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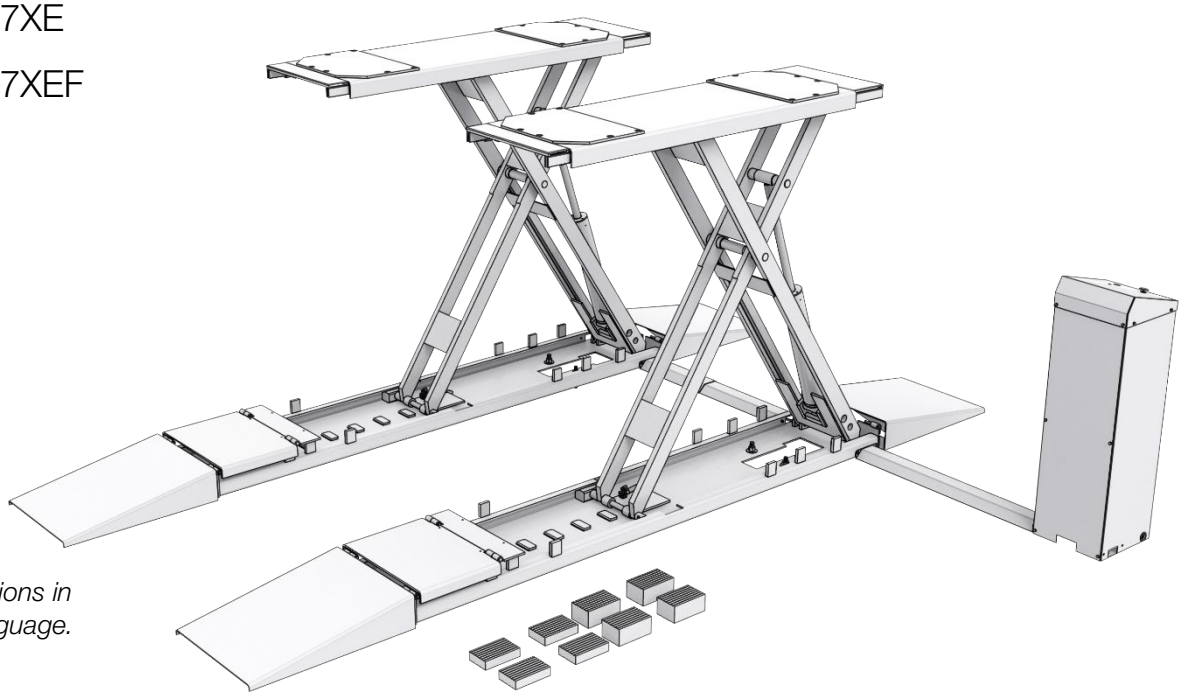
Full-Rise Scissor Lift
Installation and Operation Manual

Manual P/N 5900010 — Revision B6 — September 2025

Model:

- SP-7XE
- SP-7XEF



Original Instructions in the English Language.

Model SP-7XE shown

⚠ DANGER

IMPORTANT Safety Instructions, save these instructions! 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 severe injury or death. Make sure all other operators also read this manual. Keep the manual near the product for future reference. ***By proceeding with installation and operation, you agree that you fully understand the contents of this manual and assume full responsibility for product use.***

Manual. SP-7XE and SP-7XEF Full-Rise Scissor Lift, *Installation and Operation Manual,* Part Number 5900010, Revision B6, released September 2025.

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 receive the latest information about any product: **bendpak.com**.

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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 **https://www.bendpak.com/support/warranty/** for full warranty details.

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 maintain your product properly and to ensure operator 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 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 the manual with the product and make sure all labels are clean and visible.
- **BendPak** makes no promises, guarantees or assurances that our products meet any state, county, federal or international mandated permit, license, code, standard, certification, or any other mandate other than what is listed or shown on BendPak website(s), or any BendPak or Ranger online or published catalog. Not all BendPak Lift models meet the standards as prescribed by ANSI/ALI ALCTV-(current edition) or ANSI/UL 201. Consult **www.autolift.org** for a complete list of Lift models that meet ANSI/ALI ALCTV-(current edition) or ANSI/UL 201, or contact BendPak via **contact@bendpak.com**. ***Buyer assumes full responsibility for any state, county, federal or international mandated permit, license, code, standard, certification, or any other mandate required related to the installation and/or operation of any BendPak product.*** BendPak will not be responsible for any charges, fines, liens, or other levies imposed on the Buyer related to any special or regional structural, seismic or any other building code and/or codes such as the Uniform Building Code (UBC), International Building Code (IBC), or any other state, county, federal or international mandated permit, license, code, standard, certification, or other mandate, law, rule, regulation or directive by any other agency, government, administrations, or corporations whether state, county, federal, or international mandated.
- **Only use the Lift if it can be used safely!**

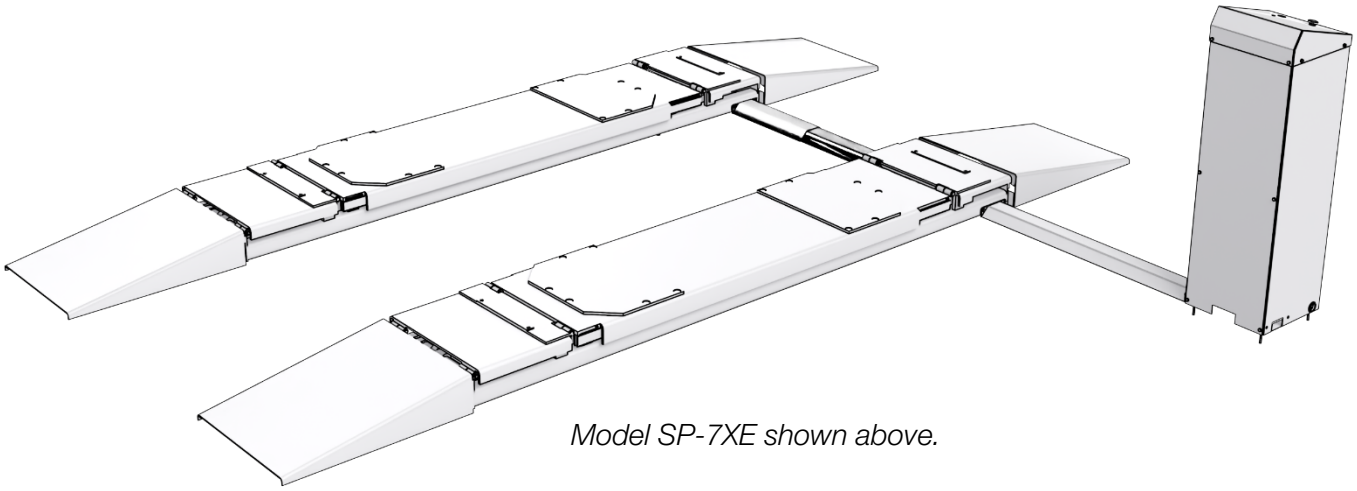
Unit Information. Enter the Model Number, Serial Number, and the Date of Manufacture from the label on your unit. This information is required for part or warranty issues.

Model: _____

Serial: _____

Date of Manufacture: _____

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



Model SP-7XE shown above.

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Introduction

This manual describes the SP-7XE and SP-7XEF, which are full-rise, frame-engaging lifts that feature an open-center design which provides full under-vehicle access. They can be installed at ground level or recessed (SP-7XEF flush mount) and are frequently installed over a service pit. Flush mount models do not use drive-up ramps but do require a recessed surface. The installations for both units are similar. Where the instructions differ, they will be clearly separated by model number.

Both models raise vehicles up to 7,000 lbs. (3,175 kg) as equipped.

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

⚠ **DANGER** Exercise caution 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. An authorized technician must perform all repairs. 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.

This manual is mandatory reading for all users* of *SP-7XE/F Series Lifts, including anyone who installs, operates, maintains, or repairs them. Always keep this manual on or near the equipment.

Technical support and service is available from your dealer, on the Web at **bendpak.com/support**, by email at **support@bendpak.com**, or by phone at **(800) 253-2363**, then follow the prompts.
Online chat is also available at **www.bendpak.com** click the chat icon.

Scan this QR Code for up-to-date information and videos on the SP-7XE/F Lift series.

SCAN FOR VIDEO

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

Important Safety Instructions, save these instructions!

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.

⚠ **WARNING** **California Proposition 65**. This product can expose you to chemicals including styrene and vinyl chloride which are on the list of over 900 chemicals identified by the State of California to cause cancer, birth defects or other reproductive harm. For more information, visit **www.P65Warnings.ca.gov**.

⚠ **WARNING** BendPak Does not supply hydraulic fluid or lubricants with the Lift. **Always** refer to the Material Safety Data Sheet (MSDS) for safe handling and disposal information. MSDS are available from the hydraulic fluid or lubricant's supplier or manufacturer.

Important Safety Instructions!

Read and understand all procedures and safety warnings before operating the Lift:

1. Read all instructions.
2. Care must be taken as burns can occur from touching hot parts.
3. Do not operate equipment with a damaged cord or if the equipment has been dropped or damaged – until qualified service personnel have examined it.
4. Do not let a cord hang over the edge of a table, bench, or counter or come in contact with hot manifolds or moving fan blades.
5. If an extension cord is necessary, a cord with a current rating equal to or more than that of the equipment should be used. Cords with a current rating less than the equipment may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.

6. Always unplug the equipment from the electrical outlet when not in use. Never use the cord to pull the plug from the outlet. Grasp the plug end and pull to disconnect.
7. Let the equipment cool completely before putting it away. Loop cord loosely around equipment when storing.
8. To reduce the risk of fire, do not operate in the vicinity of open containers of flammable liquids (such as gasoline).
9. Adequate ventilation should be provided when working on operating internal combustion engines.
10. Keep hair, loose clothing, fingers, and all parts of body away from moving parts.
11. To reduce the risk of electric shock, do not use on wet surfaces or expose to rain.
12. Use only as described in this manual. Use only BendPak recommended attachments and accessories.
13. ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact resistant lenses, they are not safety glasses.
14. To reduce the risk of injury, close supervision is necessary when this product is used around children.
15. To reduce the risk of injury, ***never*** attempt to lift more than the rated capacity. Refer to loading instructions.
16. The Lift uses electrical energy; if your organization has Lockout/Tagout policies, make sure to implement them after connecting the Lift to a power source.
17. Refer to markings for proper load on electrical receptacles.
18. Only operate your Lift between temperatures of +41°F to +104°F (+5°C to +40°C).
19. The Lift should ***only*** be operated by authorized personnel. Keep children and untrained personnel away from the Lift.
20. Do not make any modifications to the Lift; this voids the warranty and increases the chances of injury or property damage.
21. Do not use the Lift while tired or under the influence of drugs, alcohol, or medication.
22. Consider the work environment. Keep the work area clean. Cluttered work areas invite injuries. Keep areas well lit.
23. **Always** make sure both Lift platforms are secured on their safety locks before attempting to work on or near a vehicle.
24. Make a thorough inspection of the product at least once a year. Replace any damaged or severely worn parts, decals, or warning labels. Replace worn or damaged parts with BendPak or BendPak approved parts and assemblies only.
25. BendPak recommends referring to the ANSI/ALI ALIS Standard *Safety Requirements for Installation and Service* for more information about safely installing, using, and servicing your Lift.
26. The SP-7XE and SP-7XEF are full-rise, frame-engaging, scissor lifts for servicing vehicles. ***Use it only for its intended purpose***. Improper use of this Lift could cause severe injury or death.
27. You ***must*** wear OSHA-approved (publication 3151) personal protective equipment at all times when installing, using, maintaining, or repairing the Lift. Leather gloves, steel-toed work boots, eye protection, back belts, and hearing protection are ***mandatory***.
28. Keep loads balanced on the Lift. Clear area at once if a vehicle is in danger of falling off the Lift.

29. Do not make any modifications to the Lift. Modifications void the warranty and increases the chances of injury or property damage. Do not modify any safety-related features in any way.
30. Make sure all operators read and understand this Installation and Operation Manual. Keep the manual near the Lift at all times.
31. While handling a hydraulic cylinder or a hydraulic hose, ***always*** wear gloves. In rare cases, a needle-like stream of hydraulic fluid (even at low pressure) can penetrate fingers, hands, or arms; such a puncture can feel like a bite, electric shock, or a prick. While it may seem like a minor issue, any amount of hydraulic fluid (or Oil) injected into the human body is a serious issue. Anyone suffering such a puncture wound should be ***immediately*** taken to a hospital emergency room to determine the extent of the injury. Explain the circumstances of the injury to the attending physician, including what kind of hydraulic fluid was involved. Do not assume a puncture wound that could have been caused by hydraulic fluid is a minor issue; it could be life threatening.
32. Make an inspection of the Lift ***before*** using it. Check for damaged, worn, or missing parts. Do not use it if you find any of these issues. Instead, take it out of service, then contact an authorized repair facility, your dealer, or BendPak at **(877) 432-6627** or **support@BendPak.com**.
33. BendPak recommends referring to the ANSI/ALI ALIS Standard *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:

⚠ **DANGER**	Calls attention to an immediate hazard that **will** result in injury or death.
⚠ **DANGER**	Calls attention to an electrical hazard that ***will*** result in death or injury.
⚠ **WARNING**	Calls attention to a hazard or unsafe practice that **could** result in injury or death.
⚠ **CAUTION**	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.
 **Tip**	Calls attention to information that can help you use your product better.

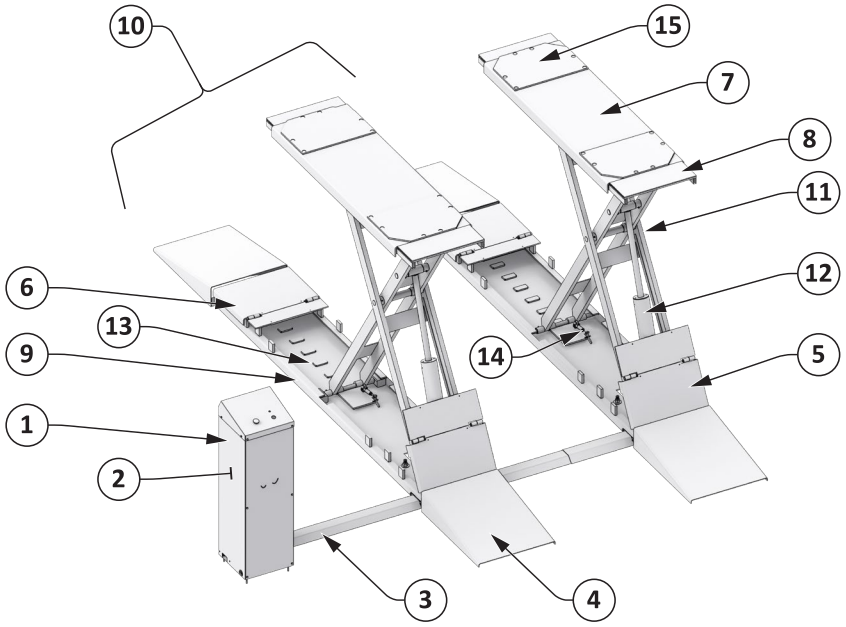
Liability Information

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

- Use of the product for purposes other than those described in this manual.
- Modifications to the equipment without prior written permission from BendPak Inc.
- Injury or death caused by modifying, disabling, overriding, or removing safety features.
- Damage to the equipment from external influences.
- Incorrect operation of the equipment.

Components

SP-7XE Model:

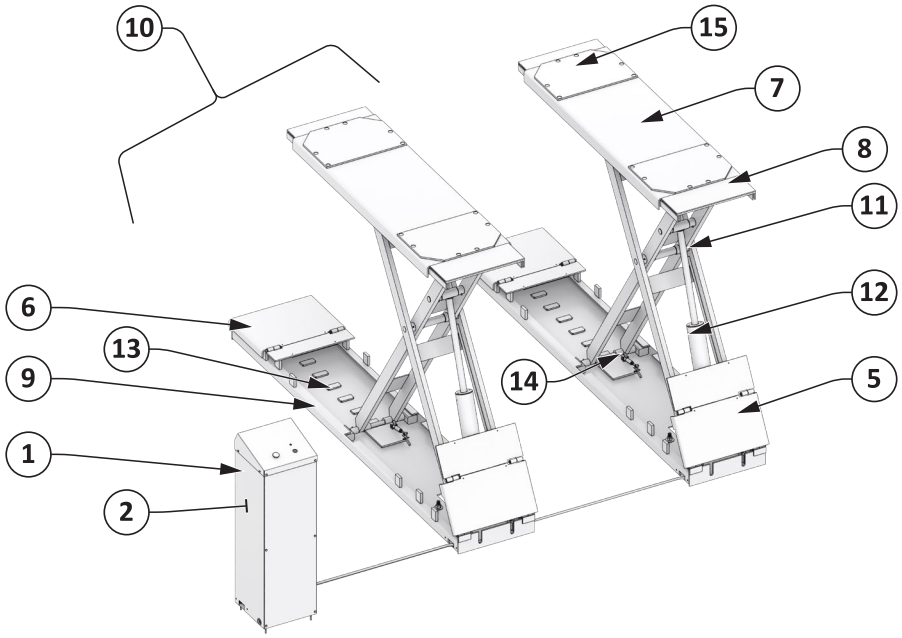


SP-7XE Series Lift components include:

1. **Console** — Hosts the controls for the Lift (on top) and the power unit (inside). The connections for the hydraulic hose and the air lines connect to the power unit inside the console.
2. **Power Unit** — Provides hydraulic pressure to the hydraulic cylinders, which are used to raise the platforms. Housed inside the console. Connects to an external power source and to the Lift Controls.
3. **Hose Covers** — Covers the Air and hydraulic hose.
4. **Drive-up ramps** — Used to drive on or off the platforms. Not included with the SP-7XE**F**.
5. **Hinged Section** — Hinges up when the platforms are raised.
6. **Fixed Section** — On the opposite end from the Hinged Section. It may be raised for installation but otherwise stays in place. Does not hinge up when the platforms are raised.
7. **Platforms** — Flat steel plates that raise and lower. The lift pads resting on the platforms, contact the undercarriage of the vehicle to raise and lower it.
8. **ramp Extensions** — Attaches to the platforms, used for supporting vehicles with longer wheelbases.
9. **Bases** — The bottoms of the Lift. They hold the Scissor Legs, hydraulic cylinders, Air cylinders, safety locks, and the bolt holes for the anchor bolts. The Lift is bolted into place using the anchor bolt holes in each base.
10. **Frames** — Combination of a platform and a base.

11. **Scissor Legs** — The mechanism of the Lift that raises and lowers, powered by the hydraulic cylinders.
12. **Hydraulic Cylinders** — Push the platforms up to raise a vehicle, move down to lower a vehicle.
13. **Safety Locks** — Hold the platforms in place and consist of a latching mechanism and welded blocks on each Lift platform assembly. The SP-7XE/F has eight safety lock positions, which allow selection of the ideal platform height for your use.
14. **Air Cylinders** — Part of the safety lock mechanism uses pressurized air to move the safety lock Mechanism off the safety lock to lower the Lift. It is the user's responsibility to provide an air pressure supply (minimum 50 psi / 10 CFM, regulated to a *maximum* of 125 psi).
15. **Lift Pads** — Rubber Pads that contact the Lifting Points on the vehicle being raised. The Lift is supplied with four Lift Pads.

    SP-7XEF does not include Drive-Up ramps or Hose Covers due to being mounted in concrete recess to end up flush to finished floor:



Frequently Asked Questions

Question: How much weight can the SP-7XE/F raise?

Answer: The SP-7XE/F can lift vehicles up to 7,000 lbs. (3,175 kg).

Q: The SP-7XE**F** is described as flush mount, what does that mean?

A: It means the bases of the SP-7XEF are installed ***below*** the surface of the Concrete, in Concrete Cutouts. The tops of the platforms are flush with the Concrete floor, so vehicles just drive straight on—no drive-up ramps required. Sufficient Concrete depth is required ***under*** the Concrete Cutout. See **Prepare the Concrete Cutouts: SP-7XEF only** for more details.

Q: The SP-7XE/F is called a Full-Rise Lift, what does that mean?

A: It means that the SP-7XE/F can raise a vehicle 5 ft. 10 in. (1,790 mm) off the ground, which is higher than most other Scissor Lifts. Additionally, the SP-7XE/F incorporates eight safety lock positions, which means the Lift may be locked at the height most convenient for the work.

Q: Can the SP-7XE/F be installed outside?

A: No. The SP-7XE/F is approved for indoor installation and use only. ***Outdoor installation is prohibited***.

Q: Can I put the console on either side of the SP-7XE/F?

A: Yes. The hydraulic hose delivered with the SP-7XE/F are long enough to support the console positioned up to 40.25 in. (1,024 mm) away from the base on either side.

Q: What if I need to raise a vehicle that is slightly over the weight capacity of the Lift?

A: ***This is not an acceptable use of the product***. Do ***not*** attempt to raise a vehicle that is heavier than the rated capacity of your Lift. If you do, you void your warranty, you could damage the Lift and/or the vehicle you are raising, and you jeopardize the safety of people under or near the Lift.

Q: What do the safety locks do?

A: Safety Locks use gravity and intelligent engineering to hold the platforms up once the safety locks are engaged. Even if the Lift loses power or the hydraulic hose are cut, the platforms stay where they are if they are engaged on a safety lock. ***Only leave your Lift either fully lowered or engaged on a safety lock! Additionally, NEVER work under a vehicle if the Lift is not engaged on a safety lock!***

Q: Which end of the SP-7XE/F is the front?

A: There is no front or back. You can drive vehicles onto and off the Lift in either direction.

Q: The SP-7XE/F is described as frame-engaging; what does that mean?

A: It means the platforms (specifically the Rubber Blocks on the platforms) contact the frame of the vehicle to raise it. Or the vehicle is ***not*** raised by its wheels.

Q: The space between the platforms is too wide for my small vehicle. What can I do?

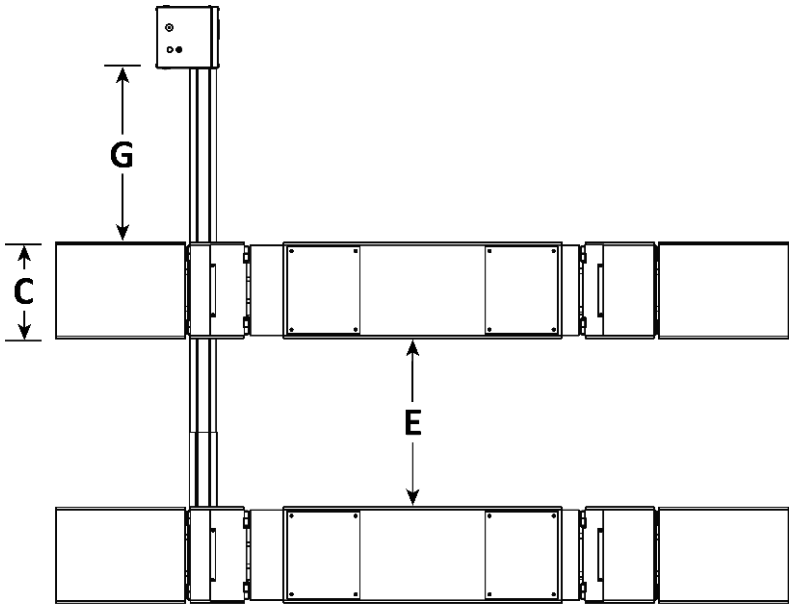
A: You can purchase an optional Lift Arm Kit. The Lift Arms extend into the space between the platforms, providing additional options for smaller vehicles.

Q: Is there a Lift Arm Attachment for the SP-7XE?

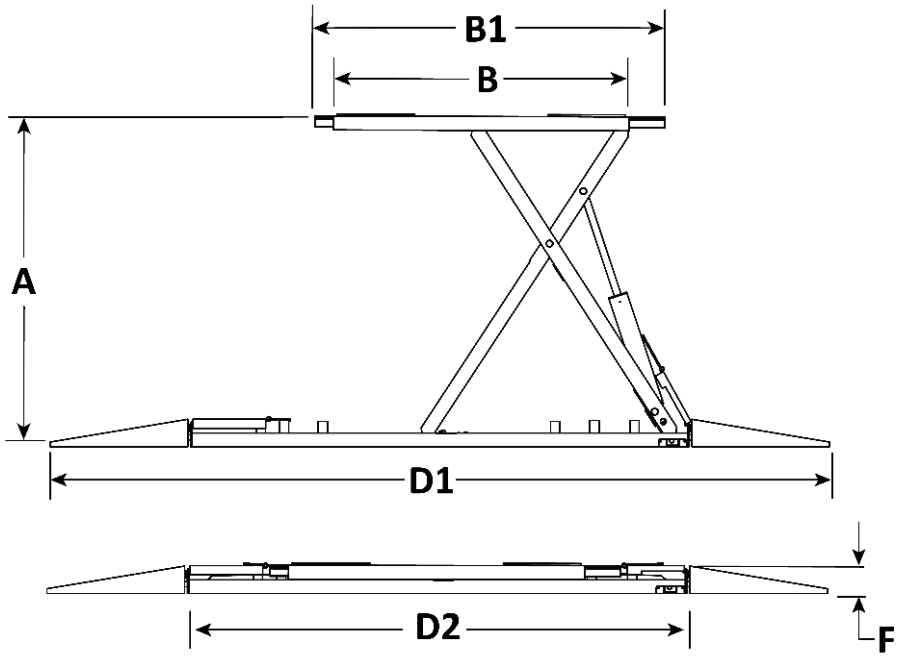
Y: Yes, see **Optional Lift Arm Kit** for more information on this Kit.

Specifications

*SP-7XE shown. The SP-7XE**F** does not have ramps or Hose Covers.*



Top View



Side View

Specifications subject to change without notice. *All dimensions rounded to the nearest 1/4 in. (6.3 mm)*

Model	**SP-7XE**	**SP-7XEF**
Mounting Style	Surface mount	Flush mount
Lifting capacity	7,000 lbs. (3,175 kg)	
A Maximum height raised (no blocks)	70.5 in. (1,790 mm)	
B Individual platform length	62.5 in. (1,590 mm)	
B1 Extended platform length	74 in. (1,880 mm)	
C Individual platform width	21.75 in. (550 mm)	
D Total length	**D1**: 165 in. (4,190 mm) (includes drive-up ramps)	**D2**: 106 in. (2,692 mm) (no drive-up ramps)
E Distance between platforms	38 – 44 in. (968 – 1,114 mm)	38 in. (968 mm)
F Lowered height	6.5 in. (161 mm)	N/A (Platform to be flush with floor)
G Max distance to Console*	Up to 40.25 in. (1,024 mm)	
Safety Lock Positions	8	
Lifting time	≈45 seconds	
Air Pressure Requirement	30 psi (3 cfm), regulated to a maximum 125 psi	
Power Requirement**	208-240 VAC, 50/60 Hz, 1 Ph., 3 HP, 18 Amps	
Hydraulic Pressure at Max. Load	3,060 psi	

*With the supplied hydraulic hoses.

**Special voltages available upon request.

SP-7XE Installation Checklist

Following are the steps needed to install a SP-7XE Lift. Perform them in the order shown.

☐ 1. Review the installation Safety Rules.

☐ 2. Plan for electrical work.

☐ 3. Make sure you have the necessary tools.

☐ 4. Select the installation site.

☐ 5. Create a floor plan.

☐ 6. Verify there is adequate clearance on all sides of the Lift installation area.

☐ 7. New Pour Concrete (if required)

☐ 8. Create Chalk Line Guides.

☐ 9. Move both bases into the chalk lines and Lift both platforms onto the same safety lock.

☐ 10. Drill then install anchors and shim as required to bring the platforms into a level condition.

☐ 11. Torque all anchors to secure, then infill cement between the base and the concrete floor.

☐ 12. Assemble the console and attach the power unit.

☐ 13. Anchor the console.

☐ 14. Read about hydraulic fluid contamination.

☐ 15. Read about thread sealant.

☐ 16. Route, then connect the hydraulic hoses.

☐ 17. Read about compression fittings and tubing.

☐ 18. Route, then connect the air lines.

☐ 19. Install the hose covers.

☐ 20. Connect the power unit (***Electrician required***).

☐ 21. Install a power disconnect switch and (if required) thermal disconnect switch (***Electrician required***).

☐ 22. Fill the hydraulic fluid reservoir.

☐ 23. Lubricate the Lift.

☐ 24. Perform an operational test.

☐ 25. Add the ramp extensions.

☐ 26. Add the drive-up ramps.

☐ 27. Review the final checklist.

☐ 28. Leave the manual for the owner/operator.

SP-7XEF **Installation Checklist**

Following are the steps needed to install an SP***-7XEF*** Lift. Perform them in the order shown.

Important: Consult a Concrete Specialist about creating the Concrete Cutouts ***well before beginning the installation***.

☐ 1. Review the installation safety rules.

☐ 2. Plan for electrical work.

☐ 3. Make sure you have the necessary tools.

☐ 4. Select the installation site.

☐ 5. Create a floor plan.

☐ 6. Verify there is adequate clearance on all sides of the Lift installation area.

☐ 7. New pour concrete (if required)

☐ 8. Create the concrete cutouts with hydraulic, air and electrical supply routing provisions.

☐ 9. Move both bases into the concrete cutouts and lift both platforms off their bases onto the same safety lock.

☐ 10. Drill then install anchors and shim as required to bring the platforms into a level condition.

☐ 11. Torque all anchors to secure, then infill cement between the base and the concrete floor.

☐ 12. Assemble the console and attach the power unit.

☐ 13. Anchor the console.

☐ 14. Read about hydraulic fluid contamination.

☐ 15. Read about thread sealants.

☐ 16. Route, then connect the hydraulic hoses.

☐ 17. Read about compression fittings and tubing.

☐ 18. Route then connect the air lines.

☐ 19. Connect the power unit (***Electrician required***).

☐ 20. Install a power disconnect switch and (if required) a thermal disconnect switch (***Electrician required***).

☐ 21. Perform an operational test.

☐ 22. Add the ramp extensions.

☐ 23. Review the final checklist.

☐ 24. Leave the manual for the owner/operator.

Installation

This section describes how to install your SP-7XE/F. Perform the steps in the order listed.

⚠ **WARNING** ***Use only 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** then follow the prompts.

Your Lift is supplied with installation instructions and concrete fasteners that meet the criteria set by the current version of the American National Standard Automotive Lifts – Safety Requirements for Construction, Testing, and Validation.

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 shop 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 *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. ***Always pay attention.*** Use appropriate tools and equipment. Stay clear of moving parts.

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

⚠ **DANGER** **Crushing hazard and pinch points**. Do not place any part of your body between the any moving part of the Lift unless confirmation is made that the safety lock is fully engaged, and that the Lift's downward motion is blocked by a Jack Stand, forklift or other Load-Holding device that will prevent the Lift's downward movement while working near or under it.

Electrical Work

A licensed Electrician must be available at some point during the installation.

⚠ **DANGER** All wiring must be performed by a licensed Electrician in accordance with all applicable national, state, and local electrical codes.

The Electrician needs to:

1. **Connect the power unit to a 220 VAC power source**. This is generally done near the end of the installation. Note that installing the power unit and connecting the power unit are two separate procedures. While anyone can install the power unit, the Electrician ***must*** connect the power unit to power. The Electrician must create a power cord with an appropriate plug, or route and correctly protect wiring from the facility power directly to the power unit protected by time-delayed fuses or circuit breakers.

2. **Install a Power Disconnect Switch**. This switch is not provided with the Lift. A power disconnect switch is an NEC requirement and provides a means to shut down the Lift in the event of an electrical circuit fault or emergency. 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. The power unit supplied with this Lift ***does not*** include thermal overload protection. Under NEC 430, UL 201, and CSA C22.2 No. 68 intermittent duty motors are not required to include thermal protection. Local electrical codes may vary, and other requirements may exist that the installing electrician will address, if required. 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 in., 3/8 in., Masonry Drill Bits
- Hammer
- Open-end Wrench set: ½ in., 15/16 in., 1-1/8 in.
- Socket and ratchet set, 1-1/8 in.
- Medium adjustable wrench
- White lithium grease
- Crowbar
- Chalk line
- Medium flat screwdriver
- Tape measure 25 ft. (7.6 m)
- Forklift or shop crane
- Quikrete® Fastset® or equal structural grout

Select a Site

Keep the following in mind when selecting a site for your Lift:

⚠ **DANGER** **Risk of explosion**. This equipment has internal arcing or parts that may spark and should not be exposed to flammable vapor. The power unit's Motor should not be located in a recessed area or below floor level. Never expose the motor to rain or other damp environments; damage to the motor caused by water is not covered by the warranty.

- **Clearance**. You must have adequate space on all sides, plus enough space above for the vehicles you will be raising. See **Clearance Around the Lift** for more information.
- **No overhead obstructions**. The site must be free of overhead obstructions.
- **Operator**. The operator at the console ***must*** have a full, unobstructed view of the SP-7XE.
- **Console**. The console must be positioned near the Lift; the hydraulic hose that are supplied with the SP-7XE models support up to 40 in. (1,016 mm) between the Lift and the console.
- **Concrete specifications. *BendPak strongly recommends consulting a Concrete Specialist early in your planning process for Lift installations. The recommendations presented in this manual are generic in nature and cannot cover all situations. A Concrete Specialist will adjust these recommendations to account for national, state, and local building codes as well as local weather conditions, soil composition, base preparation, load bearing, seismic requirements and any other structural concerns that may arise.***

  Evaluate the concrete at the installation location, Do ***not*** install the Lift on cracked or defective concrete. It is critical to determine the thickness and compression strength of the existing Concrete floor. Concrete floors must have a compression strength of at least 3,000 psi to support the Lift. A minimum of 4.25 in. (108 mm) of steel-reinforced concrete is required ***under*** the Lift frames. Drill and test a core sample to determine if the Concrete in your location meets the minimum requirements specified here. Concrete must be cured for at least 28 days (if newly poured). Verify

the floor is defect-free, dry, and level. Note that for Flush-Mount models SP-7XEF require a greater depth of concrete; there must be a minimum of 4.25 in. (108 mm) of steel-reinforced concrete ***below the bottom of the Concrete Cutout***. If you intend to run the hydraulic and air lines to some location farther than 40 in. (1,016 mm) from the Lift, consult with a concrete specialist to determine the size, depth, and location of the conduits needed for the hydraulic and air lines. No Lift anchor bolt should be closer than 6 in. (152 mm) to any inconsistency in the concrete (e.g., expansion joints, edges, or cracks).

⚠ **DANGER** Do not install the Lift on a surface with a slope greater than 3°. A slope in excess of 3° could lead to an unstable vehicle, resulting in falling and causing property damage, personal injury, or death.

- **SP-7XEF installations**. BendPak *strongly* recommends early consultation with a Concrete Specialist to plan and create the Concrete Cutouts for your Flush-Mount Lift.
- **Power**. The Lift requires a 208 to 240 VAC, single-phase power source available near the console. If electrical power is to be run to the console under new pour concrete, consult with a licensed Electrician to ensure the correct location, depth, size, and type of electrical conduit are installed according to national and local electrical codes.
- **Operating temperature**. The Lift is designed to be used between temperatures of 41° to 104ºF (5° to 40ºC).
- **Outdoor installation**. The SP-7XE/XEF Lifts are designed and approved for indoor installation and use only. ***Outdoor installation is prohibited***.
- **Second floor installations**. Do not install the Lift on a second floor or elevated floor without first consulting the building architect and receiving approval.
- **Set up Chalk Line Guides**. Create Chalk Line Guides or tape lines to verify the Lift will function in your chosen location. BendPak strongly suggests a dry run using a vehicle to verify the Lift approach and exit will be safe and efficient in this location.

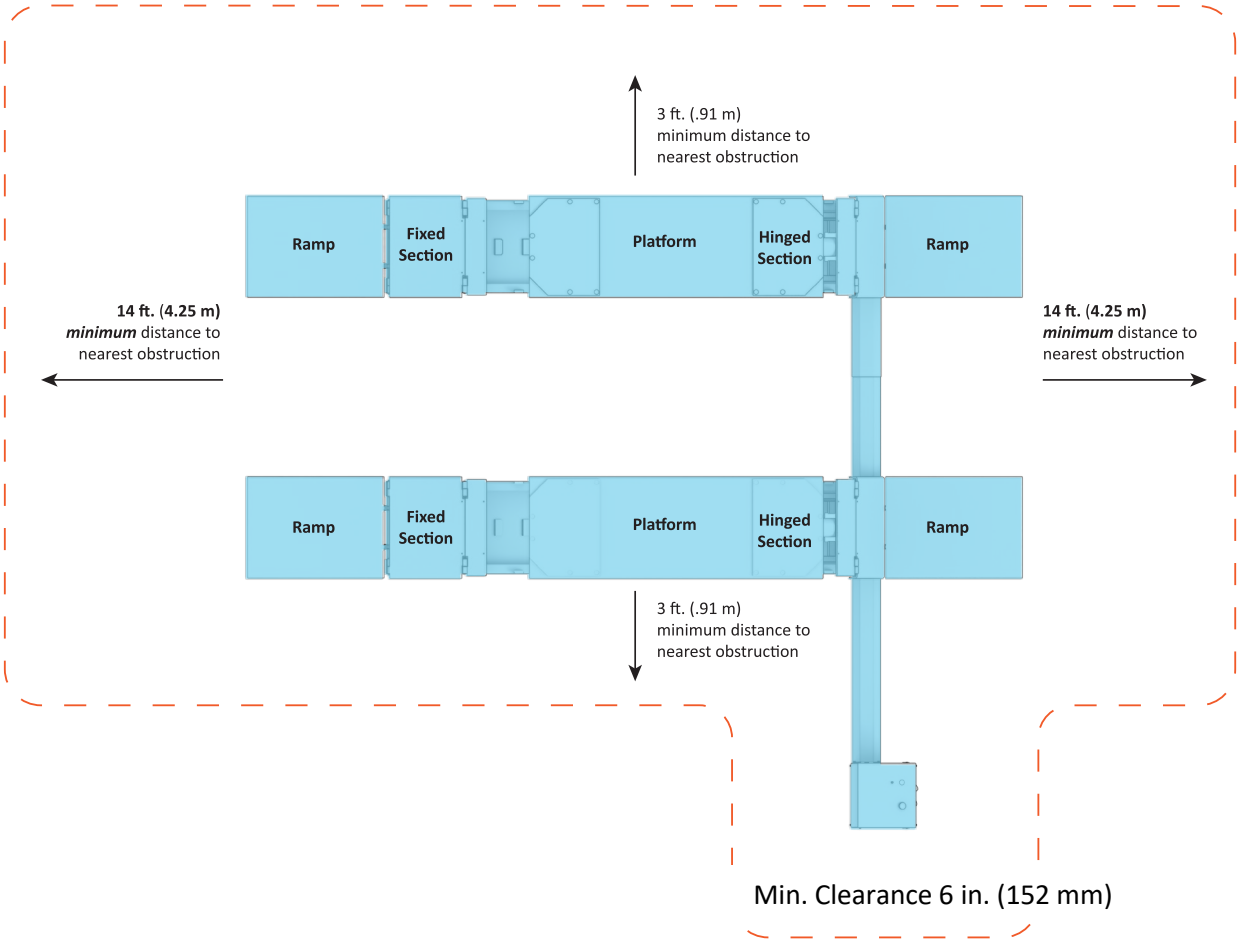
Create a Floor Plan

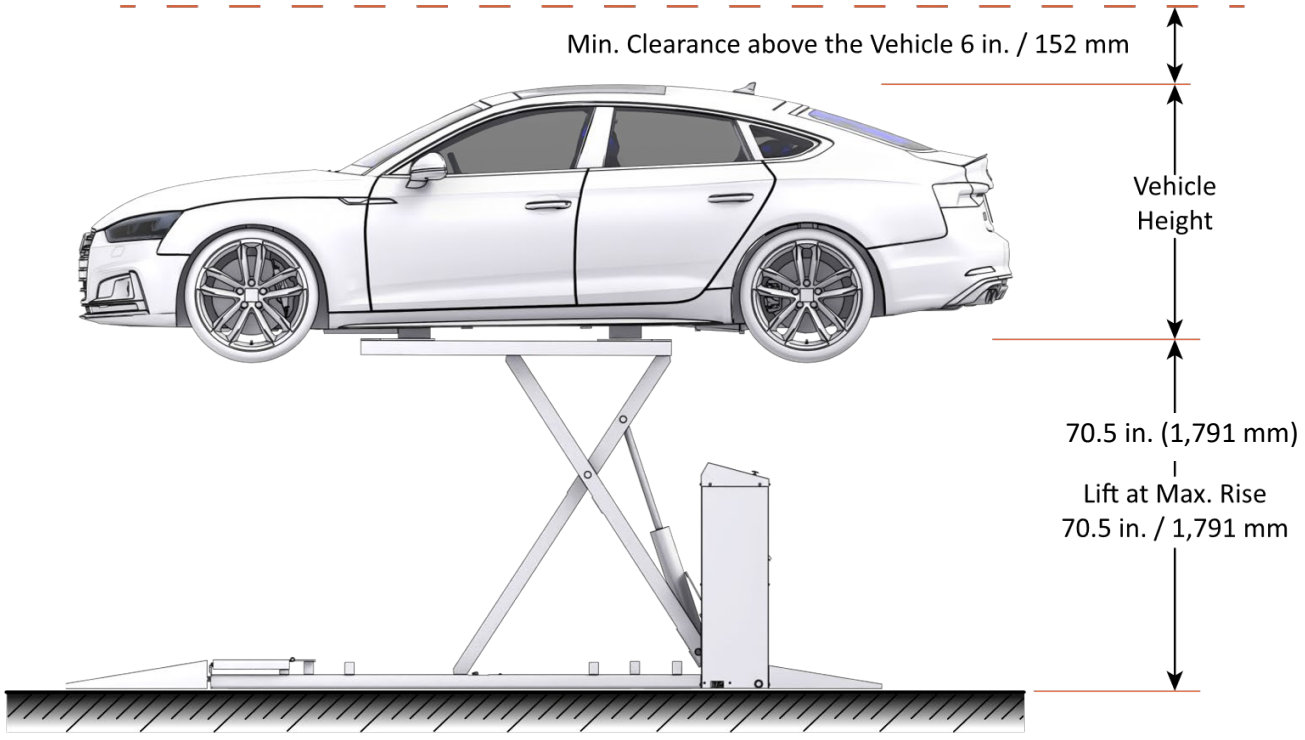
Make sure to plan out, *in advance*, where the Lift and console will be installed:

- **Clearance**. Verify there is adequate clearance on all sides and above the Lift.
- **Console**. The console must be near the Lift; it can be installed on either side of the Lift, but only on the cylinder-end of the platforms. The supplied hydraulic hoses can support up to 40.25 in. (1,024 mm) between the Lift and the console.
- **Operator**. The Operator at the console ***must*** have a full, unobstructed view of the Lift while raising and lowering vehicles.
- **Power**. The console ***must*** be positioned near an appropriate power source.
- **Create Chalk Lines**. Create Chalk Lines or tape lines for the Lift to verify it is properly aligned in the location.

Clearances around and above the Lift

For safety purposes, clear space around and above the Lift is ***required***, as depicted below.





New Pour Concrete Requirements

If your existing Concrete does not meet the requirements previously listed, then a New Concrete Slab may be required.

⚠ **CAUTION** BendPak strongly recommends working with a Concrete Specialist to plan and create Concrete Cutouts and/or new Slabs for the **SP-7XE and SP-7XEF** model.

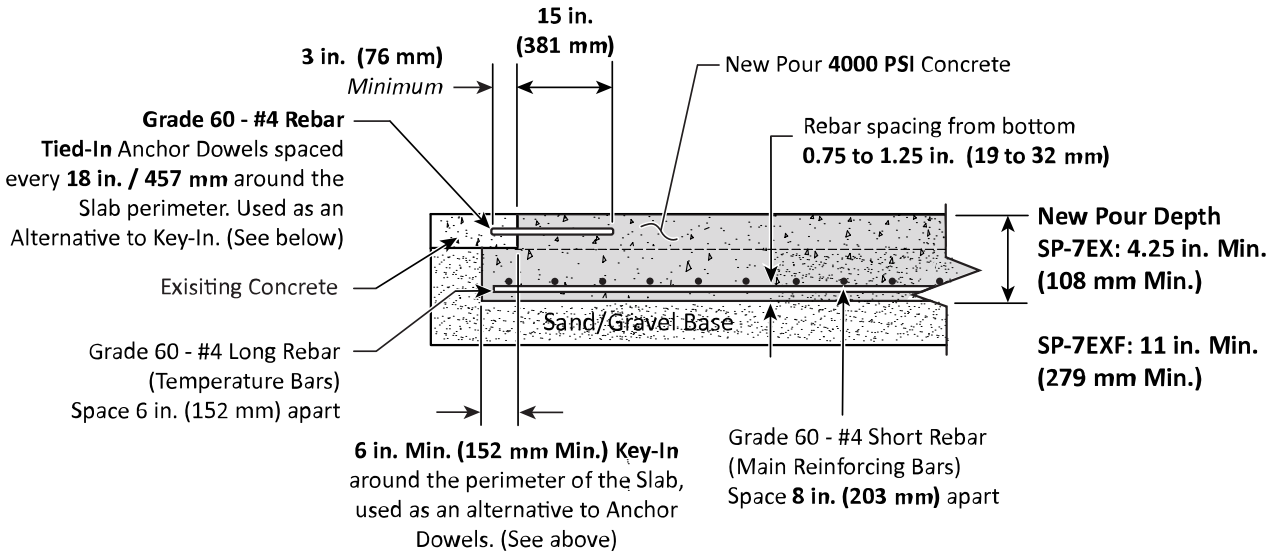
All properties of the New Concrete Slab are **mandatory** and ***must*** conform to the following requirements:

- New Concrete Slabs ***must*** have a *minimum* compression strength of 4,000 PSI, cured for at least 28 days, and a surface slope not exceeding 3°.
- New Concrete Slabs ***must*** have a *minimum* thickness of 4.25 in. **SP-7XE** (11 in. **SP-7XEF**).
- New Concrete Slabs ***must*** be fully surrounded by and flush with the existing Concrete Floor.
- New Concrete Slabs ***must*** be keyed-in around the perimeter ***or*** may be tied-in with rebar.
- Locate reinforcing bars away from any anchor positions or at an elevation that allows you to avoid drilling into reinforcing steel while installing the expansion anchors for the Lift.
- Certified strength documentation for new pours should be obtained from the firm who supplies the concrete mixture at the time of the pour.
- ***Never*** install the Lift over an expansion joint.
- ***Never*** install the Lift on hand-mixed concrete.
- ***Never*** install the Lift on a secondary floor level without written authorization from the building architect and prior approval from BendPak.
- ***Never*** drill or cut into a post-tensioned slab. Contact qualified personnel prior to drilling or cutting to check your floor for the possibility of it being a post-tensioned slab.

Key-In / Tie-In Details

New Concrete Pour must be connected to the existing concrete surrounding it. Two methods are recommended here, Key-in and Tie in. ***There is no need to complete both methods, use one or the other***.

- **Key-in**. This key-in method undercuts the existing concrete by **6 in. (152 mm)** around the perimeter of the New Pour, effectively locking the New Pour into the existing concrete.
- **Tie-in**. This tie-in method uses Anchor Dowels and the New Pour. Anchor Dowels are to be **#4 Rebar x 18 in. (457 mm) long**. These Anchor Dowels are then embedded **3 in. (76 mm)** minimum into the existing Concrete and spaced **18 in. (457 mm)** apart around the perimeter of the New Pour.



Prepare the Concrete Cutouts: SP-7XEF Only

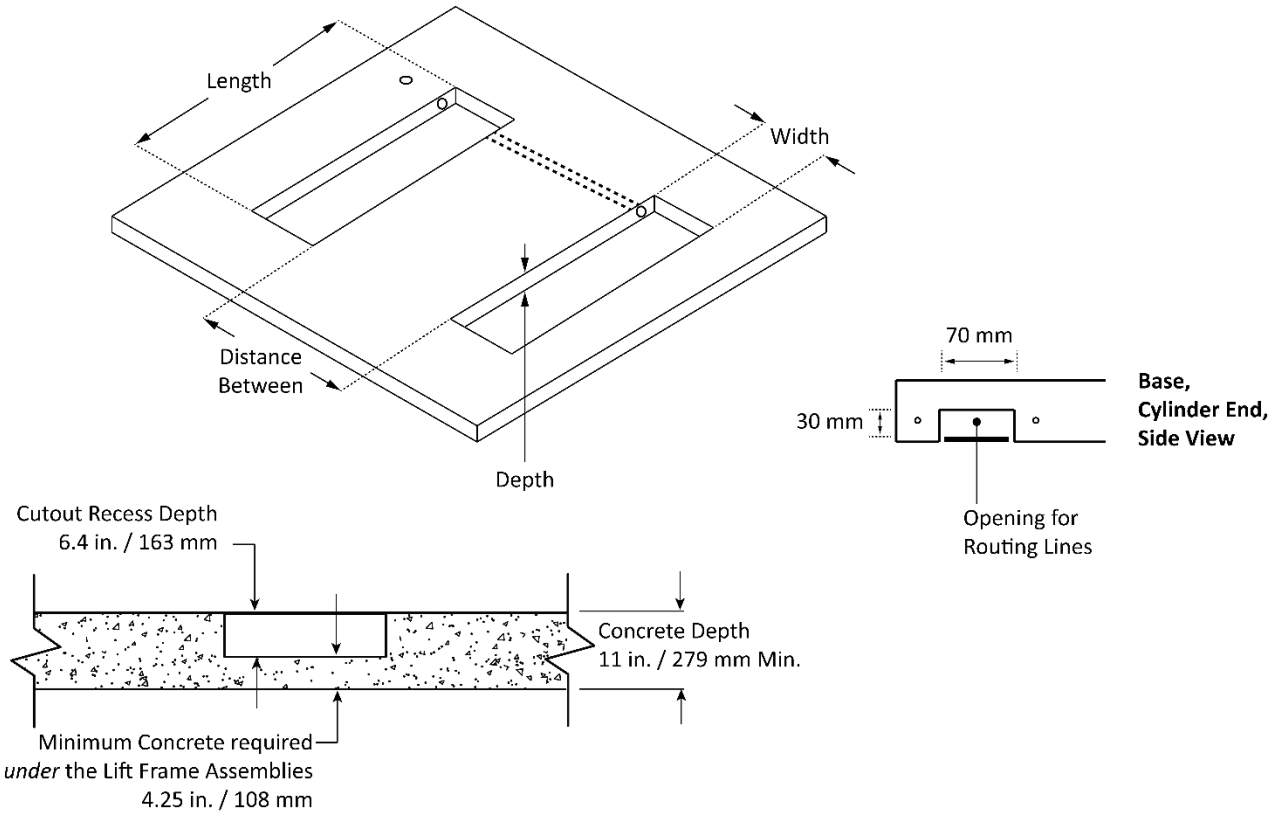
Important: BendPak *strongly* recommends working with a Concrete Specialist to plan and create the Concrete Cutouts for your Flush-Mount Lift.

It is important to understand the following ***before*** creating the concrete cutouts for SP-7XEF Lift:

- **Planning ahead**. ***Before*** creating concrete cutouts for the Lift, decide where the Lift is to be installed, which side of the Lift the console is to be installed on, how far away from the Lift the console is to be, and how far apart the two bases will be. These decisions must be incorporated into the plan created with the concrete specialist.
- **Concrete Cutouts**. The Lift bases of the flush-mount Lift are installed in a recessed section of the floor, called a *Concrete Cutout*. This cutout may be made in the existing concrete if it meets the thickness, compression, and condition requirements listed in this section. If not, then a steel reinforced new pour is required.
- **Depth of the Concrete Cutouts**. Concrete Cutouts must be a specific depth below floor level so that when the Lift is put down into the Concrete Cutout, the top of the Lift's platforms are flush with the existing floor.
- **Concrete Curing Time**. The new concrete pour must cure for a minimum of 28 days before it is strong enough to support anchor bolts.
- **Floor Material**. Concrete Cutouts and new pours must be surrounded by and created in a ***Concrete*** floor; no other surface (asphalt, dirt, or anything else) is acceptable.
- **Cutout Size**. Concrete Cutouts need to be slightly larger than the bases. The values listed at the end of this section add **0.5 in. (2.75 mm)** on all four sides to the length and width of the bases.
- **Concrete Depth**. The Concrete depth ***below the bottom*** of the Concrete Cutouts must be deep enough for the anchor bolts; a ***minimum*** of 4.25 in. (108 mm) is required.
- **Air and Hydraulic Lines**: Your plans for the Concrete Cutouts must account for how these air and hydraulic lines will be routed to the console.

  PVC Conduit with a 2.5 in. minimum diameter is commonly used to route the hydraulic and air lines between the two frame assemblies and the console. If you plan to cut in existing concrete, then plan for cutting channels between the frame assemblies and the console to fit the PVC Conduit and then cover with Concrete.

  Both bases include pre-made rectangular openings for routing the hydraulic and air lines; there are two per base, both on the cylinder end. These opening are available if useful; their use is not required.
- **Lift Location**. Use care when selecting a location for SP-7XEF. Once the concrete cutouts are created, the Lift location is permanent. Choose a location that allows a straight approach to the Lift, without obstructions, and allows access to air and electrical power.
- **Console Location**. The console may be installed on either side of the Lift at the cylinder end of the frame assemblies. The supplied hydraulic hose will support up to 40 in. (1,016 mm) away from the closest frame assembly. You can mount the console farther away, but this will require custom–length hydraulic hose, longer air lines and more hydraulic fluid. Remember to create a path through the concrete towards the console for routing the hydraulic and air lines.
- **Distance between bases**. The bases can be a variable distance apart, allowing you to pick the best width for the vehicles you will be lifting.
- **Diagram**. Use the dimensions shown in the following diagram as a guide for your Concrete Cutouts.



Not all components shown. There must be at least 4.25 in. of Concrete **below** *the bottom of the Concrete Cutouts. In this drawing, the console would be on the left.*

The Flush-Mount Lift settings for the **SP-7XEF** are:

- **Length**. The Length of each SP-7XEF frame base is 106 in. (2,692 mm). Make the cutout 1 in. (25 mm) longer to **≈107 in. (2,718 mm)**.
- **Width**. The Width of each SP-7XEF frame base is 22 in. (559 mm). Make the cutout 1 in. (25 mm) wider to **≈23 in. (584 mm)**.
- **Depth**. The Lowered height of each SP-7XEF frame is **6.4 in. (163 mm)**. Do ***not*** add an extra inch to the concrete cutout depth.
- **Distance Between**. Determine what distance between the platforms is required. The two SP-7XEF platforms may be from **38 to 44 in. (965 to 1,118 mm)** apart. Do ***not*** add extra length to the concrete cutout for this dimension.

Important: If the SP-7XEF is to be installed over a service pit, ***do not*** set the **Distance Between** the platforms to the width of the pit. The two platforms must be from 38 in. to 44 in. apart, even if installed over a service pit.

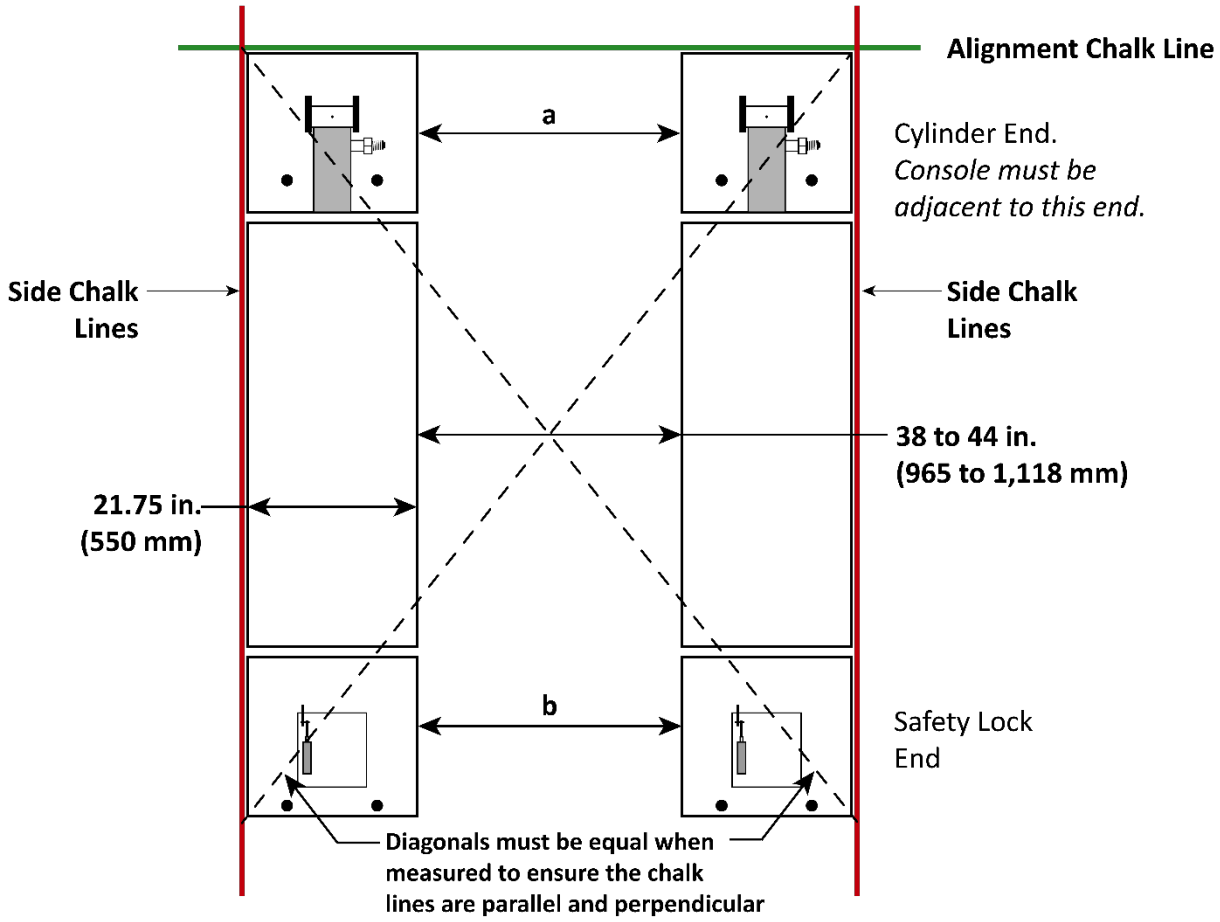
- **Distance to the Console**. The supplied hydraulic hose allows the console to be up to **40 in. (1016 mm)** from the nearest base. Do ***not*** add an extra inch to this value.

⚠ **CAUTION** If you create your Concrete Cutouts and then change your mind about the Distance Between or find that you made a mistake with one of the dimensions, it is very difficult to repair. ***BendPak strongly recommends checking your plans several times before cutting and pouring your Concrete Cutouts***.

Create Chalk Line Guides SP-7XE Only

Create Chalk Line Guides to make sure the frames are parallel and in the desired location.

The following drawing shows the Alignment Chalk Lines to create for your Lift.



To add Chalk Line Guides:

1. Decide where the Lift is to be located.
2. Refer to the figure above. Create an alignment chalk line for one end of the **SP-7XE**. Make the Alignment Chalk Line ***longer*** than the **Overall Width** and the space between them.
3. Create two side chalk lines. They must be perpendicular to the alignment chalk line, parallel to each other, and the correct distance apart 38 in. to 44 in. (965 mm to 1,118 mm) plus the width of the two frames, 44 in. (1,118 mm) total. Refer to **Specifications**.
4. Move each frame into position, into the corners created by the four Chalk Lines.

NOTICE The hydraulic cylinder ends of both frames must be positioned adjacent to the console.

5. Measure the distance between the two frames at points **a** and **b**; they need to be the same distance apart at both ends. Diagonal lines from corner to corner must also be equal.

Important: If **a** and **b** are not equal, adjust the position of the frames to make them equal; **a** and **b** ***must*** be equal distance apart and parallel to each other.

6. When the frames are in the correct location, move to the next section.

Lift the Platforms Off the Bases: SP-7XE/XEF

Raise the platforms off the bases to access the anchor points. ***When you raise the Lift platforms make sure to leave them engaged on a safety lock.***

NOTICE BendPak strongly recommends raising the platforms to the top safety lock, to provide enough room under the platform to install the anchor bolts and make the hydraulic and pneumatic connections.

⚠ DANGER **Crushing hazard and pinch points**. Do not place any part of your body between the Lift and any moving part of the Lift unless confirmation is made that the safety lock is fully engaged, and that the Lift's downward motion is blocked by a jack stand, forklift or other load-holding device that will prevent the Lift's downward movement while working near or under it.

⚠ WARNING Do not place any part of your body under the platform while it is being raised. Use a wood 2 x 4 or other suitable device to hold the base in position until the platform is secure on a safety lock.

⚠ WARNING You must always wear OSHA-approved (Publication 3151) Personal Protective Equipment when installing the Lift: leather gloves, steel-toed boots, eye protection, back belts, and hearing protection are ***mandatory***.

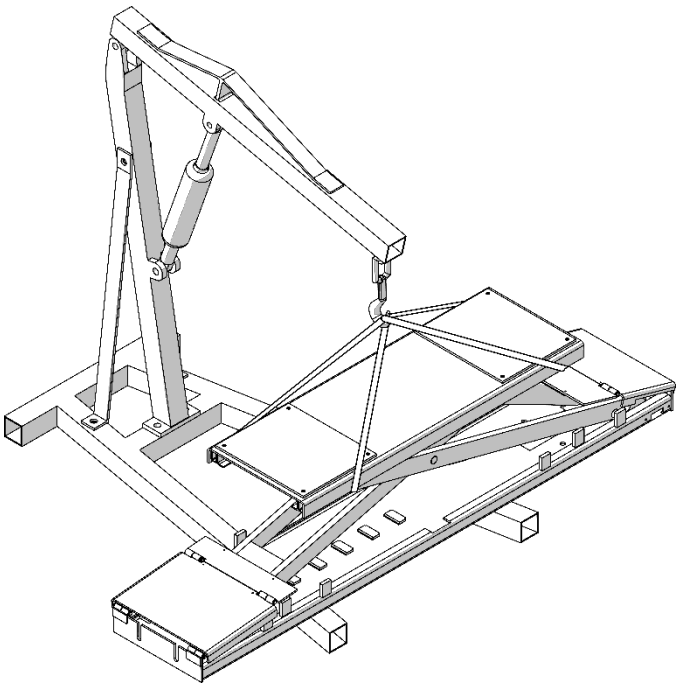
To lift the platforms off the bases:

1. Use Crowbars to lift the platforms off their bases, then carefully, slip a rope, chain, or industrial strap (sling) under each end of the platform.

Once the platform and base are separated by more than 0.5 in. (≈13 mm) you may use industrial grade lifting slings (straps) around each end to continue raising the platform off the base.

⚠ 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 difficult to hold***.

⚠ WARNING You ***must*** always wear OSHA-approved (publication 3151) Personal Protective Equipment when installing the Lift: leather gloves, steel-toed boots, eye protection, back belts, and hearing protection are ***mandatory***.



2. Using a forklift or shop crane, carefully raise the platform off its base.
3. When the platform is raised to the top safety lock, lower it back down and leave the platform on that ***top safety lock***.

⚠ WARNING Never work under a platform or vehicle unless the platform is safely engaged on a safety Lock or supported by jack stands.

⚠ WARNING The lifting frame assemblies are heavy. Do not lift the platforms without proper assistance.

4. When the platform is above the top safety lock, lower it back down onto the top safety lock. Leave the platform on that ***top safety lock***.
5. Repeat the same procedure on the second platform.
6. Verify the bases are within the chalk line guides before proceeding.

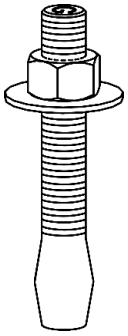
Anchor the Bases: SP-7XE/XEF

Each base provides four holes for anchoring. Anchor bolt assemblies part number *5530456* are provided with the Lift.

⚠ CAUTION Once the anchor bolts are torqued into position, they are not easily removed. BendPak strongly recommends making sure the frames are in the correct location ***before*** anchoring them into place.

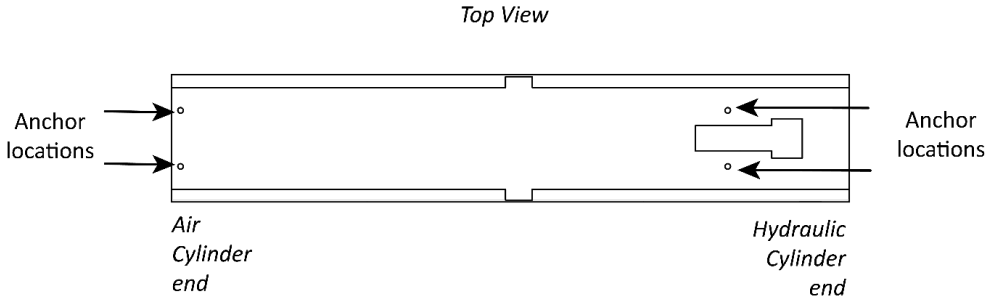
Anchor Bolt specifications are:

- **Length**: 4.75 in.
- **Diameter**: 0.75 in.
- **Effective embedment depth**: 2.75 in. minimum
- **Anchor torque**: 85 – 95 ft. lbs.



⚠ **WARNING** Use only the ALI-certified 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.

The figure below details the locations of the anchor bolts in each SP-7XE/F base.



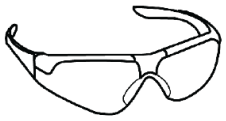
To anchor and level the bases:

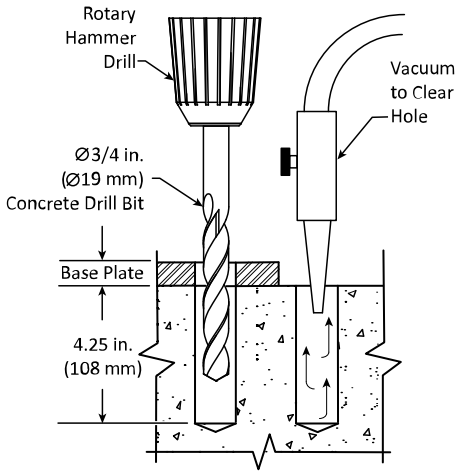
Both ramps ***must*** be resting on the top safety lock to perform this procedure.

1. Make sure the bases are in the correct location, then use the holes in the bases as guides. Drill the holes for each anchor bolt, following the anchor locations on the base of each frame.

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.

⚠ **WARNING** Always wear appropriate eye protection and protective gear.





Drill in straight and perpendicular; do not let the drill wobble.

Use a carbide bit suitable for concrete and hammer drilling applications (conforming to ANSI B212.15).

The diameter of the drill bit ***must*** be the same as the diameter of the anchor bolt. So, if you are using a ¾ in. diameter anchor bolt, for example, use a ¾ in. diameter drill bit. *Check the diameter of the drill bit before you begin!*

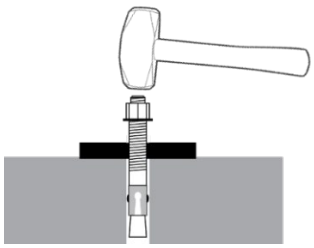
Note: BendPak recommends drilling a pilot hole first. If the final hole size is to be Ø3/4 in. (Ø19 mm), drill a Ø3/8 in. or Ø1/2 in. (Ø9.5 mm or Ø12.7 mm) pilot hole first.

Pilot holes allow straighter drilling by removing the material directly in the center of the final drill. This reduces the amount of force required to keep the drill straight and perpendicular to the floor. Verify the drill flutes are at least 4.25 in. (108 mm) long to aid in removal of the debris from the drill hole.

2. 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.

3. Do ***not*** immediately hammer the anchor bolt all the way in. Verify the washer and nut are in place, then insert the anchor bolt into the hole. You need approximately ¼ in. to 1/3 in. (6 to 8 mm) of thread visible above the nut. Tap it in until the threads are just entering the base.



The slide block may prevent the anchor bolt from passing through the hole in the base; this is normal. Use a hammer or mallet to lightly tap the slide block through the base and down into the hole.

Even using a hammer or mallet, the anchor bolt should only move into the hole part of the way; this is normal. If the anchor bolt drops in with little or no resistance, the hole is too wide.

The Lift platforms must be parallel and square to each other before leveling and shimming can be effective.

4. **SP-7XE only:** Verify the frame assemblies are still within the chalk lines and parallel to each other by measuring the A and B dimensions from the chalk lines procedure. Drilling may have moved the bases. Adjust their positions until the A and B dimensions are equal.
5. **SP-7XE/XEF:** Begin by leveling front to back. The frame assemblies will be leveled to the highest point on the concrete floor. To find the highest point, use a four-foot level across the top of the ramps or across the base of the Lift ramps. Observe the bubble position to determine the direction and magnitude of the slope pointing to the highest area.
6. Beginning at the corner closest to the highest point, place a slotted shim under the frame and around the closest anchor bolt to correct the out of level condition. Continue shimming until both frame assemblies are level front to back. Do not shim more than 0.5 in. (12 mm) on any one anchor.

Important: Loosen the nut on the anchor and use the slotted Shims provided with your Lift at each anchor bolt location to obtain the necessary level condition on each ramp. Refer to the figures on the next page.

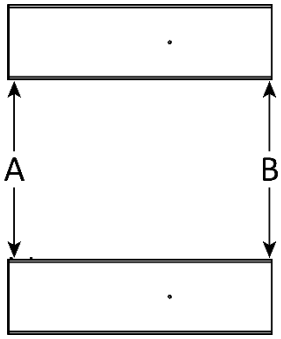
7. Once the ramp assemblies are level front to back, level the ramp assemblies laterally across the ramp assemblies.

⚠ **WARNING** Do not install your Lift on a surface with a slope greater than or equal to 3°. A slope exceeding 3° can lead to property damage, personal injury, or death. Small differences in floor level may be compensated for by proper shimming, but any slope in excess of 3° will have a negative effect on the Lift. If the concrete at the installation site has an excessive slope, create a concrete cutout, and pour a new concrete slab. Consult a concrete specialist in such a case.

8. Hammer or mallet the Wedge Anchors the rest of the way down into the hole. Stop hammering when the washer is snug against the base.
9. Verify the Lift is still level. Adjust the number and position of shims if required.

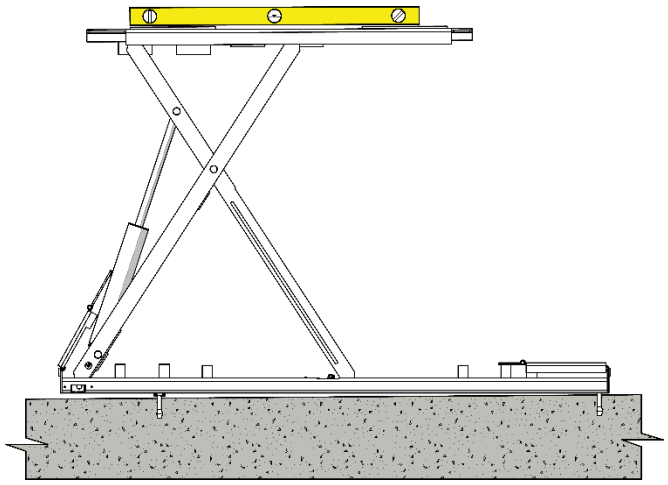
Level the Lift Platforms

The Lift ramp assemblies must be parallel and square to each other before leveling and shimming can be effective. Both ramps ***must*** be resting on the top safety lock to perform this procedure.



To Level the Platforms:

1. Verify the ramp assemblies are still within the chalk lines and parallel to each other by measuring the A and B dimensions. Adjust their positions until the A and B dimensions are equal. Refer to the figure on the right.
2. Begin by leveling lengthwise front to back. The Lift ramps will be leveled to the highest point on the concrete floor. To find the highest point, use a four-foot level across the top of the ramps or across the base of the Lift ramps. Observe the bubble position to determine the direction and magnitude of the slope pointing to the highest area.

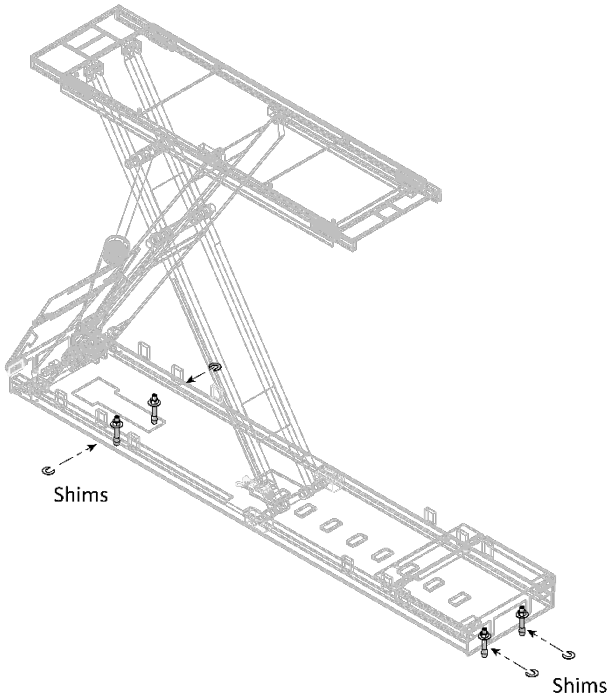


3. Beginning at the corner closest to the highest point, shim each anchor bolt hole location until each Lift ramp is Level front to back.

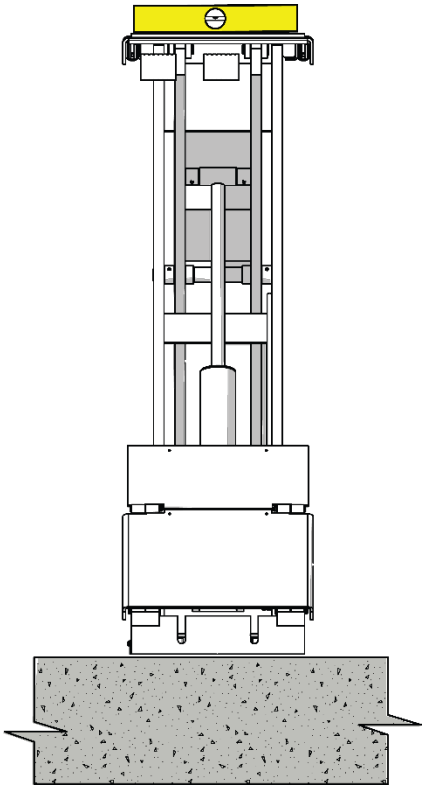
   Four anchor bolt openings are located on the base of the ramps, two at the rear and two at the front of the frame.

   Important: Use slotted Shims around each anchor bolt location to help prevent the concrete from cracking near the anchor bolts. Refer to the figures on the right.

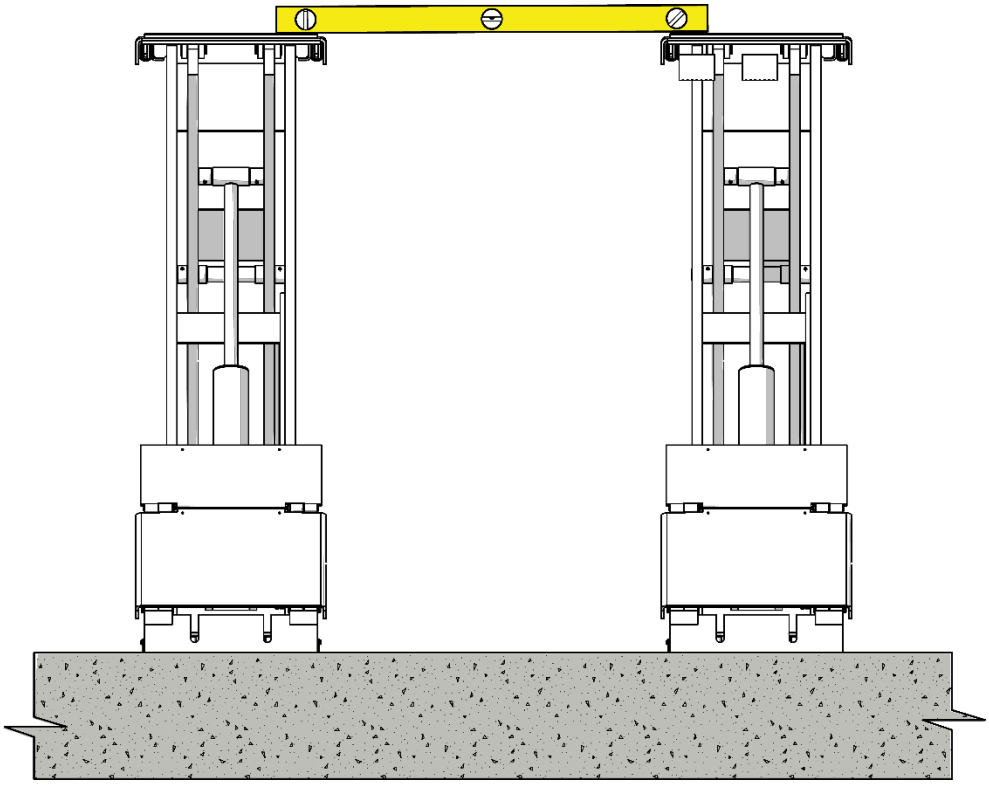
   Level both Lift platforms.



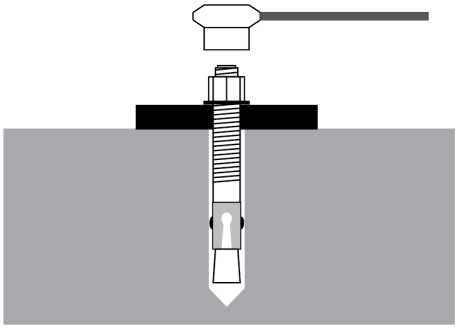
4. Once the ramp assemblies are level from front to back, level each Lift platform laterally across the inside and outside of the ramp assemblies.



5. Then verify the level condition across the platforms and correct with shims as required.



6. Using a torque wrench, tighten each anchor bolt nut ***clockwise*** to the recommended installation torque of 85 – 95 ft-lbs.



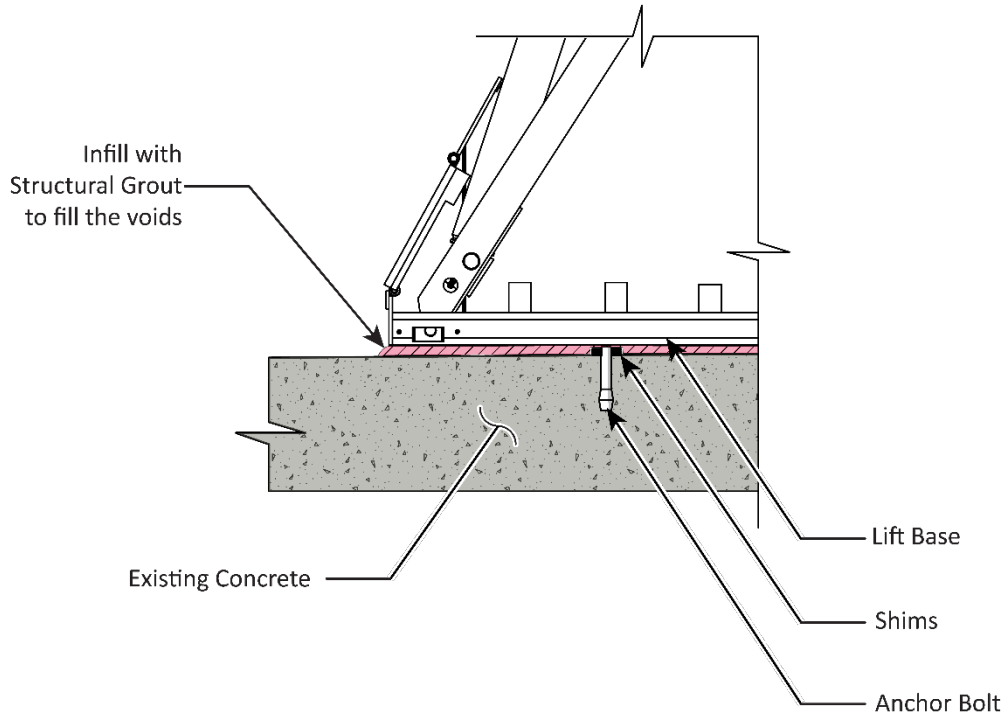
Important: Do ***not*** use an impact wrench to torque the anchor bolts.

Tightening the nut forces the anchor wedge up, pushing out the sides and pressing it tightly against the concrete.

Grouting the Lift Bases

If no shims were used, there is no requirement to grout the bases of the Lift. Using Shims to level the Lift platforms will create a void between the Lift base and the existing concrete. These voids must be filled to support the downward force exerted by the slide blocks as they travel along the base. Infill all voids with a non-shrinking structural grout or cement to provide this support. Carefully follow the manufacturer's recommended mixing and application procedures. A variety of structural grouts and cements are available: Quikrete® Fast Set® non-shrink grout is one such option.

Allow the material to cure to the manufacturer's specifications before applying weight to the Lift.



Assemble the Console and Attach the Power Unit

Some consoles are shipped assembled, and others are not.

The included hydraulic hoses require the console to be within 40 in. (1,024 mm) of the Lift.

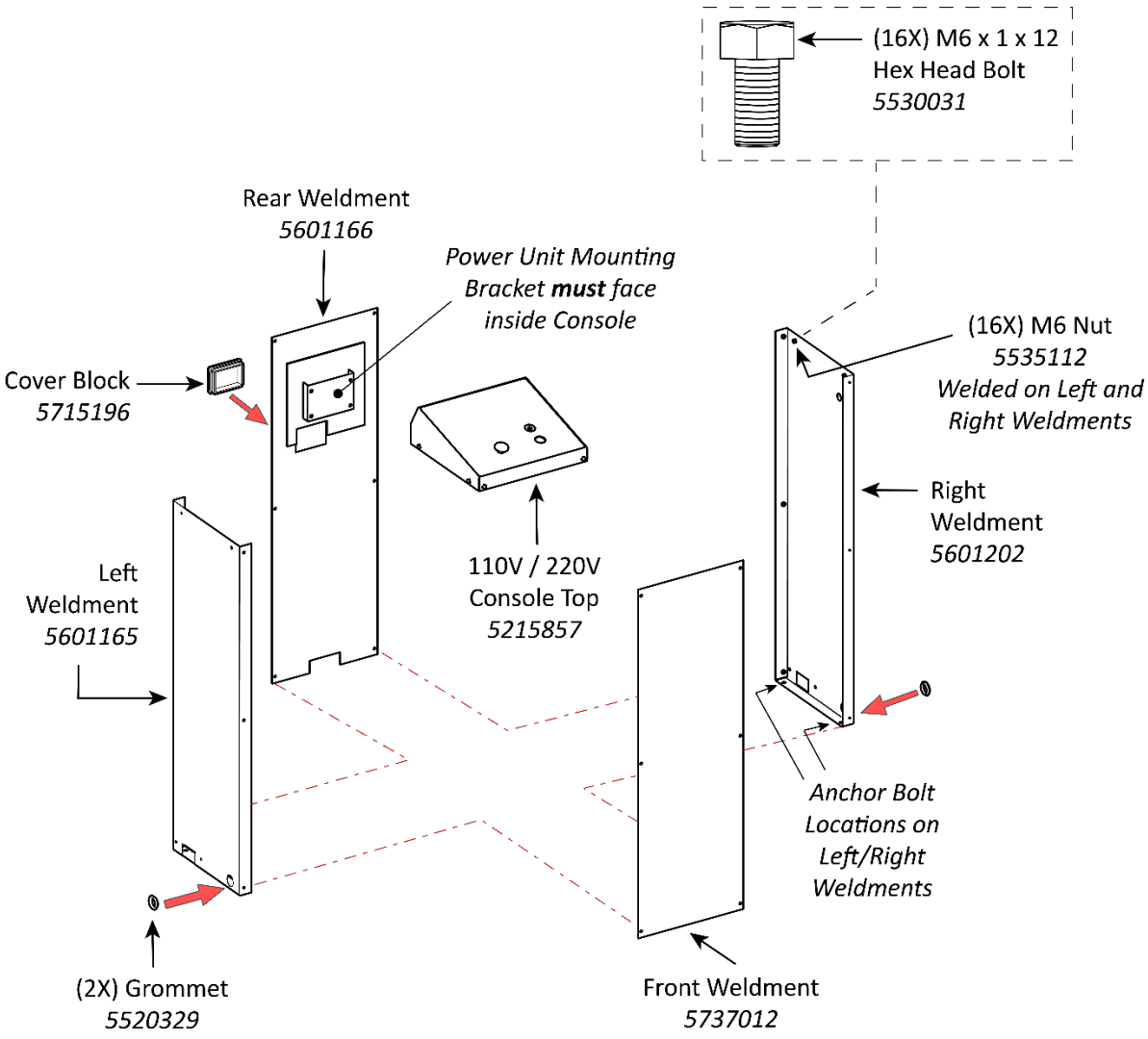
Tip

If the console is positioned farther than 40 in. (1,024 mm) from the Lift, hydraulic hoses long enough to reach the Lift from the desired location are required. Both hoses must be the same diameter and length. You may be able to obtain custom hydraulic hoses from a local hydraulic hose shop that is certified to fabricate hydraulic hoses. Provide the required measurements to the local shop. Longer air lines will also be required.

⚠ WARNING

If the hydraulic hose lengths are changed, ***both new hose lengths must be within 5% of each other***. The SP-7XE/F Lift is a hydraulically balanced Lift. If the hose lengths vary by more than 5%, there is a risk of the platforms rising unevenly. Choose a certified hydraulic hose fabrication facility to assemble the replacement hoses in equivalent lengths.

The following illustration details the main components of the console.



To assemble the Console and Attach the Power Unit:

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

   If you are planning to use the included hydraulic hose, the console can be installed on either side of the Lift (but must be on the cylinder end), up to 39.25 in (997 mm) away from the closest frame.

2. Arrange all the console components where you will be assembling them.
3. Install the Grommets into place near the bottom of the Left and Right Weldments.
4. Put the Left Side on the left and the Right Side on the right, then attach both to the Rear Weldment, making sure to orient the rear weldment so that the ***power unit mounting bracket is on the inside***.

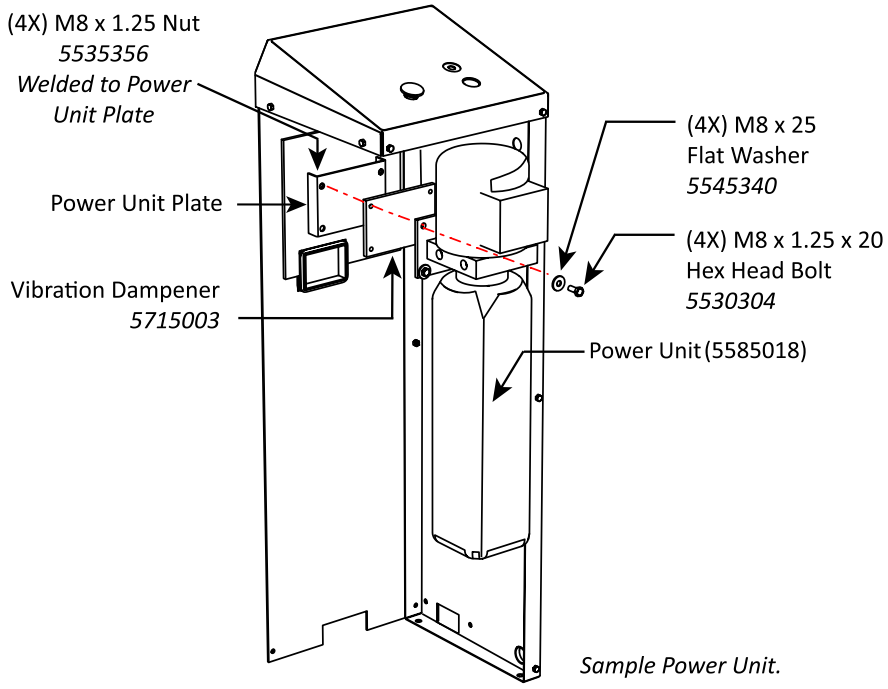
   The rear weldment attaches on the *outside* of the two sides.

NOTICE Do not attach the nuts at the top of the sides or the rear weldment at this point; these will be attached later when you are ready to attach the console top.

5. Remove the power unit from the shipping material.
6. Attach the power unit and vibration dampener to the power unit plate on the inside back of the console using the supplied nuts and bolts.

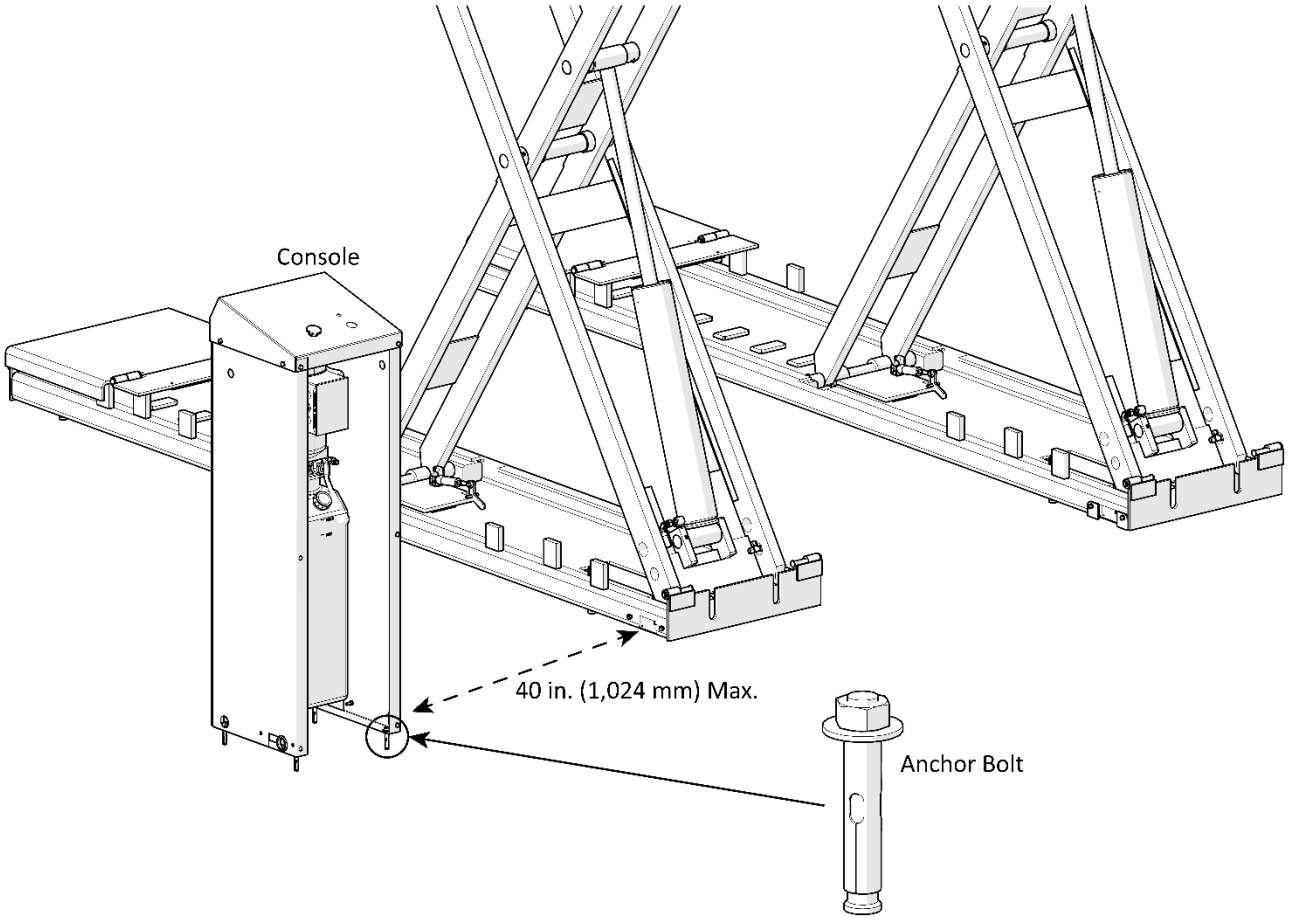
⚠ **CAUTION** The power unit is heavy. BendPak recommends having one person hold the power unit in place, while another person bolts it into place.

Important: Do not connect the power unit to the power source at this point.



Sample Power Unit.

Anchor the Console



Four anchors (5530326) Ø3/8 in. x 2.25 in. are provided with the Lift. Anchoring the console is a permanent decision. Delaying the anchoring allows you to evaluate how well the first choice performs. It is easier to change the console position later if it is not anchored. The console may be mounted on either the left or right side of the Lift, *up to 40 in (1,024 mm) away*. The console must be located on the cylinder end of the frames in a direct line from the rectangular opening in the Lift base used for routing the hydraulic and air lines. When you are ready to anchor the console into place, return to this section and follow the instructions below.

To Anchor the Console:

1. Remove the front console weldment and the four M6 hex head bolts that hold it in place.
2. Locate the mounting holes on the bottom of the left and right console weldments (on the inside). The anchor bolts will be located in these openings.

Important: BendPak recommends marking the holes with a pencil then moving aside the console to drill through the concrete to the 3 in. depth.

3. Using the holes in the console base as a guide, drill the holes 3/8 in. (9.5 mm) diameter by 3 in. (76 mm) deep into the concrete. Drill in straight; do not let the drill wobble. Use a carbide bit suitable for concrete applications (conforming to ANSI B212.15).

⚠ **WARNING** Always wear the appropriate eye protection and protective equipment.

4. Remove all dust and debris 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.
5. Move the console back over the drilled holes.

6. Retrieve the four anchor bolts from the parts bag.
7. Place a washer and nut onto each anchor bolt, then insert them into the mounting holes in the console and into the concrete.
8. Hammer or mallet the Wedge Anchor the rest of the way down into the holes. Stop hammering when the washer is snug against the console base.
9. Use a Torque Wrench to turn the nut ***clockwise*** to the installation torque of 10-15 ft. lbs.

⚠ **CAUTION** Do not use an impact wrench to torque the anchor bolts.

Hydraulic System Warnings

⚠ DANGER Failure to observe these warnings can result in serious personal injury including, in rare cases, death.

⚠ DANGER Changes to the output pressure may render the power unit incompatible with pressure limitations of other components in the hydraulic circuit. This may cause catastrophic failure of those components, and could result in property damage, serious personal injury, or death.

⚠ DANGER The hydraulic system can contain high pressure, which if suddenly released can cause severe injury or death.

⚠ WARNING The hydraulic hose and connections ***must*** be inspected before any attempt to raise a vehicle is made.

⚠ WARNING Double check to ***verify*** all hydraulic hose connections and fittings, including unused auxiliary port plugs on the power unit, the cylinders and anywhere else in the hydraulic system are tightened.

⚠ WARNING The power unit is a hydraulic pump capable of developing pressures in excess of 5,000 psi (345 BAR). A pressure relief valve is used to set the pressure to the desired level. Tampering with, adjusting, modifying, or removing the relief valve is extremely dangerous and is not allowed. Only trained Hydraulics Technicians should make adjustments to the relief valve, using calibrated hydraulic pressure gauges to ensure the proper pressure setting is achieved.

⚠ WARNING Hydraulic fluid under pressure is dangerous. You must always wear OSHA-approved (publication 3151) Personal Protective Equipment when in contact with hydraulic fluid: eye protection, leather gloves, and steel-toed boots are mandatory.

⚠ WARNING Do ***not*** attempt to connect or disconnect hydraulic hose while the equipment is loaded or while a vehicle is on the Lift, or the hydraulic system is under pressure.

⚠ WARNING Keep bare hands away from hydraulic fluid; always wear gloves when handling hydraulic fluid, cylinders, or hydraulic hose.

⚠ WARNING When handling hydraulic fluid, observe the manufacturer's safety instructions.

⚠ WARNING **Always** promptly clean any hydraulic fluid spills. If a leak is the source of the spill, lock out the Lift to prevent use until the hydraulic system is repaired.

⚠ WARNING Do **not** attempt to service the power unit through the rear panel. Only access the Power unit through the Front of the console.

⚠ WARNING If you choose to change the hydraulic hose lengths, ***the two hose lengths must be within 5% of each other***. The SP-7XE/F Lift is a hydraulically balanced Lift. If the hose lengths vary by more than 5% there is a risk that the platforms will rise unevenly. Choose a certified hydraulic Hose fabrication facility to assemble any replacement hoses in equivalent lengths.

IMPORTANT! PLEASE READ NOW

Hydraulic Fluid Contamination poses a serious issue for your Lift; contaminants such as water, dirt, or other debris can enter into the hydraulic hose and Fittings on the Lift, making your new Lift inoperable and unusable.

The Lift is shipped with clean components; however, BendPak strongly recommends that you take secondary precautions and clean all hydraulic hose and Fittings prior to making connections. It is better and less costly to take these extra steps now so that you do not need to take your Lift out of service later to fix issues that could have been prevented at the time of installation.

There are several ways to clean hydraulic hose and Fittings:

- **Compressed Air**. Use an air compressor to blow out contaminants from each hydraulic Hose and Fitting prior to installation. Clean, dry air is preferred. Wear ANSI-approved eye protection (safety glasses, goggles, or face shield) when using compressed air for cleaning. Never point an air hose nozzle at any part of your body or any other person.
- **Fluid Flushing**. If the hydraulic fluid is clean and compatible with the system fluid, you can flush Hoses and Fittings to create turbulent flow and remove particulates. Always ensure that the fluid itself is contaminant-free. Some additional steps that will help keep the hydraulic fluid clean:
- **Remove old thread seal tape**. Some ports on the hydraulic cylinders are shipped with temporary plugs secured with thread seal tape, so make sure to thoroughly remove any leftover thread seal tape that may inadvertently enter the hydraulic System.
- **Use a liquid thread sealant only**. Liquid thread sealant (Loctite™ 5452 or similar) is recommended. Do not use thread seal tape on any fitting. Liquid thread sealant is recommended for NPT connections, fine for JIC connections, but *not* necessary for O-ring (ORB) connections.
- **Always use clean equipment**. If you use a dirty bucket or funnel to transfer the hydraulic fluid into the hydraulic fluid reservoir, the contaminants will likely be introduced into the Fluid. When using cleaning rags, use a lint-free rag.
- **Proper storage**. Keep the hydraulic fluid sealed in its container until ready for use; store the Fluid in a clean, dry, and cool area.
- **Cover the Hoses and Fittings**. Before installation, do not leave the ends of the Fittings exposed; the same applies for the hydraulic hose. As a rule, keep the hydraulic hose and Fittings capped and in a clean area until ready for use.
- **Filter the new hydraulic fluid**. Just because it is new does not necessarily mean it is *clean*. Use an offline filtration cart or kidney loop system to make sure the hydraulic fluid is clean before being transferred into the hydraulic fluid reservoir (even using a heavy-duty nylon mesh screen is better than trusting what is left at the bottom of the barrel).
- **Avoid mixing different types of hydraulic fluid**. If hydraulic fluid needs to be replaced, make sure to flush the hydraulic System of the old hydraulic fluid before you add the replacement Fluid; do not mix the two together.

About Thread Sealants

Liquid Thread Sealant lubricates and fills the gaps between the Fitting threads and leaves no residue that could contaminate the hydraulic fluid.

Other types of Thread Sealants (like Teflon Tape) can shred during installation or removal and eventually enter the hydraulic System.

Thread Sealant can be used with most hydraulic fittings, although you only need to use it with NPT connectors.

Apply the thread sealant when the ambient temperature is between +46.5°F to +70°F (+8°C to 21°C)

To apply Thread Sealant:

1. Make sure the Fittings and connectors you are using are clean and dry.

   If you are adding thread sealant to a fitting or connector that has already been used with a different sealant, use a wire brush to thoroughly remove the old sealant before adding more.

2. Skipping the first thread, apply a small amount of Thread Sealant to the next four threads.

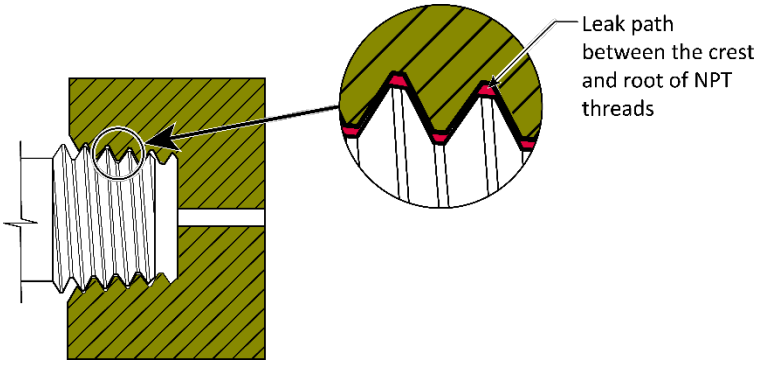
⚠ **WARNING** Always wear the proper protective equipment when handling Thread Sealant.

   You only need a small amount because the sealant spreads to the other threads as it is tightened into place.

   If you put too much, the excess liquid will be pushed out when the Fitting is tightened; use a rag to wipe the excess.

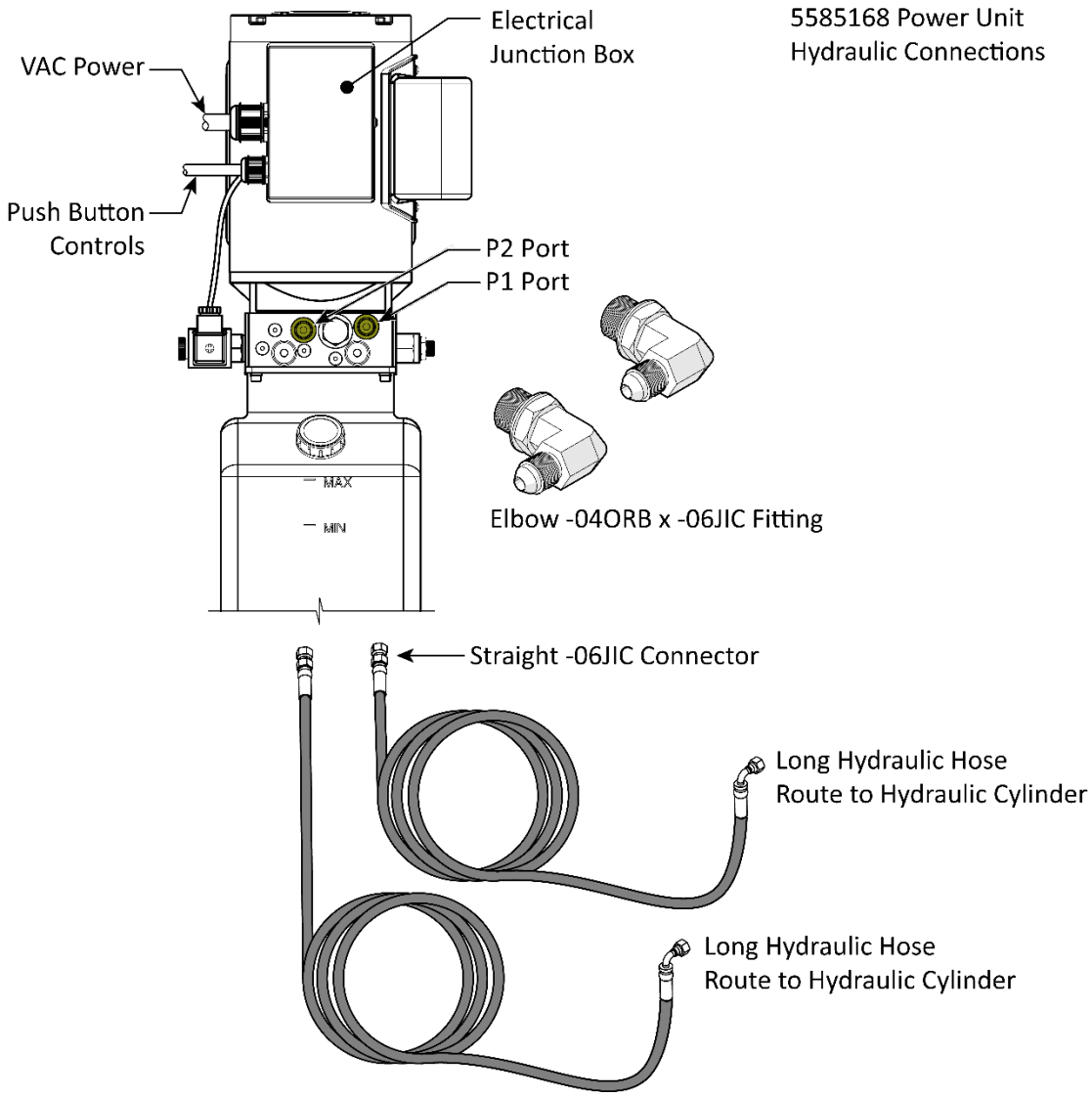
3. Tighten the Fitting into the connector; do ***not*** overtighten the fitting.
4. Allow the **24-hour** manufacturer-recommended curing time before pressurizing the system.

⚠ **WARNING** NPT threads must have thread sealant applied to prevent leaking. The shape of NPT threads creates a small gap between the crest and root of the mating threads. This gap will allow hydraulic fluid to leak unless a thread sealant is used.



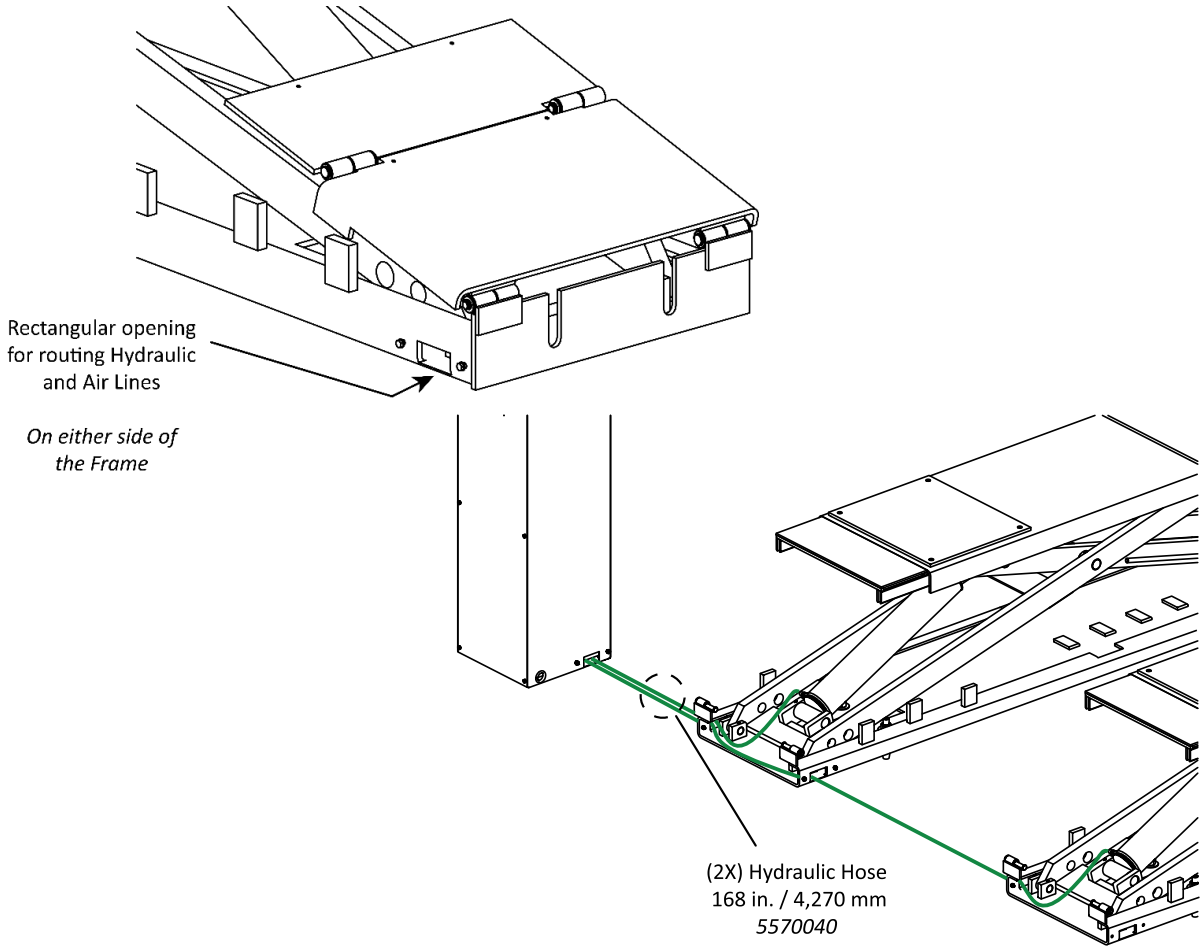
Connecting the Power Unit and Hydraulic Hoses

1. If the platforms are not already on their top safety locks, raise them now with a shop crane or other suitable lifting device, and engage them on their top locks. It is not possible to access and connect to the hydraulic hoses if the platforms are lowered.
2. ***On the power unit***, Remove the two shipping plugs from the hydraulic pressure ports on the power unit (labelled **P1** and **P2**).
3. Apply a few drops of hydraulic fluid to the O-rings on the elbow fitting (5550103) and then securely tighten the elbow fittings into the P1 and P2 ports on the power unit. No thread sealant is required on these connections.



4. Locate the two long equal length hydraulic hoses (5570040).
5. Connect the straight -06JIC connector of one hose to the ORB elbow fitting just installed. Repeat on the remaining hose and elbow fitting.

6. Route both long hoses out of the control console and into the base of the Lift platform. One hose connects to each cylinder. The hose serving the closest cylinder will have excess length. Pull this excess back into the console and coil it neatly. Secure with a cable tie.

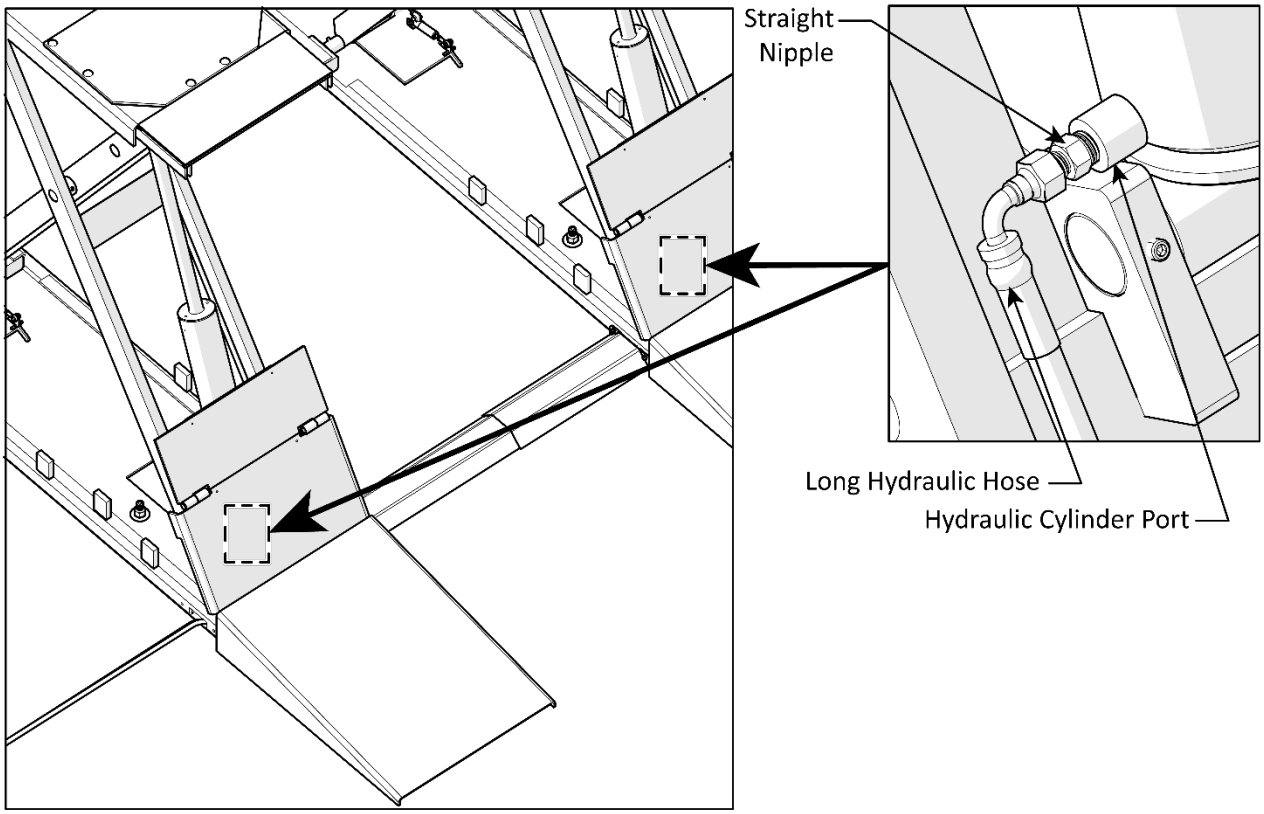


NOTICE Confirm the hydraulic hoses are both routed through the rectangular openings in the cylinder end of the bases. Both hydraulic hoses and the safety lock air line route through these openings.

7. Remove the shipping plug from the cylinder hydraulic port at the bottom of both hydraulic cylinders, then visually inspect and clean the port threads.
8. Locate the two -04 JIC x –04NPT straight nipples (5550147). Clean and inspect the threads, then apply thread sealant to the male NPT threads.
9. Hand tighten the straight nipple fittings into the cylinder hydraulic port. Then securly tighten the fittings. ***Use Thread Sealant on ALL NPT Threads***.

10. Complete the hydraulic hose installation by hand tightening the free end of the long hose on each JIC straight nipple just installed in the hydraulic cylinder ports. Use a wrench to final tighten the hose JIC connector end onto the straight nipple.
11. Ensure ALL hydraulic hose are correctly routed and do not have any kinks, then use appropriate tools to **systematically** verify all hydraulic connections are tight.

Components removed for clarity



Working with Compression Fittings and Tubing

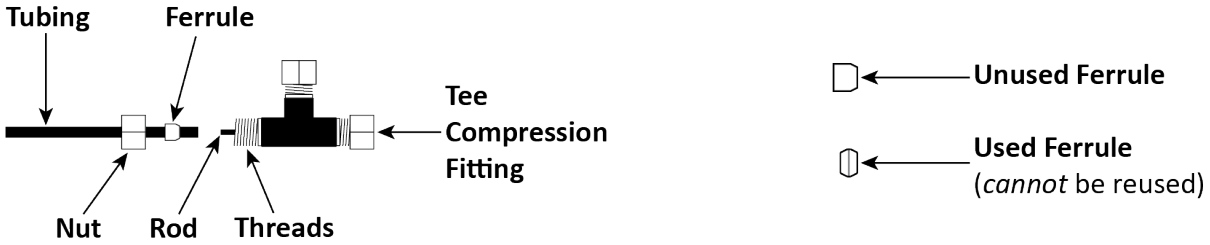
This Lift is delivered with a roll of ¼ in. (6.3 mm) black, polyethylene tubing that is used with compression fittings to attach to the Air cylinders and the Air Assist Connectors.

Note: Compression fittings are different from hydraulic fittings. ***This section covers compression fittings only***.

The components involved with compression fittings include:

- **1/4 in. (6.3 mm) 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.
- **Elbow Compression Fittings**. The air line uses two elbow compression fittings, one on each air cylinder.
- **Tee Compression Fittings**. The air line requires one tee compression fittings.
- **Nuts, Ferrules, Rods, and Threads**. Each connector on the 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 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 is compressed; changes shape and ***cannot*** be used again.

Installing the Air Lines

Air pressure is used to disengage the safety locks on both platforms, allowing the platforms to lower. Retrieve the 1/4 in. (6.3 mm) black, polyethylene tubing delivered with the Lift and the air line Tee Connector required to install the air lines.

An Air Supply (30 to 125 psi MAX. at 3 cfm) is required to disengage the safety locks.

⚠ **CAUTION** ***Do not allow the Air Supply to exceed 125 psi!*** The air lines could burst or the safety locks malfunction.

The air line elbow connectors on the air cylinders are installed from the factory.

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 travel a small distance over the Rod. You cannot see the Ferrule at this point, but the tubing must thread 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 figure 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 farther over the Rod until it stops.
5. Slide the Ferrule and the nut back to the Threads on the Fitting.
   The Ferrule installs around the Rod and under the Threads. The nut rotates onto the Threads.
6. Tighten the nut.

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

Connect the Air Line

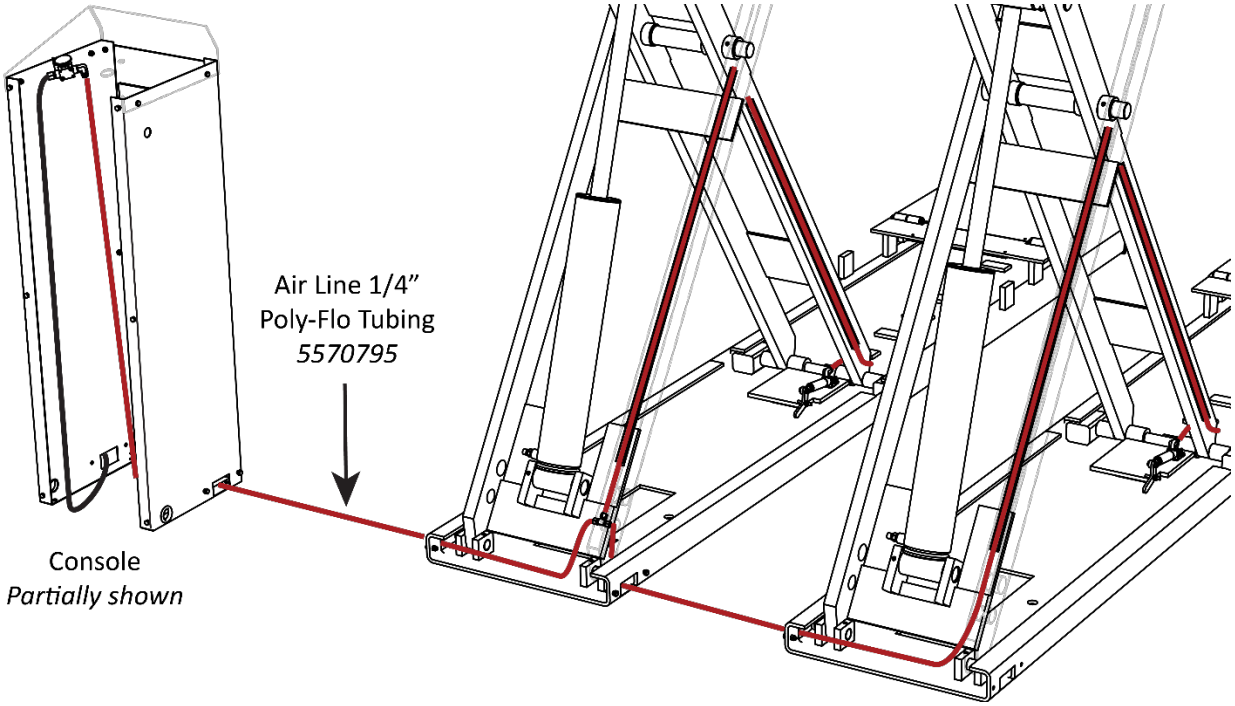
BendPak recommends routing the air line tubing ***before*** cutting it!

The SP-7XE/XEF Lifts use hydraulic pressure to move the platforms off the safety locks. Air pressure is used to raise and lower the safety latch weldments away from the safety lock blocks freeing the platform to be raised or lowered.

NOTICE It is the owner's responsibility to provide an air supply with a minimum of 30 psi (3 CFM), regulated to a maximum of 125 psi (8.6 bar).

The air pressure supply is distributed to the air cylinders using 1/4 in. (6.3 mm), black polyethylene tubing (also called Poly-Flo® tubing), supplied with the Lift. Cut the tubing into appropriate lengths. Three sections of tubing are required.

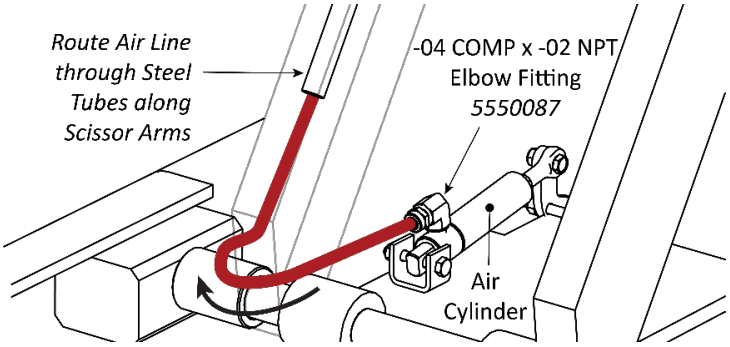
The following figure details the route the air lines take from the console to the Air cylinders.


Air Line 1/4”
Poly-Flo Tubing
5570795
Console
Partially shown

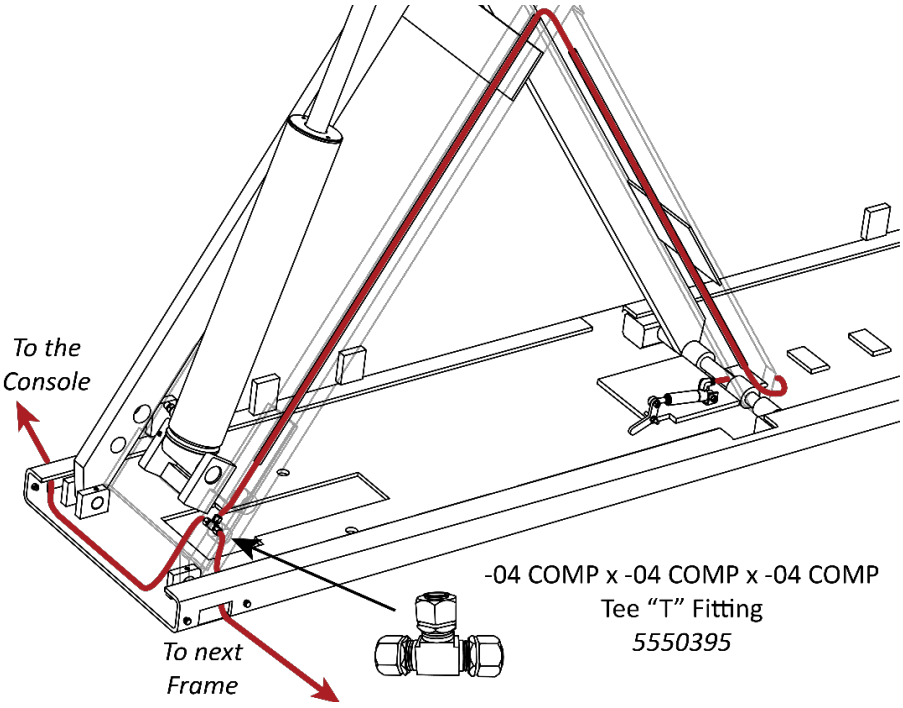
To connect the Air Line:

1. If the two elbow compression fittings (5550087) are not already installed in the top of the air cylinders, install them now.

   Use Thread Sealant on NPT Threads only.

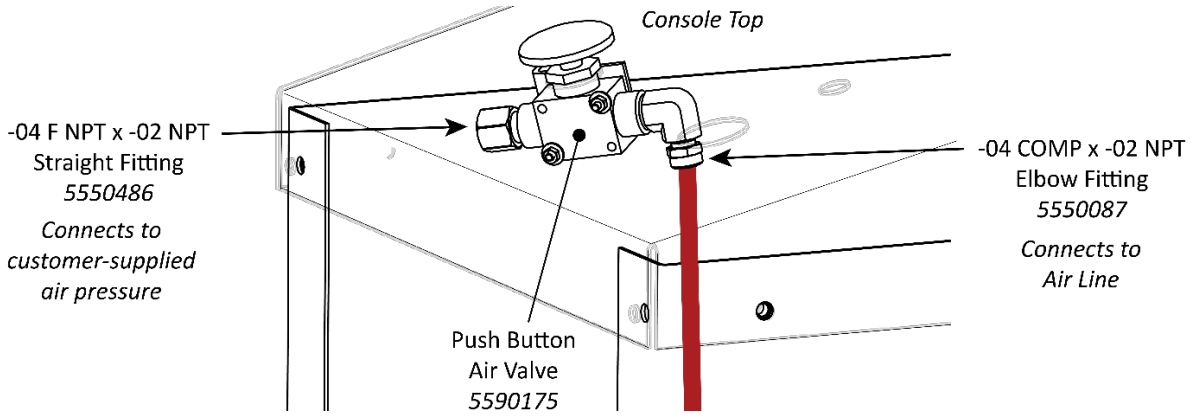


2. Locate the roll of 1/4 in. black, polyethylene tubing and the tee compression fitting (5550395).
3. Cut the tubing into three sections of appropriate lengths for your installation. See the drawing on the previous page for additional information.
4. Connect the three tubing sections and tee compression fitting to the compression fittings on the air cylinders, routing the air line through the steel tubes along the scissor arms on the Lift as shown in the figure below.



5. 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 air line tubing section to the compression end of the elbow compression fitting you just installed.

   Use Thread Sealant on NPT Threads only.



Pushbutton is mounted to the console top panel.

6. On the underside of the console top panel, attach the male end of a straight pipe 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 pipe fitting.

Install the Hose Covers

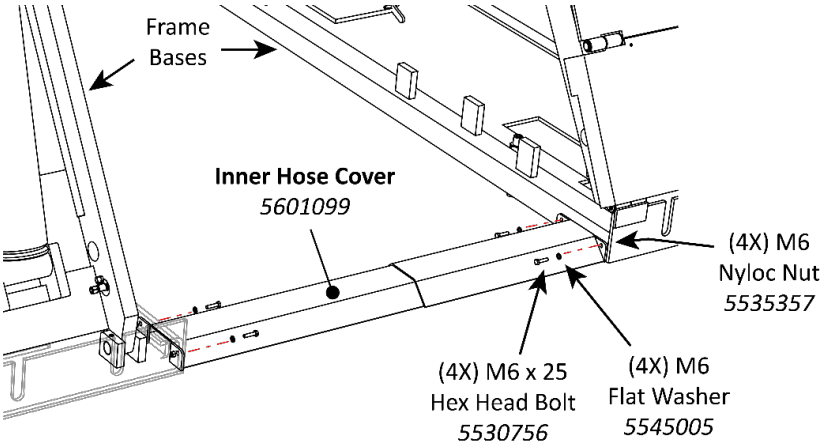
The Hose Covers are required to protect the hydraulic hose and air line from damage.

The Inner Hose Cover is positioned between the frame assemblies; the Hose Cover is adjustable 38 – 44 in. (965 – 1,118 mm).

The Outer Hose Cover is positioned between the console and the closest frame Assembly; it is ***not*** adjustable for length. The outer hose cover measures 40.25 in. (1,024 mm) long.

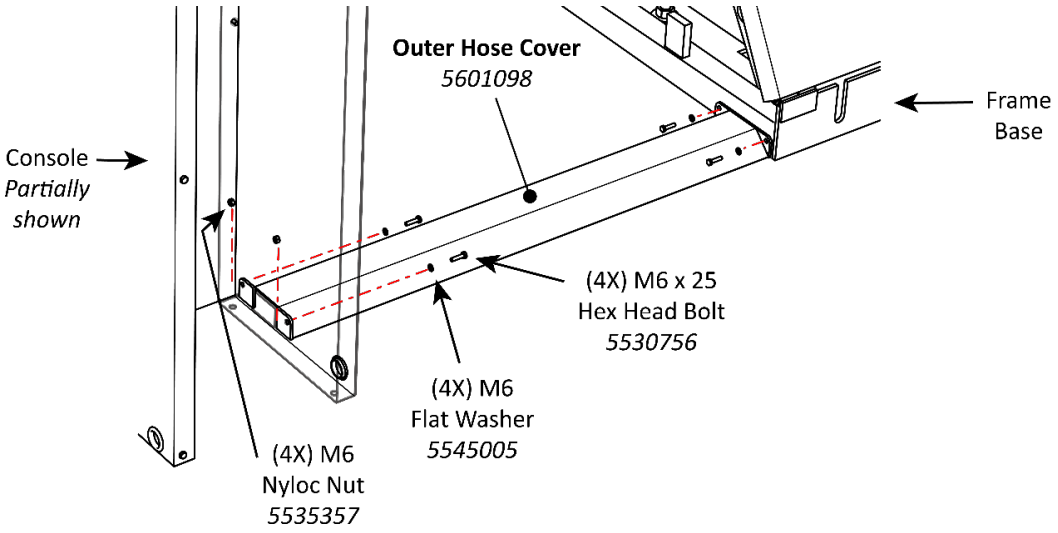
To install the Hose Covers:

1. Locate the Inner and Outer Hose Covers, eight M6 hex head bolts, M6 Flat washers, and M6 Nyloc nuts.
2. Position the Inner Hose Cover between the frame assemblies, making sure to cover the hydraulic hose and air line, and then secure it to the frame bases using four M6 hex head bolts, M6 washers, and M6 nuts.



⚠ **CAUTION** Use care not to crush or pierce the hydraulic hose and air line underneath the hose covers.

3. Position the outer hose covers between the console and the nearest frame assembly, making sure to cover the hydraulic hose and air line, and then secure it to the console base and frame base using four more M6 hex head bolts, M6 washers, and M6 nuts.



Electrical and Thermal Disconnect and Facility Power

The power unit requires no assembly. Attach the power unit to the back of the console (described in **Set Up the Console and Attach the Power Unit**) and then hire a licensed Electrician to make the connections described in this section.

The standard power unit for this Lift operates on 208-240 VAC, 50/60 Hz, 1 phase.

⚠ DANGER A licensed Electrician must perform all wiring. Do not perform ***any*** maintenance or installation on the lift without first verifying that main electrical power has been disconnected from the lift, locked out or tagged out and ***cannot*** be re-energized until all procedures are complete.

The power unit incorporates both electrical and hydraulic connections:

- **Hydraulic Hoses**. The Lift has two. They both connect to the power unit on one of its two hydraulic power output ports. *They should already be connected.* Refer to **Connect the Hydraulic Hoses** for full details.
- **Console Buttons**. The **Raise** and **Lower** buttons are the power unit controls and are mounted to the top of the console The **Safety Lock Release** is also on the top of the console, but it is a pneumatic control.
- **Power Source**. The power unit connects to an appropriate, incoming power source. A licensed Electrician is ***required*** to make this connection.

To connect the Power Unit to Electrical Power:

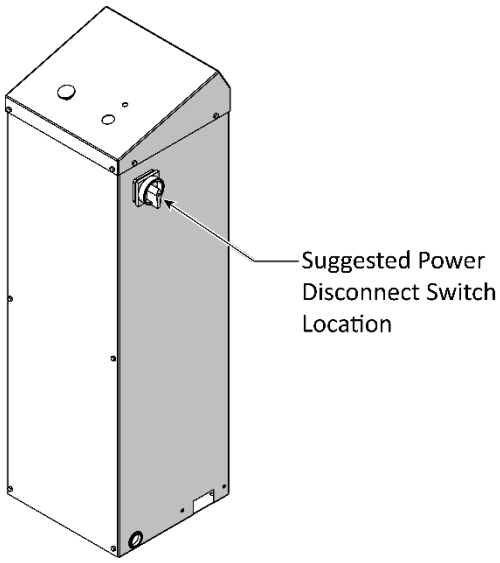
1. The Electrician will route and protect wiring from the facility power to the Lift console, in accordance with national, state, and local electrical codes.
2. Remove the console top if it is currently in place.
3. The push button controls must be connected to the correct wires. This wiring is accomplished at the factory. Simply connect the push buttons mechanically to the console top. Consult the **wiring diagram**, if required.
4. The Electrician will install a power disconnect switch.

⚠ WARNING A Power Disconnect Switch is ***not*** provided with this equipment. This is a National Electrical Code (NEC) requirement. They are designed to interrupt main electrical power in the event of an electrical circuit fault, emergency, or when equipment is undergoing service or maintenance.

Only install a power disconnect switch that is properly rated for the incoming power source.

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

⚠ DANGER Installing a Power Disconnect Switch ***must*** be performed by a licensed, Electrician in accordance with all applicable local electrical codes.



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

The Electrician will locate the electrical junction box on the power unit motor, open the box, remove the pigtail, and then connect wiring between the power unit motor and the power disconnect switch.

Power cord, plug and additional wiring are ***not*** supplied with the Lift.

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

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. Refer to the **Wiring Diagrams** for voltage and current information.

Install a Thermal Disconnect

Under NEC 430, UL 201, and CSA C22.2 No. 68 intermittent duty motors are not required to include thermal protection. Local electrical codes may vary, and other requirements may exist that the installing electrician will address, if required.

⚠ WARNING A thermal disconnect is not included with the Lift. The Electrician will supply an appropriate thermal disconnect, if required.

Have the Electrician connect a thermal disconnect switch or overload device that will shut down the equipment in the event of an overload or an overheated motor.

⚠ DANGER A licensed Electrician must install a Thermal Disconnect Switch in accordance with all applicable national, state, and local electrical codes. Do not perform ***any*** maintenance or installation on the Lift without first making sure that the main electrical power has been disconnected from the Lift and ***cannot*** be re-energized until all procedures are complete.

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

Fill the Hydraulic Fluid (Oil) Reservoir

The hydraulic fluid reservoir on the power unit must be filled with the recommended oil before you ***begin*** normal operation of the Lift. When you receive the Lift, the hydraulic fluid reservoir is empty. The power unit will NOT operate, and damage may occur, unless it is filled with approved oil first.

READ THIS:
BEFORE ADDING HYDRAULIC OIL

This car lift is equipped with a hydraulic pump and combiner valve, essential components of the hydraulic system that ensure smooth and synchronized movement of the lifting mechanisms. Proper oil is crucial for the optimal performance and longevity of your lift system.

BENDPAK RECOMMENDS ONLY USING SAE 30 CONVENTIONAL DETERGENT MOTOR OIL because of its higher viscosity (when compared to ATF), which helps prevent cross-migration of fluid across the internal flow-divider components. The use of other lower viscosity fluids such as AW32, AW46, or ATF (Automatic Transmission Fluid) is **not recommended** and may adversely affect the performance and safety of the lift system.

All reputable petroleum brands that manufacture SAE 30 conventional detergent motor oil are approved for use. Always ensure that only clean, uncontaminated oil is used. Contaminants such as dirt, water, or other foreign particles can compromise the integrity of the hydraulic system.

The hydraulic oil reservoir holds 3.5 – 3.7 gallons (13.25 – 14 liters) of oil, depending on the power unit.

⚠ **WARNING** Do ***not*** run your power unit without hydraulic oil; you will damage it.

To fill the Hydraulic Oil Reservoir:

1. Remove the reservoir cap from the top of the hydraulic oil reservoir and set it aside. Take care to ***keep contaminants out*** of the hydraulic oil reservoir.
2. If the hydraulic oil reservoir is not full, use a clean funnel with a 60-micron filter to fill it with approved oil.
3. When the reservoir is filled, replace the reservoir cap.

Important: Typically, the platforms are up on the first safety lock at this point. Keep in mind that you will need to refill the reservoir during the operational test. The hydraulic cylinders and hydraulic hoses will take up a considerable amount of fluid. If longer hydraulic hoses have been installed, then more than the specified typical amount of fluid will be required.

Lubrication Procedure

To increase the service life of the SP-7XE/F Scissor Lift, perform the following maintenance monthly. Use a small amount of white lithium grease (brush or spray-on) to lubricate each area described below.

1. Raise the lift to rest on the top safety locks.
2. Maintain cleanliness by wiping down he Lift platforms, so that they are grime-free. WD-40 applied to a clean rag may be used to remove old lubrication buildup and abrasive grit.
3. Apply Lubrication to areas along the base Weldment where the slide blocks travel only.
4. Apply Lubrication to areas under the platform where the slide blocks travel only.
5. Lubricate all scissor pivot points on both sides of both platforms.

   Refer to the figures below for specific Lubrication areas.

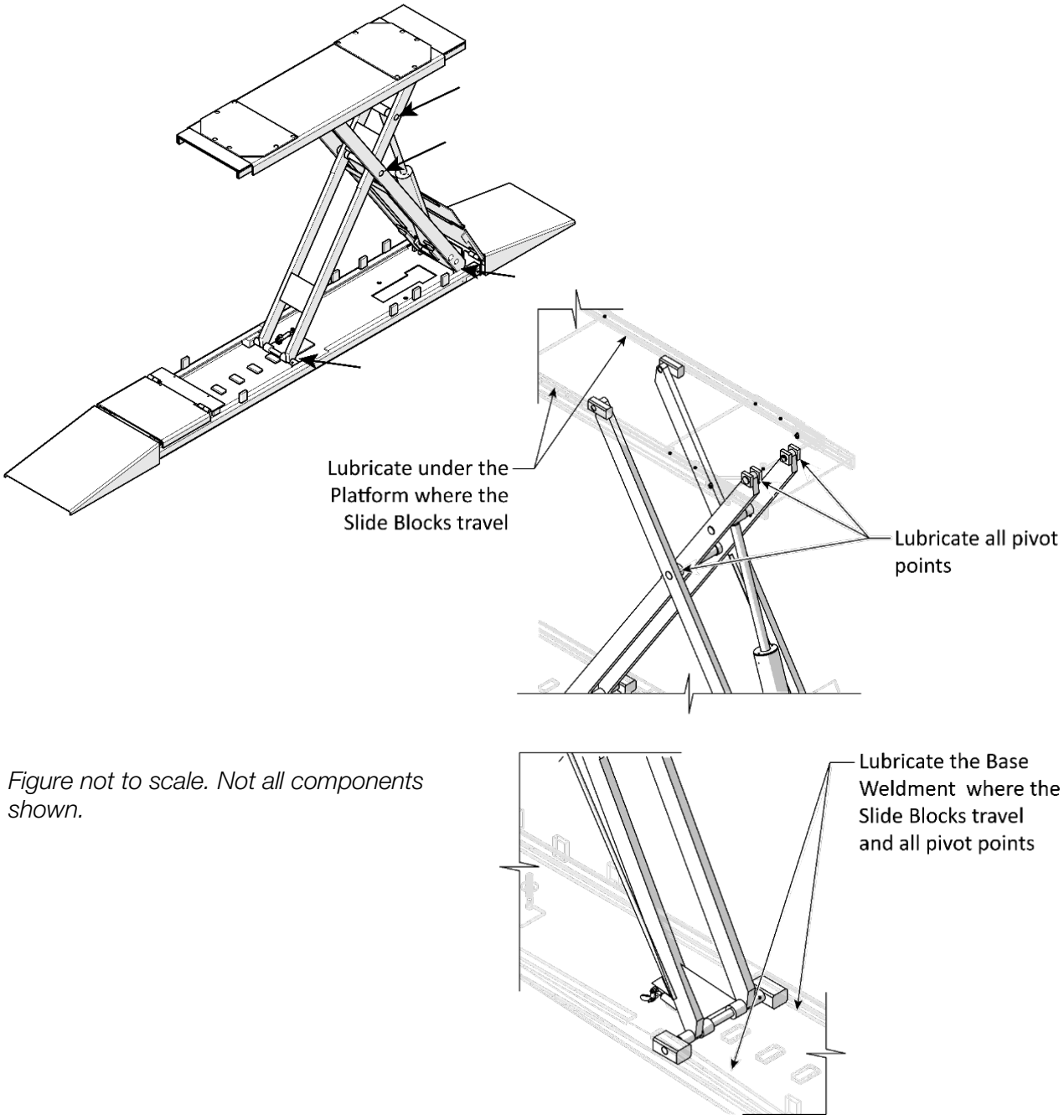


Figure not to scale. Not all components shown.

Perform an Operational Test

Before putting your Lift into normal operation, BendPak recommends raising and lowering it two or three times. This will help the operator acquire experience operating the controls and help remove any residual air from 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 during the first few up and down cycles. The Lift will stop doing this as the self-bleeding hydraulic system removes excess air.

The drive-up 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 the **Raise** button. The platforms will begin to rise.
3. When the platforms move past the first safety lock, release the **Raise** button. The platforms will stop rising.
4. Press and hold **Safety Lock Release** and **Lower** buttons at the same time. The platforms will begin to lower.
5. The platforms will stop when they return to the ground. Release the **Safety Lock Release** and **Lower** buttons.
6. Wait for one to five minutes to allow air trapped in the fluid to exit the reservoir.

⚠ **WARNING** The power unit is not a constant duty motor; ***it cannot be run continuously***. If run for too long (exceeding its duty cycle), it will overheat and damage the motor.

7. Repeat the process steps 2 through 6, 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.

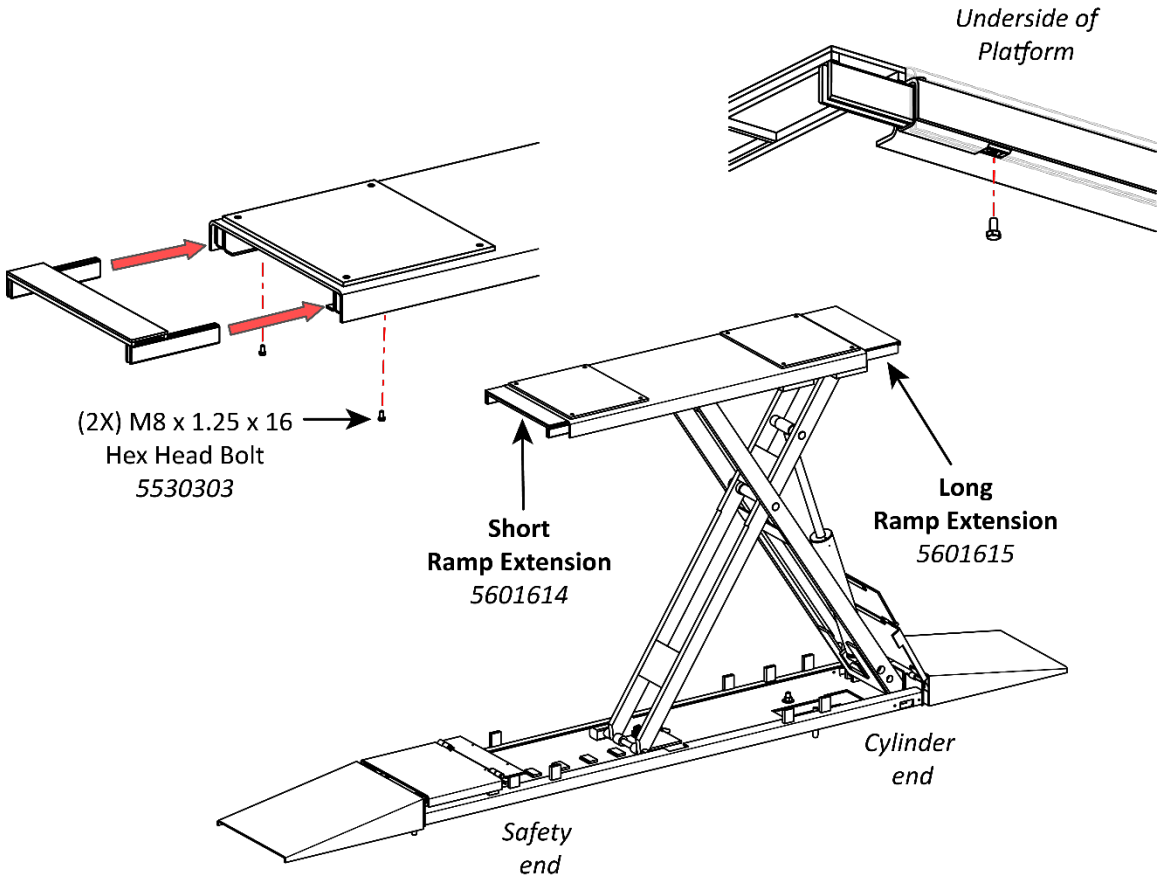
   If you continue to have issues, refer to **Troubleshooting** for assistance.

Add the Ramp Extensions

The ramp extensions add length to the platforms for use with Long Wheelbase vehicles.

There are two ramp extensions of different lengths; the short ramp extension (5601614) attaches at the safety lock end of the platform, and the long ramp extension (5601615) attaches at the cylinder end of the platform.

⚠ DANGER The maximum load capacity for each of the four ramp extensions must ***not*** exceed 25% of the Lift's rated capacity 1,750 lbs. (793 kg.), at each extension. Overloading ANY of the four ramp extensions can result in damage to the Lift or the vehicle, cause serious bodily injury or death, and voids the warranty.



To add the ramp extensions:

1. Determine which ramp extension to begin with, then move to the corresponding end of the platform.

   The short ramp extension attaches to the safety lock end; the long ramp extension attaches to the cylinder end of the platform.

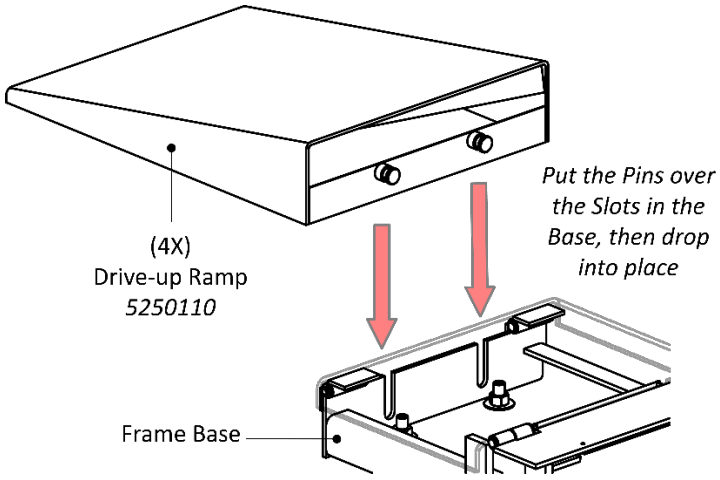
2. Slide the ramp extension into the slots near the end of the platform, then secure on each side of the ramp extension from underneath using an M8 hex head bolt.

3. Repeat the same steps for the other ramp extension on the other end of the platform.

Add the Drive-up ramps: SP–7XE only

The SP-7XE includes four drive-up ramps: two per frame. The SP-7XEF does not include drive-up ramps, as it is flush mount.

You can attach the four drive-up ramps in any configuration as they are all identical



To put a Drive-up ramp into position:

1. Put the pins over the slots in the base, then move them down into the slots.
2. Double check to verify they are fully seated.

Final Checklist Before Operation

Make sure the following steps have been completed before using the Lift:

1. Review the **Installation Checklist** to make sure all steps have been performed.
2. Ensure the power unit is receiving power from the power source.
3. Check the hydraulic fluid reservoir; it must be full of approved hydraulic oil. ***You can damage the motor by running it without enough fluid.***
4. Check the hydraulic system for leaks. Verify all hydraulic hose connections, hydraulic fittings, and auxiliary port plugs on the Lift and power unit are tight.
5. Check to see that all anchor bolts are appropriately shimmed and correctly torqued.
6. Make sure that all safety locks are clear and free.

Leave the Manual with the Owner/Operator

Leave the *Installation and Operation Manual* with the owner/operator so that it is available for anyone who needs it.

Operation

This section describes how to operate your Lift.

⚠ **WARNING** Use care around the Lift. ***When the Lift is moving, keep everyone at least 30 ft. (9.25 m) away***.

Lift Operation Safety

BendPak recommends referring to the ANSI/ALI ALIS Standard *Safety Requirements for Installation and Service* **available from ALI** for more information about safely installing, using, and servicing the 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 **support@bendpak.com**, visit **bendpak.com/support**, or call **(800) 253-2363**, then follow the prompts.
- **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 ft. (9 m) of the Lift while it is in motion.
- **Check the operators**. Make sure everyone who will be operating 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 ft. (9 m) of the Lift when it is in motion.
- **Check for safety**. Make sure everyone who will be walking near the Lift is aware 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, nor be in the vicinity.
- **Check the vehicle**. Never exceed the Lift's weight rating. Do not allow people inside a vehicle you are raising. 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.

About Lifting Points and Lift Blocks

The raised vehicle must be balanced on Lifting Blocks that ride on the Lift platform.

⚠ **WARNING** You ***must*** use all four Lift Blocks when raising a vehicle. Never use just one, two, or three Lift Blocks to raise a vehicle. The vehicle will be unstable and could slip off the Lift, possibly damaging the Lift, damaging the vehicle, and injuring anyone under it.

⚠ **DANGER** Do not estimate the best location to place the lift pads or adapters. ***You must use the manufacturer's recommended Lifting Points***. If you do not, the vehicle could become unstable and fall, which could damage the vehicle, damage the Lift, injure, or even kill anyone under or near the vehicle.

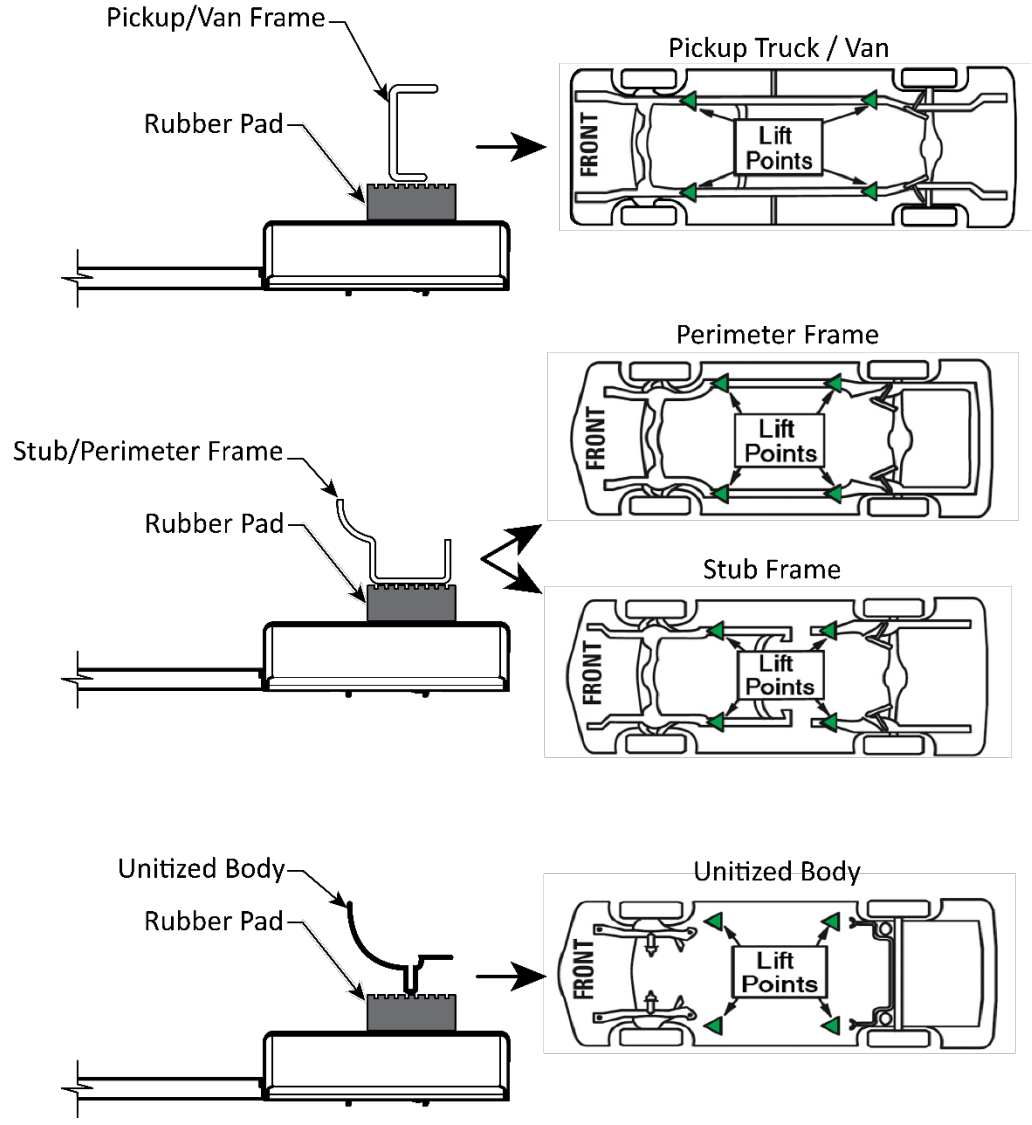
⚠ WARNING Many specialty or modified vehicles or vehicles with unusually short or long wheelbases, cannot be raised on a frame engaging Lift. Contact the vehicle's builder or manufacturer for Raising or Jacking guidance.

To balance a vehicle on a full-rise frame-engaging Lift, the lift blocks, pads or adapters must contact the vehicle on the manufacturer's recommended Lifting Points. When you raise a vehicle by its Lifting Points, the vehicle is balanced.

NOTICE The manufacturers' recommended Lifting Points do not take into consideration any major changes that might have been made to the vehicle. As an extreme example, if the engine is removed, or there is a 5,000 lb. (2,268 kg) weight in the trunk, the vehicle's Lifting Points will no longer be the proper balancing points.

Some vehicles may have the manufacturers' recommended Service Garage Lift Point locations identified by a triangle mark on the underside of the vehicle, reference SAE J2184- (Current Edition). On some vehicles, specific Lifting Points are indicated by a label located on the driver's side door jamb. Your best approach is to find the vehicle in the *vehicle Lifting Points for Frame Engaging Lifts* guide **available from ALI** or contact the manufacturer of the vehicle. This guide includes a page of safe lifting suggestions, which all who use the Lift should read. *Lifting it Right: A Safety Manual from the Automotive Lift Institute* is also **available from ALI** and includes general information about Lifts and how to use them safely.

Typical Lifting Points:



The Console

Operation of the Lift is controlled via the console.

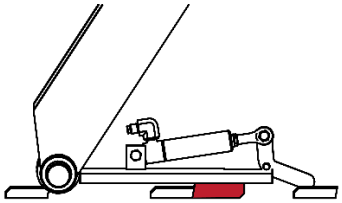
About Safety Locks

The Lift is supplied with multiple safety lock positions; they serve two important functions:

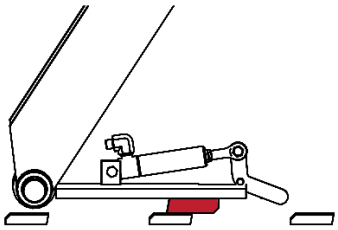
- **Safety**. Safety Locks hold the SP-7XE/F platforms in place. Once your Lift is engaged on the desired safety lock, the weight of the vehicle holds the platforms in place. If the power turns off, the safety locks still hold the platforms, and anything on them remains in place.

⚠ **WARNING** Always leave your Lift on a safety lock or fully lowered. Although rare, it is possible for hydraulic fluid in the hydraulic cylinders to leak, causing the platforms to slowly lower. ***Never work under a vehicle unless both platforms are fully engaged on their safety locks.***

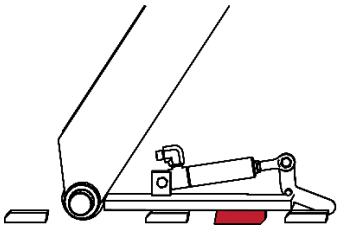
- **Adjustable height**. Multiple safety locks allow vehicles to be raised to the ideal height for the work to be performed.



Locked



Passing



Unlocked

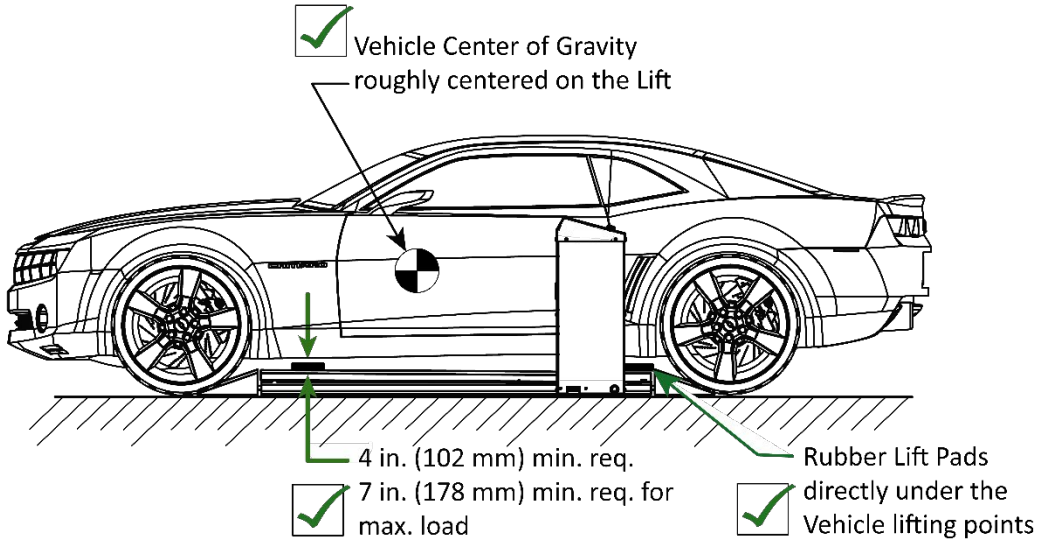
Additional Operation Safety Information

Read and understand the following instructions ***before*** operating your SP-7XE Series Lift:

- ***Never*** exceed the rated capacity of the Lift, 7,000 lbs. (3,175 kg)
- ***Never*** exceed the maximum load of 3,500 lbs. (1,587 kg) per each platform.
- ***Always*** center the load evenly on the platforms.
- ***Never*** operate the Lift with any person or equipment underneath it.
- ***Always*** use the Lift in the proper manner. Never use the Lift pads, blocks or adapters in any way other than what is approved by the manufacturer.
- ***Always*** keep a clear visual line of sight on the Lift and vehicle.
- ***Always*** verify the vehicle is centered and stable prior to operating the Lift Controls.
- ***Never*** leave the Lift in a raised position unless both safety locks are securely engaged at the same height.
- ***Never*** leave the Controls while the Lift is in motion.
- Do ***not*** rock the vehicle while on the Lift or remove any heavy component from vehicle that may cause an excessive weight shift, making the vehicle unstable.

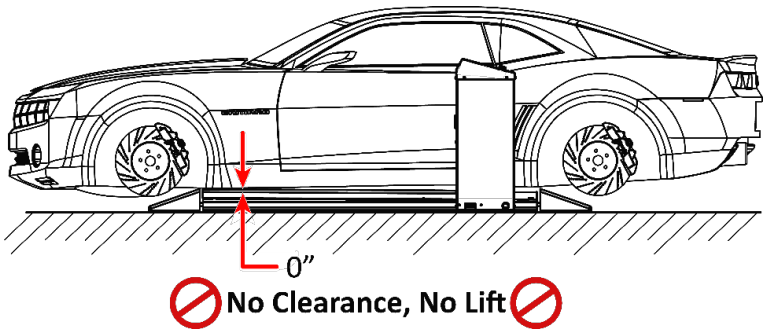
- Do ***not*** permit the power unit to become wet. The motor may be damaged, and water damage is not covered under the product warranty.
- Always allow a minimum of 2 seconds delay between motor starts. Failure to comply may cause switch and/or motor burnout. This could cause serious damage to the equipment.
- If any part of the vehicle's Lifting Points are ***not*** completely over the platform, carefully drive the vehicle back off the Lift and then drive it back on to reposition it, making sure to keep the Wheels in the middle of the platforms.

⚠ DANGER The vehicle manufacturer's recommended lifting points must be used. Failure to do so can cause the vehicle to become unstable and fall, causing damage to the vehicle, the lift, and possibly injure or kill anyone nearby.

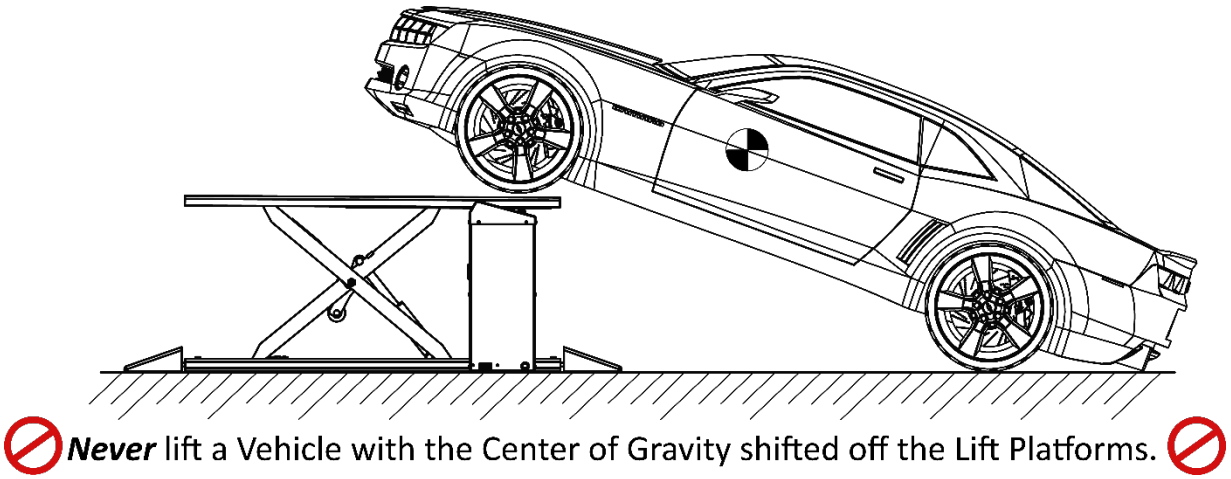


⚠ WARNING Before raising a vehicle, verify there is a minimum of 4 in. (102 mm) clearance between the lift pads and the vehicle. Maximum load requires a 7 in. (178 mm) clearance. The Lift cannot raise a full load from a completely flat starting position. Attempting to lift in this manner will damage the Lift and could injure persons nearby.

⚠ WARNING **Never lower a vehicle all the way to the floor with the wheels removed. *Failure to comply with these instructions will void the product warranty.* BendPak will assume no liability for loss or damage of any kind, expressed or implied, resulting from improper installation or use of this product.**



⚠ **WARNING** Never raise a vehicle improperly and/or with the center of Gravity shifted off the platforms.



Raising a Vehicle

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

⚠ **WARNING** Always use care when you are around the Lift. ***When the Lift is moving, keep all people and objects at least 30 ft. (9 m) away from 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. Slowly drive the vehicle over and center it above the platforms.
4. Put the vehicle in park, apply the parking brake, and turn it off.
   With a manual transmission, apply the parking brake, put it into first gear and turn it off.
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. Place lift blocks or adapters directly under the manufacturers' lift points for the vehicle. Ensure a minimum 4 in. (102 mm) gap between the Lift pad and the vehicle is present. A 7 in. (178 mm) gap is required for max. load.
7. At the console, press and hold the **Raise** button.
8. Watch the vehicle and the platforms as they rise.
   If the Lift becomes unstable or the vehicle starts moving, release the **Raise** button immediately.

⚠ **DANGER** Do not raise the Lift any farther until you are certain the vehicle on the Lift is both stable and balanced. If the vehicle is not stable and balanced, it could fall, which could damage the vehicle, damage the Lift, or injure or kill anyone under the Lift.

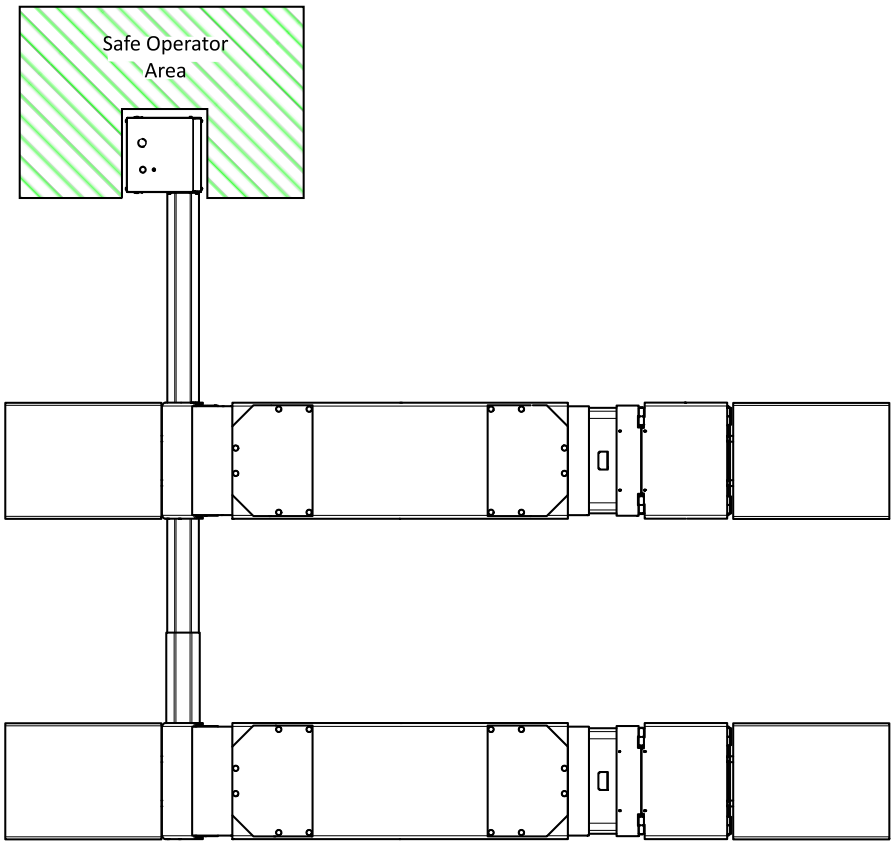
9. When the platforms are just past the desired height, release the **Raise** button.
10. Press the **Lower** button briefly to move the platforms back down, which engages them on the most recently passed safety lock. If the Lift moves past the desired safety lock position, platforms did not engage that safety lock. If the operator continues to hold the **Lower** button, the platforms will travel all the way back to the ground. If the desired safety lock is missed, press and hold Raise again until it fully passes that safety lock. Release **Raise**, then hold **Lower** again to lower the platforms onto the desired safety lock.

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.
2. At the console, stand in the Safe Operator Area, while pressing and holding the **Raise** button for a second or two. This moves the platforms up and off the engaged safety lock.



3. Press and hold down the **Safety Lock Release**, then press and hold down **Lower** button at the same time. If you do not press and hold the Safety Lock Release, the Lift will engage on the next safety lock.

⚠ **DANGER** Always watch the vehicle and the Lift as it descends to verify both safety locks disengage when the safety lock release button is pressed. If only one of the safety locks engages on descent, the Lift and vehicle may become unbalanced, fall and cause severe injury or death.

⚠ **DANGER** **Crushing hazard and pinch points**. While the lift is operating in an upward or downward direction, do not place any part of your body in any pathway or operating area of the Lift including scissor mechanisms and lowering platforms, until confirmation is made that the safety locks are fully engaged, or the platforms have fully lowered.

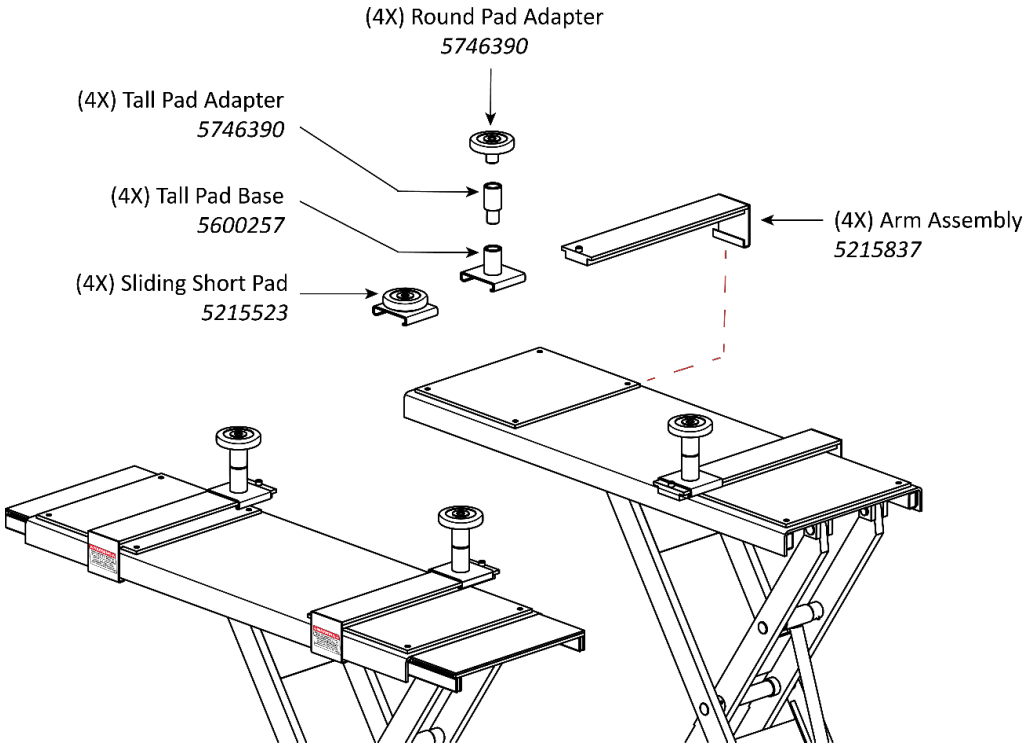
4. Carefully drive the vehicle off the platforms.

Optional Lift Arm Kit

If you purchased the optional Lift Arm Kit, this section describes how to use it.
The Kit is supplied with four Lift Arms. Hook them on the outside edge of a platform, and install the desired Pads, drive the vehicle over the Lift, and then position the Pads under the manufacturer's recommended Lifting Points for the vehicle being raised.
Note: Although the optional Lift Arm Kit provides added versatility, the add-on Lift Arm Kit extends lift points outward and therefore **REDUCES** the maximum vehicle weight rating of the Lift from **7,000 lbs. to 4,800 lbs.**

⚠ **DANGER** The maximum vehicle weight allowed using all four Lift Arms (which must always be used four at a time) is **4,800 lbs. (2,177 kg).** Do ***not*** raise a vehicle that weighs more than this. It will damage the Lift or the vehicle, put at risk everyone near the Lift, and void your warranty. **Each Lift Arm** is rated for a ***maximum*** of 1,200 lbs. (544 kg); ***never exceed this weight*** on one Lift Arm.

Position the Pads by sliding the Lift Arms along the outside edge of the platform. Each Lift Arm can be fitted with either a Short Pad or a Tall Pad/Adapter/base combination, supplied with the Lift Arm Kit.



Important: When raising vehicles with ***body-on-frame*** construction (compared to ***unibody*** construction), BendPak recommends purchasing 35 mm frame cradle pads for safer lifting. These are available on the **BendPak website in the Car Lift Accessories section**. Make sure to order the **35 mm Pin Diameter** option.

The frame cradle pads replace the Tall Pad in the Tall Pad/Adapter/base combination.

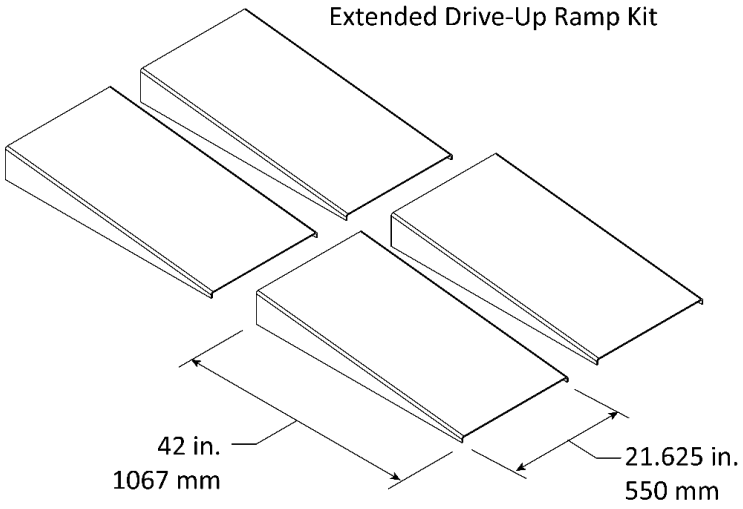
To switch between Short Pads and the Tall Pad/Adapter/base, remove the Lock Screw on the end of the Lift Arm, remove the current Pad, slide on the desired Pad, and then replace the Lock Screw.

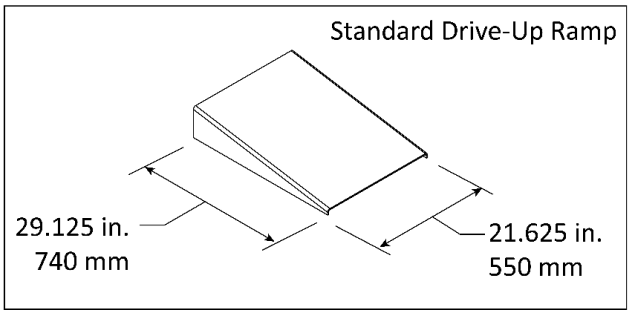
If you are using the Tall Pad/Adapter/base combination, you can use it with or without the Adapter.

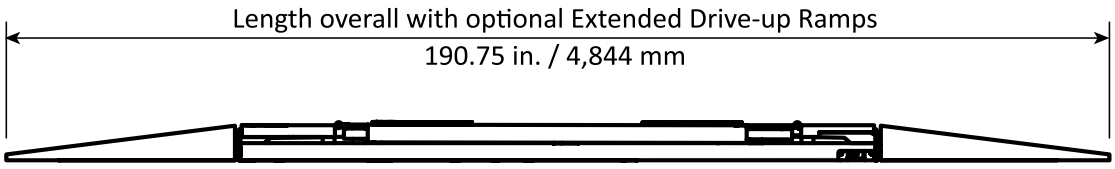
Optional Extended Drive-Up ramp Kit

Extended Drive-Up ramps (5210306) are available for the SP-7XE. The extended ramps are 12.87 in. (327 mm) longer and a drop-in replacement for the standard ramps delivered with the SP-7XE.

The extended drive-up ramp Kit includes four ramps.







Visit the Web Technical support and service is available from your dealer, on the Web at **bendpak.com**, by email at **support@bendpak.com**, or by phone at **(800) 253-2363**, select option 7, then 4.

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 turning the power disconnect switch to the off position during maintenance.

⚠ WARNING BendPak Does not supply hydraulic fluid or lubricants with the Lift. **Always** refer to the Material Safety Data Sheet (MSDS) for safe handling and disposal information. MSDS are available from the hydraulic fluid or lubricant's supplier or manufacturer.

To maintain your Lift:

- **Daily**: Keep the Lift clean. Wipe up any oil spills, clean and remove dirt and debris.
- **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 verify they are functioning normally.
- **Weekly**: Check all labels on the unit. Replace them if they are illegible or missing.
- **Monthly**: Lubricate all slide block travel zones and scissor pivot points with white lithium grease or equal.
- **Monthly**: Check the power unit's hydraulic fluid levels. Refill if low.

⚠ WARNING ***Never*** open the back of the console to access the power unit. Severe injury and component damage are possible. Always access the power unit through the console's front panel. The power unit is heavy, and the back panel is not designed to hold the power unit without support from the console's side panels.

- **Monthly**: If the Lift has experienced little or no use during the month, run the Lift up and down several times. This action will wet the cylinder Seals and improve their long-term elasticity.
- **Every two months**: Check all anchor bolts to ensure they are tight. If not, tighten them.

⚠ DANGER **Crushing hazard and pinch points**. While the lift is operating in an upward or downward direction, do not place any part of your body in any pathway or operating area of the Lift including scissor mechanisms and lowering platforms, until confirmation is made that the safety locks are fully engaged, or the platforms have fully lowered.

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

Fastener Torque Table

FASTENER TORQUE CHART

Bolt Grade (SAE)		SAE Grade 0-1-2			SAE Grade 5			SAE Grade 8			Socket Head Cap Screw SAE Grade
Bolt Class (Metric)		4.6	Metric Class 4.6		8.8	Metric Class 8.8		10.9	Metric Class 10.9		12.9	Metric Class 12.9
Bolt Size (SAE)	Bolt Size (Metric)	Tightening Torque			Tightening Torque			Tightening Torque			Tightening Torque	
		Lubricated (ft-lbs)	Zinc Plated (ft-lbs)	Plain & Dry (ft-lbs)	Lubricated (ft-lbs)	Zinc Plated (ft-lbs)	Plain & Dry (ft-lbs)	Lubricated (ft-lbs)	Zinc Plated (ft-lbs)	Plain & Dry (ft-lbs)	Lubricated (ft-lbs)	Zinc Plated (ft-lbs)	Plain & Dry (ft-lbs)
1/4-20	M6 x1.0	2.3	2.6	3.0	5.8	6.6	7.7	8.3	9.4	11.1	9.7	11.0	13.0
5/16-18	M8 x 1.25	3.8	4.3	5.0	9.7	11.0	13.0	13.9	15.8	18.5	16.3	18.4	21.7
3/8-16	M10 x 1.50	10.8	12.3	14.4	27.9	31.6	37.2	39.9	45.2	53.2	46.7	52.9	62.2
7/16-14	N/A	24.0	27	30.0	35.0	42	50.0	55.0	59	70.0	61.0	68	76.0
1/2-13	M12 x 1.75	18.9	21.4	25.2	48.7	55.1	64.9	69.6	78.9	92.8	81.4	92.2	108.5
9/16-12	M14 x 2.00	30.2	34.2	40.2	77.8	88.1	103.7	111.3	126.1	148.4	130.0	147.4	173.4
5/8-11	M16 x 2.00	47	53	62	121	137	161	173	196	230	202	229	269
3/4-10	M18 x 2.50	65	73	86	167	189	222	239	270	318	279	316	372
7/8-9	M22 x 2.50	136	155	182	320	365	430	460	515	600	510	575	640

WARNING! Prior to Installation, inspect all accompanying manuals, parts lists and catalogs to ensure you have all the necessary parts. Identify all fasteners and their proper torque settings as illustrated on this chart. Proper torquing practices cannot be over emphasized. Torque values are provided as a convenient method of achieving correct pre-loading of highly stressed fasteners. If the fasteners are not properly plated, the fastener threads are not clean and free of deformation, or are not properly lubricated, the correct fastener pre-load will not be achieved even though the given torque value is reached. For this reason, it is critical that all fasteners be inspected for proper plating, thread form and correctly lubricated prior to torquing. Failure to verify a fastener's serviceability or to correctly lubricate the fastener prior to assembly and torquing will result in the fastener not being properly pre-loaded and subsequent failure of the fastener may occur. The torque values can only be achieved if the nut (or tapped hole) has a proof load greater than or equal to the bolt's minimum ultimate tensile strength. Clamp loads estimated as 75% of proof load for specified bolts. Torque values are listed in foot-pounds. Torque wrenches should be calibrated on an annual basis. Never use an impact driver on a torque multiplier.

Disposing of Used Hydraulic Fluid

Used hydraulic fluid cannot be disposed of by dropping it into the trash or dumping into the street. hydraulic fluid has toxic ingredients that are harmful to the environment. Either recycle the hydraulic fluid or drop it off at a hazardous waste collection facility. Dirty or contaminated fluid must be treated as hazardous waste. Rags and/or granular absorbents that have soaked up hydraulic fluid should be treated like hazardous waste and be disposed of at a hazardous waste collection facility.

To find an appropriate facility:

- Local automotive parts stores, auto care facilities, or automobile dealerships may accept fluid for recycling or, in some cases, for disposal. Contact them for more information.
- Cities, counties, and states often support both recycling facilities and hazardous waste collection facilities. Contact them to see if and where they have these programs.

If you are unable to find an appropriate facility, the website **earth911.com** has resources that may be of help.

SP-7XE and SP-7XEF Lift Disposal - End of Service Life

Once your Lift has reached the end of its service life it must be disposed of properly. Metal recyclers will be able to advise on methods and costs to remove the Lift and will *reuse* the materials, diverting them from landfills. The best option is to contact a metal recycling center and discuss the size and weight of the Lift to determine if the facility can deconstruct and recover the usable components and metals.

The hydraulic cylinders, Hoses, Fittings, and the power unit itself must be disposed of in accordance with current national, state, and local regulations governing the use and disposal of hazardous materials. These components and any used hydraulic fluid *must not* be disposed of by dropping it into the trash or dumping it into the street. The hydraulic fluid contains toxic ingredients that are harmful to the environment.

These components and the hydraulic fluid are required to be recycled or must be delivered to a hazardous waste collection facility.

If you have substantial amounts of hydraulic fluid, consider contacting a commercial waste disposal company. In all cases, the best approach is to find an appropriate facility and contact them — in advance — to ask them: what kinds of fluids and materials they accept, what kind of containers they must be in, what hours they are open, their location, and any other information specific to their facility.

If you are unable to find an appropriate facility, the website **earth911.com** has resources that may be of help.

Troubleshooting

This section describes how to troubleshoot your Lift.

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

Important: Qualified personnel must perform all repair work.

Issue	Action to Take
Platforms move erratically or squeak when in use.	Move the platforms up and down a few times, with a break between each; there could be residual air in the hydraulic system. The hydraulic cylinders are self-bleeding.
Platforms are stuck in the up position and will not lower with the vehicle on the Lift.	Verify the power unit is being supplied with electrical power and that none of the hydraulic hose are pinched or leaking. Verify there is sufficient hydraulic fluid in the reservoir on the power unit. Contact BendPak Service **bendpak.com/support**, or call **(800) 253-2363**, select option 7, then 4.
Hydraulic Oil is old or dirty.	Replace the dirty fluid with clean, approved SAE 30
Platforms make odd noises when in use.	Lubricate hinge points using white lithium grease. Lubricate the platforms where the slide blocks travel using White Lithium Grease.
Platforms are slowly lowering on their own.	Make sure both platforms are on safety locks (if not, hydraulic oil is being pushed back into the reservoir, lowering the platforms). ***Only leave the Lift either fully lowered or engaged on a safety lock.***

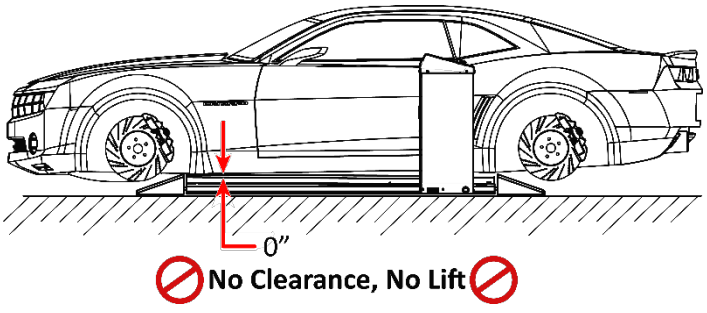
If you continue to have problems with your Lift, contact your dealer, visit **bendpak.com/support**, email **support@bendpak.com**, or call **(800) 253-2363** select option 7, then 4.

Vehicles with No Tires – Fully Lowered

When the SP-7XE Series Lift is completely flat, with a vehicle directly on the platforms, there is no room to develop any mechanical upward force. The weight on the Lift must be reduced by at least half or raise the vehicle off the Lift platform or Lift Pads in some other manner.

In order to raise the platforms in this situation, the vehicle must be raised 4 to 6 in. (102 to 152 mm), providing the lift with the necessary mechanical advantage. This can be accomplished by:

- Use a floor jack to raise the vehicle from 4 to 6 in. (102 to 152 mm).
- Use lifting equipment to raise the vehicle. If you are still unable to raise your vehicle, contact BendPak Technical Support for assistance.

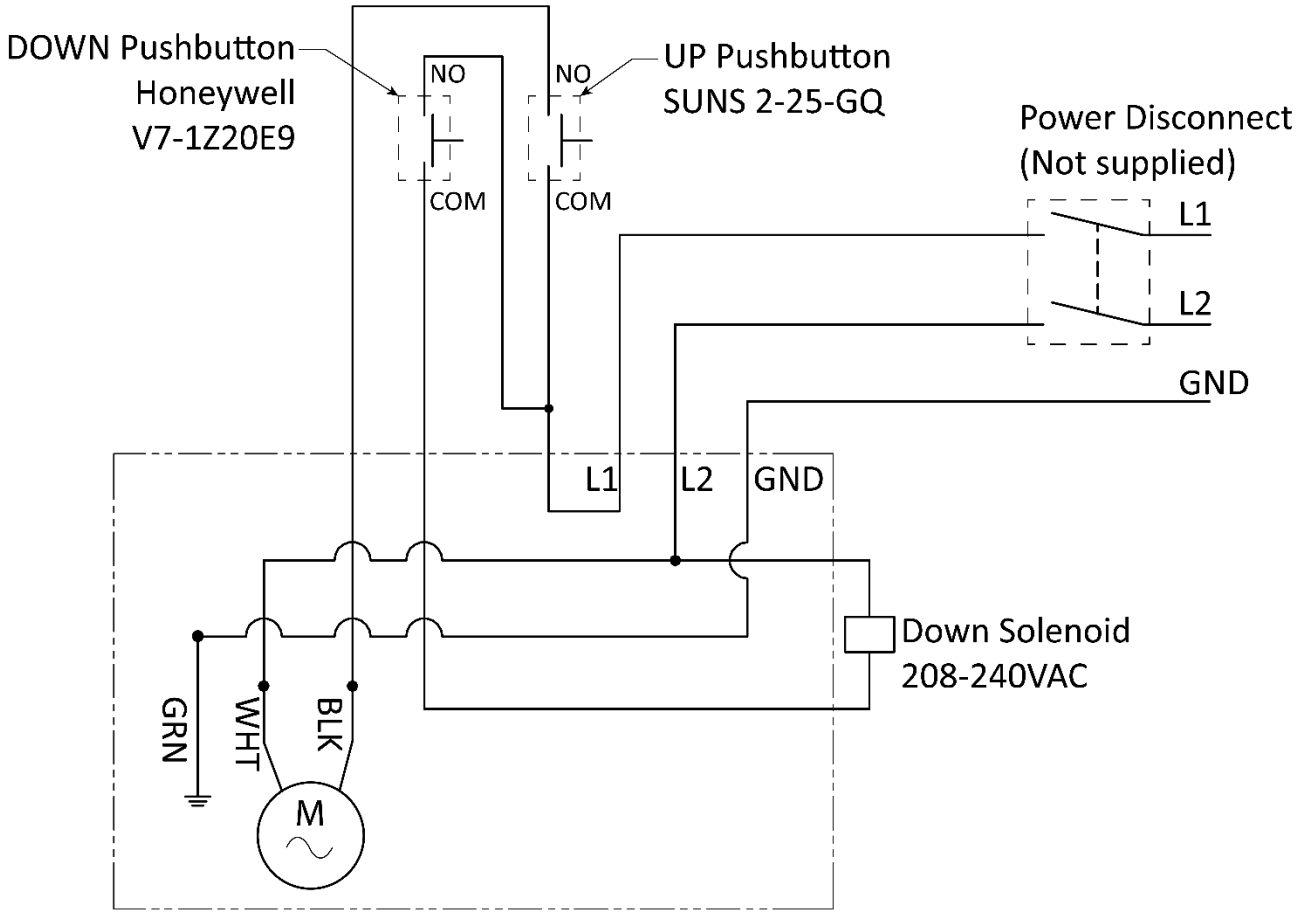


Wiring Diagrams

⚠ DANGER All electrical work must be performed by a licensed Electrician in accordance with all applicable local and national electrical codes. ***Damage caused by improper electrical installation may void your warranty***.

5585168 Power Unit

208-240VAC 50/60 Hz., Single Phase, 3 HP



Labels

A

PN 5905039

B

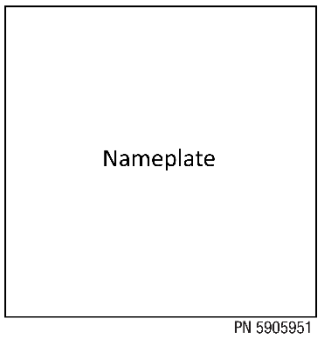
Black & Yellow Hazard Roll

Size: 10' W x 2" H

C

PN 5905524

D



PN 5905951

E

PN 5905940

F

PN 5905138

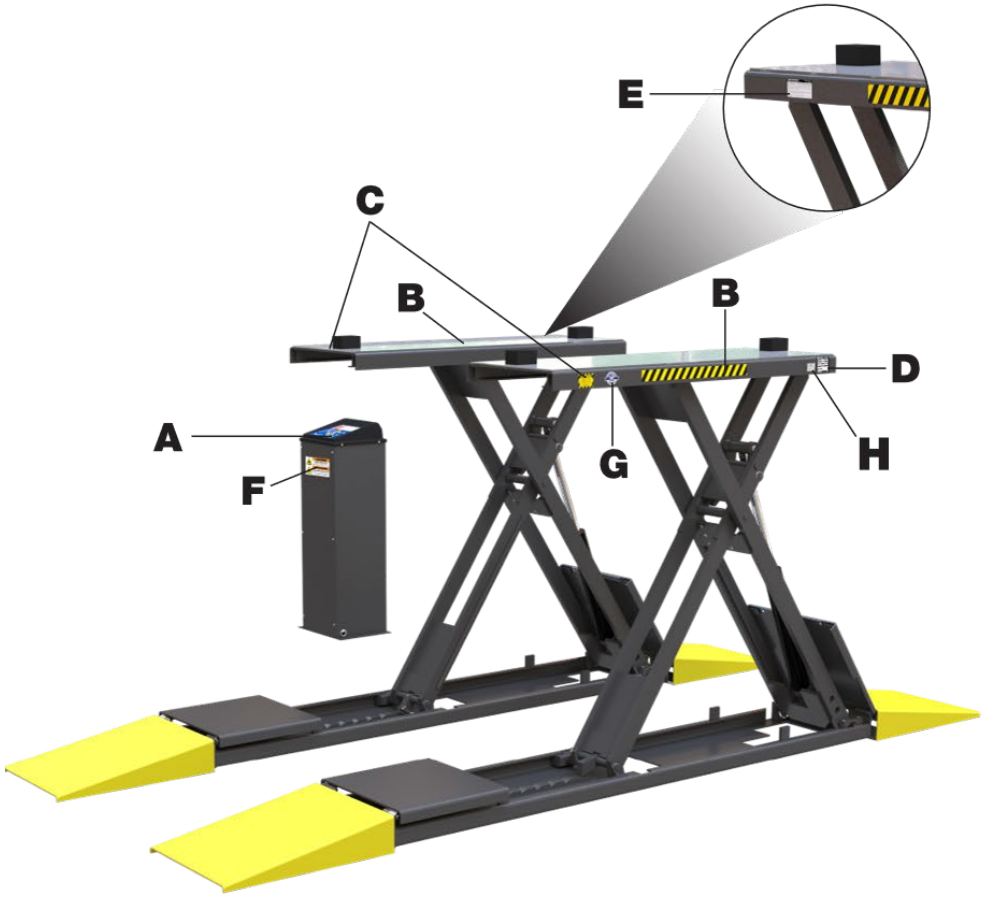
G

PN 5906044

H

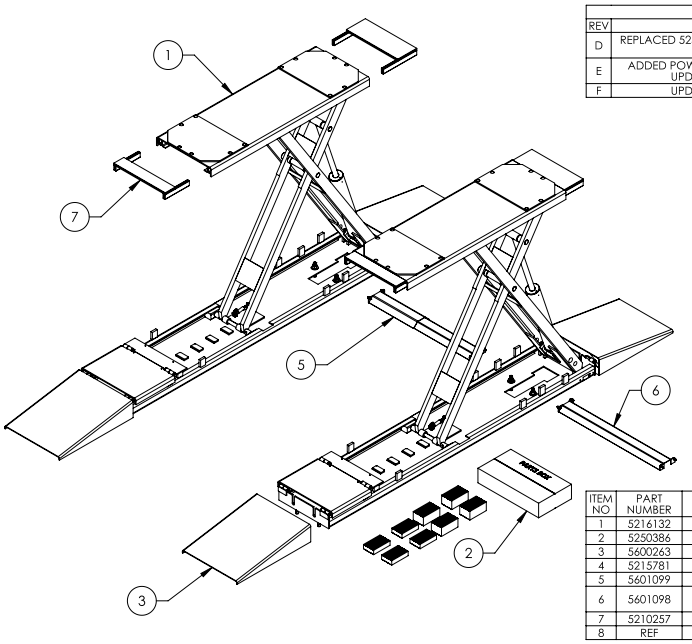
PN 5905775

Label Placement Positions



Parts Diagrams

REVISION				
REV	DESCRIPTION	DATE	EDITED BY	ECO#
D	REPLACED 5250110 WITH 5250386, UPDATED BOM REVISION	10/25/2023	CA	01517
E	ADDED POWER UNIT & REFERENCE NOTE, UPDATED BOM REVISION	08/16/2024	CA	01517 POST-A
F	UPDATED BOM REVISION	08/29/2024	CA	01566



ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	5216132	SP-7XE RAMP ASSEMBLY	2
2	5250386	SP-7XE PARTS BOX	1
3	5600263	SP-7XE DRIVE UP RAMP WELDMENT	4
4	5215781	TALL POWER UNIT CONSOLE ASSEMBLY	1
5	5601099	MDS-6/SP-7XE INNER FLOOR TROUGH WELDMENT	1
6	5601098	SP-7XE/MDS-6EXT/LP OUTER FLOOR TROUGH WELDMENT	1
7	5210257	SP-7XE RAMP EXTENSION KIT	2
8	REF	POWER UNIT	1

NOTE: UNLESS OTHERWISE SPECIFIED.

1. REFER TO MODEL FOR ADDITIONAL INFORMATION
2. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING
3. SEE COLORS & GRAPHICS FOR LABEL PLACEMENT
4. POWER UNIT REFERENCE ON PURCHASE ORDER

DO NOT SCALE DRAWING — NAME — DATE

DRAWN TM 03/30/2022

CHECKED

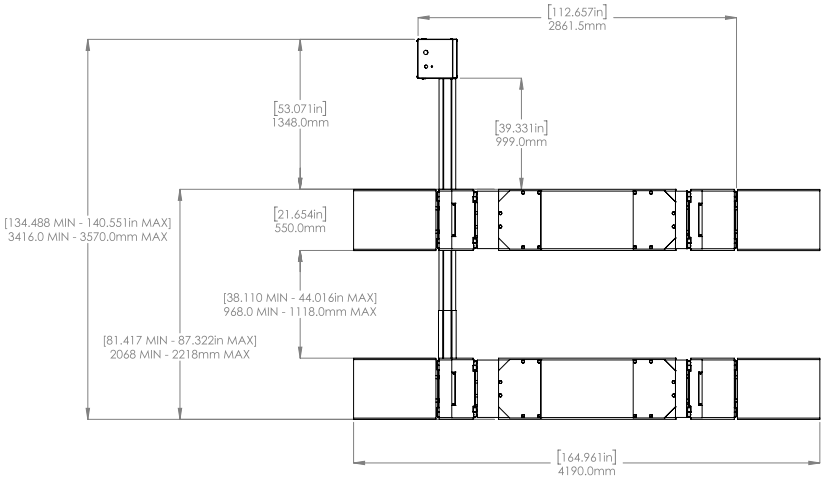
DIMENSIONS ARE IN MM — THIRD ANGLE PROJECTION

1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: SP-7XE PRODUCTION LIFT VER B

SIZE A — DWG. NO. 5260681 — REV

SCALE: 1:28 — SHEET 1 OF 3

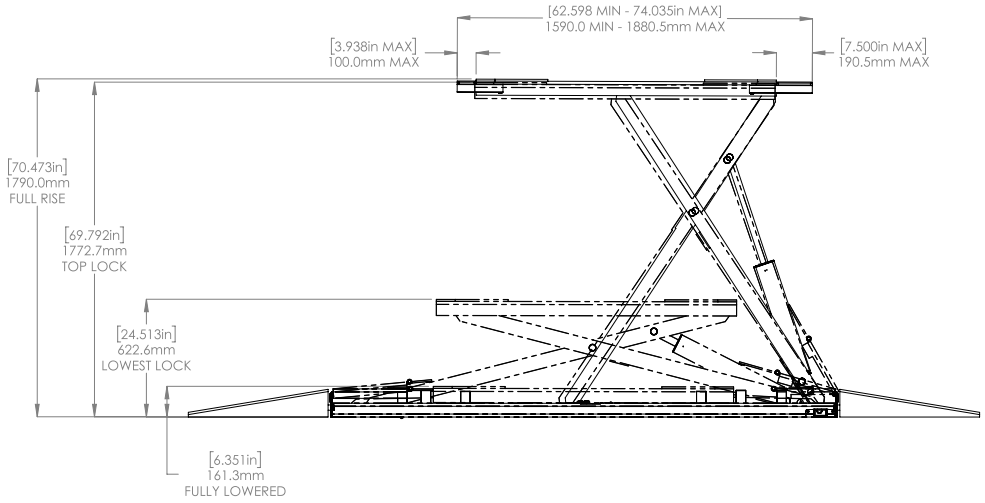


1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: SP-7XE PRODUCTION LIFT VER B

SIZE A — DWG. NO. 5260681 — REV

SCALE: 1:30 — SHEET 2 OF 3



1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

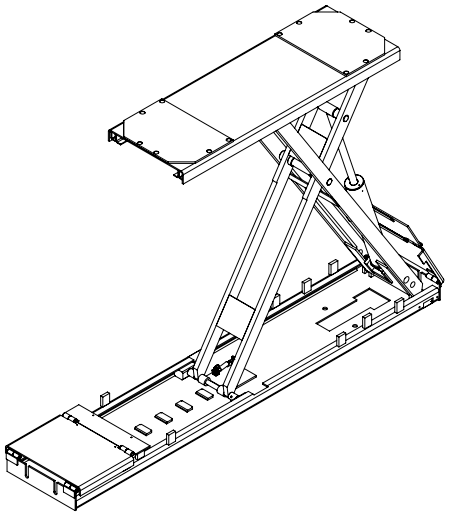
TITLE: SP-7XE PRODUCTION LIFT VER B

SIZE DWG. NO. REV
A 5260681

SCALE: 1:20 SHEET 3 OF 3

1. SAFETY LOCK POSITIONS: 8
2. SPACED EVERY: 147.7mm / 5.816"

REVISION				
REV	DESCRIPTION	DATE	EDITED BY	ECO#
B	REPLACED 5715035 WITH 5715050, 5530366 WITH 5530466 AND 5530364, ADDED (2) 5530466 AND (6) 5535357, UPDATED BOM REVISION, MOVED DIMENSION PAGE TO TOP LEVEL DRAWING	08/01/2022	TM	01433
C	UPDATED BOM REVISION	06/01/2023	TM	01496
D	UPDATED BOM REVISION	08/29/2024	CA	01566



ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	5601804	SP-7XE BASE WELDMENT	1
2	5620278	SP-7XE OUTER SCISSOR ARM WELDMENT	1
3	5746449	SP-7XE CYLINDER BOTTOM PIN	1
4	5215485	SP-7XE INNER ARM ASSEMBLY	1
5	5716150	SP-7XE SLIDE BLOCK, BOTTOM	2
6	5737243	SP-7XE SAFETY ROCKER ARM	1
7	5550087	FTG ELB -04 COMP x -02 NPT	1
8	5502195	AIR CYLINDER, Ø19mm x 25 STROKE	1
9	5505625	FEMALE ROD END M6 x 33	1
10	5545005	WASHER M6 x 12 FLAT, CL 10.9	2
11	5535357	NUT M6 x 1.0 NL, CL10.9	15
12	5530093	HHB M6 x 1.0 x 20mm	1
13	5530757	HHB M6 x 1.0 x 40	1
14	5716155	SP-7XE SLIDE BLOCK, TOP	2
15	5505727	SP-7XE MAIN SCISSOR PIVOT PIN	1
16	5502021	CYLINDER ASSEMBLY Ø3.5 x 20.49	1
17	5746448	SP-7XE CYLINDER TOP PIN	1
18	5601653	SP-7XE RAMP WELDMENT	1
19	5746610	SP-7XE RAMP ANCHOR PIN	2
20	5216040	SP-7XE RAMP COVER ASSEMBLY, CYLINDER SIDE	1
21	5216041	SP-7XE RAMP COVER ASSEMBLY, SAFETY SIDE	1
22	5540006	SNAP RING TRUARC 5103-100	2
23	5505716	SP-7XE RAMP COVER HINGE PIN	4
24	5540116	TRUARC Ø12mm 5103-50	4
25	5545347	WASHER M12 x 24 FLAT, CL 10.9	4
26	5550395	FTG TEE -04 COMP x -04 COMP x -04 COMP	1
27	5530372	SSS M8 x 1.25 x 20 EXTENDED NL	8
28	5755145	TUBE, Ø44 x Ø38 x 138mm	1
29	5746450	SP-7XE SCISSOR BOTTOM PIN	2
30	5715050	SP-7 RAMP BOLT-ON RUBBER PAD	2
31	5530466	ELEVATOR BOLT M6 x 1.0 x 30	8
32	5530364	ELEVATOR BOLT M6 x 1.0 x 25	4

WHERE USED
SP-7XE SERIES

NOTE: UNLESS OTHERWISE SPECIFIED.
1. REFER TO MODEL FOR ADDITIONAL INFORMATION
2. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING
3. ASSEMBLE ITEMS AS SHOWN

NEXT ASSEMBLY
5260681
5260682

DO NOT SCALE DRAWING NAME DATE

DRAWN TM 03/30/2022

CHECKED

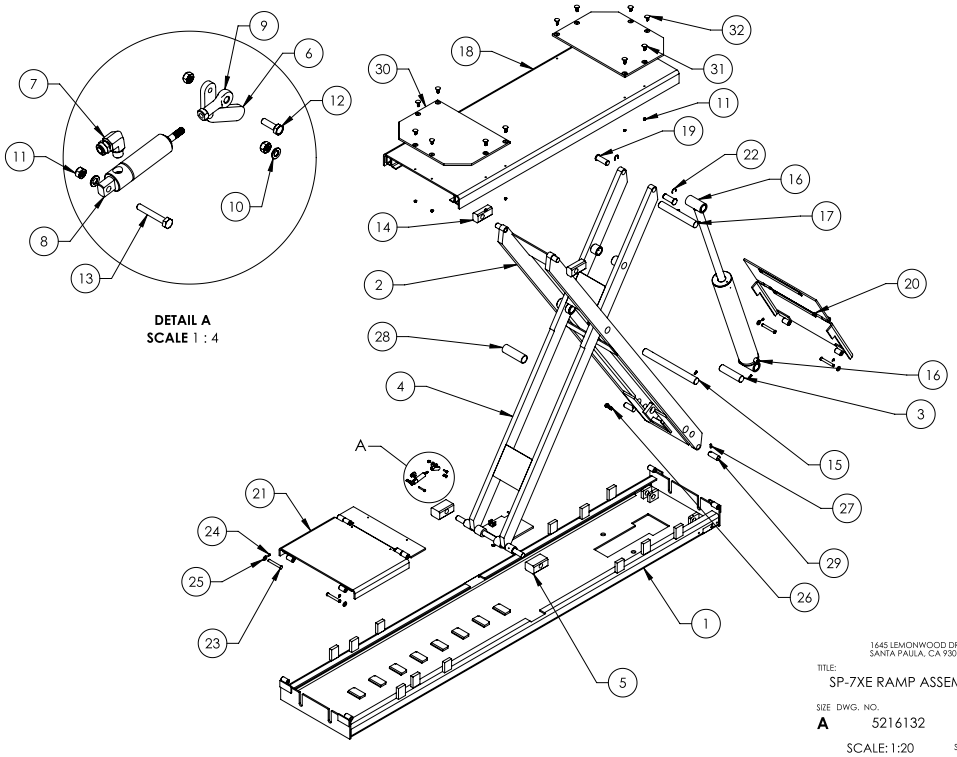
DIMENSIONS ARE IN MM THIRD ANGLE PROJECTION

1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: SP-7XE RAMP ASSEMBLY

SIZE DWG. NO. REV
A 5216132

SCALE: 1:20 SHEET 1 OF 2



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REV	DESCRIPTION	DATE	EDITED BY	ECO#
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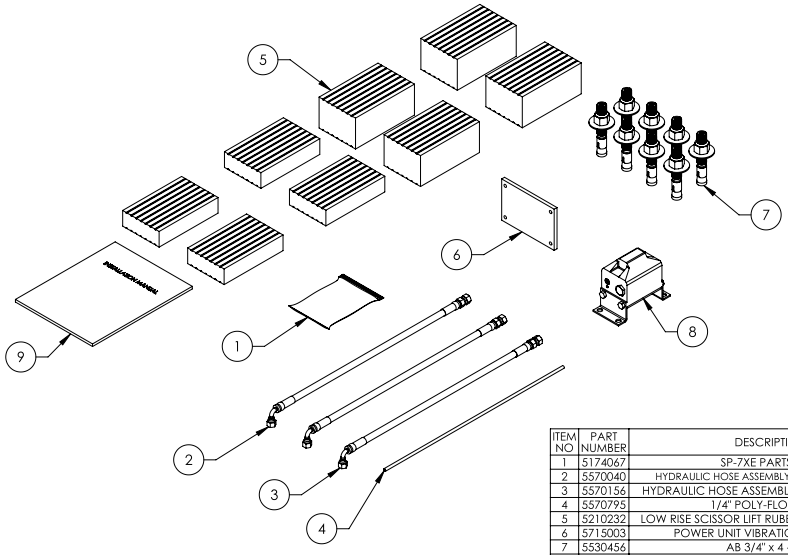


ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	5174067	SP-7XE PARTS BAG	1
2	5570040	HYDRAULIC HOSE ASSEMBLY Ø6.35 x 4270mm SB	2
3	5570156	HYDRAULIC HOSE ASSEMBLY Ø6.35 x 740mm SB	1
4	5570795	1/4" POLY-FLO TUBING	10820mm*
5	5210232	LOW RISE SCISSOR LIFT RUBBER PAD KIT, SET OF 8	1
6	5715003	POWER UNIT VIBRATION DAMPENER	1
7	5530456	AB 3/4" x 4 - 3/4"	8
8	5590104	HYDRAULIC FLOW DIVIDER, CAST IRON; ST	1
9	5900010	SP-7XE INSTALLATION MANUAL	1

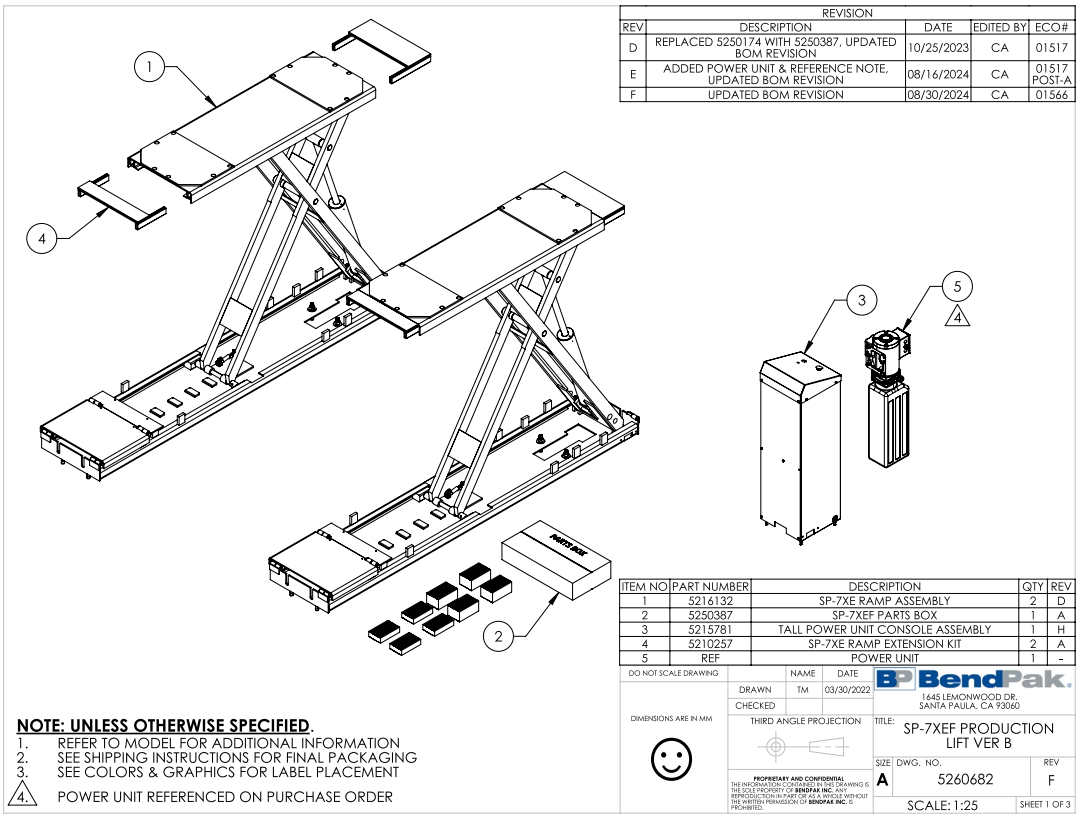
WHERE USED
SP-7XE

NOTE: UNLESS OTHERWISE SPECIFIED.
1. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING
2. (*) LENGH FOR REFERENCE ONLY

NEXT ASSEMBLY
5260681

DO NOT SCALE DRAWING NAME DATE
DRAWN CA 10/19/2023
CHECKED
DIMENSIONS ARE IN MM THIRD ANGLE PROJECTION

30440 AGOURA RD.
AGOURA HILLS, CA 91301
TITLE:
SP-7XE PARTS BOX
SIZE DWG. NO. REV
A 5250386
SCALE: 1:8 SHEET 1 OF 1



REVISION				
REV	DESCRIPTION	DATE	EDITED BY	ECO#
D	REPLACED 5250174 WITH 5250387, UPDATED BOM REVISION	10/25/2023	CA	01517
E	ADDED POWER UNIT & REFERENCE NOTE, UPDATED BOM REVISION	08/16/2024	CA	01517 POST-A
F	UPDATED BOM REVISION	08/30/2024	CA	01566

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5216132	SP-7XE RAMP ASSEMBLY	2	D
2	5250387	SP-7XEF PARTS BOX	1	A
3	5215781	TALL POWER UNIT CONSOLE ASSEMBLY	1	H
4	5210257	SP-7XE RAMP EXTENSION KIT	2	A
5	REF	POWER UNIT	1	-

NOTE: UNLESS OTHERWISE SPECIFIED.
1. REFER TO MODEL FOR ADDITIONAL INFORMATION
2. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING
3. SEE COLORS & GRAPHICS FOR LABEL PLACEMENT
4. POWER UNIT REFERENCED ON PURCHASE ORDER

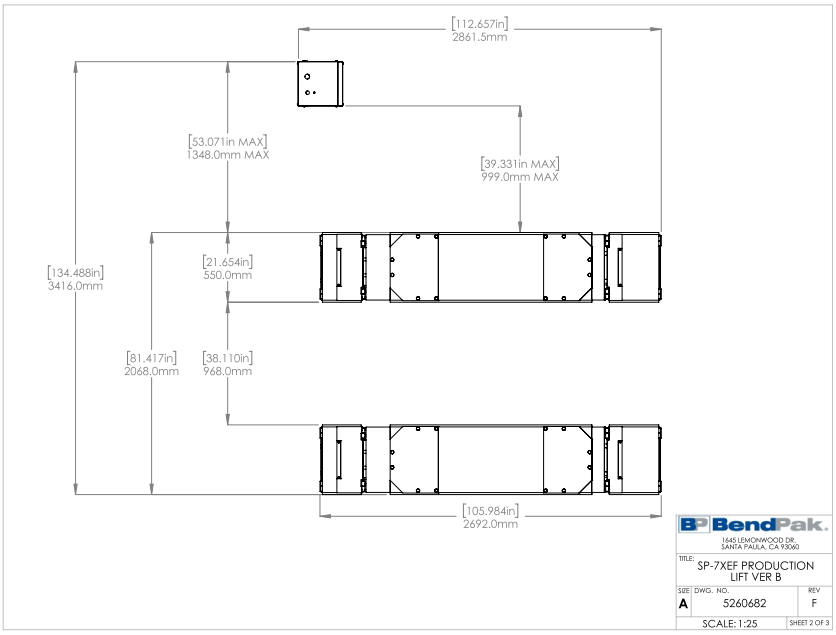
DO NOT SCALE DRAWING | NAME | DATE
DRAWN | TM | 03/30/2022
CHECKED
DIMENSIONS ARE IN MM
THIRD ANGLE PROJECTION

BendPak.
1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: SP-7XEF PRODUCTION LIFT VER B

SIZE A | DWG. NO. 5260682 | REV F

SCALE: 1:25 | SHEET 1 OF 3

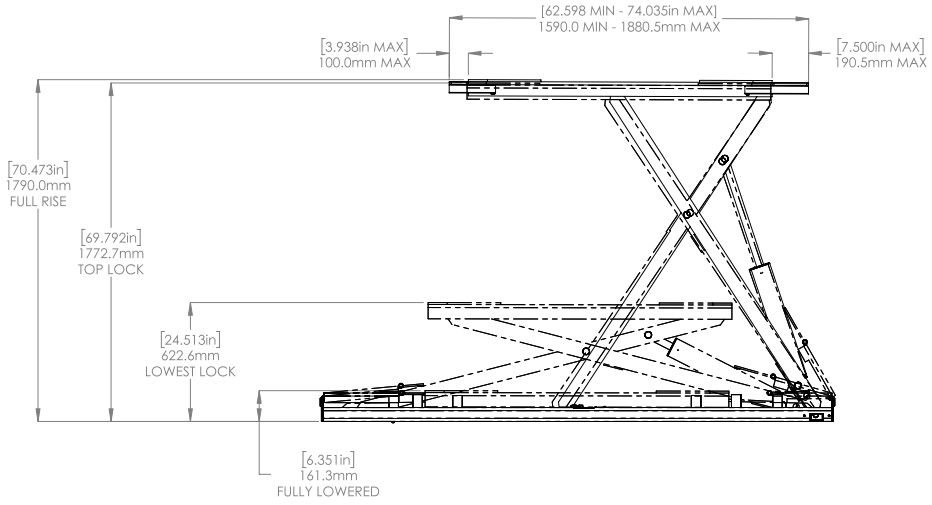


BendPak.
1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: SP-7XEF PRODUCTION LIFT VER B

SIZE A | DWG. NO. 5260682 | REV F

SCALE: 1:25 | SHEET 2 OF 3



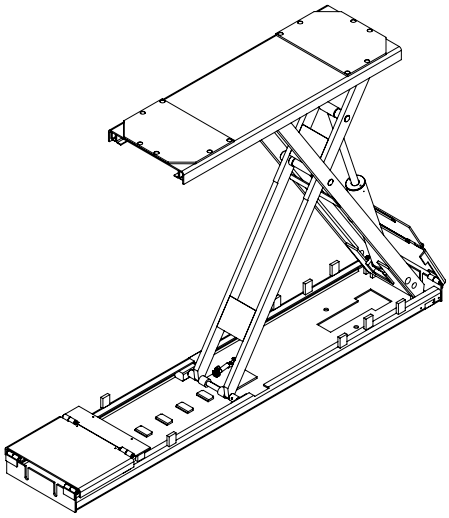
1. SAFETY LOCK POSITIONS: 8
2. SPACED EVERY: 147.7mm / 5.816"

BendPak
1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: SP-7XEF PRODUCTION LIFT VER B

SIZE	DWG. NO.	REV
A	5260682	F

SCALE: 1:20 SHEET 3 OF 3



REVISION				
REV	DESCRIPTION	DATE	EDITED BY	ECO#
B	REPLACED 5715035 WITH 5715050, 5530366 WITH 5530466 AND 5530364, ADDED (2) 5530466 AND (6) 5535357, UPDATED BOM REVISION, MOVED DIMENSION PAGE TO TOP LEVEL DRAWING	08/01/2022	TM	01433
C	UPDATED BOM REVISION	06/01/2023	TM	01496
D	UPDATED BOM REVISION	08/29/2024	CA	01566

ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5601804	SP-7XE BASE WELDMENT	1	B
2	5620278	SP-7XE OUTER SCISSOR ARM WELDMENT	1	C
3	5746449	SP-7XE CYLINDER BOTTOM PIN	1	A
4	5215485	SP-7XE INNER ARM ASSEMBLY	1	C
5	5716150	SP-7XE SLIDE BLOCK, BOTTOM	2	C
6	5737243	SP-7XE SAFETY ROCKER ARM	1	A
7	5550087	FTG ELB -04 COMP x -02 NPT	1	-
8	5502195	AIR CYLINDER, Ø19mm x 25 STROKE	1	-
9	5505625	FEMALE ROD END M6 x 33	1	-
10	5545005	WASHER M6 x 12 FLAT, CL 10.9	2	-
11	5535357	NUT M6 x 1.0 NL, CL10.9	15	-
12	5530093	HHB M6 x 1.0 x 20mm	1	-
13	5530757	HHB M6 x 1.0 x 40	1	-
14	5716155	SP-7XE SLIDE BLOCK, TOP	2	B
15	5505727	SP-7XE MAIN SCISSOR PIVOT PIN	1	A
16	5502021	CYLINDER ASSEMBLY Ø3.5 x 20.49	1	F
17	5746448	SP-7XE CYLINDER TOP PIN	1	A
18	5601653	SP-7XE RAMP WELDMENT	1	B
19	5746610	SP-7XE RAMP ANCHOR PIN	2	B
20	5216040	SP-7XE RAMP COVER ASSEMBLY, CYLINDER SIDE	1	A
21	5216041	SP-7XE RAMP COVER ASSEMBLY, SAFETY SIDE	1	A
22	5540006	SNAP RING TRUARC 5103-100	2	-
23	5505716	SP-7XE RAMP COVER HINGE PIN	4	B
24	5540116	TRUARC Ø12mm 5103-50	4	-
25	5545347	WASHER M12 x 24 FLAT, CL 10.9	4	-
26	5550395	FTG TEE -04 COMP x -04 COMP x -04 COMP	1	-
27	5530372	SSS M8 x 1.25 x 20 EXTENDED NL	8	-
28	5755145	TUBE, Ø44 x Ø38 x 138mm	1	B
29	5746450	SP-7XE SCISSOR BOTTOM PIN	2	A
30	5715050	SP-7 RAMP BOLT-ON RUBBER PAD	2	B
31	5530466	ELEVATOR BOLT M6 x 1.0 x 30	8	-
32	5530364	ELEVATOR BOLT M6 x 1.0 x 25	4	-

WHERE USED
SP-7XE SERIES

NOTE: UNLESS OTHERWISE SPECIFIED.
1. REFER TO MODEL FOR ADDITIONAL INFORMATION
2. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING
3. ASSEMBLE ITEMS AS SHOWN

NEXT ASSEMBLY
5260681
5260682

DO NOT SCALE DRAWING

	NAME	DATE
DRAWN	TM	03/30/2022
CHECKED		

DIMENSIONS ARE IN MM

THIRD ANGLE PROJECTION

BendPak
1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: SP-7XE RAMP ASSEMBLY

SIZE	DWG. NO.	REV
A	5216132	D

SCALE: 1:20 SHEET 1 OF 2

REVISION				
REV	DESCRIPTION	DATE	EDITED BY	ECO#
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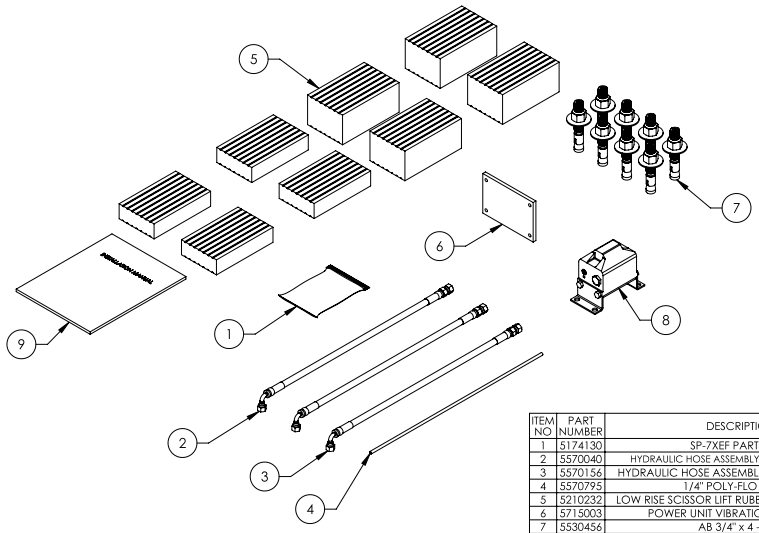


ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5174130	SP-7XEF PARTS BAG	1	A
2	5570040	HYDRAULIC HOSE ASSEMBLY Ø6.35 x 4270mm SB	2	D
3	5570156	HYDRAULIC HOSE ASSEMBLY Ø6.35 x 740mm SB	1	C
4	5570795	1/4" POLY-FLO TUBING	10820mm*	-
5	5210232	LOW RISE SCISSOR LIFT RUBBER PAD KIT, SET OF 8	1	A
6	5715003	POWER UNIT VIBRATION DAMPENER	1	B
7	5530456	AB 3/4" x 4 - 3/4"	8	-
8	5590104	HYDRAULIC FLOW DIVIDER, CAST IRON; ST	1	-
9	5900010	SP-7XE INSTALLATION MANUAL	1	-

DO NOT SCALE DRAWING | NAME | DATE
DRAWN | CA | 10/19/2023
CHECKED
DIMENSIONS ARE IN MM
THIRD ANGLE PROJECTION

BP BendPak
30440 AGOURA RD.
AGOURA HILLS, CA 91301

TITLE: SP-7XEF PARTS BOX

SIZE A | DWG. NO. 5250387 | REV A

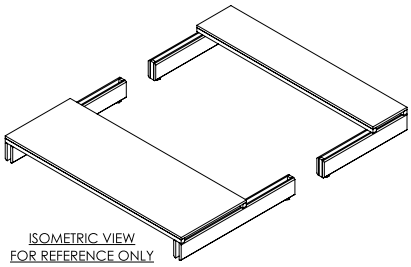
SCALE: 1:8 | SHEET 1 OF 1

WHERE USED
SP-7XEF

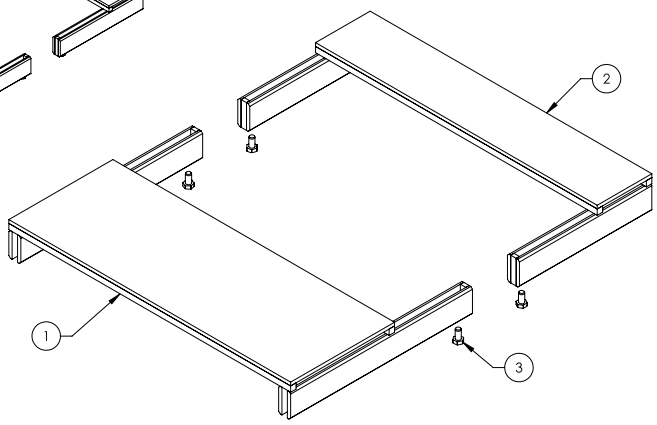
NEXT ASSEMBLY
5260682

NOTE: UNLESS OTHERWISE SPECIFIED.
1. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING
2. (*) LENGH FOR REFERENCE ONLY

REVISION				
REV	DESCRIPTION	DATE	EDITED BY	ECO#
A	PRODUCTION RELEASE	12/21/2020	TM	01314



ISOMETRIC VIEW
FOR REFERENCE ONLY
DO NOT SCALE



ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	5601615	SP-7XE RAMP LONG EXTENSION	1
2	5601614	SP-7XE RAMP SHORT EXTENSION	1
3	5530303	HHB M8 x 1.25 x 16	4

DO NOT SCALE DRAWING | NAME | DATE
DRAWN | TM | 11/13/2020
CHECKED | OR | 07/15/2021
DIMENSIONS ARE IN MM
THIRD ANGLE PROJECTION

1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: SP-7XE RAMP EXTENSION KIT

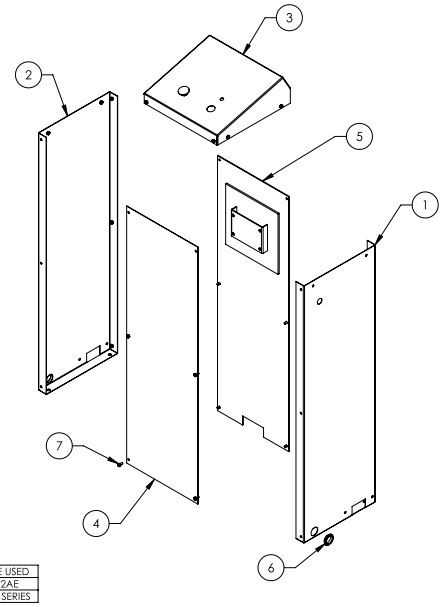
SIZE A | DWG. NO. 5210257 | REV

SCALE: 1:5 | SHEET 1 OF 1

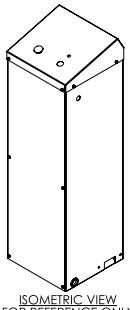
WHERE USED
SP-7XE SERIES

NEXT ASSEMBLY
5260654
5260655

NOTE: UNLESS OTHERWISE SPECIFIED.
1. REFER TO MODEL FOR ADDITIONAL INFORMATION
2. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING



REVISION				
REV	DESCRIPTION	DATE	EDITED BY	ECO#
F	REPLACED 5905138, 5905477, 5905478, AND 5906015 WITH COLORS & GRAPHICS NOTE, UPDATED BOM REVISION	09/30/2021	CA	01350
G	ADDED (1) 5530031, REMOVED 5715196, UPDATED BOM REVISION AND NEXT ASSEMBLIES	10/24/2023	CA	01517
H	UPDATED BOM REVISION	08/15/2024	CA	01517 POST-A



ISOMETRIC VIEW
FOR REFERENCE ONLY
DO NOT SCALE

ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	5601202	TALL POWER UNIT CONSOLE WELDMENT, R.H.	1
2	5601165	TALL POWER UNIT CONSOLE WELDMENT, L.H.	1
3	5215857	3-BUTTON 110/220V CONSOLE TOP	1
4	5737012	TALL POWER UNIT CONSOLE DOOR	1
5	5601166	TALL POWER UNIT CONSOLE DOOR WELDMENT, REAR	1
6	5520329	GROMMET GRO-1.25-UL CAPLUGS	2
7	5530031	HHB M6 x 1.0 x 12mm	16

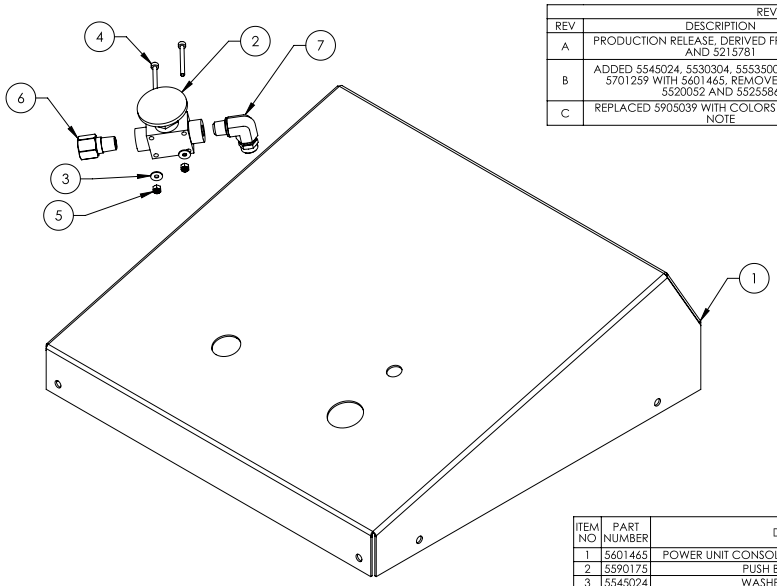
WHERE USED
XR-12AE
SP-7XE SERIES

NOTE: UNLESS OTHERWISE SPECIFIED.
1. REFER TO MODEL FOR ADDITIONAL INFORMATION
2. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING
3. SEE COLORS & GRAPHICS FOR LABEL PLACEMENT

NEXT ASSEMBLY
5260648
5260681
5260682

DO NOT SCALE DRAWING — NAME — DATE
DRAWN TM 05/01/2018
CHECKED
DIMENSIONS ARE IN MM — THIRD ANGLE PROJECTION — TITLE: TALL POWER UNIT CONSOLE ASSEMBLY
1645 LEMONWOOD DR. SANTA PAULA, CA 93060

SIZE A — DWG. NO. 5215781 — REV
SCALE: 1:12 — SHEET 1 OF 1



REVISION				
REV	DESCRIPTION	DATE	EDITED BY	ECO#
A	PRODUCTION RELEASE, DERIVED FROM 5215780 AND 5215781	06/24/2019	TM	01096
B	ADDED 5545024, 5530304, 55535001, REPLACED 5701259 WITH 5601465, REMOVED 5525102, 5520052 AND 5525586	03/31/2020	TM	01152
C	REPLACED 5905039 WITH COLORS & GRAPHICS NOTE	09/30/2021	CA	01350

ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	5601465	POWER UNIT CONSOLE COVER WELDMENT (3 BUTTON)	1
2	5590175	PUSH BUTTON AIR VALVE	1
3	5545024	WASHER, M3 x 9mm FLAT	2
4	5530043	SHCS M3 x 0.5 x 30	2
5	5535020	NUT M3 x 0.5, NL CL8	2
6	5550486	FTG NPL -02 NPT x -04 F NPT	1
7	5550087	FTG ELB -04 COMP x -02 NPT	1

WHERE USED
XR-12AE
SP-7XE SERIES
P9000LT SERIES
MDS-6 SERIES

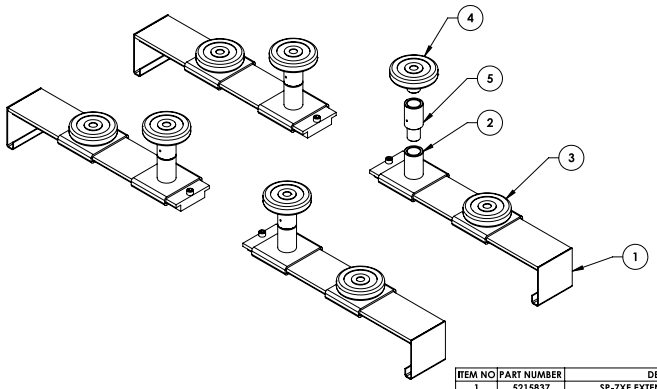
NOTE: UNLESS OTHERWISE SPECIFIED.
1. REFER TO MODEL FOR ADDITIONAL INFORMATION
2. ASSEMBLE ITEMS AS SHOWN
3. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING
4. SEE COLORS & GRAPHICS FOR LABEL PLACEMENT

NEXT ASSEMBLY
5215780
5215781

DO NOT SCALE DRAWING — NAME — DATE
DRAWN TM 06/24/2019
CHECKED OR 10/07/2021
DIMENSIONS ARE IN MM — THIRD ANGLE PROJECTION — TITLE: 3-BUTTON 110/220V CONSOLE TOP
1645 LEMONWOOD DR. SANTA PAULA, CA 93060

SIZE A — DWG. NO. 5215857 — REV
SCALE: 1:3 — SHEET 1 OF 1

REVISION				
REV	DESCRIPTION	DATE	EDITED BY	ECO#
A	PRODUCTION RELEASE, DERIVED FROM 5210045	04/05/2019	TM	01071
B	ADDED 5905454	08/01/2019	CA	01101
C	REPLACED 5905454 WITH COLORS & GRAPHICS NOTE	09/30/2021	CA	01350



ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	5215837	SP-7XE EXTENSION ARM ASSEMBLY	4
2	5600257	TALL LIFT PAD WELDMENT	4
3	5215523	SLIDING SHORT ROUND LIFT PAD ASSEMBLY	4
4	5215507	ROUND LIFT PAD ADAPTER ASSEMBLY	4
5	5746390	MEDIUM LIFT PAD EXTENSION Ø35 x 113mm	4

WHERE USED
SP-7XE SERIES

NOTE: UNLESS OTHERWISE SPECIFIED.
1. REFER TO MODEL FOR ADDITIONAL INFORMATION
2. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING
3. SEE COLORS & GRAPHICS FOR LABEL PLACEMENT

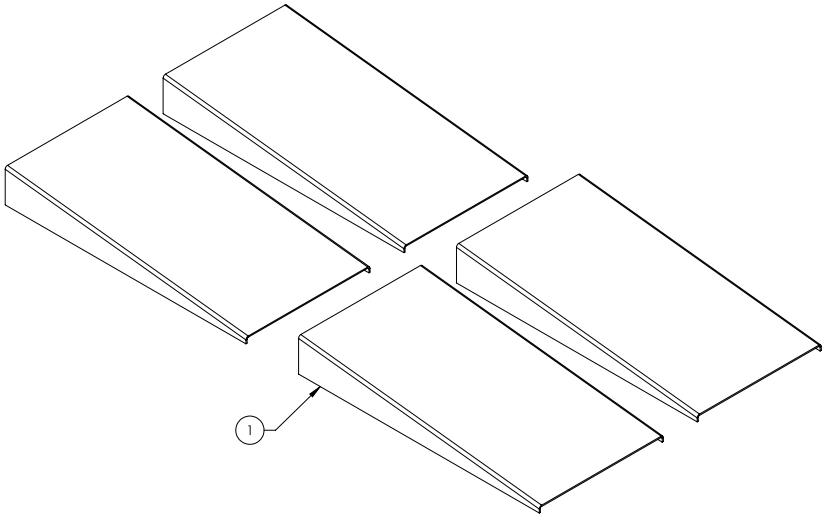
NEXT ASSEMBLY
ACCESSORY

DO NOT SCALE DRAWING | NAME | DATE
DRAWN | TM | 04/05/2019
CHECKED | OR | 10/01/2021
DIMENSIONS ARE IN MM
THIRD ANGLE PROJECTION
PROPRIETARY AND CONFIDENTIAL
THE INFORMATION CONTAINED IN THE DRAWING IS THE SOLE PROPERTY OF BENDPAK INC. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF BENDPAK INC. IS PROHIBITED.

BendPak
1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: SP-7XE ARM KIT
SIZE A | DWG. NO. 5210214 | REV
SCALE: 1:10 | SHEET 1 OF 1

REVISION				
REV	DESCRIPTION	DATE	EDITED BY	ECO#
A	PRODUCTION RELEASE, DERIVED FROM 5600263	12/21/2021	TM	01372



ITEM NO	PART NUMBER	DESCRIPTION	QTY
1	5601766	SP-7XE EXTENDED DRIVE UP RAMP WELDMENT	4

NOTE: UNLESS OTHERWISE SPECIFIED.
1. REFER TO MODEL FOR ADDITIONAL INFORMATION
2. SEE SHIPPING INSTRUCTIONS FOR FINAL PACKAGING

WHERE USED
SP-7XE
ACCESSORY

DO NOT SCALE DRAWING | NAME | DATE
DRAWN | CA | 01/10/2022
CHECKED
DIMENSIONS ARE IN MM
THIRD ANGLE PROJECTION
PROPRIETARY AND CONFIDENTIAL
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BendPak
1645 LEMONWOOD DR.
SANTA PAULA, CA 93060

TITLE: SP-7XE EXTENDED DRIVE UP RAMP KIT, SET OF 4
SIZE A | DWG. NO. 5210306 | REV
SCALE: 1:12 | SHEET 1 OF 1

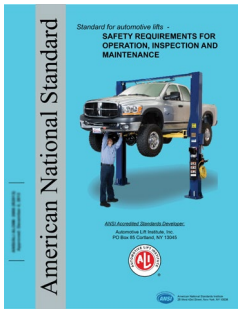
Automotive Lift Institute (ALI) Store

You probably checked the **ALI's Directory of Certified Lifts** (www.autolift.org/ali-directory-of-certified-lifts/) before making your most recent Lift purchase, but did you know the **ALI Store** (www.autolift.org/ali-store/) offers a wide variety of professional, easy-to-use, and reasonably priced training and safety materials that will make your garage a safer place to work?

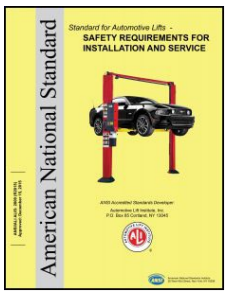
The ALI Store is your trusted source for workplace safety!

Lifting It Right Online Certificate Course. Make *sure* you and your people are lifting vehicles the right way.

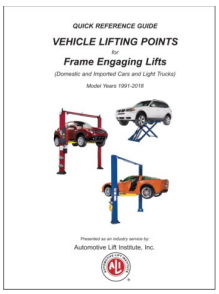
ALI Lift Inspector Certification Program Registration. Become a ALI Certified Lift Inspector.



ANSI/ALI ALOIM Standard for Automotive Lifts. Safety Requirements for Operation, Inspection, and Maintenance.

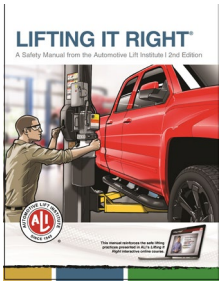


ANSI/ALI ALIS Standard. Safety Requirements for Installation and Service.

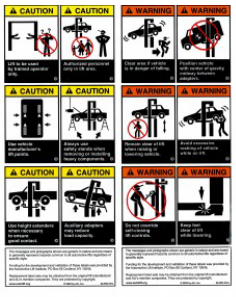


Guide to Hitting Vehicle Lifting Points for Frame-Engaging Lifts. Don't eyeball your lifting points, ***know*** where they are.

Lift Operator Safety Materials. Five safety documents in a single package.



Lifting It Right. A hardcopy version of the *Lifting It Right* safety manual from the Automotive Lift Institute.



Uniform Warning Labels and Placards for 2-Posts. Labels in Mandarin, French Canadian, and Spanish are also available.

Safety Tips Card. Reminds your people of 13 key safety tips to follow daily.

Visit today and receive the training and materials you need to work safely:
www.autolift.org/ali-store/.

Maintenance Log

Maintenance Log

Maintenance Log

30440 Agoura Road
Agoura Hills, CA 91301 USA
bendpak.com