

1645 Lemonwood Dr. Santa Paula, CA, 93060 USA Toll Free (800) 253-2363 Tel: (805) 933-9970 bendpak.com

## **Low-Rise Pit Lift**

## **Installation and Operation Manual**

Manual P/N 5900022 — Manual Revision A4 — January 2019

Models:

- P-9000LT
- P-9000LTF



Model P-9000LT 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.** P-9000LT/F Low-Rise Pit Lift, *Installation and Operation Manual*, Manual Part Number 5900022, Manual Revision A4, Released January 2019.

**Copyright.** Copyright © 2019 by BendPak Inc. All rights reserved. You may make copies of this document if you agree that: you will give full attribution to BendPak Inc., you will not make changes to the content, you do not gain any rights to this content, and you will not use the copies for commercial purposes.

**Trademarks.** BendPak and the BendPak logo are registered trademarks of BendPak Inc. All other company, product, and service names are used for identification only. All trademarks and registered trademarks mentioned in this manual are the property of their respective owners.

**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. Feel free to contact us at any time to get the latest information about any product: **bendpak.com**.

**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 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; *do not use your Lift unless you can do so safely!* 

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

- Follow all setup, operation, and maintenance instructions.
- Make sure product setup and use 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 all parts are in place and operating correctly.
- Carefully inspect the product on a regular basis and perform all maintenance as specified.
- Service and maintain the unit only with approved replacement parts.
- Keep all instructions permanently with the product and make sure all labels are clean and visible.
- Only use the Lift if it can be used safely!

**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:



## **Table of Contents**

Introduction	3	Operation	32
Shipping Information	4	Lift Arm Kit	35
Safety Considerations	4	Maintenance	37
Components	5	Troubleshooting	38
FAQs	7	Wiring Diagram	39
Specifications	8	Labels	40
Installation Checklist	10	Parts Diagrams	43
Installation	11	Maintenance Log	

### Introduction

This manual describes the P-9000LT and P-9000LTF, which are low-rise, frame-engaging, pit lifts that are designed and engineered for fast-paced auto shop environments, oil-change facilities, and home garages. They can be installed at ground level or recessed (the **F** in P-9000LT**F** stands for "flush mount"), generally over a service pit. Flush mount models do not use ramps, but they do require a recessed surface.

Both models raise vehicles up to 9,000 lbs (4,082 kg).

More information about the full line of BendPak products is available at **bendpak.com**.

This manual is mandatory reading for all P-9000LT/F users, including anyone who sets up, operates, maintains, or repairs them.

▲ DANGER Be very careful when setting up, 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 the bill of lading, it tells the carrier that the items on the invoice were received in good condition. *Do not sign the bill of lading until after you have inspected the shipment.* If any of the items listed on the bill of lading are missing or 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. 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 using your new product.** Do not set up or operate the product until you are familiar with all operating instructions and warnings. Do not allow anyone else to operate the product until they are also familiar with all operating instructions and warnings.

#### **General Safety Information**

- The product is a low-rise pit lift. Use it only for its intended purpose. Do not make any modifications to the product.
- The product should only be operated by authorized personnel.
- Wear appropriate protective clothing when installing, servicing, or repairing your lift.
- Keep loads centered and balanced on the Platforms.
- When the product is in use, keep all body parts away from it.
- Make sure all operators read and understand the *Installation and Operation Manual*. Keep the manual near the device at all times.
- Make a visual inspection of the product before using it. Check for damage or missing parts. Do not use the product if you find any issues. Instead, take it out of service, then contact your dealer, email techsupport@bendpak.com, visit bendpak.com/support, or call (800) 253-2363.
- Make a thorough inspection of the product at least once a year. Replace any damaged or severely worn parts, decals, or warning labels.
- BendPak recommends referring to the ANSI/ALI ALIS Standard (R2015) Safety Requirements for Installation and Service for more information about safely installing, using, and servicing your Lift.

#### Symbols

Following are the symbols used in this manual:

	Calls attention to an immediate hazard that <b>will</b> result in injury or death.
	Calls attention to a hazard or unsafe practice that <b>could</b> result in injury or death.
	Calls attention to a hazard or unsafe practice that could result in minor personal injury, product, or property damage.
NOTICE	Calls attention to a situation that, if not avoided, could result in product or property damage.
-`	Calls attention to information that can help you use your product better.

#### **Liability Information**

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

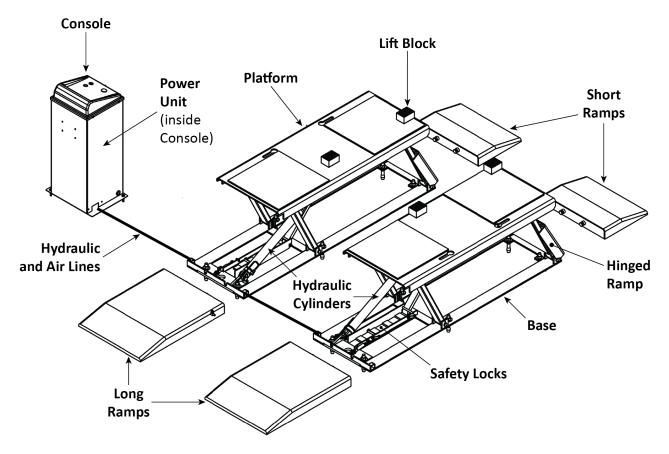
- Use of the product for purposes other than those described in this manual.
- Modifications to the equipment without prior, written permission from BendPak Inc. ٠
- Damage to the equipment from external influences.
- Incorrect operation of the equipment.

#### Components

P-9000LT/F components include:

- **Console**. Hosts the controls for the Lift (on top) and the Power Unit (inside). The connections for the Hydraulic Lines and the Air Lines connect to the Power Unit inside the Console.
- **Power Unit**. Provides Hydraulic Fluid to the Hydraulic Cylinders, which they use to raise the Platforms. Housed inside the Console. Connects to an external power source.
- Long Ramps. Used to drive onto or off of the Platforms. Not included with the P-9000LTF. Most people use the Long Ramps to drive up onto the Platforms.
- Short Ramps. Used to drive onto or off of the Platforms. Not included with the P-9000LTF. Most people use the Short Ramps for driving off of the Platforms.
- Hinged Ramps. Next to the Short Ramp while the P-9000LT/F is on the ground; hinges up when the Platforms are raised.
- Platforms. Flat steel plates that raise and lower. Platforms have openings for the optional Lift Arms. The Platforms, or the Lift Blocks on the Platforms, make contact with the undercarriage of the vehicle in order to raise and lower the vehicle. Each Platform has two square rubber pads, which are designed to make contact with the undercarriage of the vehicle.
- Bases. The bottoms of the Lift. They hold the Hydraulic Cylinders, Air Cylinders, Safety Locks, the holes for the Anchor Bolts, and more,
- Frames. The combination of the Platforms, the Bases, and the scissor components. Each P-9000LT/F is made up of two Frames, four Ramps (not the P-9000LTF), and one Console.

- Hydraulic Cylinders. Push the Platforms up to raise a vehicle, move down to lower a vehicle.
- **Safety Locks**. Hold the Platforms while they are raised. The P-9000LT/F has four Safety Lock positions, which lets you select the right Platform height for your needs.
- Air Cylinders. Move the Platforms off the Safety Locks when you want to lower the Lift.
- Lift Blocks. Rubber blocks that make contact with the lifting points on the vehicle being raised.
- Lift Arms. An optional accessory that provides additional raising capability for trucks and SUVs.



Covers for Hydraulic and Air Lines included with Lift. Optional Lift Arms not shown. P-9000LT **F** does not have Long or Short Ramps.

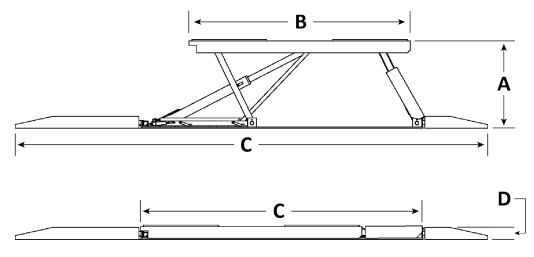
## **Frequently Asked Questions**

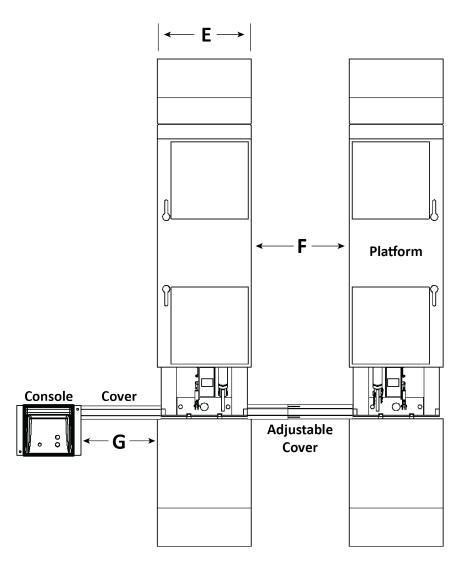
**Question**: How much weight can the P-9000LT/F raise?

Answer: The P-9000LT/F can raise vehicles up to 9,000 pounds (4,082 kg).

- Q: The P-9000LTF is "flush mount", what does that mean?
- A: It means the Base of the P-9000LT/F is installed below the surface of the concrete so that no ramps are needed; the tops of the Platforms are flush with the concrete, so vehicles just drive straight on. Note that sufficient concrete depth is required under the concrete cutout.
- **Q**: The P-9000LT/F is called a "pit lift", what does that mean?
- A: It means that in addition to working great to raise vehicles in any environment, the P-9000LT/F is optimized to hold vehicles over a pit, which you would typically find at an oil-change facility or automotive shop. Adding a pit lift to an oil change facility lets you easily add wheel rotations and brake service to the services you already offer.
- Q: Can the P-9000LT/F be installed outside?
- A: No. The P-9000LT/F is approved for indoor installation and use only. *Outdoor installation is prohibited*. If you are still considering installing your Lift outdoors, contact BendPak Customer Service (on the web at **bendpak.com/support**, via email **techsupport@bendpak.com**, or by phone (800) 253-2363).
- **Q**: Can I put the Console on either side of the P-9000LT/F?
- A: Yes. Keep in mind that the Hydraulic Lines that come with the P-9000LT/F are long enough to support the Console being up to 30 inches away on either side.
- Q: What if I want to raise a vehicle that is slightly over the weight capacity of the Lift?
- A: This is not an intended use of the product. We strongly recommend against trying to raise a vehicle that is heavier than the rated capacity of your Lift.
- Q: How many locking positions does my Lift have?
- A: Four. This gives you multiple heights to which you can raise the Lift, so it is easy to find the right height for what you are doing.
- **Q**: What do the Safety Locks do?
- A: Safety Locks use gravity and intelligent engineering to hold the Platforms up, once they are engaged. Even if the Lift loses power, the Platforms stay where they are if they were left engaged on a Safety Lock. *Only leave your Lift either lowered or engaged on a Safety Lock!*
- **Q**: Which end of the P-9000LT is the "front"?
- A: Neither and both. Most people drive onto the Platforms using the Long Ramps and drive off using the Short Ramps. In this orientation, the "front" of the Lift would be the end with the Short Ramps. But this orientation is not required: if you prefer, you can drive onto the Platforms using the Short Ramps, or you can drive onto the Platforms using the Long Ramps for some vehicles and the Short Ramps for other vehicles. Whatever is best for you.
- **Q**: The P-9000LT/F is described as "frame-engaging", what does that mean?
- A: it means the Platforms (actually, the Rubber Blocks on the Platforms) contact the frame of the vehicle to raise it. Put another way, the vehicle is *not* raised by its wheels.

## **Specifications**





P-9000LT shown. The P-9000LT **F** does not have Ramps or Covers.

Model	P-9000LT	P-9000LTF
Style	Surface mount	Flush mount
Lifting capacity	9,000 lbs. / 4,082 kg	9,000 lbs. / 4,082 kg
A Lifting height	23.5" / 596 mm	20.25" / 516 mm
B Overall Platform length	58.5" / 1,484 mm	58.5" / 1,484 mm
C Overall length	124.5" / 3,165 mm (with ramps)	74.5" / 1,890 mm (no ramps)
D Lowered height	3.15" / 80 mm	0" / 0 mm
E Platform width	24" / 610 mm	24" / 610 mm
<b>F</b> Width between Platforms	38 to 45" / 965 to 1,143 mm	38 to 45" / 965 to 1,143 mm
<b>G</b> Max distance to Console*	Up to 30" / 762 mm	Up to 30" / 762 mm
Maximum hydraulic pressure	2,800 PSI	2,800 PSI
Lifting time	35 seconds	35 seconds
Motor	208 – 240 VAC, 50/60 Hz, 1 Ph	208 – 240 VAC, 50/60 Hz, 1 Ph

\* With supplied hosing.

Specifications subject to change without notice.

## **Installation Checklist**

Following are the steps needed to install a P-9000LT/F Lift. Perform them in the order shown.

- □ 1. Review the installation Safety Rules.
- □ 2. Plan for Electrical Work.
- $\Box$  3. Make sure you have the necessary Tools.
- $\Box$  4. Select the Installation Site.
- $\hfill\square$  5. Make sure there is adequate clearance on all sides of the Lift.
- □ 6. Create the Concrete Cutouts (P-9000LTF only).
- 7. Create Chalk Line Guides.
- $\Box$  8. Lift the Platforms off the Bases.
- $\Box$  9. Anchor the Bases.
- $\hfill\square$  10. Set up the Console and attach the Power Unit.
- □ 11. Connect the Hydraulic Lines.
- □ 12. About Compression Fittings and Tubing.
- $\Box$  13. Connect the Air Lines.
- $\Box$  14. Connect the Power Unit.
- □ 15. Install a Power Disconnect Switch.
- □ 16. Install a Thermal Disconnect Switch.
- □ 17. Test the Lift.
- 18. Add the Ramps (P-9000LT only).
- $\Box$  19. Review the Final Checklist.
- $\hfill\square$  20. Leave the Manual for the owner/operator.

## Installation

This section describes how to install your P-9000LT/F. Perform the steps 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.

The P-9000LT/F is supplied with installation instructions and concrete fasteners that meet the criteria set by the American National Standard "Automotive Lifts – Safety Requirements for Construction, Testing, and Validation" ANSI/ALI ALCTV-2011.

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

#### **Safety Rules**

When installing the Lift, 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 tools, such as a forklift or crane, to move heavy components. Do not install this equipment without reading and understanding this manual and the safety labels on the unit.

BendPak recommends referring to the ANSI/ALI ALIS Standard (R2015) Safety Requirements for Installation and Service for more information about safely installing, using, and servicing your Lift.

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

**WARNING** You must wear protective equipment at all times during the installation: leather gloves, steel-toed work boots, eye protection, back belts, and hearing protection.

#### **Electrical Work**

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

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

The electrician needs to:

- **Connect the 208 240 VAC power source to the Power Unit**. This is generally done near the end of the installation. Note that installing the Power Unit and connecting the Power Unit are separate procedures; they are done at different times in the installation process. The electrician will need to provide a *cable to* the Power Unit and a *power connector for* the Power Unit.
- Install a Power Disconnect Switch. A Power Disconnect Switch gives you a way to shut down the Lift in the event of an electrical circuit fault or emergency situation. Refer to Install a Power Disconnect Switch for more information.
- Install a Thermal Disconnect Switch. A Thermal Disconnect Switch automatically shuts down the Lift in the event of an overload or an overheated motor. Refer to Install a Thermal Disconnect Switch for more information.

#### Tools

You may need some or all of the following tools:

- Rotary hammer drill or similar
- 3/4", 3/8", 1 1/4" masonry bits
- Hammer
- Open-end wrench set: 1/2", 15/16" 1 1/8"
- Socket and ratchet set, 1 1/8"
- Medium crescent wrench
- Chalk line
- Medium flat screwdriver
- Tape measure
- Forklift or Shop Crane

#### Select a Site

Keep the following in mind when selecting a site for your P-9000LT/F:

- **Enough space**. Make sure there is adequate space on all sides, plus enough space above for the vehicles you will be raising. See **Clearance Around the Lift** for more information.
- **Radial Shift**. When you raise the Lift, the geometry of the scissor arms moves the Platforms up at an angle, towards the Hinged Ramp end of the Lift. The amount of radial shift for the P-9000LT is approximately 12 inches. Note that radial shift is always this direction, towards the Hinged Ramp end of the Lift, no matter which way the vehicle is facing.
- Check for overhead obstructions. The site must be free of overhead obstructions.
- **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 at least 28 days (if newly poured). Make sure the floor is defect-free, dry, and level. For flush-mount models, there must be 4.25 inches of concrete below the bottom of the concrete cutout.

## **WARNING** Do not install the Lift on a surface with 3° of slope or more. A 3° degree slope or greater could lead to property damage, personal injury, or death; the slope makes the Lift less stable, which could lead to vehicles falling off of it.

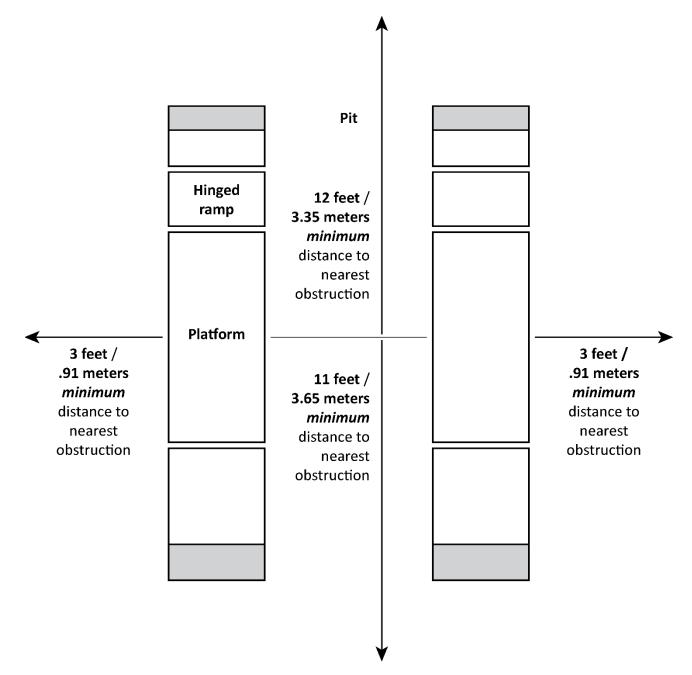
- **Power**. You will need a 208 to 240 VAC power source available near the Console. Use a 25 amp or greater fuse for a 230 VAC, 1 phase circuit.
- **Operating temperature**. The Lift is designed to be used between temperatures of 41° to 104°F (5° to 40°C).
- **Outdoor installation**. The Lift *cannot* be installed outside. It is for indoor use only.
- **Second floor installs**. Do not install the Lift on a second floor or elevated floor without first consulting the building architect and getting their permission.
- **Dress properly**. Always wear protective gear (like safety goggles, helmet, heavy gloves, suitable working clothes, safety boots, ear protection, and so on) when installing the Lift.

Do not wear loose clothing or jewelry; contain long hair; keep hair, clothing, and gloves away from moving parts.

**WARNING** Always wear appropriate protective gear when installing the Lift.

#### **Clearance Around the Lift**

For safety purposes, a reasonable amount of clear space around the Lift is *required*.



#### **P-9000LTF Only: Prepare the Concrete Cutouts**

It is important to understand the following *before* creating the Concrete Cutouts for your Lift:

- A Flush-Mount Lift is one that sits in a recessed section of the floor, called a Concrete Cutout.
- Concrete Cutouts must be created in a *concrete* floor; no other surface (asphalt, dirt, anything else) is acceptable.
- Concrete Cutouts must be a specific depth below the rest of the floor so when the Flush-Mount Lift is put down into the Concrete Cutout, the top of the Lift's Platforms are flush with the floor.
- To install a Flush-Mount Lift, you must create the Concrete Cutouts in advance, unless you already have Concrete Cutouts of the exact right dimensions.
- You need to create your Concrete Cutouts at least a month in advance, as the concrete must cure for at least 28 days before it is strong enough to support Anchor Bolts.
- There are three important factors to keep in mind if you are creating Concrete Cutouts: the concrete depth **below the bottom** of the Concrete Cutouts must be deep enough for the Anchor Bolts, the size of the two rectangles must be big enough to fit the Bases of the Lift, and you need a method of connecting the Air and Hydraulic Lines to the Console.

# **NOTICE** Installing a Flush-Mount Lift requires greater concrete depth. The Concrete Cutouts must be recessed the height of the Base plus Platform and then *have the required 4.25 inches of concrete depth below the bottom of the Concrete Cutouts* (for the Anchor Bolts).

• Regarding the Air and Hydraulic Lines: because the Lift's bases are recessed, the Air and Hydraulic Lines start out recessed as well. Your plans for the Concrete Cutouts need to account for how the Lines will be routed to the Console.

Some people use PVC tubing to create a connection between the two Bases using the Hose Routing Rings on the inside of the Lift when they are creating their Concrete Cutouts. This allows the Air and Hydraulic Lines to be routed between the two Bases.

To connect to the Console, some people use PVC tubing to create a connection between the Console and the Hose Routing Ring on the Base closest to the Console. Other customers use the round Access Hole in the Base between the two Hose Routing Rings. The Access Hole is frequently used when the Lift is installed over a pit.

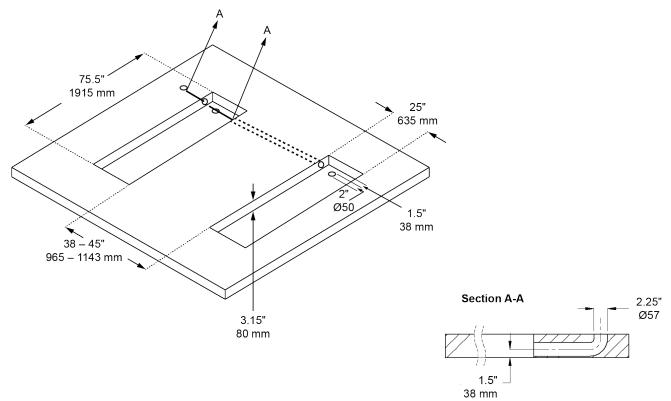
Consult with your concrete specialist *prior to creating* your Concrete Cutouts.

- There are certain decisions you have to make before you create your Concrete Cutouts: where the Lift is going to go, where the Console will be (and thus how far away from the Lift it will be), and how far apart the two Bases will be.
- Regarding the distance between the two Bases: The P-9000LT/F can be from 38 to 45 inches (965 to 1,143 mm) apart. You need to decide how far apart you want your Bases *before* you create your Concrete Cutouts.

## **Important**: BendPak strongly recommends consulting with your concrete specialist prior to creating your Concrete Cutouts.

• The diagram on the following page provide information you and your concrete specialist will need to create your Concrete Cutouts.

If you need to prepare a recessed surface for the P-9000LTF, use the following diagram as a guide.



Depth of Concrete Cutouts must be 3.15 inches. There must also be 4.25 inches of concrete below the bottom of the Concrete Cutouts.

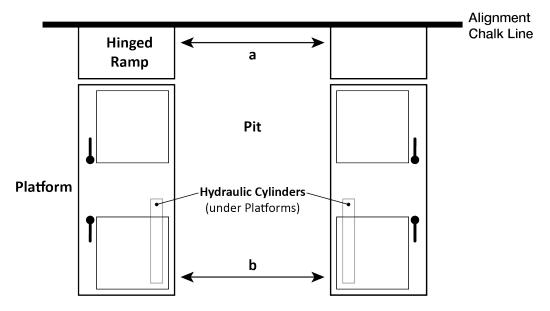
#### **Create Chalk Line Guides**

Make sure to plan out, in advance, where the P-9000LT is going to go:

- **Clearance**. If you are install the P-9000LT over a pit, you are restricted as to where you can put it. Be sure to check beforehand, however, to make sure there is clearance on all sides.
- **Console**. The Console must be positioned near the Lift; the Hydraulic Lines that come with the P-9000LT are optimized for up to 30 inches between the Lift and the Console.
- **Operator**. The operator at the Console *must* have a full, unobstructed view of the P-9000LT.
- **Power**. The Console must also be positioned near an appropriate power source.
- **Hydraulic Cylinders on the inside**. The two Frames are not interchangeable. The Hydraulic Cylinders must go on the inside (on the pit side if installing over a pit). The holes in the Platforms for the optional Lift Arms must go on the outside.
- Set up Chalk Line Guides. Create Chalk Line Guides to make sure the P-9000LT is set up correctly.

#### To add Chalk Line Guides:

- 1. Decide where you want to locate the Lift.
- 2. Create an Alignment Chalk Line where you want one end of the P-9000LT.



Make the Alignment Chalk Line longer than the width of the P-9000LT and the Pit.

3. Move the two Frames into position: the Hinged Ramp ends just inside the Alignment Chalk Line and the inside edges of the Frames aligned with the Pit.

The two Frames are not interchangeable; the Hydraulic Cylinders on the P-9000LT Bases need to be on the inside, closer to the Pit.

This procedure assumes you are installing the P-9000LT over a pit. If not, create two additional Chalk Line Guides: they need to be perpendicular to the Alignment Chalk Line, parallel to each other, and the distance apart you want the two Platforms (within the range of 38" to 45" / 965 mm to 1,143 mm).

- 4. Measure the distance between the two P-9000LT Platforms at points **a** and **b**; the two Platforms need to be the same distance apart at both ends.
- **Important**: If **a** and **b** are not the same, adjust the Frames; **a** and **b** *must* be the same distance apart and parallel to the Pit.
- 5. When the Platforms are in the correct location, they can be anchored into place.

#### Lift the Platforms Off the Bases

You must raise the P-9000LT/F Platforms off of the Bases in order to anchor the Lift and/or connect the Hydraulic and the Air Lines. Raising the Platforms off the Bases gives you some room to work.

#### When you raise the P-9000LT, be sure to leave it engaged on a Safety Lock.

**WARNING** BendPak strongly recommends using at least three people to lift the Platforms off their Bases: one person on each end to hold down the Base and one person to operate the Forklift or Shop Crane to raise the Platform. Use care when raising the Platforms off their Bases; they are heavy and sometimes difficult to hold.

#### To lift the Platforms off the Bases:

1. Position one person at each end of a Platform you want to raise off the Base.

These two people need to hold down the Base while it is raised.

2. Have the third person use a crowbar or other device to create separation between the Platform and the Base.

Make sure the Base is held down while you create the separation between Platform and Base.

3. Once the Platform and Base are separated by more than half an inch (~13 mm), put industrial slings (straps) around each end, attach them to a lifting device such as a Forklift or Shop Crane, then continue raising the Platform off the Base.

The Platform still needs to be held down as the lifting device raises it.

4. When the Platform gets above the top Safety Lock, lower it back down onto the top Safety Lock.

Do not raise the Platform a random distance; leave it on the top Safety Lock.

5. Perform the same procedure on the second Platform.

#### **Anchor the Bases**

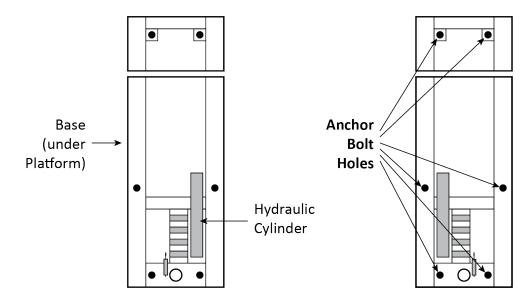
Both Bases have six holes in them for anchoring the Base.

Anchor Bolt specifications are:

- Length: 4.75 inches
- Diameter: 3/4 inch
- Effective embedment depth: 2.75 inches, minimum
- Anchor torque: 110 150 foot pounds

## **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.

The following drawing shows the locations of the six Anchor Bolt holes in each P-9000LT Base.



Drawing not necessarily to scale. Not all components shown.

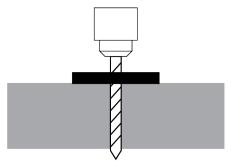
#### To anchor your P-9000LT Bases:

1. Make sure the Bases are in the correct location.

Once the Anchor Bolts are torqued into position, they are not easily removed. BendPak strongly recommends making sure the Bases are in the correct location *before* anchoring them into place.

- 2. Using the holes in the Bases as guides, drill the holes for the Anchor Bolts.
  - **Note**: If you prefer, you can mark the Anchor Bolt hole locations, move the Frames out of the way, drill the holes, and then move the Frames back into position.

Go in straight; do not let the drill wobble.

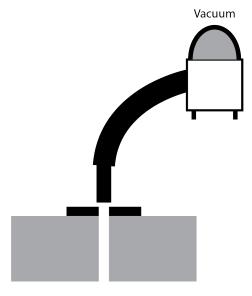


Use a carbide bit (conforming to ANSI B212.15-1994).

The diameter of the drill bit *must* be the same as the diameter of the Anchor Bolt. So if you are using a <sup>3</sup>/<sub>4</sub> inch diameter Anchor Bolt, for example, use a <sup>3</sup>/<sub>4</sub> inch diameter drill bit.

3. Use a vacuum to thoroughly clean each hole.

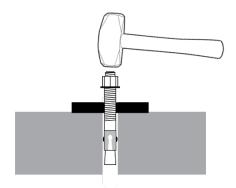
If a vacuum is not available, use a wire brush, hand pump, or compressed air.



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

4. Make sure the Washer and Nut are in place (you want approximately 1/4 inch to 1/3 inch — 6 to 8 mm — of thread visible above the nut), 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; this is normal. Use a hammer or mallet to get the Expansion Sleeve through the Base and down into the hole.



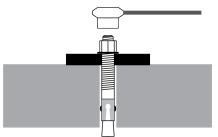
Even using a hammer or mallet, the Anchor Bolt should only go into the hole part of the way; this is normal. If the Anchor Bolt goes all the way in with little or no resistance, the hole is too wide.

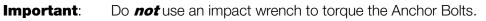
Once past the hole in the Base, the Anchor Bolt eventually stops going down into the hole as the Expansion Sleeve contacts the sides of the hole; this is normal.

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

Stop hammering when the Washer is snug against the Base.

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





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

#### Set Up the Console and Attach the Power Unit

The Console comes unassembled from the factory.

**Note**: Some Consoles are occasionally shipped assembled. If you receive an assembled Console, ignore the steps in the procedure that have already been done for you.

The included Hydraulic Lines require the Console to be within 30 inches of the Lift.

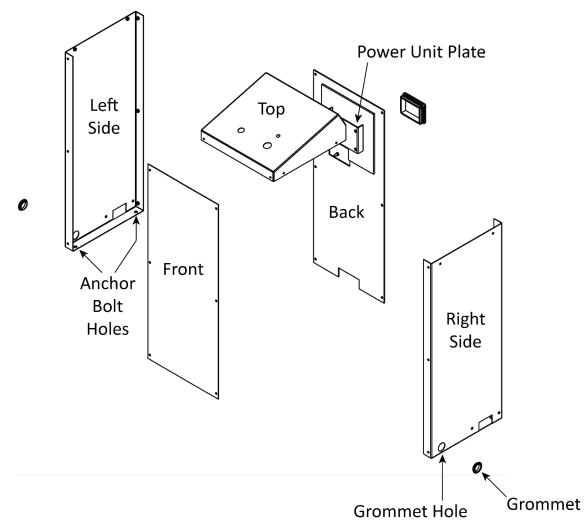


If you want to set up the Console further than 30 inches from your Lift, you will need to get Hydraulic Lines that are long enough to reach the Lift from the desired location. You may be able to obtain these lines from the local hydraulics shop, once you know how long you need them. You will also need longer Air Lines.

The following procedure includes instructions for anchoring the Console into place. If you prefer, you can defer anchoring the Console.

Why would you defer anchoring the Console for later? Anchoring the Console is a pretty permanent decision. Delaying the anchoring gives you a chance to evaluate how well you like the your first choice for the location of the Console. It is easier to change the Console location later if it is not anchored.

When you want to anchor the Console into place, return to this section and follow the instructions starting with Step 8.



#### To assemble the Console and attach the Power Unit:

1. Select a site for the Console that permits operators to have a full, unobstructed view of the Lift.

If you are going to use the included Hydraulic Lines, the Console can go on either side of the Lift, up to 30 inches away from the closest side.

- 2. Arrange all of the Console components near where you are going to put it together.
- 3. Put the Grommets into place in the Grommet Holes on the bottom of the Left and Right Sides.
- 4. Put the Left Side on the left and the Right Side on the right, then attach both of them to the Back; make sure to orient the Back so that the *Power Unit Plate is on the inside*.

The Back attaches on the *outside* of the two sides.

Do not attach the Nuts at the top of the sides or the Back at this point; these will be attached later when you are ready to attach the Top of the Console.

- 5. Remove the Power Unit from its packing material.
- 6. Using the supplied Nuts and Bolts, attach the Power Unit to the Power Unit Plate on the inside Back of the Console.

**Important**: Do not make any of the connections to the Power Unit at this point.

- 7. Attach the Front of the Console, then the Top.
  - **Important**: All of the components of the Console are now in place, but they are not all connected. To connect the Hydraulic Lines, Return Lines, and the other connections to the Power Unit, you are going to need to remove both the Top of the Console and the Front. Making these connections is described later in the installation procedure.
- 8. If you are ready to anchor the Console, find the holes in the bottoms of the two sides (*on the inside*). The Anchor Bolts go into these holes.
- 9. Using the holes in the base as a guide, drill two holes 3/8" wide by 2.5" deep into the concrete.

Go in straight; do not let the drill wobble. Use a carbide bit (conforming to ANSI B212.15-1994).

10. Remove all dust from the holes.

Use a wire brush, vacuum, hand pump, or compressed air. Do **not** ream the hole. Do **not** make the hole any wider than the drill bit made it.

- 11. Insert an Anchor Bolt with Washer into each hole, then tap it down into the hole.
- 12. Turn the Anchor Bolt *clockwise* to the recommended installation torque, 80 110 foot pounds, using a Torque Wrench.

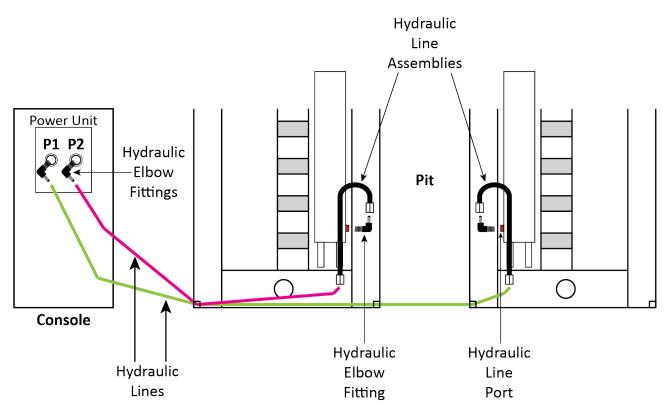
#### **Connect the Hydraulic Lines**

Hydraulic Lines provide Hydraulic Fluid to the Hydraulic Cylinders, where it is used to raise the Platforms.

**Note:** Hydraulic Lines and Fittings are different from Compression Lines and Fittings. *This section covers Hydraulic Lines and Fittings only*.

The P-9000LT comes with two Hydraulic Lines, both of which go from a Hydraulic Power Out connector on the Power Unit to one of the Hydraulic Cylinders.

The following drawing shows the general arrangement of how Hydraulic Lines are routed from the Power Unit to the Hydraulic Cylinders. The Console is on the left in this drawing.



Drawing not to scale. Some components not shown, other components exaggerated for clarity. Fittings shown not connected for clarity.

**Note**: Previous models of the P-9000 Series used Flow Dividers. They are no longer used.

**Important**: The Hydraulic Line Assemblies, when installed, need to be *angled* so that they are up against or very near to the Hydraulic Cylinders, not standing straight up.

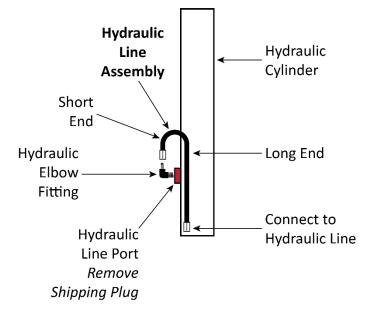
#### To connect the Hydraulic Lines:

1. If the Platforms are not already on their top Safety Locks, raise them now. It is not possible to connect the Hydraulic Lines if the Platforms are lowered.

Refer to Lift the Platforms Off the Bases for additional information.

- 2. Locate four Hydraulic Elbow Fittings, two Hydraulic Lines, and two Hydraulic Line Assemblies.
- 3. Attach an Hydraulic Elbow Fitting to each of the two Hydraulic Power Out connectors on the Power Unit, labeled P1 and P2.

- 4. Remove the Shipping Plugs from the Hydraulic Line Ports at the bottom of each Hydraulic Cylinder.
- 5. Attach an Hydraulic Elbow Fitting to each of the Hydraulic Line Ports at the bottoms of each of the Hydraulic Cylinders.
- 6. Attach the Short End of either of the Hydraulic Line Assemblies to one of the Hydraulic Elbow Fittings you just attached, then attach the Short End of the other Hydraulic Line Assembly to the other Hydraulic Elbow Fitting.
- **CAUTION** When installing the Hydraulic Line Assemblies, make sure they are angled so they end up against or very near to the Hydraulic Cylinders, not standing straight up.



Drawing not to scale. Some components not shown, other components exaggerated for clarity. Fittings shown not connected for clarity.

Finger tighten the connections.

- 7. Route one of the two Hydraulic Lines from the Long End of one of the Hydraulic Line Assemblies, through the Retaining Rings in the corners of each Base, into an opening in the bottom of the Console, then up to one of the Hydraulic Power Out connectors on the Power Unit.
- 8. When the Hydraulic Line is correctly routed, connect it at both ends to the appropriate fittings. Finger tighten the connections.
- 9. Perform Steps 7 and 8 for the second Hydraulic Line.
- 10. Make sure both Hydraulic Lines are correctly routed and do not have any kinks, then use appropriate tools to *securely* tighten the finger-tightened connections.

#### **Working with Compression Fittings and Tubing**

Your Lift comes with a roll of 1/4 inch, black, polyethylene Tubing (also called Poly-Flo® Tubing) that is used with Compression Fittings to attach to the Air Cylinders and the Air Assist Connectors.

## **Note:** Compression Fittings are different from Hydraulic Fittings. *This section covers Compression Fittings only*.

The components involved with Compression Fittings include:

- 1/4 inch, black, polyethylene Tubing. The Air Lines require multiple Tubing pieces to make the necessary connections. Create the Tubing pieces by cutting lengths from the long roll of Tubing supplied with your Lift.
- **Straight Compression Fittings**. The Air Line uses two Straight Compression Fittings, one at the top of each Hydraulic Cylinder.
- **Elbow Compression Fittings**. The Air Line uses two Elbow Compression Fittings, one on each Air Cylinder.
- **Tee Compression Fittings**. The Air Line requires three Tee Compression Fittings.
- **Nuts, Ferrules, Rods, and Threads**. Each connector on Straight, Elbow, and Tee Compression Fittings have a Nut, Ferrule, Rod, and Threads (see drawing below). The Nut holds the Tubing and Fitting together. The Ferrule compresses when you tighten the Nut on the Threads to make a secure connection. The Rod goes inside the Tubing so that nothing leaks out.

The following drawing shows the components of a connector on a Tee Compression Fitting.



## **Important**: *Ferrules can only be tightened once*. When you tighten the Nut on the Threads, the Ferrule gets compressed; it literally changes shape and *cannot* be used again.

#### To connect Tubing to a Compression Fitting:

1. Push the Tubing through the Nut and over the Rod.

Do not push hard; you only need the Tubing to go a little way over the Rod. You cannot see the Ferrule at this point, but the Tubing must go through the Ferrule and over the Rod.

- 2. Slide the Nut on the Tubing *away from the Fitting*, if the Nut is still on the Threads, unscrew it from the Threads and then slide it away from the Fitting. See the drawing above.
- 3. Slide the Ferrule over the Tubing, away from the Fitting and towards the Nut.
- 4. With the Nut and the Ferrule out of the way, push the Tubing further over the Rod until it stops.
- 5. Slide the Ferrule and the Nut back to the Threads on the Fitting.

The Ferrule goes around the Rod and under the Threads. The Nut goes onto the Threads.

6. Tighten the Nut.

Remember that the Ferrule can only be used once; do not tighten the Nut until everything is ready.

#### **Connect the Air Line**

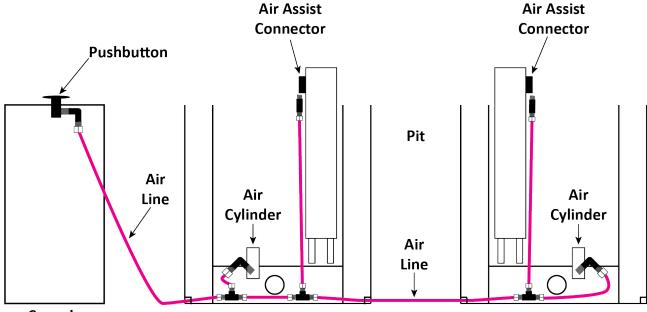
The P-9000LT uses air pressure in two ways:

- It helps push the Platforms down. The weight of the vehicle does much of the work, but the Air Line also helps.
- It moves the Platforms off the Safety Lock, so they can be lowered.

**Important**: It is the responsibility of the P-9000LT owner to provide an air pressure supply (minimum 30 psi / 3 CFM, regulated to a maximum of 125 psi).

The air pressure supply is distributed to the Air Cylinders and the Air Lower Connectors using .25 inch black plastic tubing, which is supplied with the Lift. You need to cut the tubing into appropriate lengths based on the distance between the components you are connecting. You should need seven tubing sections.

The following drawing shows how you can route the Air Lines from the Console to the components that require air pressure.



Console

Drawing not to scale. Some components now shown, other components exaggerated for clarity.

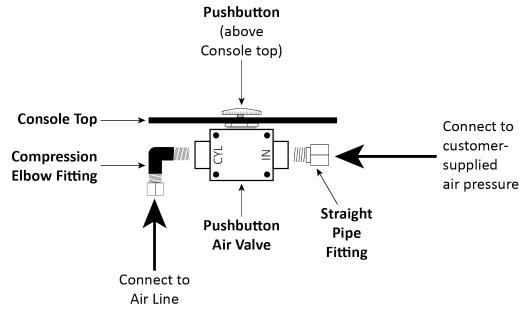
#### To connect the Air Line:

- 1. Locate two Straight Compression Fittings and connect them to the connectors at the top of the Hydraulic Cylinders.
- 2. Locate two Elbow Compression Fittings and connect them to the connectors on the top of the Air Cylinders.
- 3. Locate the black plastic tubing and the three Tee Compression Fittings.
- 4. Cut the tubing into appropriate lengths for your installation.



BendPak recommends planning out the path of the Air Line before you start cutting the tubing.

- 5. Connect the tubing lengths and Tee Compression Fittings to the Compression Fittings on the Air Cylinders and the Hydraulic Cylinders.
- 6. On the underside of the Console top, attach the male end of a Compression Elbow Fitting to the CYL connector on the Pushbutton Air Valve, then connect the final tubing length to the compression end of the Elbow Compression Fitting.
- 7. Also on the underside of the Console top, attach the male end of a Straight Expander Fitting to the IN connector on the underside of the Pushbutton Air Valve, then connect the customer-supplied air pressure to the other end of the Straight Expander Fitting.



Drawing not necessarily to scale. Not all components shown. Pushbutton is above the Console top, all other components are under the Console top.

#### **Connect the Power Unit**

The Power Unit comes fully assembled from the factory. You need to attach it to the back of the Console (described in **Set Up the Console and Attach the Power Unit**) and then make additional connections, described in this section.

The Power Unit for the P-9000LT is 208-240 VAC, 50/60 Hz, 1 phase. The Hydraulic Fluid Reservoir holds 6 liters (1.6 gallons) of fluid.

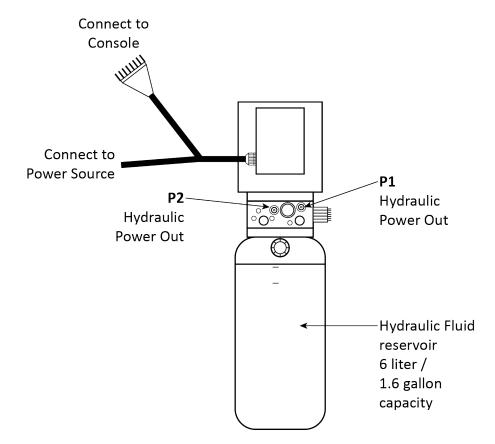
**DANGER** All wiring *must* be performed by a licensed, certified electrician.

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

**CAUTION** The Power Unit's motor is **not** thermally protected.

The Power Unit has multiple connections:

- **Hydraulic Lines**. The Lift has two Hydraulic Lines. They both connect to the Power Unit on its Hydraulic Power Out connectors (labelled P1 and P2). *The Hydraulic Lines should already be connected to the Power Unit.*
- **Controls**. The Power Unit connects to the controls on the top of the Console via a female (Molex<sup>™</sup>) connector.
- **Power Source**. The Power Unit connects to an appropriate, incoming power source. A licensed, certified electrician is *required* to make this connection.



The following drawing shows the Power Unit of the P-9000LT.

Drawing is not necessarily to scale. Your Power Unit may be slightly different.

#### To make connections to the Power Unit:

- 1. Remove the front cover of the Console if it is currently in place.
- 2. Locate the female (Molex<sup>™</sup>) connector on the Power Unit and attach it to the male connector that comes from the controls on the Console.

This connection is made *inside* the Console. Make sure to orient the two connectors correctly.

3. Have an electrician connect an appropriate power source to the Power Unit.

Refer to **Wiring Diagram** for proper wiring information. Note that the cord from the power source to the Power Unit is **not** supplied, nor is the power connector for the Power Unit.

# 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 115 VAC, 1 phase circuit, use a 15 amp or greater fuse. For a 230 VAC, 1 phase circuit, use a 25 amp or greater fuse.
- 4. Fill the Hydraulic Fluid reservoir.

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

Approved Hydraulic 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, Shell Tellus S4 / S3 / S2, or any synthetic multi-vehicle automatic transmission fluid.

MARNING Do not run your Power Unit without Hydraulic Fluid; you will damage it.

#### **Install a Power Disconnect Switch**

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

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

Make sure to install a Power Disconnect Switch that is properly rated for the incoming power source.

Your Power Disconnect Switch must be installed so that it is in *easy reach of the operator* or in their line of sight. The Power Disconnect Switch must be *clearly marked* to indicate its purpose.

If you are not clear where to put the Power Disconnect Switch, consult with your electrician.

## **DANGER** Installing a Thermal Disconnect Switch *must* be performed by a licensed, certified electrician.

Have the electrician select a *UL-listed* Power Disconnect Switch.

#### Install a Thermal Disconnect Switch

**WARNING** The motor on the P-9000LT Power Unit has no thermal overload protection.

Have an electrician 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 Installing a Thermal Disconnect Switch *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.

High running amps that exceed the motor's full load amps (FLA) rating may result in permanent damage to the motor. *Do not exceed the rated duty cycle of the motor.* 

#### Test the Lift

Before putting your Lift into normal operation, we recommend raising and lowering it two or three times. This will help you get a feel for how to operate the controls and help get any residual air out of the Hydraulic System (sometimes called "bleeding" the system).



Residual air in the Hydraulic System can cause the Lift to shake, move erratically, or squeak; this is normal when you first start using the Lift. It will soon stop doing this, as the Hydraulic System is self-bleeding.

The Ramps do not need to be installed to test the Lift, nor do you need a vehicle on it.

#### To test your Lift:

- 1. Check the area around and above the Lift for obstructions; move them away if you find any.
- 2. Press and hold **Raise**. The Platforms begin rising.
- 3. When the Platforms move past the first Safety Lock, release **Raise**. The Platforms stop rising.
- 4. Press and hold Safety Lock Release and Lower. The Platforms start lowering.
- 5. When the Platforms get to the ground, they will stop lowering; release **Safety Lock Release** and **Lower**.
- 6. Wait for one minute.

**WARNING** The Power Unit is not a constant duty motor; *it cannot be run continuously*.

- 7. Repeat the process, this time raising the Lift to the top Safety Lock and then lowering it back down to the ground.
- 8. If the Lift is working without shaking, moving erratically, or squeaking, there is no need to repeat the procedure.

If the Lift is shaking, moving erratically, or squeaking, repeat the procedure one more time.

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

#### Add the Ramps

The P-9000LT comes with four Ramps: two Long Ramps and two Short Ramps. The P-9000LTF does not come with any Ramps, as it is flush mount.

You can attach the Ramps in any configuration you want. Most people drive vehicles onto the Platforms using the Long Ramps and drive off using the Short Ramps, but it is up to you.

All four Ramps come with pins that fit into holes in the Base. To put a Ramp into position, put the pins into the holes in the Base and make sure they are correctly seated.

#### **Final Checklist Before Operation**

Make sure these things have been done before using your 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 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.
- Check to see that all Anchor Bolts are appropriately shimmed and correctly torqued.
- Make sure that all Safety Locks are cleared and free.

#### Leave the Manual with the Owner/Operator

Make sure to leave the *Installation and Operation Manual* with the owner/operator so that it is available for anyone who needs to read it.

## Operation

This section describes how to operate your Lift.

▲ WARNING Use care around the Lift. When it is in a lowered position, be careful not to trip over it. When it is raised, be careful not to bang into the Ramps or the Platforms. *When the lift is moving, keep everyone at least 30 feet away* from it.

#### **Lift Operation Safety**

BendPak recommends referring to the ANSI/ALI ALIS Standard (R2015) *Safety Requirements for Installation and Service* for more information about safely installing, using, and servicing your Lift.

Before you raise or lower a vehicle using your Lift, do the following:

- 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, visit bendpak.com/support, or call (800) 253-2363, x196.
- **Check the area**. Check the area around the lift for obstructions; anything that might block the lift. Do not forget to check *above* the lift. If you find an obstruction, move it out of the way. Do not allow anyone within 30 feet of the lift while it is in motion.
- **Check the operators**. Make sure 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.
- 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 Lift. When raising the Lift, do not leave it until it is engaged on a Safety Lock. When lowering the Lift, do not leave it until it is fully lowered. Do not allow children to operate the Lift. Do not allow anyone under the influence of drugs or alcohol to operate the Lift.
- **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. Make sure you know and use the manufacturer's recommended lifting points for the vehicle. Never raise just one side, one corner, or one end of a vehicle.

#### The Console

Operation of the Lift is controlled via the Console.



The controls on the Console are:

- **Safety Lock Release** button. Uses air pressure to release engaged Safety Locks so the Platforms can lower.
- **Raise** button. Moves the Platforms up.
- Lower button. Moves the Platforms down.

#### **Raising a Vehicle**

This section describes how to position a vehicle on the Lift and raise it.

#### To raise a vehicle:

1. Check the items listed in Lift Operation Safety.

If you find any issues, resolve them before raising the vehicle.

- 2. Make sure both Platforms are on the ground.
- 3. Drive the vehicle over the Platforms and situate it correctly.

## **CAUTION** Make sure to situate the vehicle so that neither the front nor the rear wheels are over the Platforms. If you raise the Platforms with the wheels over the Platforms, you could damage the wheels.

4. Put the vehicle in park, put on the parking brake, and turn off the vehicle.

If the vehicle is a manual transmission, put it into first gear before turning it off.

You do not want the vehicle moving while it is raised.

- 5. Walk around the vehicle and make sure there are no obstructions or any other issues that will interfere with the raising of the Platforms.
- 6. At the Console, press and hold the **Raise** button.

7. Watch the vehicle and the Platforms as they rise.

If the Lift becomes unstable or the vehicle starts moving, release the **Raise** button immediately.

8. When the Platforms are just past the desired height, release the **Raise** button.

The Lift stops rising.

9. Press the **Lower** button briefly to move the Platforms back down, which engages them on the most recently passed Safety Lock.

If you do not go far enough past the lowest Safety Lock, then lower the Platforms, you may miss the Safety Lock. This would mean that if you continue to hold the **Lower** button, the Platforms will go all the way back to the ground.

If you miss the lowest Safety Lock, simple hold **Raise** again and go somewhat further past the lowest Safety Lock, then hold **Lower** again to lower the Platforms onto the lowest Safety Lock.

#### About Safety Locks

Your lift comes with multiple Safety Lock positions; they serve two important functions:

- **Safety**. Safety Locks hold the P-9000LT Platforms in place. Once your P-9000LT is engaged on the desired Safety Lock, the weight of the vehicle holds the Platforms in place. If the power goes out, the Safety Lock holds the P-9000LT Platforms, and anything on them, in place.
- Always leave your P-9000LT on a Safety Lock or on the ground. Although rare, it is possible for Hydraulic Fluid in the Hydraulic Cylinders to leak, causing the Platforms to slowly come down. *Always leave it your Lift either fully lowered or engaged on a Safety Lock.*
- **Adjustable height**. Having multiple Safety Locks means you can raise the vehicle to just the right height for the work you are performing.

#### **Lowering a Vehicle**

This section describes how to lower a vehicle from a raised position.

#### To lower a vehicle:

1. Check the items listed in Lift Operation Safety.

If you find any issues, resolve them before lowering the vehicle.

- At the Console, press and hold the **Raise** button for a second or two.
   This moves the Platforms off the Safety Lock.
- 3. Press and hold **Safety Lock Release**, then press and hold **Lower**.
- 4. When the Platforms are resting on the ground, release both buttons.
- 5. Carefully drive the vehicle off the Platforms.

## Lift Arm Kit

The P-9000LT/F has an optional Lift Arm Kit available.

The Lift Arms increase the capabilities of your Lift. The pads and extenders let you quickly and easily hit the lifting points of cars, light trucks, and SUVs. If you are using your P-9000LT/F in a pit environment, the Lift Arms install over your pit without interfering with your lube bay opening.

The Lift Arm Kit includes:

- Four telescoping Lift Arms
- Four round rubber pads
- Four extensions
- Four Safety Stop Bushings

Together, the Lift Arms can raise up to 9,000 pounds (4,082 kilograms). The Lift Arms are designed to be used together to raise a vehicle; *do not use the Lift Arms separately*.

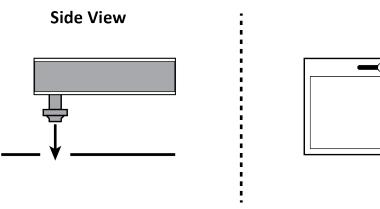
If you extend the Lift Arms (using their telescoping ability) past four inches from the edge of the Platform, the rated capacity of the Lift Arms is reduced:

- **Up to four inches**: 2,250 lbs per Lift Arm, 9,000 lbs total. No reduction in rated capacity.
- At six inches: 1,500 lbs per Lift Arm, 6,000 lbs total.
- At 10 inches: 900 lbs per Lift Arm, 3,600 lbs total.
- At 18 inches (fully extended): 500 lbs per Lift Arm, 2,000 lbs total.

**WARNING** Do not overload the Lift Arms. If you try to raise a vehicle that is over the rated capacity, you could damage the Lift or the Lift Arms. Also, the vehicle could fall, possibly damaging the vehicle or causing serious bodily injury, even death.

#### To install the Lift Arms:

1. Move the first Lift Arm into place on top of the Platform, with the non-telescoping end above the hole on the Platform you want to install it into.





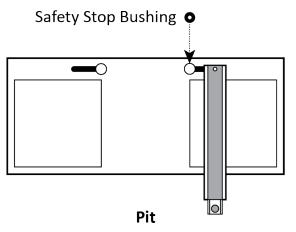
Be careful with the Lift Arms; they are heavy and you can pinch your fingers. BendPak recommends wearing gloves when installing or moving the Lift Arms.

**Top View** 

Pit

2. Put the flange on the bottom of the Lift Arm into the hole, then move the Lift Arm over into the narrower section of the hole.

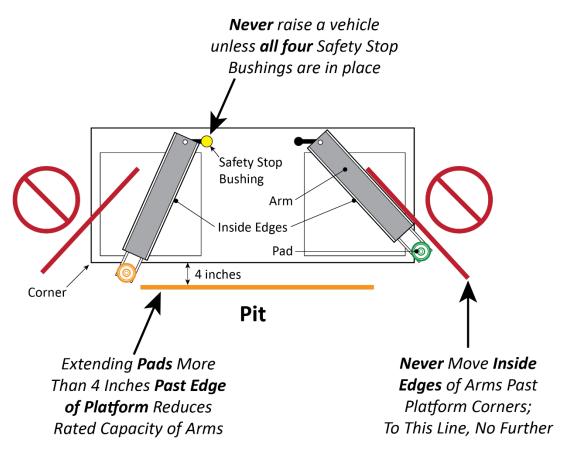
3. Put the Safety Stop Bushing into the hole; firmly press it into place.



Important: Do not use any of the Lift Arms unless all four of the Safety Stop bushings are in place.

4. Repeat Steps 2 through 4 for the other Lift Arms.

**WARNING** Never move the inside edges of the Lift Arms past the corners of the Platform. They are not designed to hold weight past the inside edges; you could damage the Lift or the Lift Arms.



# Maintenance

# ▲ DANGER Before performing any maintenance, make sure the Lift is completely disconnected from power and *cannot* be re-energized until all maintenance is complete. BendPak strongly recommends using your Power Disconnect Switch during maintenance.

#### To maintain your Lift:

- Daily: Keep the Lift clean. Wipe up any oil spills, clean any dirt.
- **Daily**: Make a visual inspection of all moving parts and check for damage or excessive wear. If you find any damaged or worn parts, take the Lift out of service until they are replaced.
- **Daily**: Make sure the Safety Locks are in good operating condition. If you find that the Safety Locks are damaged or excessively worn, take the Lift out of service until they are replaced. *Do not use your Lift if the Safety Locks are damaged or excessively worn*.
- **Weekly**: Check all controls to make sure they are functioning normally.
- Weekly: Check all labels on the unit. Replace them if they are illegible or missing.
- Monthly: Lubricate the grease fittings. We recommend using white lithium grease or similar.
- Monthly: Check the Power Unit's Hydraulic Fluid levels. Refill if low.
- **Every two months**: Check all Anchor Bolts to make sure they are tight. If not, tighten them.

WARNING: Do not operate your Lift if you find issues; instead, take the lift out of service, then contact your dealer, email techsupport@bendpak.com, visit bendpak.com/support, or call (800) 253-2363, extension 196.

## Troubleshooting

This section describes how to troubleshoot your Lift.

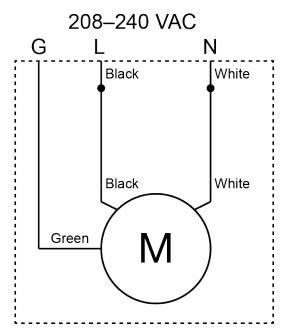
**Note**: If your Lift is not functioning correctly, you must take it out of service until it is fixed.

Important:	All repair work <i>must</i> be done by qualified personnel.
------------	---

Issue	Action to Take			
Platforms move erratically or squeak when in use.	Move the Platforms up and down a few times, with a break betweer each; there could be residual air in the Hydraulic System.			
Platforms do not go up or down.	Make sure the Power Unit is connected to an appropriate power source.			
	Make sure none of the Hydraulic Lines are pinched or leaking.			
	Make sure there is sufficient Hydraulic Fluid in the reservoir on the Power Unit.			
Hydraulic Fluid is old or 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.			
Platforms make odd noises when in use.	Lubricate hinge points using white lithium grease.			
Platforms are slowly lowering on their own.	Make sure both Platforms are on Safety Locks (if not, Hydraulic Fluid could be leaking out, lowering the Platforms). Only leave the Lift either fully lowered or engaged on a Safety Lock.			

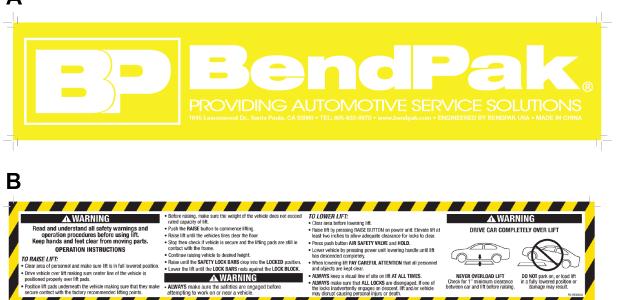
If you continue to have problems with your Lift, contact your dealer, visit **bendpak.com/support**, email **techsupport@bendpak.com**, or call **(800) 253-2363**, extension 196.

# **Wiring Diagram**



# Labels

#### Α





Over and of personnel and makes sure it is as it in write work of the mit time under each of the mit time data which is a surface of a solution it and autometarbit the which are mit they make secure contact with the factory recommended fitting points.

Over the mit time data of the mit time data with the mit time make secure the astrone in a solution it and autometarbit the which making sure that they make secure contact with the factory recommended fitting points.

Over the mit time data of the mit time da

Santa Paula, CA USA www.bendpak.com

EAL

DATE OF MFG.

SERIAL NUMBER

Clear area of personnel and make sure lift is in full lowered position.

1

BP BendPak

LIFT CAPACITY

VOLTAGE

110-240V. 50-60 Hz. 1 Ph

208-240V, 50-60 Hz, 1 Ph 380-415V, 50-60 Hz, 3 Ph 208-440V, 50-60 Hz, 3 Ph

4

DANGER!

connect Po ore Servici

MODEL NUMBER

DESCRIPTION

ITVICING NTY VOID IF DATA PLATE IS REMOV



NEVER OVERLOAD LIFT for 1" minimum clearance car and lift before raising

P-9000LT/F Low-Rise Pit Lift

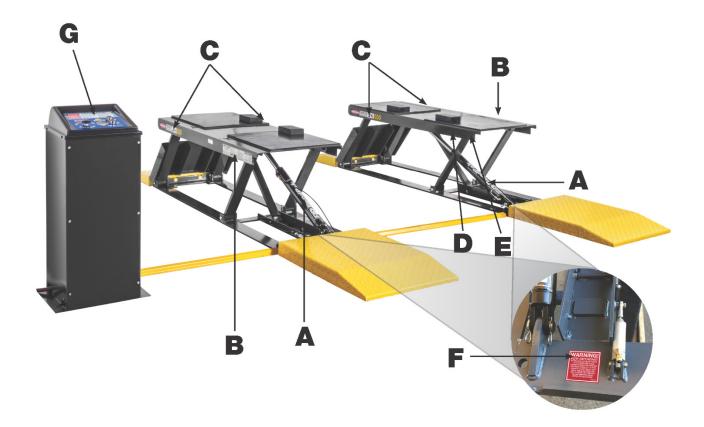
D



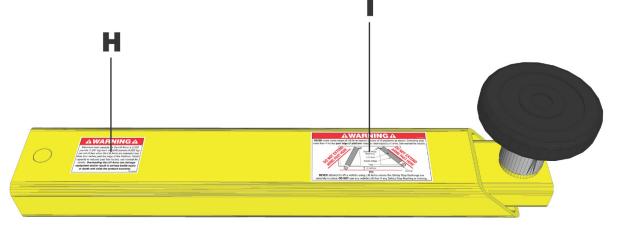


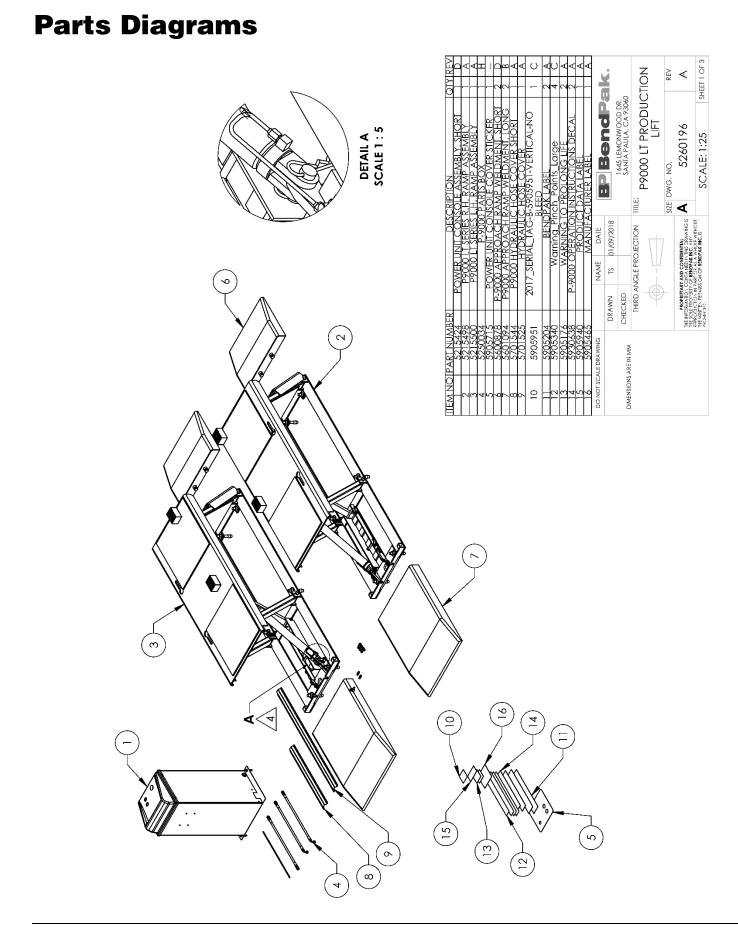
### AWARNINGA

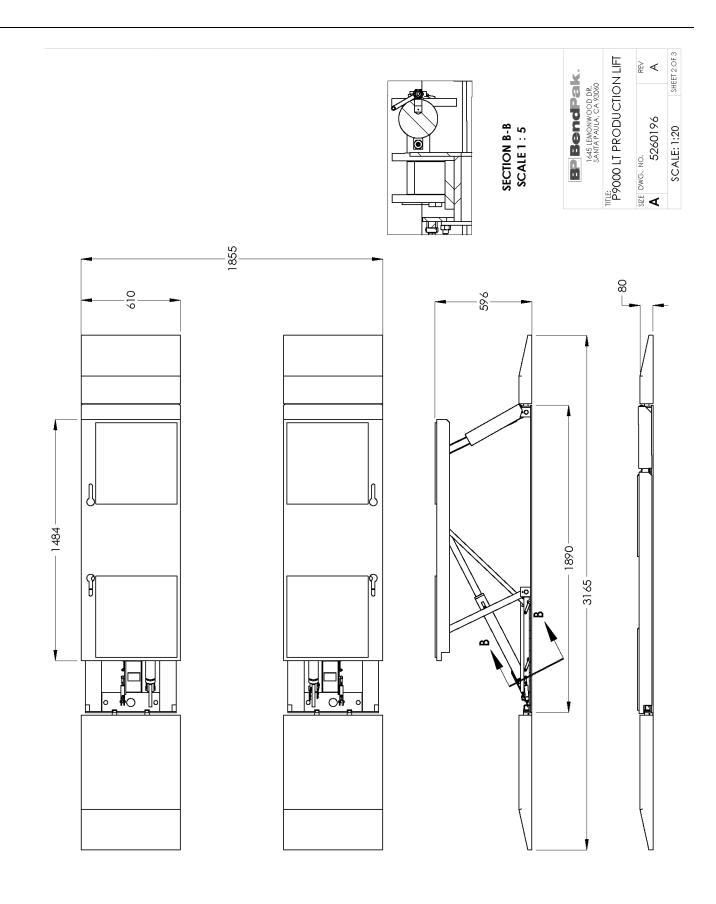
Maximum load capacity for the Lift Arms is 2,250 pounds (1,021 kg) each or 9,000 pounds (4,082 kg) per set of four when the Lift Arms are extended less than four inches past the edge of the Platform. Rated capacity is reduced past four inches; see manual for details. Overloading the Lift Arms can damage equipment and/or result in serious bodily injury or death and voids the product warranty. REVER notate inside edges of Lift Arms beyond comers of lift platforms as shown. Extending pads more than 4 inches past edge of platform reduces rated capacity of arms. See manual for details.

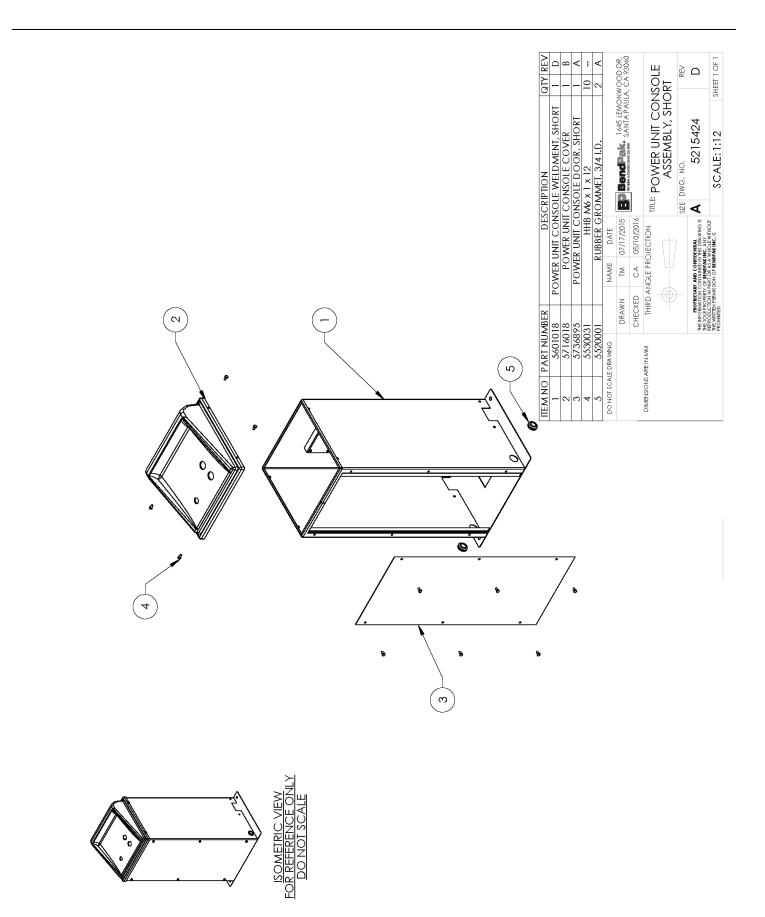


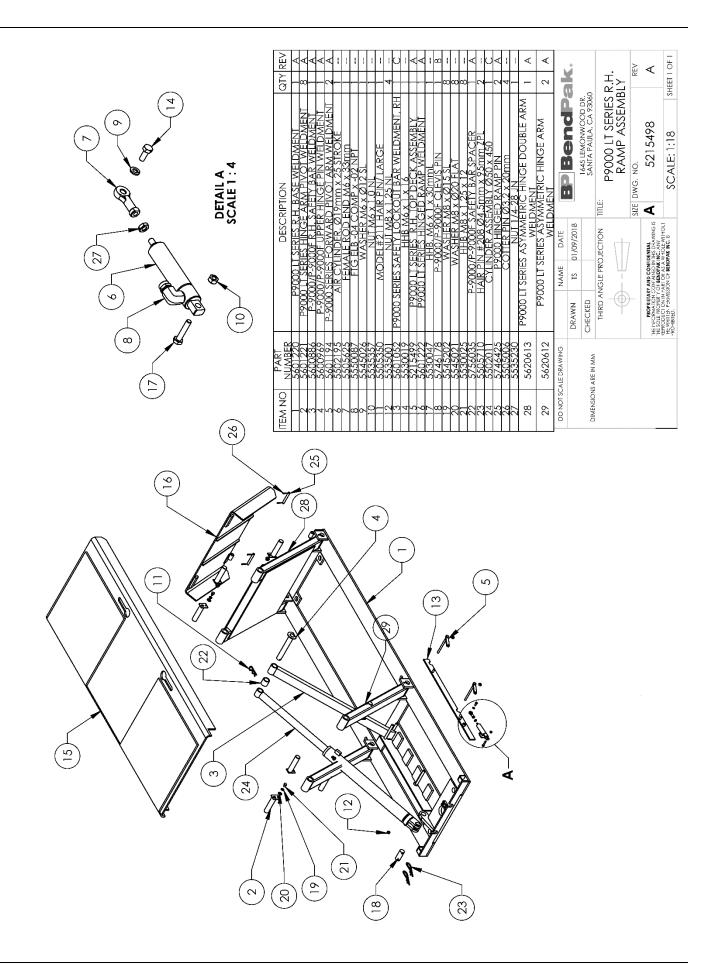
## Optional Arm Kit Labels

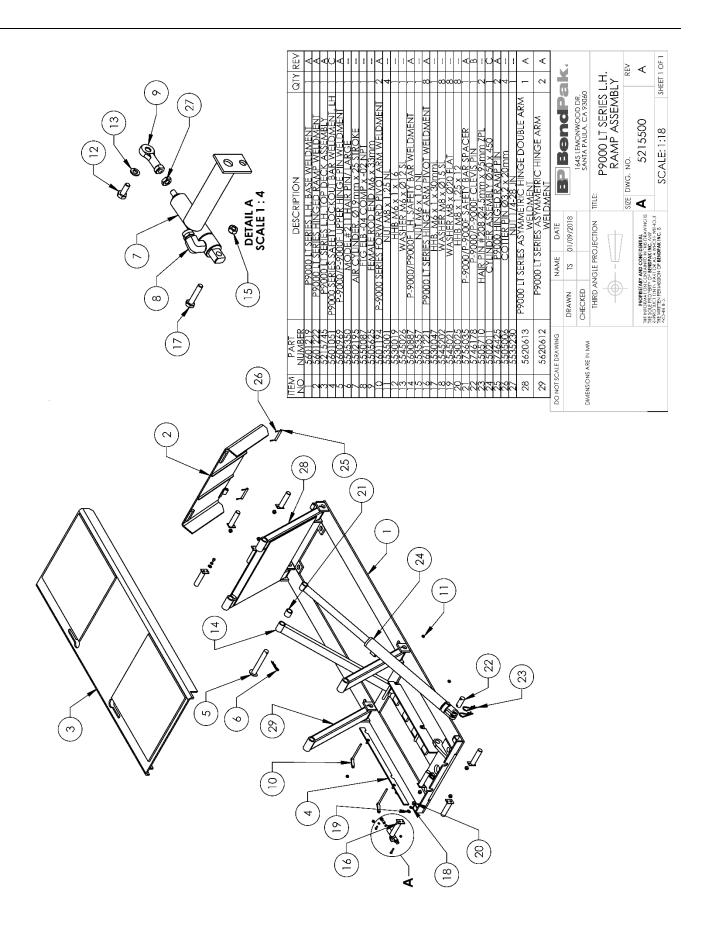


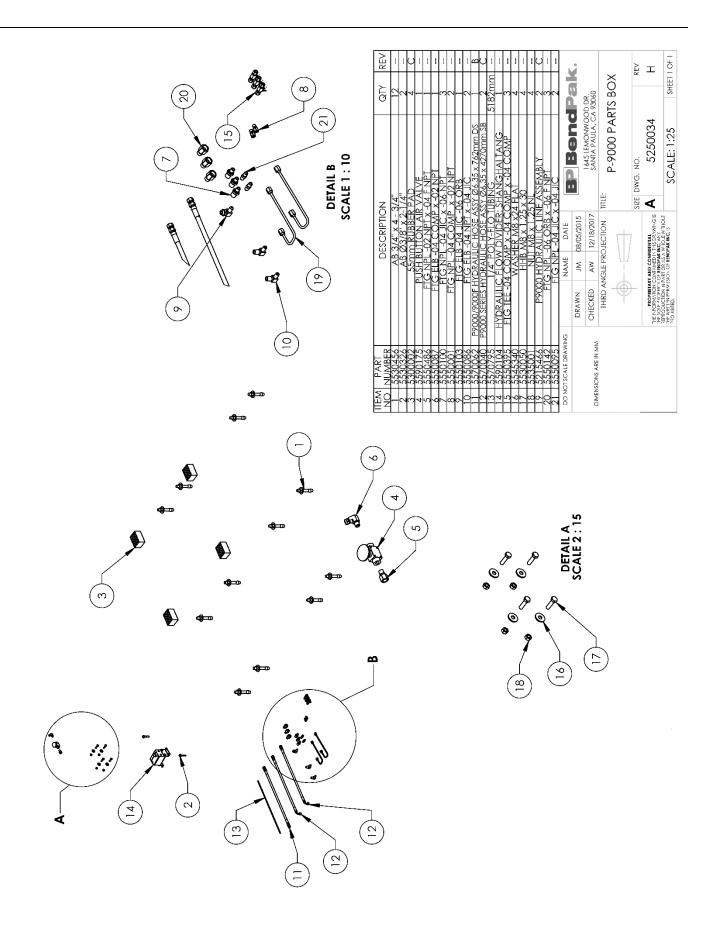












tenance	LOG		
	-	-	
	-	-	

enance Log		

ce Log			



1645 Lemonwood Drive Santa Paula, CA 93060 USA

© 2019 by BendPak Inc. All rights reserved.

bendpak.com