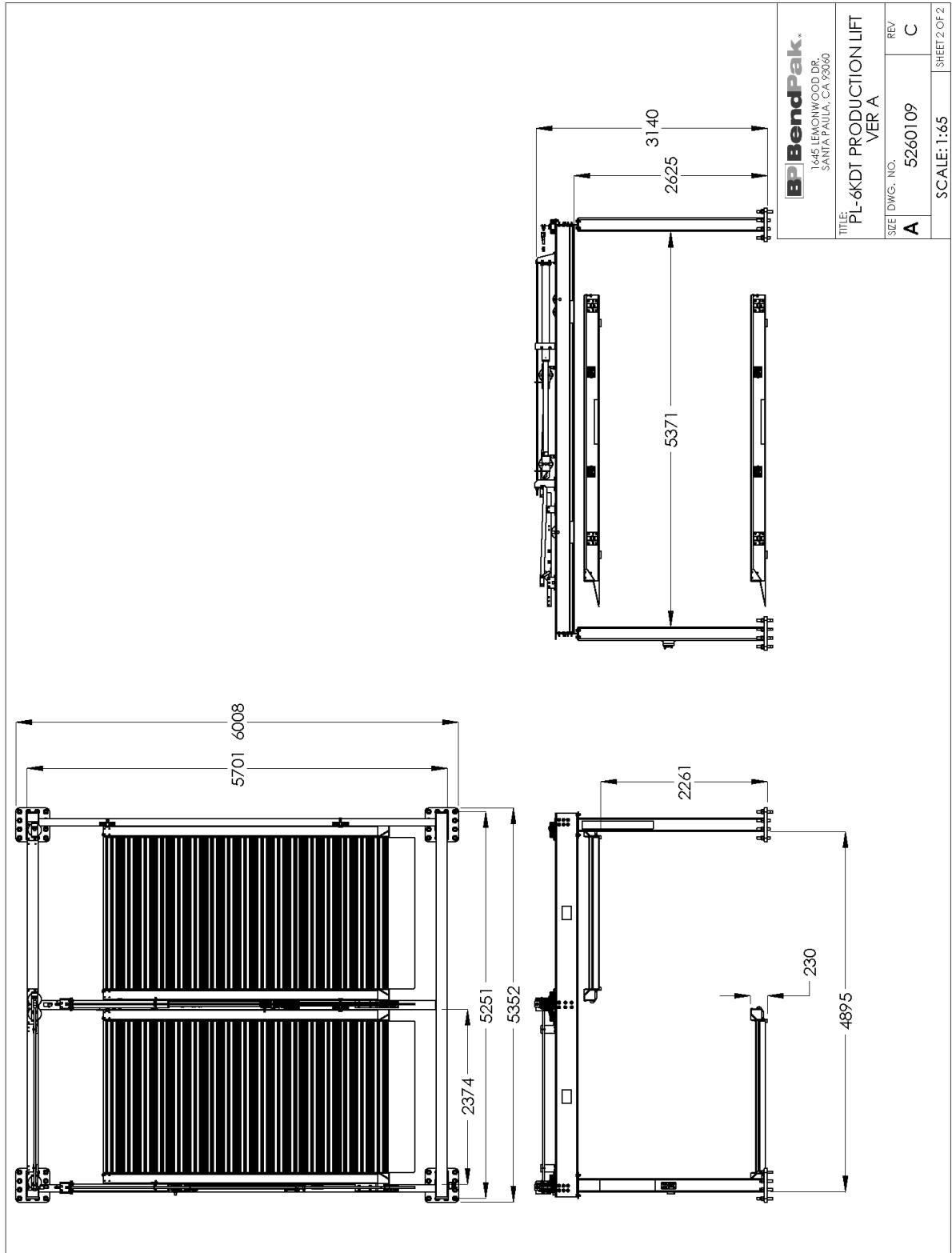
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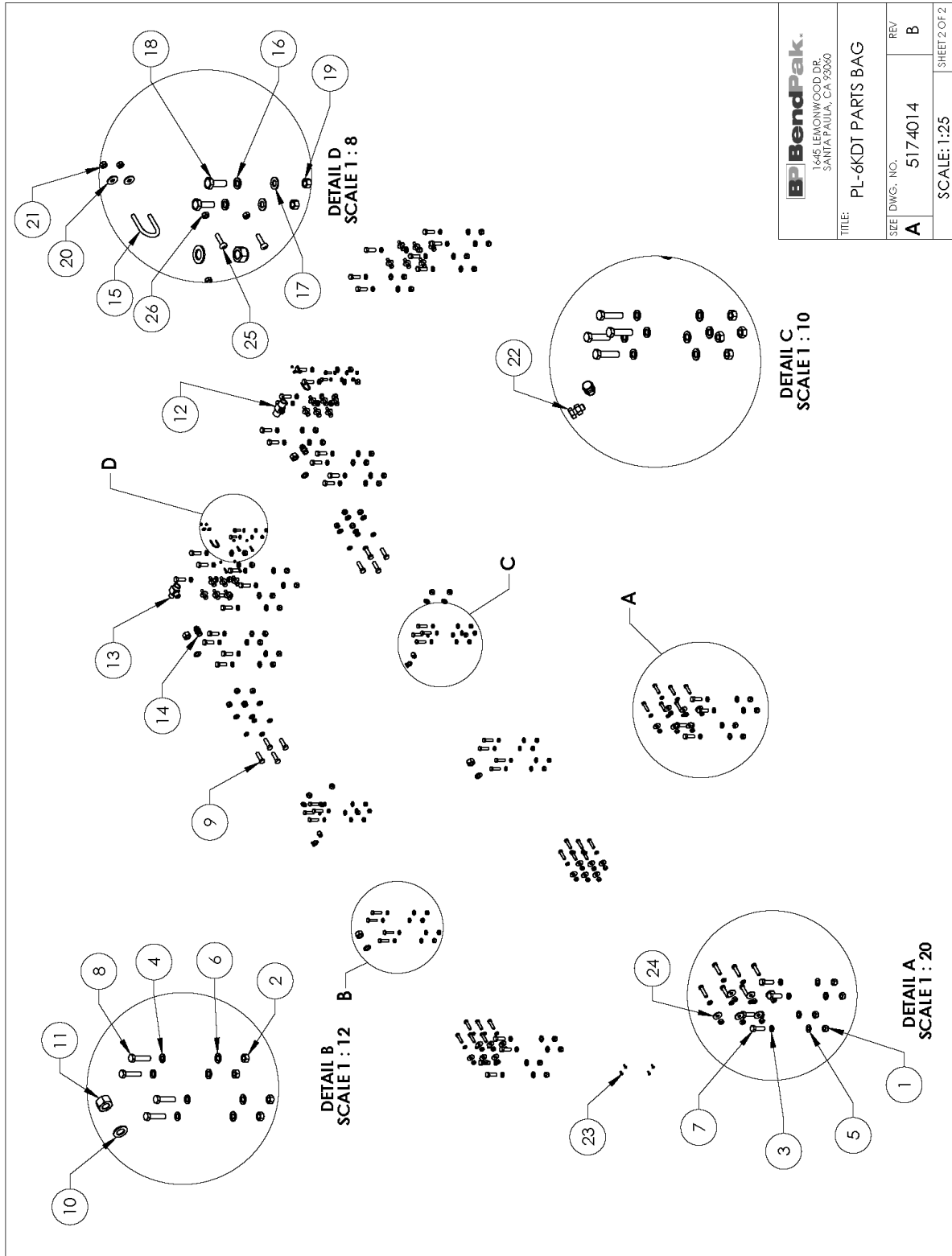
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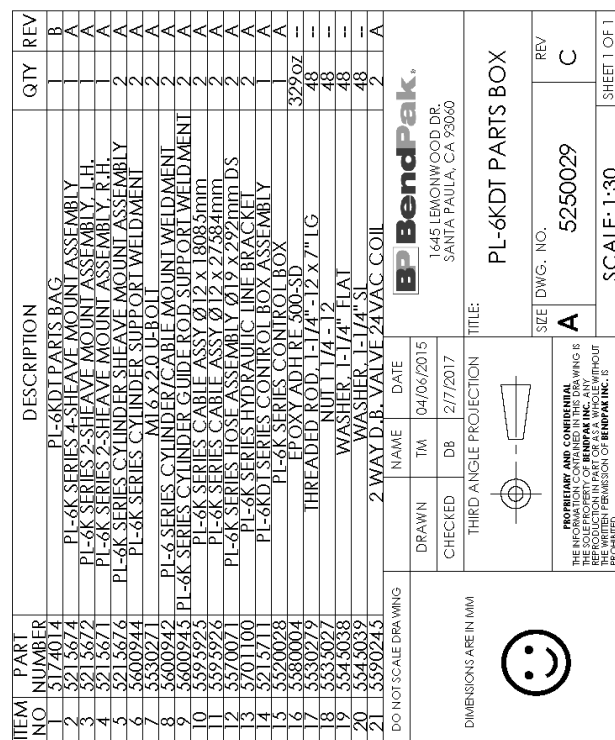
SHEET 1 OF 2

NOTE: UNLESS OTHERWISE SPECIFIED.

1. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING







REV	DESCRIPTION	REVISION	DATE	EDITED BY	ECO.#
A	PRODUCTION RELEASE		03/12/2015	TM	00481
A-001	UPDATED NEXT ASSEMBLY		08/23/2016	TM	00772
B	ADDED 5601132, (3) 5545202, 5545021, 553001, and 5530010, REPLACED (1) 5600958 WITH 5601131, 5701182 WITH 5716040, REMOVED (8) 5545200, UPDATED BOM REVISIONS		01/16/2017	TM	00802

DETAIL A
SCALE 1 : 8

ITEM NO.	PART NUMBER	DESCRIPTION	QTY	REV
1	5701170	PL-6K SERIES RAMP ASSEMBLY	1	A
2	5215628	PL-6K SERIES RAMP SIDE RAIL ASSEMBLY, R.H.	1	A
3	5215677	PL-6K SERIES RAMP SIDE RAIL ASSEMBLY, L.H.	1	A
4	5701185	PL-6K SERIES RAMP RAIL END COVER, R.H.	1	A
5	5701184	PL-6K SERIES RAMP RAIL END COVER, L.H.	1	A
6	5600957	PL-6K SERIES RAMP UPPER STRUT WELDMENT	1	A
7	5601131	PL-6K SERIES RAMP LOWER DOUBLE STRUT WELDMENT	1	A
8	5600958	PL-6K SERIES RAMP LOWER STRUT WELDMENT	1	A
9	5545202	WASHER M8 X 1.25 X 25	87	---
10	5545200	WASHER M8 X 1.25 X 25	87	---
11	5530010	NUT M8 X 1.25 NI	87	---
12	5530010	HHB M8 X 1.25 X 25	87	---
13	5545200	WASHER M10 X 1.5 X 30	10	---
14	5545201	WASHER M10 X 1.5 X 30	18	---
15	5530021	HHB M10 X 1.5 X 30	10	---
16	5530013	NUT M10 X 1.5 NI	18	---
17	5530028	SHCS M10 X 1.5 X 30mm	8	---
18	5716040	PL-6K SERIES RAMP PLASTIC FOOT BLOCK	4	A
19	5601132	PL-6K SERIES DRIVE ON RAMP WELDMENT	1	A

DETAIL B
SCALE 1 : 8

DO NOT SCALE DRAWING	NAME	DATE
	TM	02/12/2015

CHECKED DB 2/7/2017

THIRD ANGLE PROJECTION

THE BENDPAK COMPANY
1645 LEMONWOOD DR.
SANTA PAULA, CA 92360

BendPak.

TITLE: PL-6K SERIES RAMP ASSEMBLY

SIZE DWG. NO. A 5215684

REV B

SCALE: 1:30

SHEET 1 OF 2

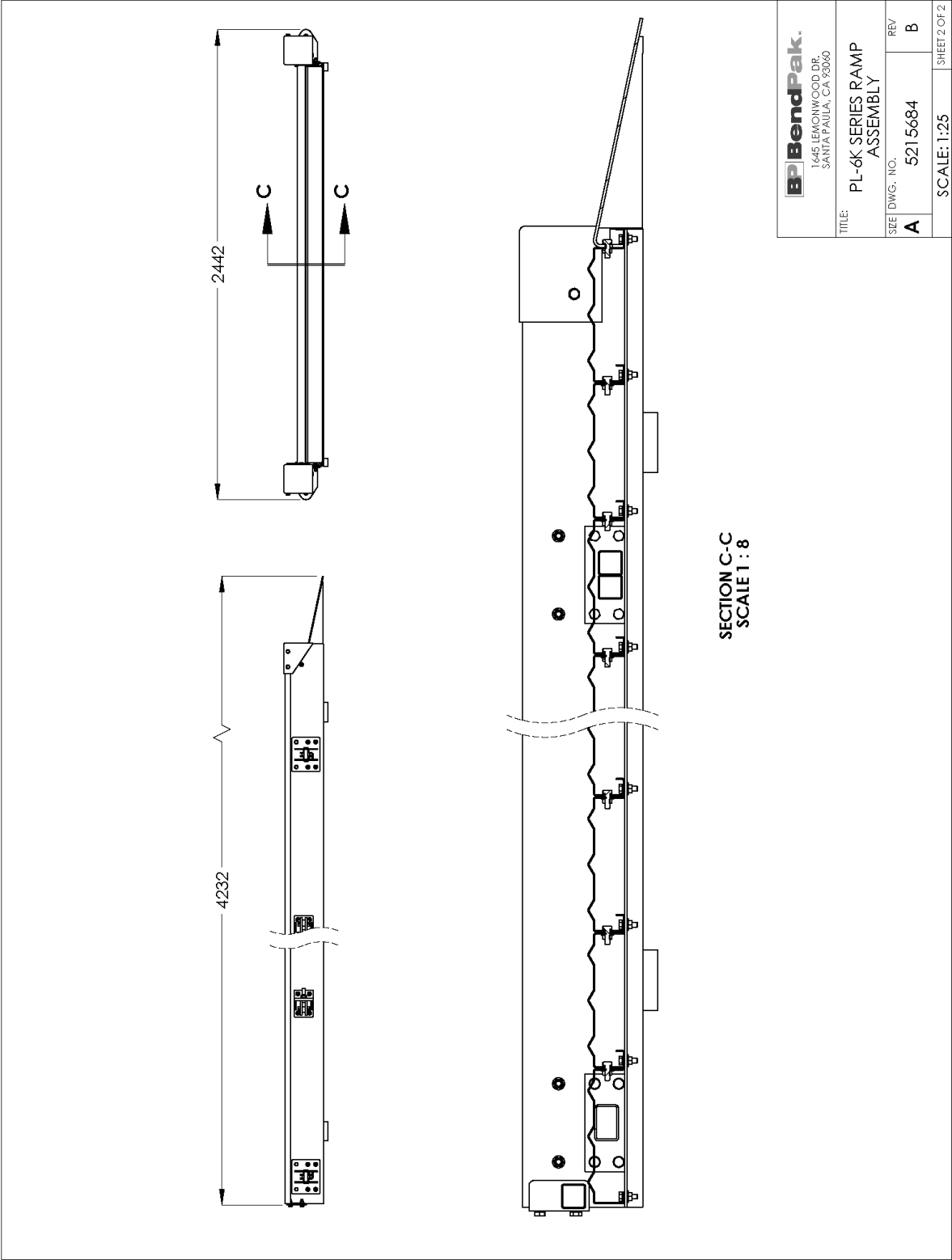
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1. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING

NEXT ASSEMBLY

5245027

5245050

5245409



BendPak.

1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: PL-6K SERIES RAMP
ASSEMBLY

SEE DWG. NO.	REV.
A	B

SCALE: 1:25 SHEET 2 OF 2

REV	DESCRIPTION	DATE	EDITED BY	FCO #
A	PRODUCTION RELEASE	04/06/2015	TM	00681
B	UPDATED BOM REVISIONS	10/14/2015	HG	00733
C	REPLACED 5600962 WITH 5770128, 5600959 WITH 5770127, UPDATED BOM REVISIONS	01/17/2017	TM	00802

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5600951	PL-6K SERIES POWER POST WELDMENT	1	B
2	5600952	PL-6K SERIES CONTROL POST WELDMENT	1	C
3	5600953	PL-6K SERIES CROSSBEAM, CLOSEOUT WELDMENT	2	C
4	5215683	PL-6K SERIES CROSSBEAM, CLOSEOUT ASSEMBLY	1	B
5	5215682	PL-6K SERIES CROSSBEAM, POWER SIDE CLOSEOUT ASSEMBLY	1	B
6	5215681	PL-6K SERIES CROSSBEAM, CENTER ASSEMBLY	1	B
7	5770127	PL-6KDT REAR BEAM	1	B
8	5770128	PL-6KDT FRONT BEAM	1	B
9	5215684	PL-6K SERIES RAMP ASSEMBLY	2	B
10	5530246	M20 X 2.5 THREADED ROD	2	A
11	5755146	PL-6K SERIES HYDRAULIC LINE	1	A

DO NOT SCALE DRAWING

DRAWN

TM

04/06/2015

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DB

12/7/2017

THIRD ANGLE PROJECTION

1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE

PL-6KDT
SUPERSTRUCTURE

SIZE

DWG. NO.

REV

A

5245027

C

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SHEET 1 OF 1

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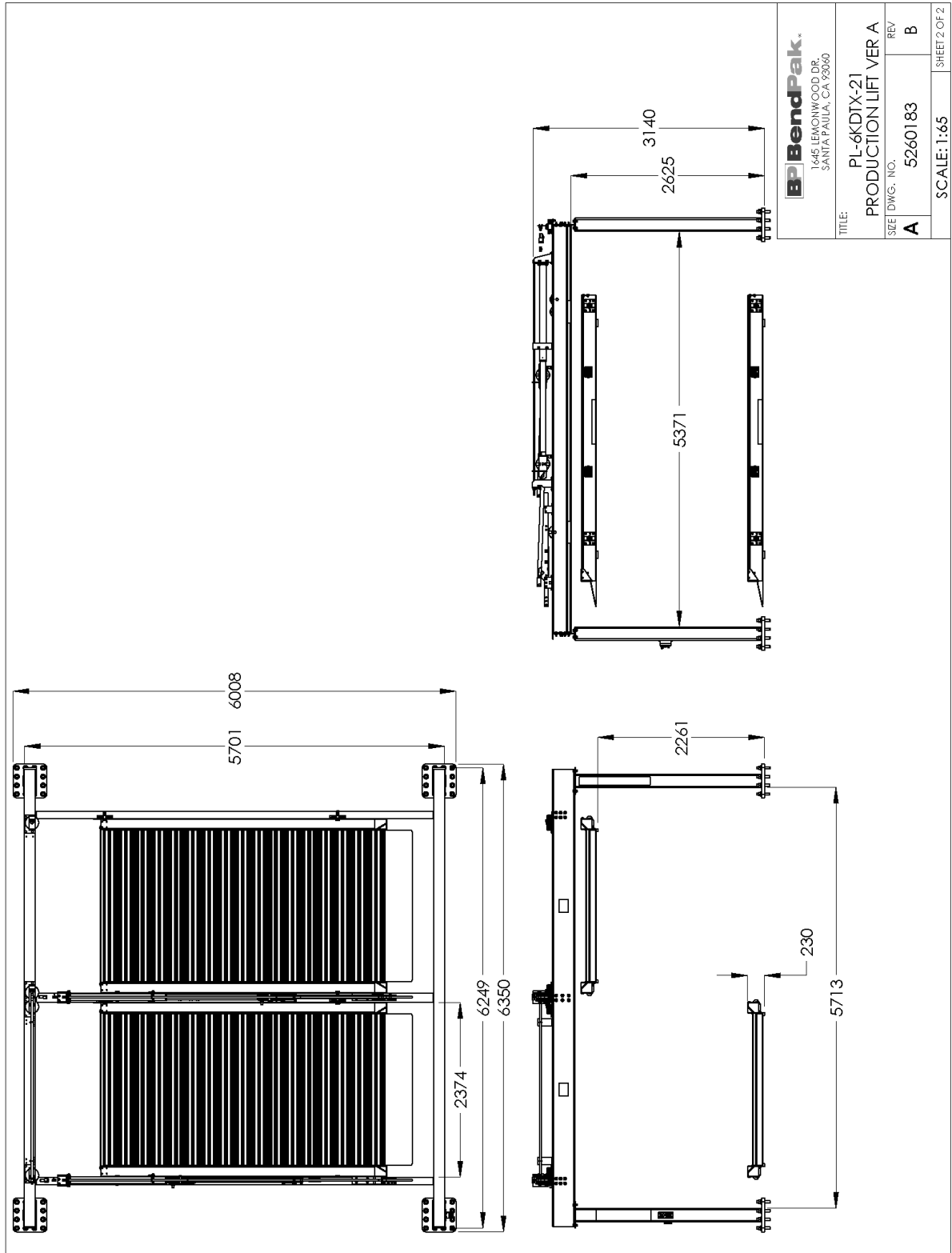
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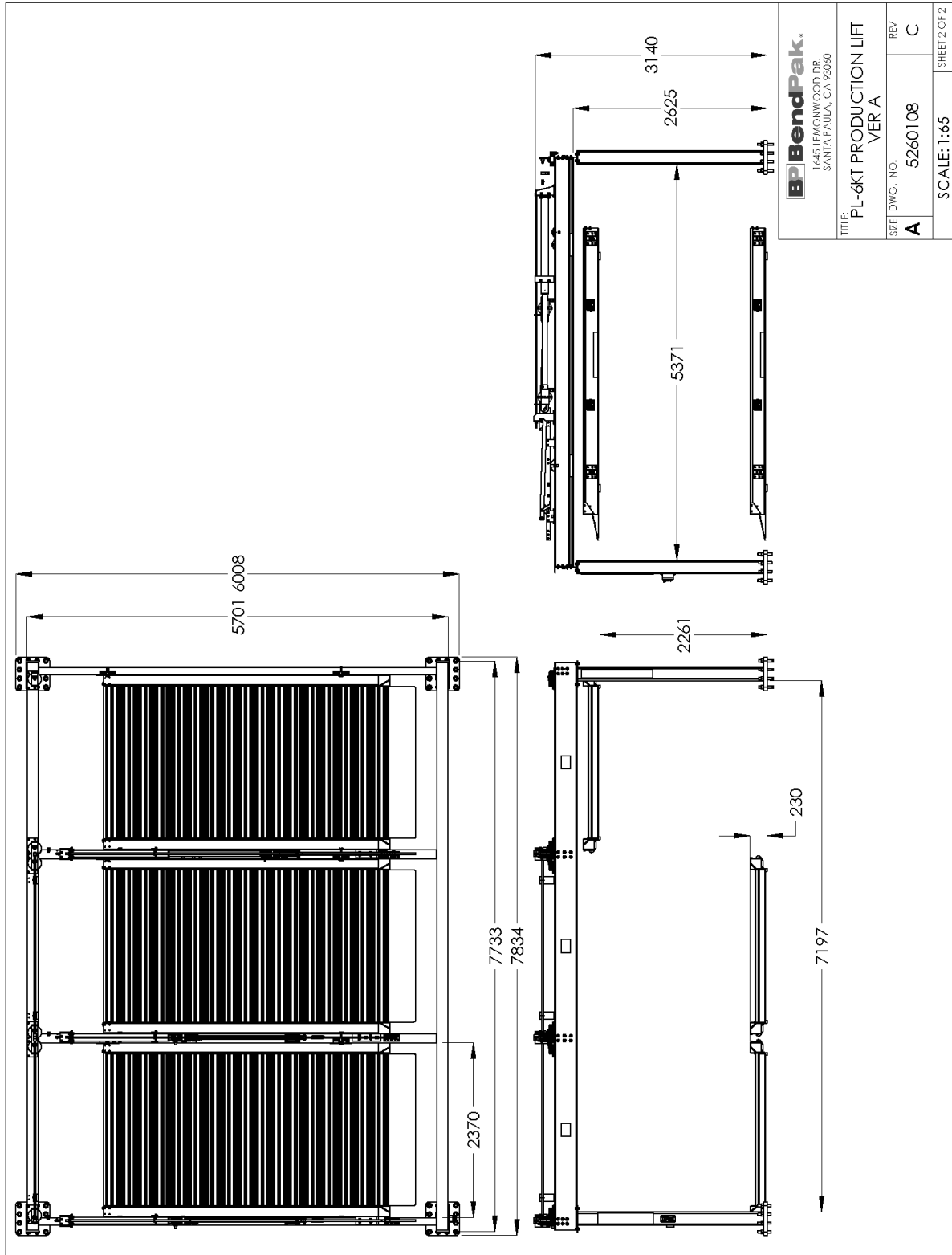
NEXT ASSEMBLY

5240109

NOTE: UNLESS OTHERWISE SPECIFIED,

1. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING





REV

DESCRIPTION

REVISION

DATE

EDITED BY

EC.O.#

A

PRODUCTION RELEASE

03/16/2015

TM

00681

B

UPDATED BOM REVISIONS

10/13/2015

HG

00733

C

REPLACED 5600944 WITH 5770121; REPLACED 5600947 WITH 5770122; UPDATED BOM REVISIONS

01/11/2017

TM

00802

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
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2	5600952	PL-6K SERIES CONTROL POST WELDMENT	1	C
3	5600953	PL-6K SERIES CLOSEOUT POST WELDMENT	2	C
4	5715683	PL-6K SERIES CROSSBEAM, CLOSEOUT ASSEMBLY	1	B
5	5215682	PL-6K SERIES CROSSBEAM, POWERSIDE CLOSEOUT ASSEMBLY	1	B
6	5215681	PL-6K SERIES CROSSBEAM, CENTER ASSEMBLY	2	B
7	5770121	PL-6KT FRONT BEAM	1	B
8	5770122	PL-6KT REAR BEAM	1	B
9	5215684	PL-6K SERIES RAMP ASSEMBLY	3	B
10	5530266	M20 X 2.5 THREADED ROD	3	A
11	5755146	PL-6K SERIES HYDRAULIC LINE	2	A

DO NOT SCALE DRAWING

DRAWN

TM

03/16/2015

CHECKED

DB

2/7/2017

DATE

2/7/2017

THIRD ANGLE PROJECTION

DIMENSIONS ARE IN MM

BendPak.
1645 LEMONWOOD DR.
SANTA PAULA, CA 95060

TITLE

PL-6KT SUPERSTRUCTURE

SIZE

DWG. NO.

REV

A

5245409

C

SCALE

1:65

SHEET 1 OF 1

NOTE: UNLESS OTHERWISE SPECIFIED.

1. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING

NEXT ASSEMBLY

5260108

Maintenance Log

Maintenance Log



1645 Lemonwood Drive
Santa Paula, CA, 93060 USA