



PLEASE READ THE ENTIRE CONTENTS OF THIS MANUAL PRIOR TO INSTALLATION AND OPERATION. BY PROCEEDING YOU AGREE THAT YOU FULLY UNDERSTAND AND COMPREHEND THE FULL CONTENTS OF THIS MANUAL. FORWARD THIS MANUAL TO ALL OPERATORS. FAILURE TO OPERATE THIS EQUIPMENT AS DIRECTED MAY CAUSE INJURY OR DEATH.

07-20-2016

Rev F P/N# 5900960

## INSTALLATION AND OPERATION MANUAL

**7,000 LB. / 3.175 KG. CAPACITY  
FULL-RISE SCISSORS LIFTS**

**MODEL:**

**SP-7X**      VERSION C

**SP-7XF**      VERSION C



### READ FIRST



Do not operate this machine until you read and understand all the dangers, warnings and cautions in this manual.

Keep this operation manual near the machine at all times. Make sure that ALL USERS read this manual.

#### SHIPPING DAMAGE CLAIMS

When this equipment is shipped, title passes to the purchaser upon receipt from the carrier. Consequently, claims for the material damaged in shipment must be made by the purchaser against the transportation company at the time shipment is received.

#### BE SAFE

Your new lift was designed and built with safety in mind. However, your overall safety can be increased by proper training and thoughtful operation on the part of the operator. DO NOT operate or repair this equipment without reading this manual and the important safety instructions shown inside.



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Santa Paula, CA. 93060, USA  
Toll Free 1-800-253-2363  
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# 7,000 POUND CAPACITY FULL RISE SCISSORS LIFT

This instruction manual has been prepared especially for you.  
Your new lift is the product of over 40 years of continuous research, testing and development;  
it is the most technically advanced lift on the market today.

## READ THIS ENTIRE MANUAL BEFORE INSTALLATION & OPERATION BEGINS

RECORD HERE THE LIFT AND POWER UNIT  
INFORMATION WHICH IS LOCATED ON THE  
SERIAL NUMBER DATA PLATES ON THE LIFT  
AND ON THE POWER UNIT

Power Unit Model # \_\_\_\_\_  
Power Unit Date Of Mfg. \_\_\_\_\_  
Power Unit Serial # \_\_\_\_\_  
Max Operating Pressure \_\_\_\_\_

<b>BP BendPak</b> Santa Paula, CA USA www.bendpak.com	
MODEL NUMBER	
SERIAL NUMBER	
LIFT CAPACITY	DESCRIPTION
DATE OF MFG.	
<b>DANGER!</b> Disconnect Power Before Servicing	
WARRANTY VOID IF DATA PLATE IS REMOVED PN 5905150	
CE EAC	

**This information is required when  
calling for parts or warranty issues.**

## PRODUCT WARRANTY

Our comprehensive product warranty means more than a commitment to you; it's also a commitment to the value of your new BendPak lift. For full warranty details and to register your new lift contact your nearest BendPak dealer or visit:

<http://www.bendpak.com/support/warranty/>

### NOTE:

Every effort has been taken to ensure complete and accurate instructions have been included in this manual, however, possible product updates, revisions and or changes may have occurred since this printing. BendPak Ranger reserves the right to change specifications without incurring any obligation for equipment previously or subsequently sold. Not responsible for typographical errors.

## IMPORTANT NOTES

Do not attempt to install this lift if you have never been trained on basic automotive lift installation procedures. Never attempt to lift components without proper lifting tools such as forklift or cranes. Stay clear of any moving parts that can fall and cause injury. These instructions must be followed to insure proper installation and operation of your lift. Failure to comply with these instructions can result in serious bodily harm and void product warranty. Manufacturer will assume no liability for loss or damage of any kind, expressed or implied resulting from improper installation or use of this product.

### PLEASE READ ENTIRE MANUAL PRIOR TO INSTALLATION.

### DEFINITIONS OF HAZARD LEVELS

Identify the hazard levels used in this manual with the following definitions and signal words:



Watch for this symbol: It Means: Immediate hazards which will result in severe personal injury or death.



Watch for this symbol: It Means: Hazards or unsafe practices which could result in severe personal injury or death.



Watch for this symbol: It Means: Hazards or unsafe practices which may result in minor personal injury, product or property damage.

## OWNER'S RESPONSIBILITY

To maintain the lift and user safety, the responsibility of the owner is to read and follow these instructions:

- ◆ Follow all installation and operation instructions.
- ◆ Make sure installation conforms to all applicable Local, State, and Federal Codes, Rules, and Regulations; such as State and Federal OSHA Regulations and Electrical Codes.
- ◆ Carefully check the lift for correct initial function.
- ◆ Read and follow the safety instructions. Keep them readily available for machine operators.
- ◆ Make certain all operators are properly trained, know how to safely and correctly operate the unit, and are properly supervised.
- ◆ Allow unit operation only with all parts in place and operating safely.
- ◆ Carefully inspect the unit on a regular basis and perform all maintenance as required.
- ◆ Service and maintain the unit only with authorized or approved replacement parts.
- ◆ Keep all instructions permanently with the unit and all decals on the unit clean and visible.

### BEFORE YOU BEGIN

#### Receiving:

The shipment should be thoroughly inspected as soon as it is received. The signed bill of lading is acknowledgement by the carrier of receipt in good condition of shipment covered by your invoice. If any of the goods called for on this bill of lading are shorted or damaged, do not accept them until the carrier makes a notation on the freight bill of the shorted or damaged goods. Do this for your own protection.

**NOTIFY THE CARRIER AT ONCE** if any hidden loss or damage is discovered after receipt and request the carrier to make an inspection. If the carrier will not do so, 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 CLEAR RECEIPT.** File your claim with the carrier promptly. Support your claim with copies of the bill of lading, freight bill, invoice, and photographs, if available. Our willingness to assist in helping you process your claim does not make BendPak responsible for collection of claims or replacement of lost or damaged materials.

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**INSTALLER / OPERATOR  
PLEASE READ AND FULLY  
UNDERSTAND.  
BY PROCEEDING YOU AGREE TO  
THE FOLLOWING.**



Failure to follow danger, warning, and caution instructions may lead to serious personal injury or death to operator or bystander or damage to property.



Please read entire manual prior to installation. Do not operate this machine until you read and understand all the dangers, warnings and cautions in this manual.

For additional copies or further information, contact:

**BendPak Inc. / Ranger Products**

1645 Lemonwood Dr.

Santa Paula, CA. 93060

1-805-933-9970

[www.bendpak.com](http://www.bendpak.com)

**INSTALLER / OPERATOR  
PROTECTIVE EQUIPMENT**

Remember, personal protective equipment helps makes installation and operation safer, however, it does not take the place of safe operating practices. Always wear durable work clothing during any installation and/or service activity. Shop aprons or shop coats may also be worn, however loose fitting clothing should be avoided. Tight fitting leather gloves are recommended to protect technician hands when handling parts. Sturdy leather work shoes with steel toes and oil resistant soles should be used by all service personnel to help prevent injury during typical installation and operation activities.

Eye protection is essential during installation and operation activities. Safety glasses with side shields, goggles, or face shields are acceptable. Everyday eyeglasses only have impact resistant lenses, they are not safety glasses. Back belts provide support during lifting activities and are also helpful in providing worker protection. Consideration should also be given to the use of hearing protection if service activity is performed in an enclosed area, or if noise levels are high.



**THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH IF NOT FOLLOWED  
COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OR YOURSELF AND OTHERS  
AND CAN CAUSE PERSONAL INJURY OR DEATH. READ AND FOLLOW ALL INSTRUCTIONS IN  
THIS MANUAL BEFORE ATTEMPTING TO OPERATE THIS MACHINE.**

## INTRODUCTION

1. Carefully remove the crating and packing materials. **CAUTION!** Be careful when cutting steel banding material as items may become loose and fall causing personal harm or injury.

2. Check the voltage, phase and proper amperage requirements for the motor shown on the motor plate. Wiring should be performed by a certified electrician only.

### IMPORTANT SAFETY INSTRUCTIONS READ THESE SAFETY INSTRUCTIONS ENTIRELY

#### IMPORTANT NOTICE

Do not attempt to install this lift if you have never been trained on basic automotive lift installation procedures.

Never attempt to lift components without proper lifting tools such as forklift or cranes.

Stay clear of any moving parts that can fall and cause injury.

1. **READ AND UNDERSTAND** all safety warning procedures before operating lift.

2. **KEEP HANDS AND FEET CLEAR.** Remove hands and feet from any moving parts. Keep feet clear of lift when lowering. Avoid pinch points.

3. **KEEP WORK AREA CLEAN.** Cluttered work areas invite injuries.

4. Consider work area environment. Do not expose equipment to rain. **DO NOT** use in damp or wet locations. Keep area well lighted.

5. **ONLY TRAINED OPERATORS** should operate this lift. All non-trained personnel should be kept away from work area. Never let non-trained personnel come in contact with, or operate lift.

6. **USE LIFT CORRECTLY.** Use lift in the proper manner. Never use lifting adapters other than what is approved by the manufacturer.

7. **DO NOT** override self-closing lift controls.

8. **REMAIN CLEAR** of lift when raising or lowering vehicle.

9. **CLEAR AREA** if vehicle is in danger of falling.

10. **ALWAYS ENSURE** that the safeties are engaged before any attempt is made to work on or near vehicle.

11. **DRESS PROPERLY.** Non-skid steel-toe footwear is recommended when operating lift.

12. **GUARD AGAINST ELECTRIC SHOCK.** This lift must be grounded while in use to protect the operator from electric shock. Never connect the green power cord wire to a live terminal. This is for ground only.



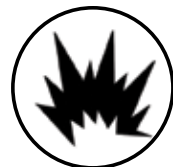
13. **DANGER!** The power unit used on this lift contains

high voltage. Disconnect power at the receptacle before performing any electrical repairs. Secure plug so that it cannot be accidentally plugged in during service.



14. **WARNING! RISK OF EXPLOSION.**

This equipment has internal arcing or sparking parts which should not be exposed to flammable vapors. This machine should not be located in a recessed area or below floor level.



15. **MAINTAIN WITH CARE.** Keep lift clean for better and safer performance. Follow manual for proper lubrication and maintenance instructions. Keep control handles and/or buttons dry, clean and free from grease and oil.



16. **STAY ALERT.** Watch what you are doing. Use common sense. Be aware.

17. **CHECK FOR DAMAGED PARTS.** Check for alignment of moving parts, breakage of parts or any condition that may affect its operation. Do not use lift if any component is broken or damaged.

18. **NEVER** remove safety related components from the lift. Do not use lift if safety related components are damaged or missing.

19. Keep hair, loose clothing, fingers, and all parts of body away from moving parts

20. Use only as described in this manual. Use only manufacturer's recommended attachments

21. **ALWAYS WEAR SAFETY GLASSES.** Everyday eyeglasses only have impact resistant lenses, they are not safety glasses

22. **SAVE THESE INSTRUCTIONS.**

## TOOLS REQUIRED

- ◆ Rotary Hammer Drill or Similar
- ◆ 3/4" Masonry Bit
- ◆ Hammer
- ◆ 4 Foot Level
- ◆ Open-End Wrench Set: SAE/Metric
- ◆ Socket And Ratchet Set: SAE/Metric
- ◆ Hex-Key / Allen Wrench Set
- ◆ Medium Crescent Wrench
- ◆ Medium Pipe Wrench
- ◆ Crow Bar
- ◆ Chalk Line
- ◆ Medium Flat Screwdriver
- ◆ Tape Measure: 25 Foot Minimum
- ◆ Needle Nose Pliers

### NOTE:

An air supply (30 PSI / 3 CFM Min.) will be required for operation of the safety-lock mechanisms.

### IMPORTANT NOTES:

These instructions must be followed to insure proper installation and operation of your lift. Failure to comply with these instructions can result in serious bodily harm and void product warranty. Manufacturer will assume no liability for loss or damage of any kind, expressed or implied resulting from improper installation or use of this product.

### PLEASE READ ENTIRE MANUAL PRIOR TO INSTALLATION

## STEP 1

(Selecting Site)

Before installing your new lift, check the following

1. **LIFT LOCATION:** Always use architects plans when available. Check layout dimension against floor plan requirements making sure that adequate space is available.
2. **OVERHEAD OBSTRUCTIONS:** The area where the lift will be located should be free of overhead obstructions such as heaters, building supports, electrical lines etc.
3. **DEFECTIVE FLOOR:** Visually inspect the site where the lift is to be installed and check for cracked or defective concrete.



4. **OPERATING TEMPERATURE.** Operate lift only between temperatures of 41° -104° F.
5. Lift is designed for **INDOOR INSTALLATION ONLY.** Outdoor use permitted only if covered and dry. Always follow warnings illustrated on equipment labels.

## STEP 2

(Floor Requirements)



This lift must be installed on a solid level concrete floor with no more than 3-degrees of slope. Failure to do so could cause personal injury or death.

A level floor is suggested for proper use and installation and level lifting. If a floor is of questionable slope, consider a survey of the site and/or the possibility of pouring a new level concrete slab.



- ◆ **DO NOT** install or use this lift on any asphalt surface or any surface other than concrete.
- ◆ **DO NOT** install or use this lift on expansion seams or on cracked or defective concrete.
- ◆ **DO NOT** install or use this lift on a second / elevated floor without first consulting building architect.

CONCRETE SPECIFICATIONS	
LIFT MODEL	CONCRETE REQUIREMENTS
SP-7X SP-7XF	4" Min. Thickness / 3,000 PSI See Page 9.



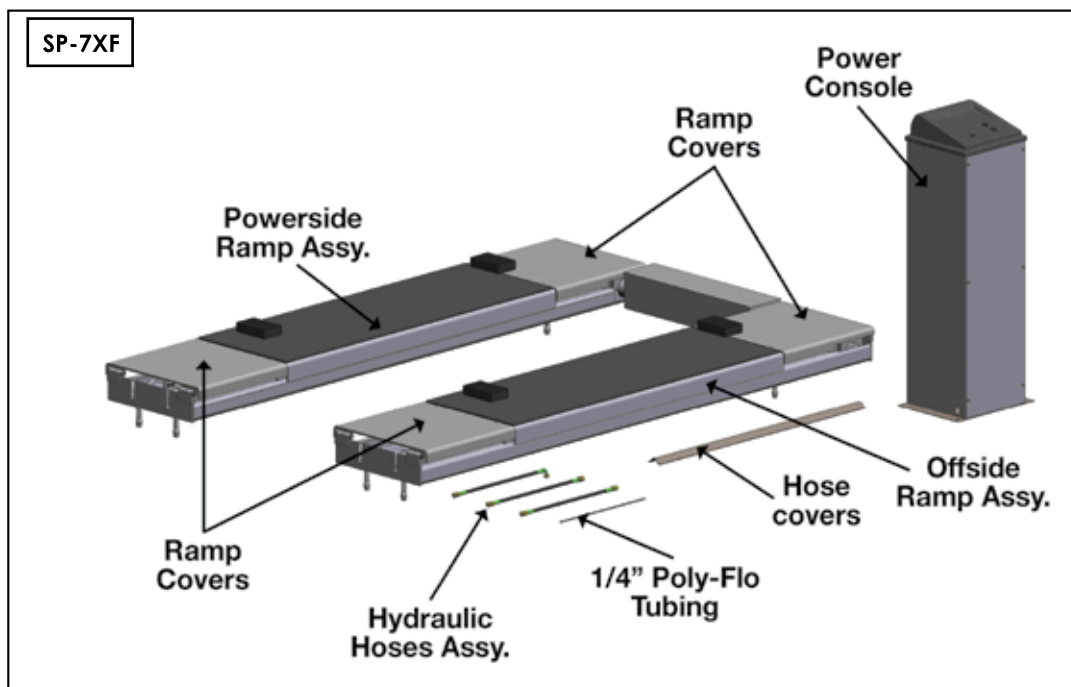
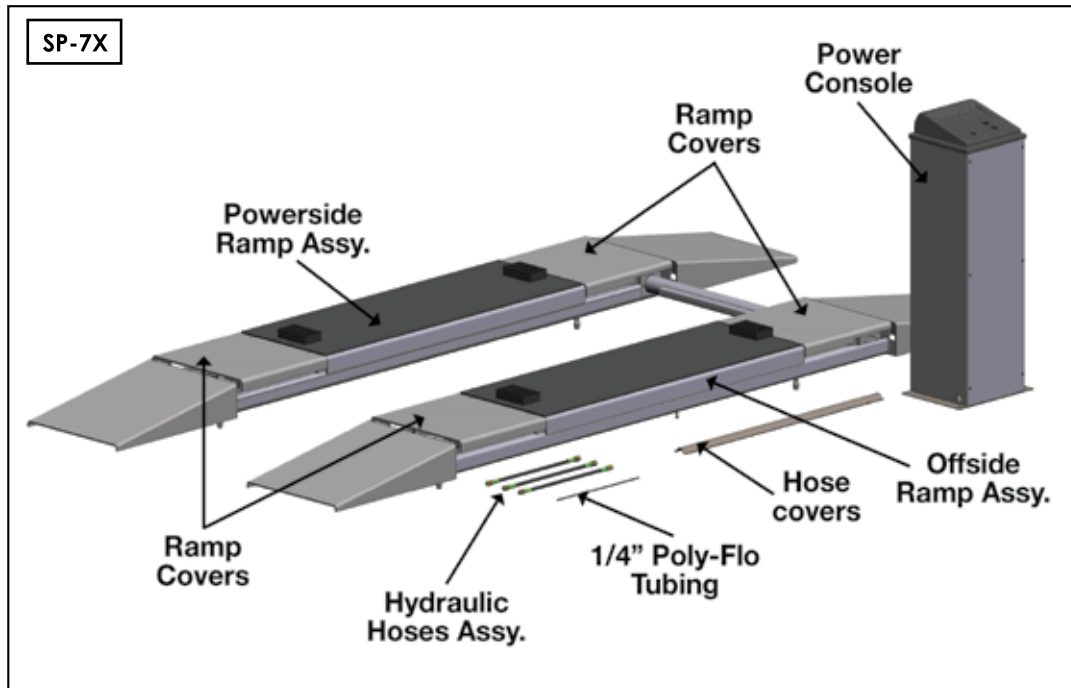
All models **MUST** be installed on 3000 PSI concrete only conforming to the minimum requirements shown above. New concrete must be adequately cured by at least 28 days minimum.



When removing the lift from shipping angles or pallets pay close attention as the lift can slide and can cause injury. Prior to removing the lift make sure the lift is held securely by a fork lift or some other heavy lifting device.

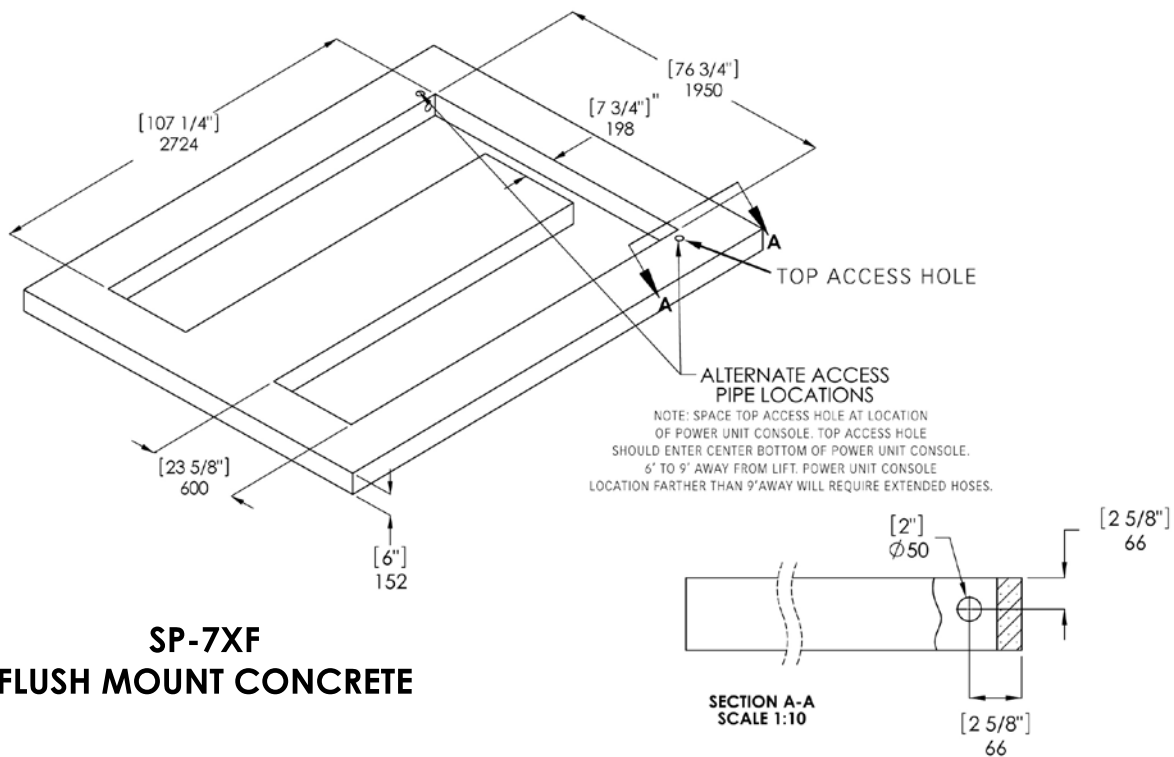
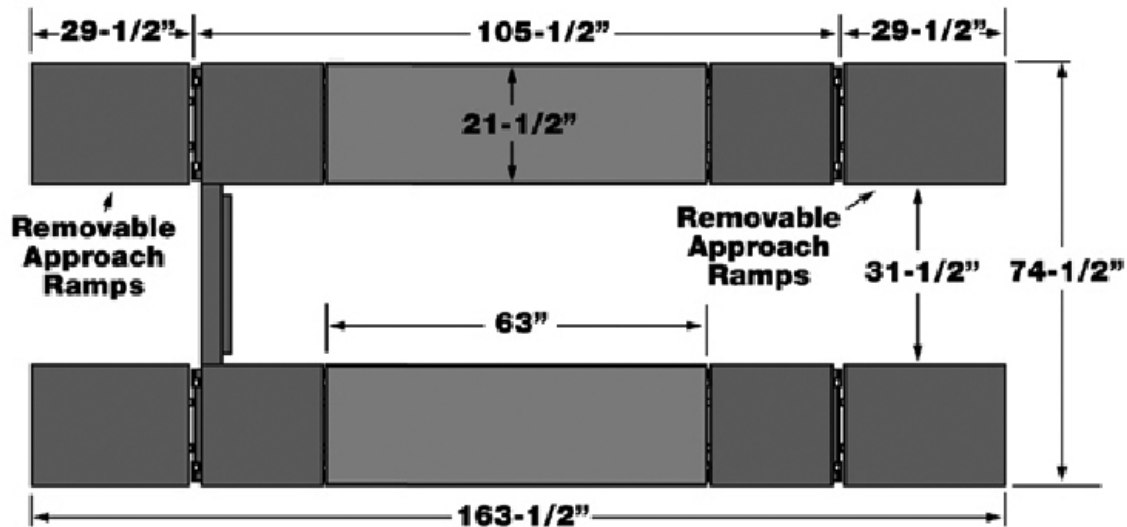
## PARTS INVENTORY

Be sure to take a complete inventory of parts prior to beginning installation.





## FLOOR PLAN / LAYOUT DIMENSIONS



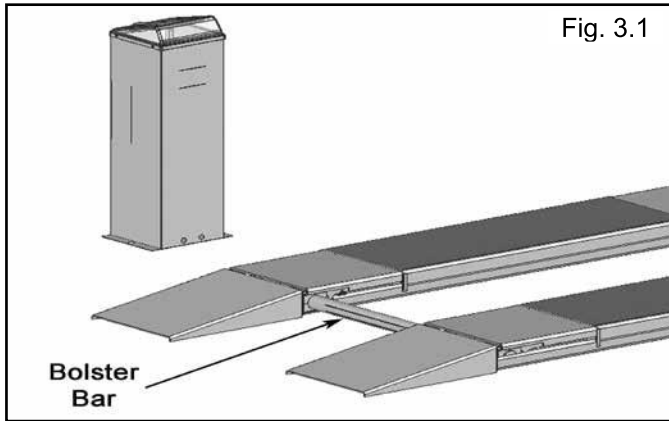
### SP-7XF FLUSH MOUNT CONCRETE

MODEL	SP-7X (Rev. C)	SP-7XF (Rev C.)
Lifting Capacity	7,000 lbs / 3,175 Kg.	7,000 lbs / 3,175 Kg.
Lifting Height	68" / 1727 mm.	68" / 1727 mm.
Overall Length	163-1/2" / 4153 mm.	163-1/2" / 4153 mm.
Overall Width	74-1/2" / 1892 mm.	74-1/2" / 1892 mm.
Lift Platform	21-1/2" x 63" / 47mm. x 1600mm.	21-1/2" x 63" / 47mm. x 1600mm.
Lowered Height	5" / 127mm.	5" / 127mm.
Lifting Time	45 seconds	45 Seconds
Motor (*)	208-240 VAC / 50-60 Hz. 1Ph.	208-240 VAC / 50-60 Hz. 1Ph.
* Special Voltages Available upon Request.		
The design, material and specifications are subject to change without notice.		

## STEP THREE

### (Anchoring The Lift Frames)

1. The lift can be installed with the BOLSTER BAR ( the round bar connecting the frames together ) located either at the front or rear. Typical installations place the Bolster Bar at the rear to allow for unobstructed work space underneath the engine compartment and to allow for rolling oil drains or other shop equipment. (See Fig. 3.1)

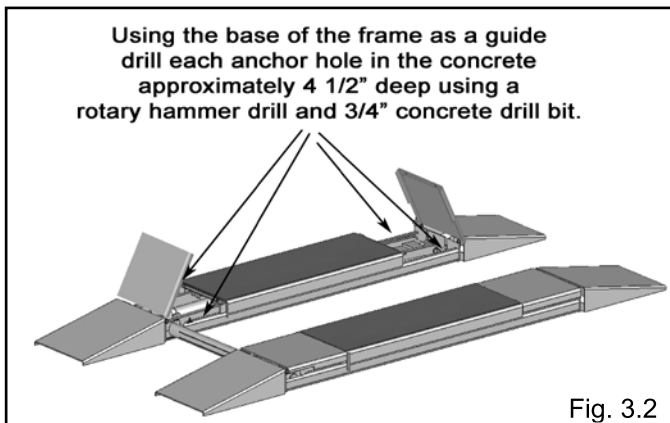


2. Before proceeding, make certain the lift is positioned with clearances around and overhead. THE POWER UNIT CAN BE PLACED ON EITHER SIDE.

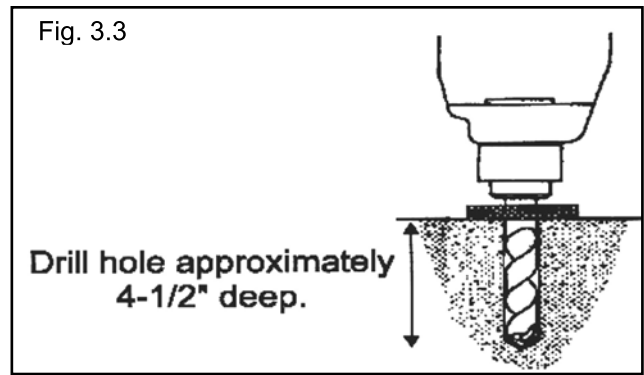
### IMPORTANT NOTE

A level floor is suggested for proper installation. Small differences in floor slope may be compensated for by proper shimming. Any major slope changes will affect the units level lifting performance. If a floor is of questionable slope, ( more than 1" side to side or 2" within the full length of the lift ) consider pouring a new concrete slab.

3. Lift the ramp covers at the ends of each lift unit. This will give you access to the eight anchor bolt locations. (See Fig. 3.2)

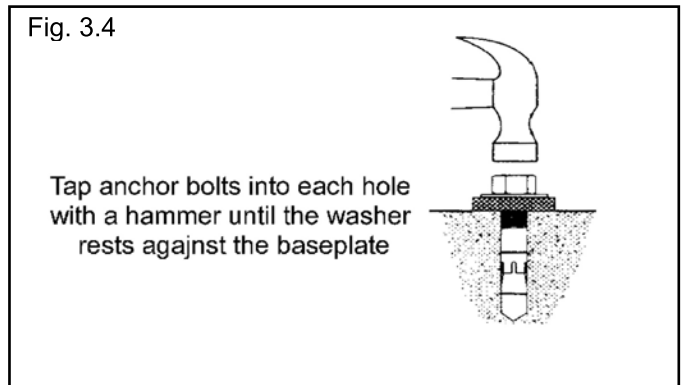


4. Using the Base of the frame as a guide, drill each anchor hole in the concrete approximately 4-1/2" deep using a rotary hammer drill and 3/4" concrete drill-bit. Do not ream the hole or allow the drill to wobble. (See Fig. 3.3)

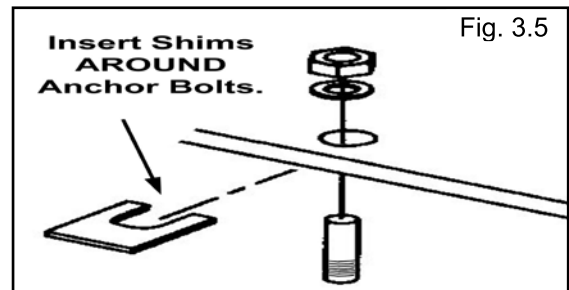


5. After drilling the anchor holes, remove the dust thoroughly from each hole using compressed air and/or wire brush. ALWAYS WEAR SAFETY GOGGLES.

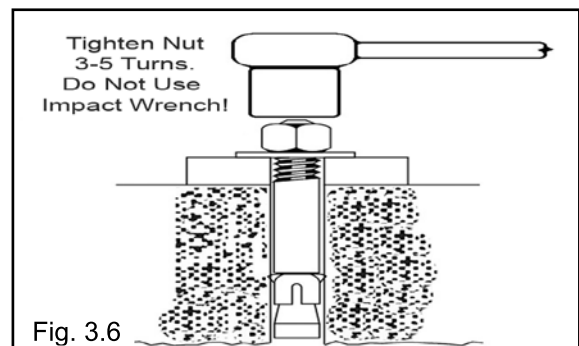
6. Assemble the washers and nuts on the anchors then tap into each hole with a hammer until the washer rests against the Base. Be sure that if shimming is required, enough threads are left exposed. (See Fig. 3.4)



7. If shimming is required, insert the shims as necessary around each anchor bolts. (See Fig. 3.5)



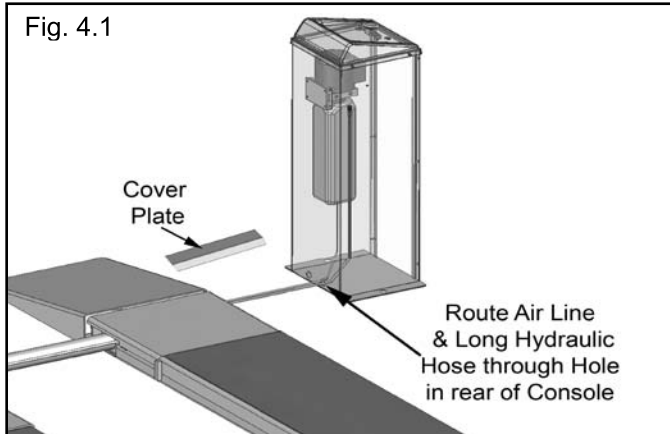
8. With the shims and anchor bolts in place, tighten to approximately 40 ft.-lbs. **DO NOT** use an impact wrench for this procedure. (See Fig. 3.6)



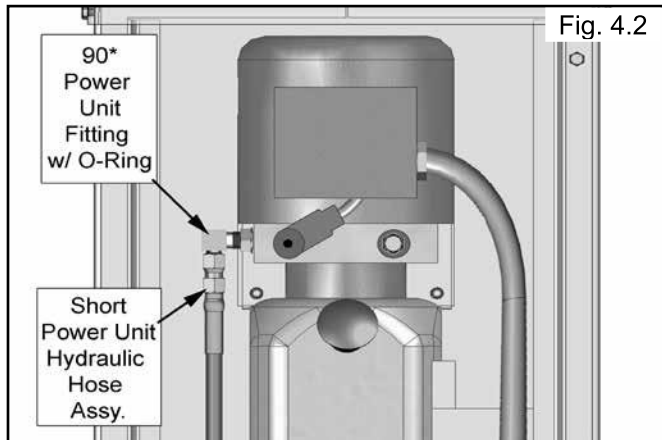
## STEP FOUR

(Power Console / Hose Routing)

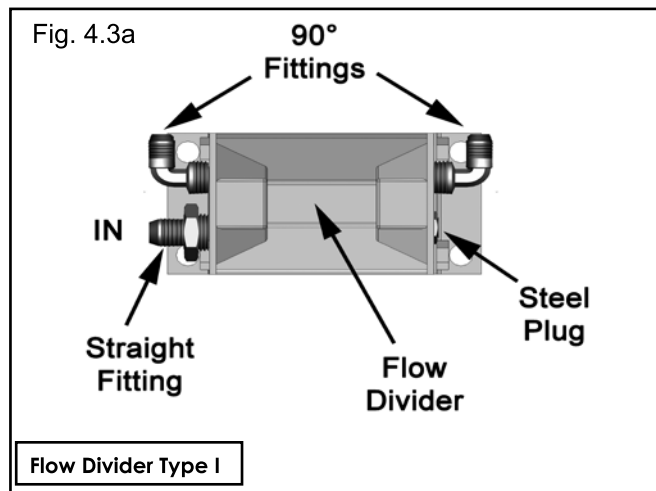
1. Remove the front Panel cover on the Power Console.
2. Route the Hydraulic Hoses and the Air Line through the holes at the back of the Power Console. (See Fig. 4.1)



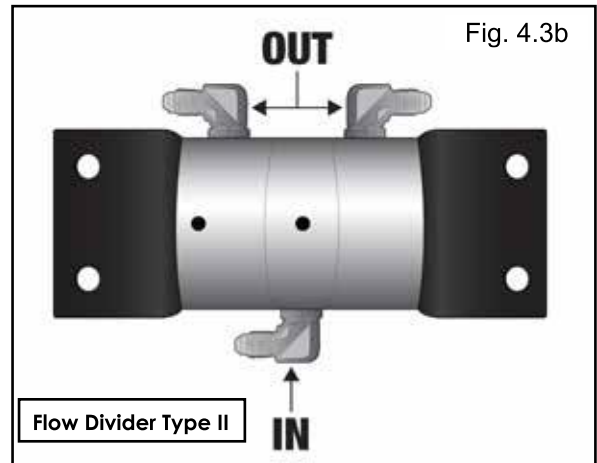
3. Connect the Power Unit (shortest) Hydraulic Hose to the Power Unit Fitting as shown below. It is not necessary to use Teflon tape on JIC fittings. DO NOT OVERTIGHTEN. (See Fig. 4.2)



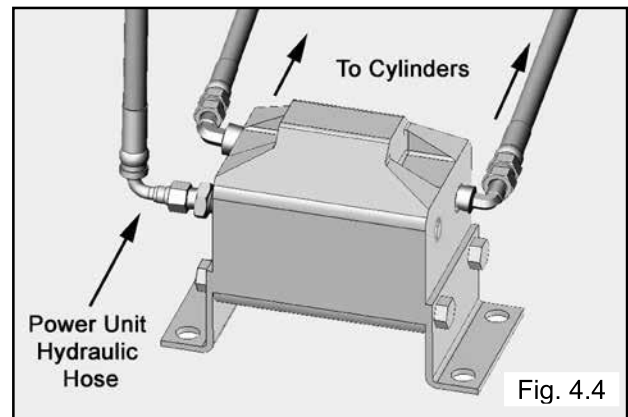
- 4a. Install the two 90° Fittings and one Straight Fitting in the Flow Divider Type I, configured as shown. (See Fig. 4.3a).



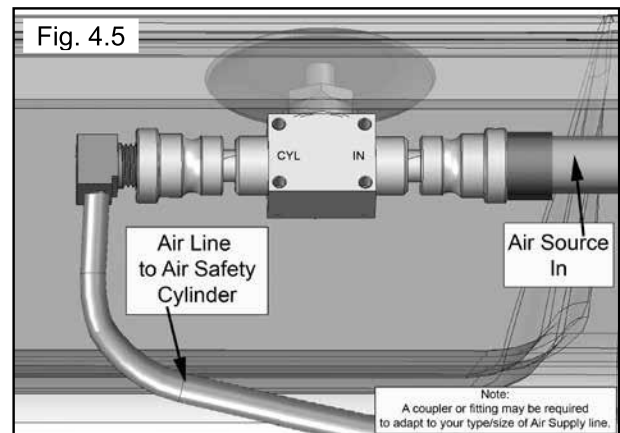
- 4b. Install the two 90° out Fittings and one 90° in Fitting in the Flow Divider Type II configured as shown. (See Fig. 4.3b).



5. Install the Flow divider in the bottom of the Power Console.
6. Connect the Power Unit Hose to the Straight Fitting on the Flow Divider and connect both the Powerside and Offside Hydraulic Hoses to the 90° Fittings on the Flow divider as shown. (See Fig. 4.4)



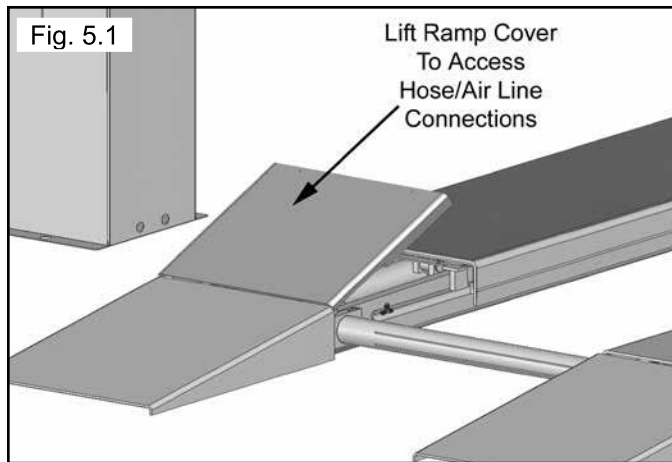
7. Route the 1/4" Poly-Flow Air Tubing through the hole at the back of the Power Console and connect to the Push Button Air Safety Switch as shown below. (See Fig. 4.5)



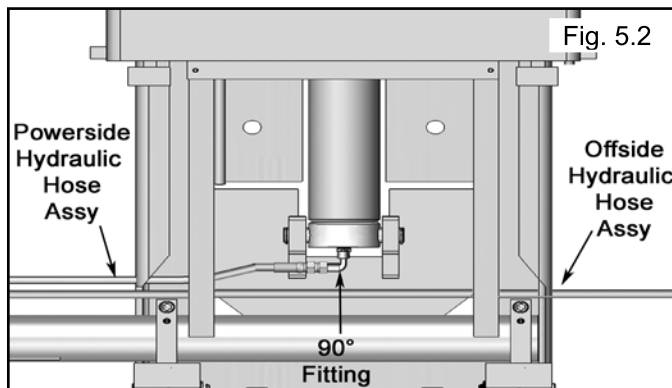
## STEP FIVE

(Hose Connections)

1. Raise the Rear Ramp Covers on the lift to access the Hydraulic Hose/Cylinder connection location. (See Fig. 5.1)

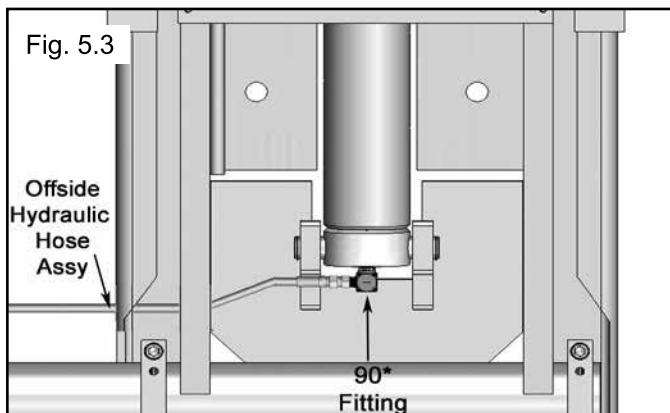


2. Route the two Hydraulic Hoses through the hole at the Powerside of the Lift Frame and connect the Powerside (medium) Hose to the 90° Fitting of the Powerside Cylinder. (See Fig. 5.2). **DO NOT use Teflon tape or other sealant on JIC fittings. DO NOT OVER-TIGHTEN.**



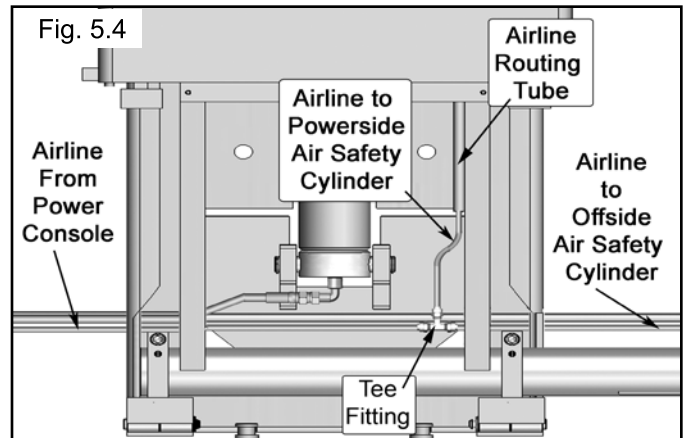
3. Route the Offside Hydraulic (Long) Hose to the Offside Cylinder and connect it to the 90° Fitting (See Fig. 5.3)

**DO NOT use Teflon tape or other sealant on JIC fittings. DO NOT OVER-TIGHTEN.**

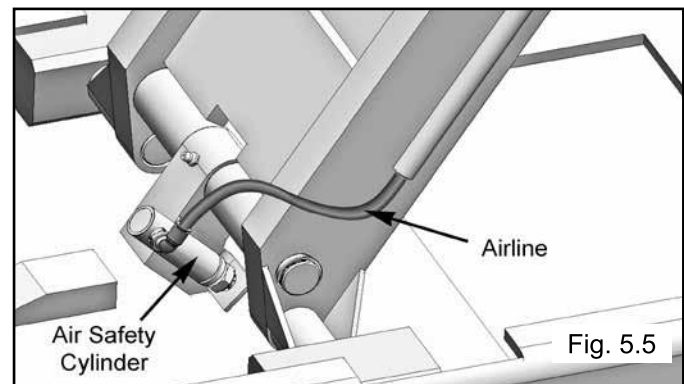


4. Route the 1/4" Poly-Flow Air Tubing through the hole at

the Powerside of the Lift Frame connect it to the Tee Fitting. (See Fig. 5.4)



5. Connect Air line to each Air Safety Cylinder. (Fig. 5.5)



## STEP SIX

(Power Unit Hook Up)

**! WARNING**

**ALL WIRING MUST BE PERFORMED BY A LICENSED ELECTRICIAN.**

**! DANGER**

**DO NOT PERFORM ANY MAINTENANCE OR INSTALLATION OF ANY COMPONENTS WITHOUT FIRST ENSURING THAT ELECTRICAL POWER HAS BEEN DISCONNECTED AT THE SOURCE OR PANEL AND CANNOT BE RE-ENERGIZED UNTIL ALL MAINTENANCE AND/OR INSTALLATION PROCEDURES ARE COMPLETED.**

1. Have a certified electrician run 208 - 230 volt single phase 60 HZ power supply to motor. ( If you ordered optional three phase power or 50HZ, refer to the data plate found on the motor for proper power supply. ) Be sure to size wire for a 25 amp circuit.



**DO NOT** run power unit with no oil. Damage to pump can occur. The power unit must be kept dry. Damage to power unit caused by water or other liquids such as detergents, acid etc., is not covered under warranty. Operate lift only between temperatures of 41 °- 104° F.

Improper electrical hook-up can damage motor and will not be covered under warranty. Motor can not run on 50HZ without a physical change in motor. Use a separate breaker for each power unit.

Protect each circuit with time delay fuse or circuit breaker.

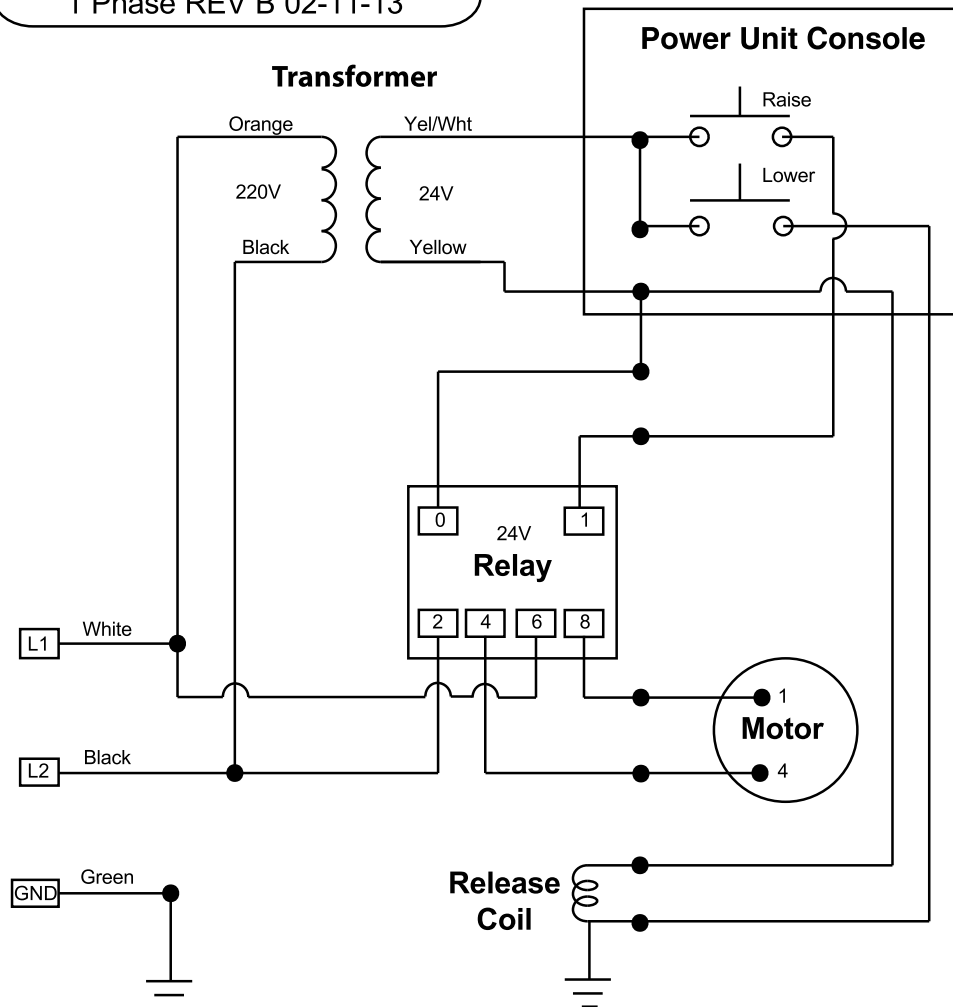
For 208-230 volt, single phase, use a 25 amp fuse.

For 208-230 volt, three phase, use a 20 amp fuse.

For 380-440 volt, three phase, use a 15 amp fuse.

**IMPORTANT NOTE:**  
DO NOT USE 110 VOLT POWER SUPPLY for this power unit. Damage to motor will occur which is not covered under warranty. You must use a separate circuit breaker for each lift.

SP-7X & SP-7XF Wiring Diagram  
(MTE Power Unit) 220V  
1 Phase REV B 02-11-13



## STEP SEVEN

(Lift Start Up)



During the START-UP procedure, observe all operating components and check for proper installation and adjustment. DO NOT attempt to raise vehicle until a thorough operational check has been completed.

1. Make sure the Power Unit reservoir is full with 15 quarts of AW-32 Hydraulic Oil.
2. Lubricate all friction points on the lift with a 90-WT Gear Oil.
3. Test the power unit by depressing the push-button switch. If the motor sounds like it is operating properly, raise lift and check all hose connections for leaks.  
IF MOTOR GETS HOT OR SOUNDS PECULIAR, STOP IMMEDIATELY AND RE-CHECK ELECTRICAL CONNECTIONS.
4. Once the lift starts to raise, simultaneously press the Power Unit lowering button at the same time you are pressing the raise button. This will allow any air trapped in the Cylinder and lines to escape and vent into the fluid reservoir.
5. Continue raising the lift slowly until THE CYLINDER BOTTOMS OUT AND THE LIFT STOPS.
6. Press the Air Safety Release Valve on the console and lower the lift to the ground
7. Repeat this process at least three times to equalize the oil pressure in each Cylinder.



## POST-INSTALLATION CHECK-OFF

- Columns Properly Shimmed And Stable
- Anchor Bolts Tightened
- Pivot / Sheave Pins Properly Attached
- Carriage Stop bolts Torqued to 20 Ft. Lbs
- Electric Power Supply Confirmed
- Cables Adjusted Properly
- Safety Locks Functioning Properly
- Check For Hydraulic Leaks
- Oil Level
- Lubrication of Critical Components
- Check For Overhead Obstructions
- Lift Arms Level
- All Screws, Bolts, and Pins Secured
- Surrounding Area Clean
- Operation, Maintenance and Safety Manuals on Site.
- Perform an Operational Test With a Typical Vehicle



- ◆ **NEVER EXCEED THE RATED CAPACITY** of lift.
- ◆ **DO NOT USE LIFT** if any component is found to be defective or worn.
- ◆ **NEVER OPERATE LIFT** with any person or equipment below.
- ◆ **ALWAYS STAND CLEAR** of lift when lowering or raising.
- ◆ **ALWAYS INSURE SAFETY LOCKS ARE ENGAGED** before entering work area.
- ◆ **NEVER LEAVE LIFT IN ELEVATED CONDITION** unless all safety locks are engaged.

## STEP 8

(Operation)

### To Raise Lift:

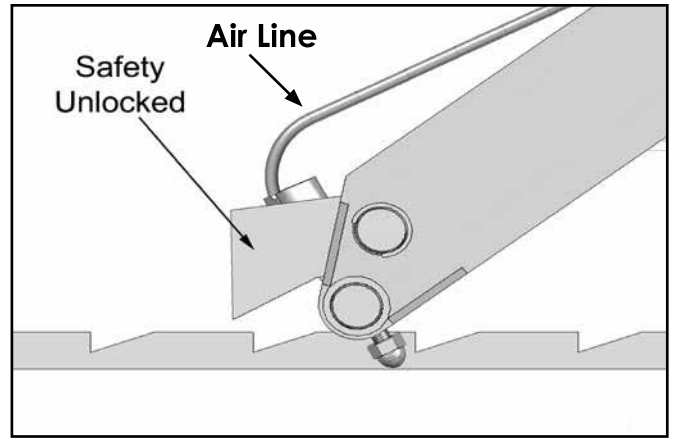
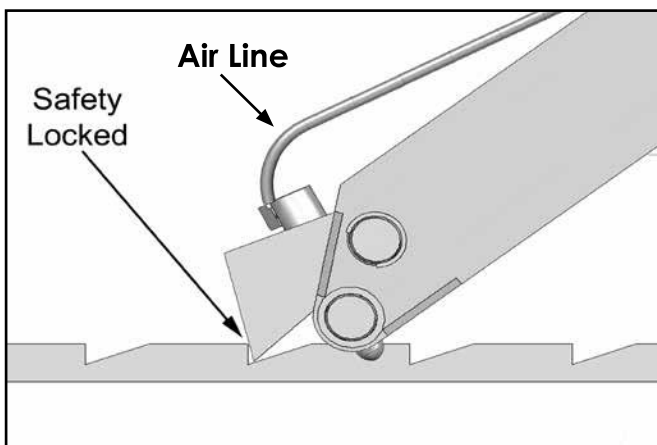
1. Load vehicle onto the lift using Vehicle Lifting Guide to determine proper lifting points.
2. **NEVER** use lift pad assemblies without rubber slip over pads in place.
3. Set parking brake or use wheel chock to hold vehicle in position.
4. Before raising vehicle, be sure all personnel are clear of the lift and surrounding area. Pay careful attention to overhead clearances.
5. Raise the lift to the desired height by pressing the push button on the power unit.



### VISUALLY CONFIRM THAT ALL PRIMARY SAFETY LOCKS ARE ENGAGED BEFORE ENTERING WORK AREA.

Suspension components on this lift are intended to raise and lower lift only and are not meant to be load holding devices. Remain clear of elevated lift unless visual confirmation is made that all primary safety locks are fully engaged and the lift is LOWERED onto the safety locks. Refer to installation /operation manual for proper safety lock procedures and /or further instruction.

6. After vehicle is raised to the desired height, **lower the lift onto the nearest safety lock.** **ALWAYS INSURE ALL SAFETY LOCKS ARE ENGAGED** before entering work area.



### To Lower Lift:

1. Before lowering vehicle, be sure all personnel are clear of the lift and surrounding area. Pay careful attention to overhead clearances. Insure all tools and equipment have been cleared from under the lift.
2. Raise the lift off of the safety locks by pressing the push button on the power unit. Make sure you raise the lift by at least two inches to allow adequate clearance for the locks to clear.
3. Press the push button air safety valve and HOLD.
4. Push the LOWERING HANDLE on the power unit until the lift has descended completely.

When lowering the lift PAY CAREFUL ATTENTION that all personnel and objects are kept clear. ALWAYS keep a visual line of site on the lift AT ALL TIMES. ALWAYS make sure that ALL LOCKS are disengaged. If one of the locks inadvertently locks on descent the lift and/or vehicle may disrupt causing personal injury or death,

## WEEKLY MAINTENANCE

1. Lubricate all rollers with general purpose oil or WE-40.
2. Check all hose connections, bolts and pins to insure proper mounting.
3. Lubricate safety lock pivot points with general purpose oil or WE-40.

## MONTHLY MAINTENANCE

1. Check safety locks to insure they are in good operating condition.
2. Check all hoses for excessive signs of wear.
3. Make a visual inspection of ALL MOVING PARTS and check for excessive signs of wear.
4. Replace ALL FAULTY PARTS before lift is put back into operation.

## TO RAISE LIFT

- ◆ Read operating and Safety manuals before using lift.
- ◆ Always lift a vehicle according to the manufactures recommended lifting points.
- ◆ Position vehicle properly.
- ◆ Insure that the vehicle is positioned with the center of gravity midway between pads.
- ◆ **NEVER** use runway assemblies without rubber pads in place.
- ◆ Raise the vehicle by depressing button until the vehicle just lifts off the ground.
- ◆ Recheck to make sure the vehicle is secure and stable.
- ◆ Raise vehicle to desired height. Lower vehicle onto nearest safety,
- ◆ Always ensure safeties are engaged before any attempt is made to work on or near vehicle.

## TO LOWER THE LIFT

- ◆ First raise the lift clear to the safeties.
- ◆ Release safeties by pressing on the air safety button.
- ◆ Be sure tool trays, stands or personnel are cleared from under the vehicle.
- ◆ Lower vehicle by activating lowering handle on power unit.
- ◆ Before removing vehicle from lift; position lift arms and supports to provide an unobstructed exit.

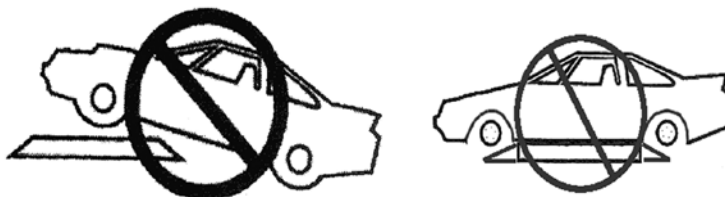
## REQUIRED MONTHLY MAINTENANCE

- ◆ Check all lift components adjusting locks for proper operation.
- ◆ Check all connections, bolts and pins to insure proper mounting and torque.
- ◆ Visually inspect safeties for proper operation.
- ◆ Lubricate slide block paths with grease.
- ◆ Inspect all anchors bolts and retighten if necessary.
- ◆ Check lift frame for squareness and plumb.



1. If cement anchor bolts are loose or any component of the lift is found to be defective. **DO NOT USE THE LIFT!**
2. Never operate the lift with any person or equipment below the vehicle.
3. Never exceed the rated lift capacity.
4. Always insure the safeties are engaged before any attempt is made to work on or near the vehicle.
5. Never leave lift in elevated position unless the safeties are engaged.
6. Do not permit electric motor to get wet! Motor damage caused by dampness is not covered under warranty.

**NEVER LIFT ANY VEHICLE IN ANY MANNER WITHOUT THE VEHICLE CENTERED ON THE ENTIRE RUNWAY. THE CAPACITY OF EACH RUNWAY IS NO GREATER THAT ONE HALF (1/2) OF THE OVERALL LIFT CAPACITY.**





## **Safe Lift Operation**

Automotive and truck lifts are critical to the operation and profitability of your business. The safe use of this and other lifts in your shop is critical in preventing employee injuries and damage to customer's vehicles. By operating lifts safely you can insure that your shop is profitable, productive and safe.

Safe operation of automotive lifts requires that only trained employees should be allowed to use the lift.

### ***TRAINING SHOULD INCLUDE, BUT NOT LIMITED TO:***

- ◆ Proper positioning of the vehicle on the runway. (See manufacturers minimize wheel base loading requirements.)
- ◆ Use of the operating controls.
- ◆ Understanding the lift capacity.
- ◆ Proper use of jack stands or other load supporting devices.
- ◆ Proper use, understanding and visual identification of safety lock devices and their operation.
- ◆ Reviewing the safety rules.
- ◆ Proper housekeeping procedures (lift area should be free of grease, oil, tools, equipment, trash, and other debris).
- ◆ A daily inspection of the lift should be completed prior to its use. Safety devices, operating controls, lift arms and other critical parts should be inspected prior to using the lift.
- ◆ All maintenance and repairs of the lift should be completed by following the manufacturer's requirements. Lift repair parts should meet or exceed OEM specifications. Repairs should only be completed by a qualified lift technician.
- ◆ The vehicle manufacturer's recommendations should be used for spotting and lifting the vehicle.

### ***LIFT OPERATION SAFETY***

- ◆ It is important that you know the load limit. Be careful that you do not overload the lift . If you are unsure what the load limit is, check the data plate found on one of the lift columns or contact the manufacturer.
- ◆ The center of gravity should be followed closely to what the manufacturer recommends.
- ◆ Always make sure you have proper overhead clearance. Additionally, check that attachments, ( vehicle signs, campers, antennas, etc.) are not in the way.
- ◆ Be sure that prior to the vehicle being raised, the doors, trunk, and hood are closed securely.
- ◆ Prior to being raised, make sure there is no one standing closer than six feet from the lift.
- ◆ After positioning the vehicle on the lift runways, set the emergency brake, make sure the ignition is off, the doors are closed, overhead obstructions are cleared, and the transmission is in neutral.
- ◆ Double check that the automatic chock devices are in position and then when the lift is raised, observe the chocks.
- ◆ Put pads or adapters in the right position under the contact points that have been recommended.
- ◆ The lift should be raised just until the vehicle's wheels are about one foot off the ground. If contact with the vehicle is uneven or it appears that the vehicle is not sitting secure, carefully lower the lift and readjust.
- ◆ Always consider potential problems that might cause a vehicle to slip, i.e., heavy cargo, undercoating, etc.
- ◆ Pay attention when walking under a vehicle that is up on the hydraulic lift.



- ◆ **DO NOT** leave the controls while the lift is still in motion.
- ◆ **DO NOT** stand directly in front of the vehicle or in the bay when vehicle is being loaded or driven into position.
- ◆ **DO NOT** Go near vehicle or attempt to work on the vehicle when being raised or lowered.
- ◆ **REMAIN CLEAR** of lift when raising or lowering vehicle.
- ◆ **DO NOT** rock the vehicle while on the lift or remove any heavy component from vehicle that may cause excessive weight shift.
- ◆ **DO NOT** lower the vehicle until people, materials, and tools are clear.
- ◆ **ALWAYS INSURE** that the safeties are engaged and lowered on to the safety ladders before any attempt is made to work on or near vehicle.
- ◆ Some vehicle maintenance and repair activities may cause the vehicle to shift. Follow the manufacturer's guidelines when performing these operations. The use of jack stands or alternate lift points may be required when completing some repairs.
- ◆ **READ AND UNDERSTAND** all safety warning procedures before operating lift.
- ◆ **KEEP HANDS AND FEET CLEAR.** Remove hands and feet from any moving parts. Keep feet clear of lift when lowering. Avoid pinch points.
- ◆ **ONLY TRAINED OPERATORS** should operate this lift. All non-trained personnel should be kept away from work area. Never let non-trained personnel come in contact with, or operate lift.
- ◆ **USE LIFT CORRECTLY.** Use lift in the proper manner. Never use lifting adapters other than what is approved by the manufacturer.
- ◆ **DO NOT** override self-closing lift controls.
- ◆ **CLEAR AREA** if vehicle is on danger of falling.
- ◆ **STAY ALERT.** Watch what you are doing. Use common sense. Be aware.
- ◆ **CHECK FOR DAMAGED PARTS.** Check for alignment of moving parts, breakage of parts or any condition that may affect its operation. Do not use lift if any component is broken or damaged.
- ◆ **NEVER** remove safety related components from the lift. Do not use lift if safety related components are damaged or missing.
- ◆ When the lift is being lowered, make sure everyone is standing at least six feet away.
- ◆ Be sure there are no jacks, tools, equipment, left under the lift before lowering.
- ◆ Always lower the vehicle down slowly and smoothly.

## LIFT WILL NOT RAISE

### **POSSIBLE CAUSE**

1. Air in oil, (1,2,8,13)
2. Cylinder binding, (9)
3. Cylinder leaks internally, (9)
4. Motor run backward under pressure, (11)
5. Lowering valve leaks, (3,4,6,10,11)
6. Motor runs backwards, (7,14,11)
7. Pump damaged, (10,11)
8. Pump won't prime, (1,8,13,14,3,12,10,11)
9. Relief valve leaks, (10,11)
10. Voltage to motor incorrect, (7,14,11)

### **REMEDY**

### **INSTRUCTION**

- |   |  |
|---|--|
| 1. Check for proper oil level. . . . .                                | The oil level should be up to the bleed screw in the reservoir with the lift all the way down. |
| 2. Bleed cylinders. . . . .   | See Installation Manual.   |
| 3. Flush- Release valve to get rid of. . . . . possible contamination | Hold release handle down and start unit allowing it to run for 15 seconds.                     |
| 4. Dirty oil. . . . .   | Replace oil with clean AW-32 Hydraulic Oil.  |
| 5. Tighten all fasteners. . . . .                                     | Tighten fasteners to recommended torques.  |
| 6. Check for free movement of release. . . . .                        | If handle does not move freely, replace bracket or handle assembly.                            |
| 7. Check motor is wired correctly. . . . .                            | Compare wiring of motor to electrical diagram on drawing.                                      |
| 8. Oil seal damaged or cocked . . . . .                               | Replace oil seal around pump shaft.  |
| 9. See Installation Manual . . . . .                                  | Consult Lift Manufacturer.   |
| 10. Replace with new part . . . . .                                   | Replace with new part.   |
| 11. Return unit for repair . . . . .                                  | Return unit for repair.  |
| 12. Check pump-mounting bolts . . . . .                               | Bolts should be 15 to 18 ft. lbs.  |
| 13. Inlet screen clogged . . . . .                                    | Clean inlet screen or replace.   |
| 14. Check wall outlet voltages and wiring . . . . .                   | Make sure unit and wall outlet are wired properly.   |

## MOTOR WILL NOT RUN

### **POSSIBLE CAUSE**

1. Fuse blown, (5,2,1,3,4)
2. Limit switch burned out, (1,2,3,4)
3. Microswitch burned out, (1,2,3,4)
4. Motor burned out, (1,2,3,4,6)
5. Voltage to motor incorrect, (2,1,8)

### **REMEDY**

- |   |   |
|---|---|
| 1. Check for correct voltage . . . . .            | <b>INSTRUCTION</b><br>Compare supply voltage with voltage on motor name tag. Check that the wire is sized correctly. N.E.C. table 310-12 requires AWG 10 for 25 Amps.   |
| 2. Check motor is wired correctly . . . . .       | Compare wiring of motor to electrical diagram on drawing.   |
| 3. Don't use extension cords . . . . .            | According to N.E.C. : " The size of the conductors... should be such that the voltage drop would not exceed 3% to the farthest outlet for power..." Do not run motor at 115 VAC – damage to the motor will occur. |
| 4. Replace with new part . . . . .                | Replace with new part.  |
| 5. Reset circuit breaker/fuse . . . . .           | Reset circuit breaker/fuse.   |
| 6. Return unit for repair . . . . .               | Return unit for repair.   |
| 7. See Installation Manual . . . . .              | See Installation Manual.  |
| 8. Check wall outlet voltage and wiring . . . . . | Make sure unit and wall outlet is wired properly. Motor must run at 208/230 VAC.  |

## WILL NOT RAISE LOADED LIFT

### **POSSIBLE CAUSE**

1. Air in oil, (1,2,3,4)
2. Cylinder binding, (5)
3. Cylinder leaks internally, (5)
4. Lift overloaded, (6,5)
5. Lowering valve leaks, (7,8,1,5,9)
6. Motor runs backwards, (10,12,9)
7. Pump damaged, (5,9)
8. Pump won't prime, (1,2,3,4,5,11,9)
9. Relief valve leaks, (8,5,9)
10. Voltage to motor incorrect, (10,12,5)

### **REMEDY**

### **INSTRUCTION**

- |  |   |
|--|---|
| 1. Check oil level . . . . .                       | The oil level should be up to the bleed screw in the reservoir [with the lift all the way down. |
| 2. Check/Tighten inlet tubes . . . . .             | Replace inlet hose assembly.  |
| 3. Oil seal damaged or cocked . . . . .            | Replace oil seal and install.   |
| 4. Bleed cylinders . . . . .                       | See Installation Manual.  |
| 5. See Installation Manual . . . . .               | Consult Lift Manufacturer.  |
| 6. Check vehicle weight . . . . .                  | Compare weight of vehicle to weight limit of the lift.  |
| 7. Flush release valve . . . . .                   | Hold release handle down and start unit allowing it to run for 15 seconds.                      |
| 8. Replace with new part . . . . .                 | Replace with new part.  |
| 9. Return unit for repair . . . . .                | Return unit for repair.   |
| 10. Check motor is wired correctly . . . . .       | Compare wiring of motor to electrical diagram on power unit drawing.                            |
| 11. Inlet screen clogged . . . . .                 | Clean inlet screen or replace.  |
| 12. Check wall outlet voltage and wiring . . . . . | Make sure unit and wall outlet is wired properly.   |

## LIFT WILL NOT STAY UP

### **POSSIBLE CAUSE**

1. Air in oil, (1,2,3)
2. Check valve leaks, (6)
3. Cylinders leak internally, (7)
4. Lowering valve leaks, (4,5,1,7,6)
5. Leaking fittings, (8)

### **REMEDY**

### **INSTRUCTION**

- |   |  |
|---|--|
| 1. Check oil level . . . . .                          | The oil level should be up to the bleed screw in the reservoir with the lift all the way down. |
| 2. Oil seal damaged and cocked . . . . .              | Replace oil seal around pump shaft.  |
| 3. Bleed cylinder . . . . .                           | Refer to Installation Manual.  |
| 4. Flush release valve . . . . .                      | Hold release handle down and start unit allowing it to run for 15 seconds.                     |
| 5. Replace with new valve . . . . .                   | Replace with new valve.  |
| 6. Return unit for repair . . . . .                   | Return unit for repair.  |
| 7. See Installation Manual . . . . .                  | Consult Lift Manufacturer.   |
| 8. Check complete hydraulic system for leaks. . . . . | Tighten all hydraulics fittings and inspect all hoses.   |

## LIFT LOWERS SLOWLY OR NOT AT ALL

### **POSSIBLE CAUSE**

1. Cylinders binding, (1)
2. Release valve clogged, (5,4,2,3)
3. Pressure fitting too long, (6)

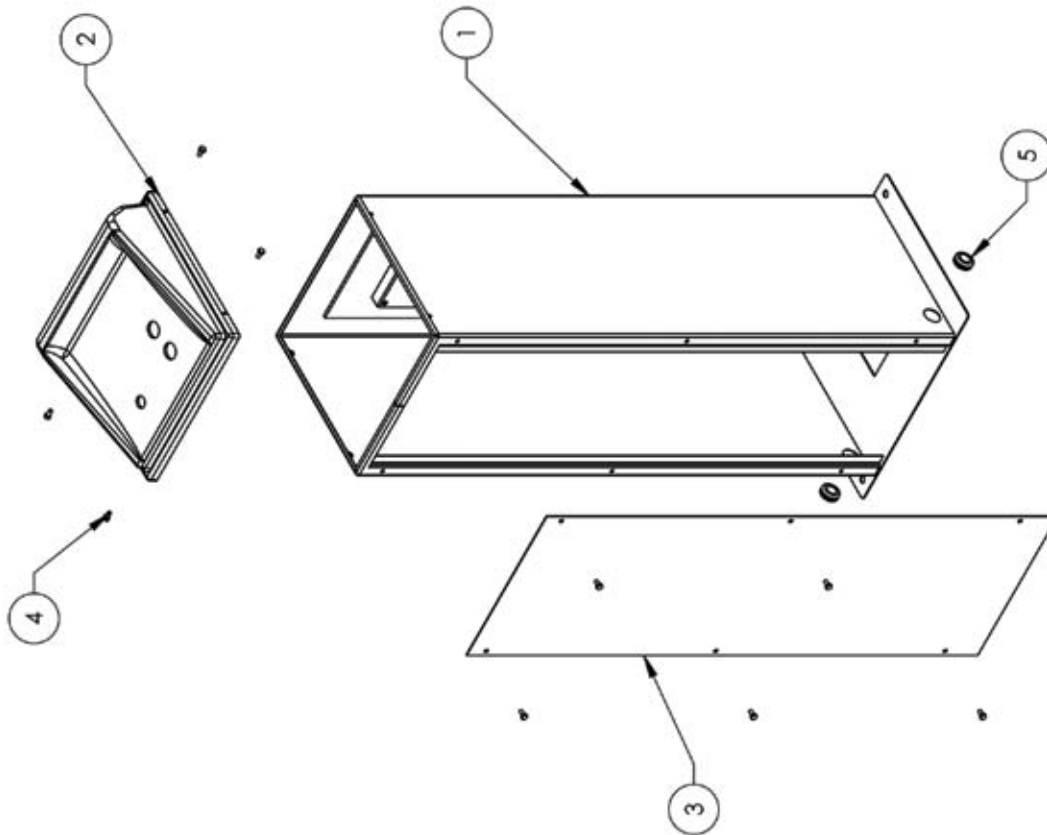
### **REMEDY**

### **INSTRUCTION**

- |   |  |
|---|--|
| 1. See Installation Manual . . . . .                | Consult Lift Manufacturer.   |
| 2. Replace with new part . . . . .                  | Replace with new part.   |
| 3. Return for repair . . . . .                      | Return for repair.   |
| 4. Check oil. . . . .                               | Use clean AW-32 Hydraulic Oil. If oil is contaminated, replace and clean entire system.  |
| 5. Clean release valve . . . . .                    | Wash release valve in solvent and blow out with air.   |
| 6. Replace fitting with short thread lead . . . . . | Replace fitting with short thread lead. If a vehicle has been loaded on the lift and lift becomes inoperable while in the raised position. |

## INSTALLATION FORM

Customer Name:		Date of Installation:			
Company Name:					
Street Address:					
City:	State:	Zip:			
Phone:		Fax:			
<b>Pre-Install Agreement</b>					
<p>I, (the undersigned) acting as the owner of the business listed above assume responsibility for any permits required, either state or county mandated, related to the installation and/or operation of this equipment. I assume responsibility for the concrete floor and condition thereof, now or later, where the above equipment model(s) are installed. I will assume all liability for losses, damages (including loss of use), expenses, demands, claims, and judgments in connection with or arising out of any personal injury or alleged damage to property, sustained or alleged to have been sustained in connection with, or to have arisen out of the condition and/or drilling of the concrete near or adjacent to the equipment model(s) listed above. If my employee(s) offer assistance of any kind during installation of the above equipment model(s) I hold the manufacturer and installation company harmless of all liability for losses, damages, expenses, claims, and judgments in connection with or arising out of any personal injury or alleged damage to property, sustained or alleged to have been sustained in connection with the installation of the above equipment model(s).</p> <p>I understand that the lifts above are supplied with concrete fasteners meeting the criteria of the American National Standard "Automotive Lifts - Safety Requirements for Construction, Testing, and Validation" ANSI/ALI ALCTV-1998, and that I will be responsible for all charges related to any special regional structural and/or seismic anchoring requirements specified by any other agencies and/or codes such as the Uniform Building Code (UBC) and/or International Building Code (IBC).</p>					
Customer Signature:		Print Name:	Date:		
<b>Post-Installation Check-Off</b>					
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> <input type="checkbox"/> Base and Columns Properly Shimmed And Stable  <input type="checkbox"/> Anchor Bolts Tightened  <input type="checkbox"/> Runways Properly Attached and Secured  <input type="checkbox"/> Electric Power Supply Confirmed  <input type="checkbox"/> Cables / Chains Adjusted Properly  <input type="checkbox"/> Safety Locks Functioning Properly  <input type="checkbox"/> Check For Hydraulic Leaks  <input type="checkbox"/> Oil Level                 </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> <input type="checkbox"/> Lubrication of Critical Components  <input type="checkbox"/> Lift Adapters  <input type="checkbox"/> Check For Overhead Obstructions  <input type="checkbox"/> Runways Level  <input type="checkbox"/> All Screws, Bolts, and Pins Secured  <input type="checkbox"/> Surrounding Area and Lift Clean In Appearance  <input type="checkbox"/> Proper Operation, Maintenance and Safety Explained  <input type="checkbox"/> Operation and Safety Manual(s) Left at Site                 </td> </tr> </table>				<input type="checkbox"/> Base and Columns Properly Shimmed And Stable <input type="checkbox"/> Anchor Bolts Tightened <input type="checkbox"/> Runways Properly Attached and Secured <input type="checkbox"/> Electric Power Supply Confirmed <input type="checkbox"/> Cables / Chains Adjusted Properly <input type="checkbox"/> Safety Locks Functioning Properly <input type="checkbox"/> Check For Hydraulic Leaks <input type="checkbox"/> Oil Level	<input type="checkbox"/> Lubrication of Critical Components <input type="checkbox"/> Lift Adapters <input type="checkbox"/> Check For Overhead Obstructions <input type="checkbox"/> Runways Level <input type="checkbox"/> All Screws, Bolts, and Pins Secured <input type="checkbox"/> Surrounding Area and Lift Clean In Appearance <input type="checkbox"/> Proper Operation, Maintenance and Safety Explained <input type="checkbox"/> Operation and Safety Manual(s) Left at Site
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<p>I, (the undersigned) confirm that the above installation procedure(s) were completed. I understand that I will be responsible for maintaining this equipment as outlined in the accompanied <b>Installation and Operation Manual</b> and <b>ANSI/ALI ALOIM Safety Requirements for Operation, Inspection and Maintenance</b>. I understand that personal injury and/or damage to property can occur if the above equipment model(s) are not maintained or used improperly and take full responsibility for training my employees on proper use and maintenance of this equipment. I hold the manufacturer and installation company harmless of all liability for losses, damages (including loss of use), expenses, demands, claims, and judgments in connection with or related to improper use, improper training, or lack of required maintenance. I understand that the warranty does not cover replacement of parts worn or damaged due to normal use or lack of required maintenance</p>					
Customer Signature:		Print Name:	Date:		
Installer Signature:		Print Name:	Date:		
Installer Company Name:					
Street Address:					
City:	State:	Zip:			
Phone:		Phone ( Other ):			



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5600482	POWER UNIT CONSOLE WELDMENT	1	E
2	5716018	POWER UNIT CONSOLE COVER	1	B
3	5736191	SP-7X POWER UNIT CONSOLE DOOR	1	A
4	5530031	HHB M6 x 1 x 12	10	B
5	5520001	RUBBER GROMMET, 3/4 I.D.	2	-

DATE

04/30/2010

01/04/2016

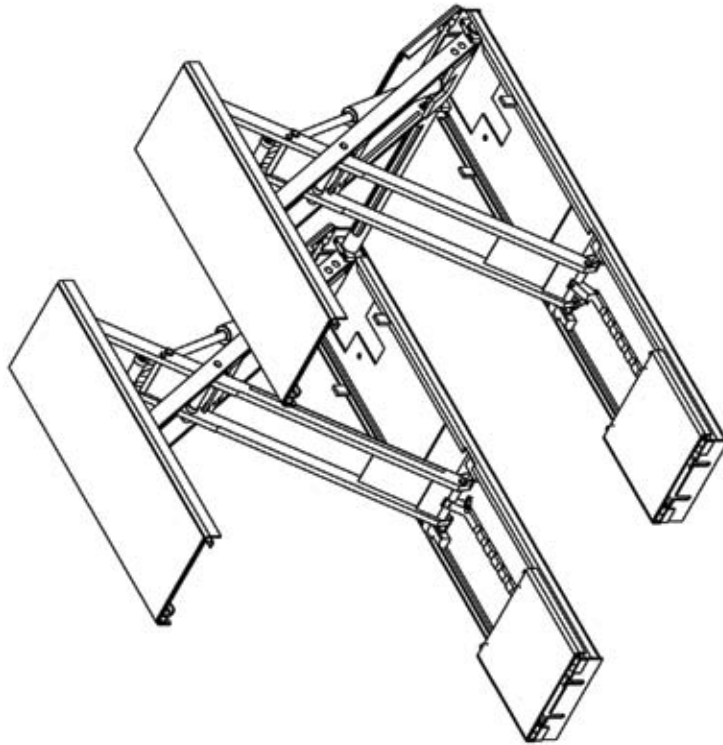
**BendPak**  
1645 LEMONWOOD DR.  
SANTA PAULA, CA 93560

TITLE: POWER UNIT CONSOLE

SIZE DWG. NO. A 5215377

REV F





ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5600928	SP-7 SERIES BASE WELDMENT RIGHT	1	A
2	5600927	SP-7 SERIES BASE WELDMENT LEFT	1	A
3	5565355	SP-7X BOTTOM ARM JOINT BUSHING	4	A
4	5215256	SP-7X OUTER ARM ASSEMBLY	1	G
5	5565354	SP-7X TOP ARM JOINT BUSHING	4	A
6	5736194	SP-7X ARM JOINT TOP BLOCK	4	A
7	5746614	SP-7X CYLINDER CLEVIS PIN	2	A
8	5540006	SNAP RING TRUARC 5103-100	8	-
9	5215254	SP-7X RIGHT HAND INNER ARM ASSEMBLY	1	D
10	5215255	SP-7X LEFT HAND INNER ARM ASSEMBLY	1	D
11	5716155	SP-7X SLIDE BLOCK TOP	4	A
12	5505711	SP-7X MAIN SCISSOR PIVOT PIN	2	B
13	5502180	CYLINDER ASSEMBLY Ø3 x 20	2	B
14	5600247	SP-7X CYLINDER GUIDE WELDMENT	4	B
15	5755005	SP-7X CYLINDER GUIDE SPACER	2	A
16	5505022	SP-7X CYLINDER GUIDE PIVOT PIN	2	A
17	5746613	SP-7X CYLINDER LIFT PIN	2	A
18	5540015	C RING Ø30mm OD TRUARC 5103-118	8	-
19	5600265	SP-7X RAMP WELDMENT	2	D
20	5746610	SP-7X RAMP ANCHOR PIN	4	A
21	5215260	SP-7X RAMP COVER ASSEMBLY CYLINDER SIDE	2	A
22	5215261	SP-7X RAMP COVER ASSEMBLY SAFETY SIDE	2	A
23	5505716	SP-7X RAMP COVER HINGE PIN	8	A
24	5540116	TRUARC Ø12mm 5103-50	8	-
25	5545347	WASHER, M12 FLAT WASHER	8	-
26	5502196	AIR CYLINDER, Ø.75 x 0.5" STROKE	2	-
27	5550410	FIG ELB 1/4 TUBE INS 1/8 NPT	2	-
28	5550489	FIG TEE 1/4-1/4-1/4 TUBE INS	1	-
29	5550106	FIG ELB -04 JIC-06 NPT	2	-
30	5530129	SHCS M12 x 1.75 x .55	8	-
31	5550025	FIG GR3 M6x1	6	-
32	5530054	SSS M10x1.5x12	4	-
33	5755145	TUBE, Ø40 x Ø38 x 140mm	2	A

DATE

05/02/2014

02/15/2016



1445 LEMONWOOD DR.  
SANTA PAULA, CA 93060

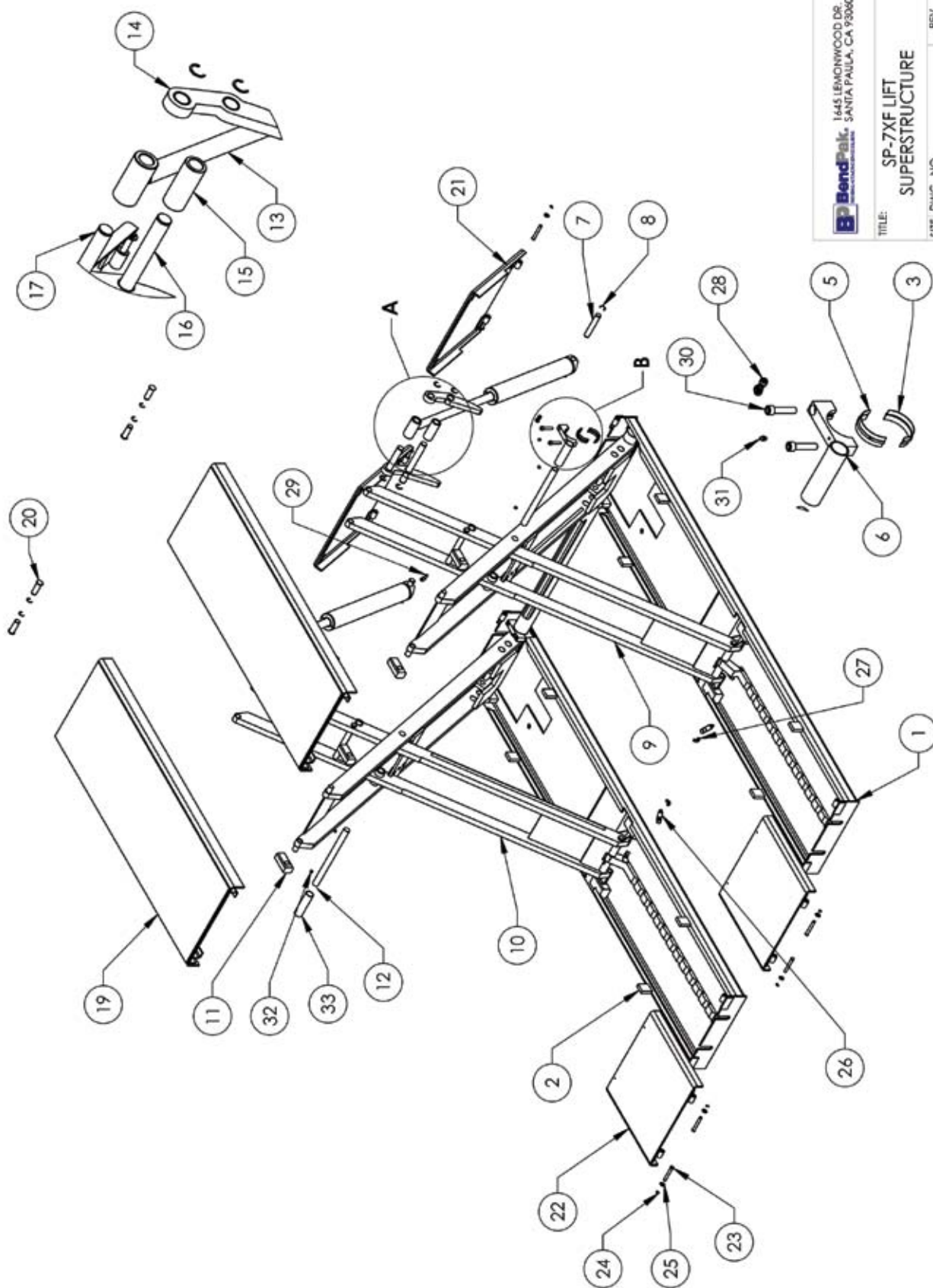
TITLE: SP-7XF LIFT  
SUPERSTRUCTURE

SIZE DWG. NO.

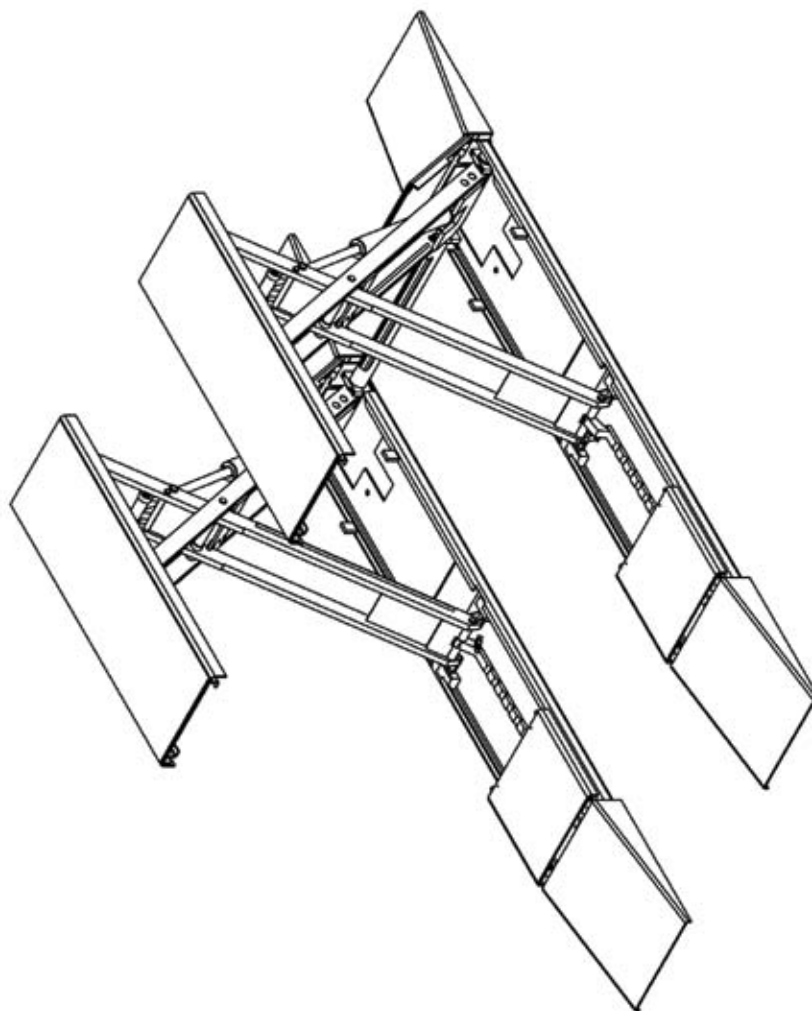
A 5245102

REV

D



 1445 LEMMONWOOD DR. SANTA PAULA, CA 93060	
TITLE:	SP-7XF LIFT SUPERSTRUCTURE
SIZE DWG. NO.	A 5245102
REV	D



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5600928	SP-7X SERIES BASE WELDMENT RIGHT	1	A
2	5600927	SP-7X SERIES BASE WELDMENT LEFT	1	A
3	5565355	SP-7X BOTTOM ARM JOINT BUSHING	4	A
4	5215256	SP-7X OUTER ARM ASSEMBLY	1	G
5	5565354	SP-7X TOP ARM JOINT BUSHING	4	A
6	5736194	SP-7X ARM JOINT TOP BLOCK	4	A
7	5746614	SP-7X CYLINDER CLEVIS PIN	2	A
8	5540006	SNAP RING TRUARC 5103-100	8	-
9	5215254	SP-7X RIGHT HAND INNER ARM ASSEMBLY	1	D
10	5215255	SP-7X LEFT HAND INNER ARM ASSEMBLY	1	D
11	5716155	SP-7X SLIDE BLOCK TOP	4	A
12	5505711	SP-7X MAIN SCISSOR PIVOT PIN	2	B
13	5502180	CYLINDER ASSEMBLY Ø3 x 20	2	B
14	5600247	SP-7X CYLINDER GUIDE WELDMENT	4	B
15	5755005	SP-7X CYLINDER GUIDE SPACER	2	A
16	5505022	SP-7X CYLINDER GUIDE PIVOT PIN	2	A
17	5746613	SP-7X CYLINDER LIFT PIN	2	A
18	5540015	C RING Ø30mm OD TRUARC 5103-118	8	-
19	5600265	SP-7X RAMP WELDMENT	2	D
20	5746610	SP-7X RAMP ANCHOR PIN	4	A
21	5215260	SP-7X RAMP COVER ASSEMBLY CYLINDER SIDE	2	A
22	5215261	SP-7X RAMP COVER ASSEMBLY SAFETY SIDE	2	A
23	5505716	SP-7X RAMP COVER HINGE PIN	8	A
24	5540116	TRUARC Ø12mm 5103-50	8	-
25	5545347	WASHER, M12 FLAT WASHER	8	-
26	5600263	SP-7X DRIVE UP RAMP WELDMENT	4	A
27	5502196	AIR CYLINDER, Ø 75 x 0.5" STROKE	2	-
28	5550410	FIG ELB 1/4 TUBE INS 1/8 NPT	2	-
29	5550489	FIG TEE 1/4-1/4-1/4 TUBE INS	1	-
30	5550106	FIG ELB -04 JIC-06 NPT	2	-
31	5530129	SHCS M12 x 1.75 x .55	8	-
32	5550025	FIG GRS M6x1	6	-
33	5530054	SSS M10x1.5x12	4	-
34	5755145	TUBE, Ø40 x Ø38 x 1.40mm	2	A

DATE

11/04/2014

02/15/2016

**BendPak** 1645 LEMONWOOD DR.  
SANTA PAULA, CA 93060

TITLE: SP-7X LIFT  
SUPERSTRUCTURE

SIZE DWG. NO.

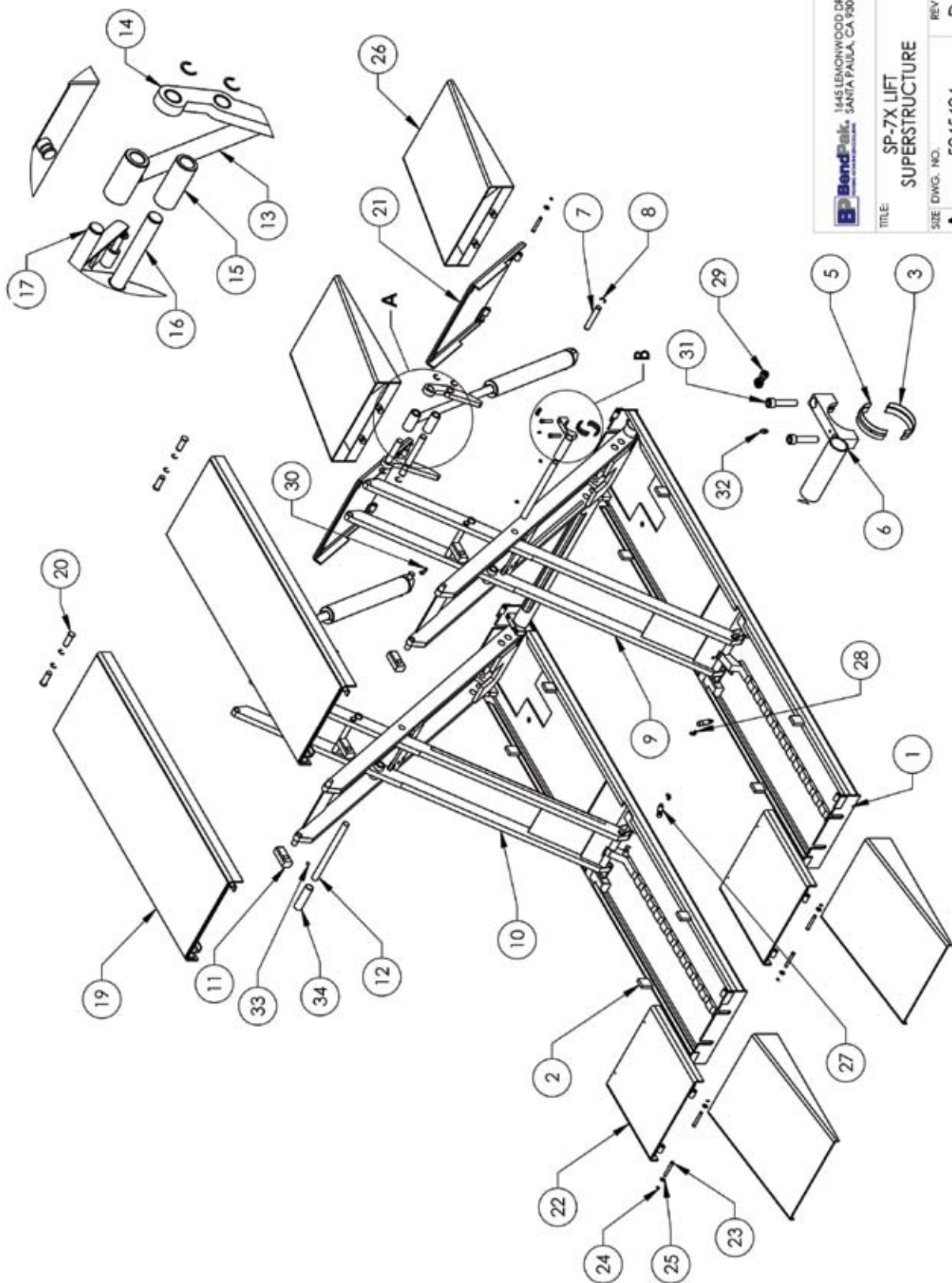
**A**

5245404

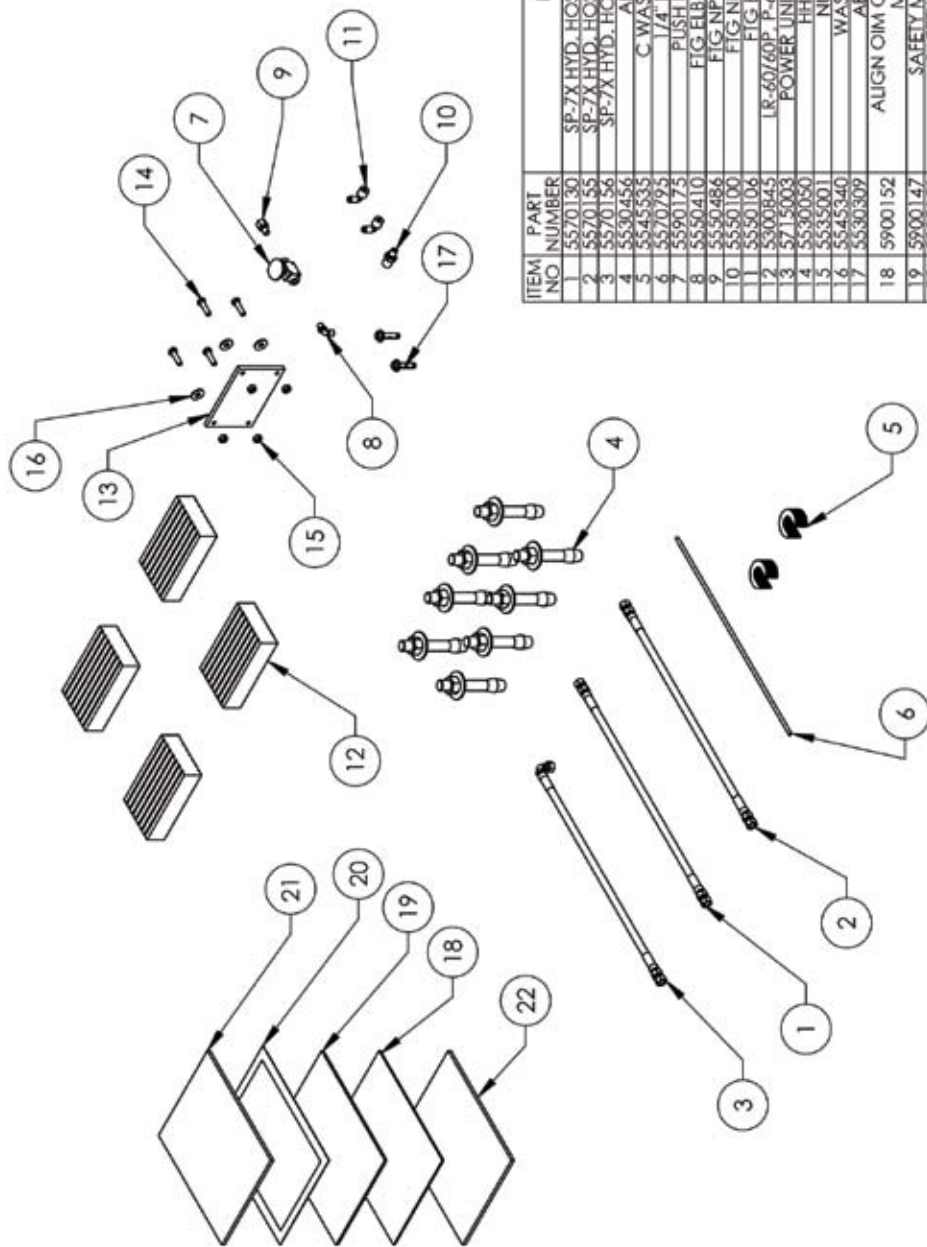
REV

**D**





<b>BendPak</b> 1645 LEMONWOOD DR. SANTA PAULA, CA 95060	
TITLE:	SP-7X LIFT SUPERSTRUCTURE
SHEET NO.	A
REV	D



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5570130	SP-7X HYD. HOSE ASSY Ø6.35 x 3350mm DS	1	B
2	5570135	SP-7X HYD. HOSE ASSY Ø6.35 x 4675mm DS	1	B
3	5570136	SP-7X HYD. HOSE ASSY Ø6.35 x 740mm SB	1	B
4	5530456	AB 3/4" x 4 - 3/4"	8	-
5	5545535	C WASHER SHIM FOR LIFTS	20	-
6	5570175	1/4" POLY-FLO TUBING	10820mm*	-
7	5590175	PUSH BUTTON AIR VALVE	1	-
8	5550410	FIG ELB 1/4 TUBE INST 1/8 NPT	1	-
9	5550486	FIG NPL -02 NPT X -04 F NPT	1	-
10	5550100	FIG NPL -04 JIC X -06 NPT	1	-
11	5550106	FIG ELB -04 JIC -06 NPT	2	-
12	5300845	LR-60/60P P-6.38mm I-57 RUBBER PAD	4	A
13	5215003	POWER UNIT VIBRATION DAMPENER	1	B
14	5530050	HHB M8 x 1.25 x 30	4	-
15	5535001	NUT M8 x 1.25 NL	4	-
16	5545340	WASHER MB X24 FLAT	4	-
17	5530309	AB Ø3/8" x 1-7/8"	2	-
18	5900152	ALIGN OIM OPERATION INSPECTION & MAINTENANCE	1	-
19	5900147	SAFETY MANUAL AU / SM 93-1	1	-
20	5900151	SAFETY TIPS CARD ALL ST 90	1	-
21	5900109	SP-7X INSTALLATION MANUAL	1	-
22	5900280	AU / P FRAME ENGAGING LIFTS GUIDE	1	-

DATE

02/27/2009

01/14/2016

**BendPak** 1645 LEMONWOOD DR.  
SANTA PAULA, CA 93060

TITLE:

SP-7X PARTS BOX

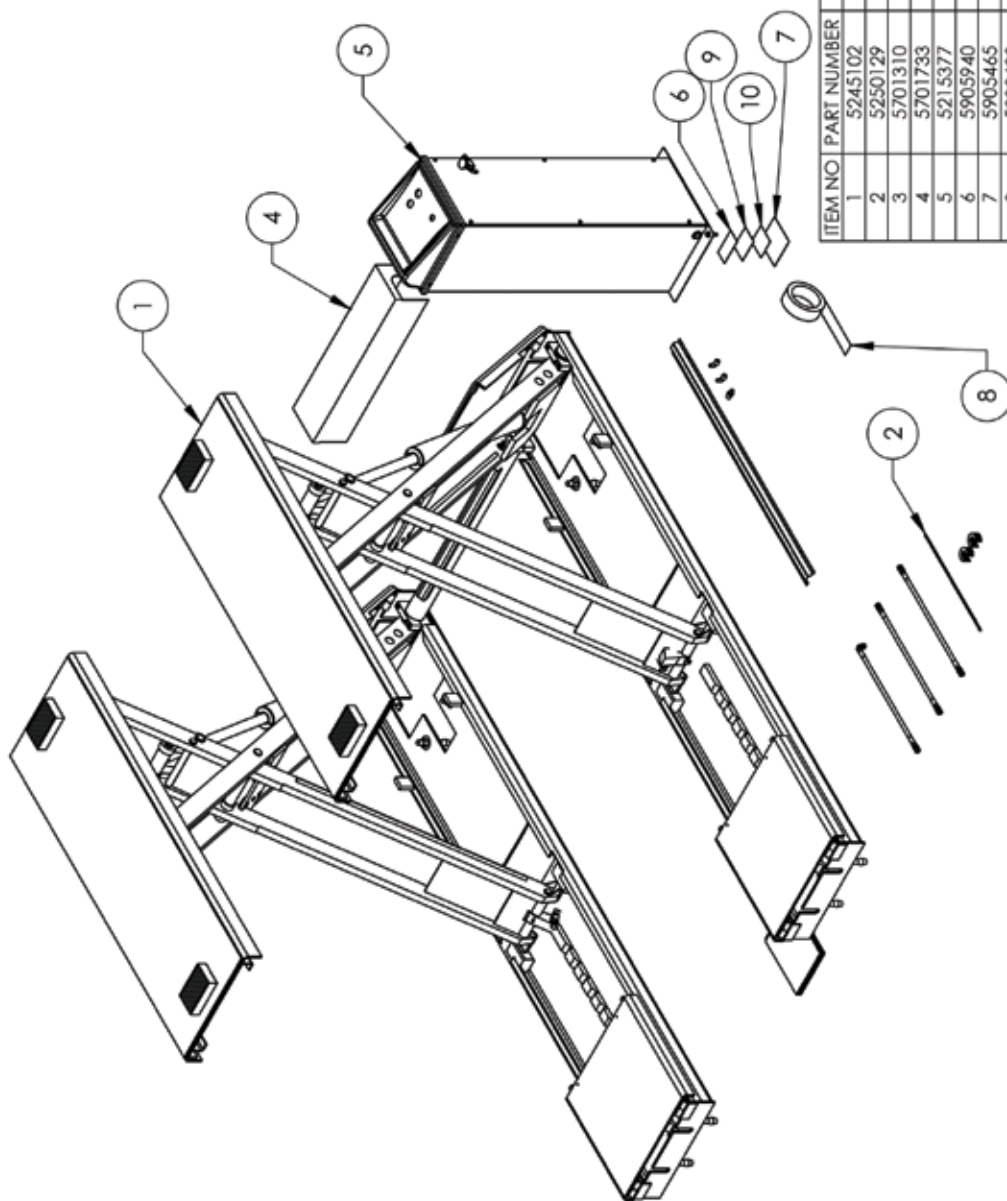
SIZE DWG. NO.

A

5250129

REV

M



ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5245102	SP-7XF LIFT SUPERSTRUCTURE	1	D
2	5250129	SP-7X PARTS BOX	1	M
3	5701310	SP-7X HYDRAULIC HOSE COVER	1	A
4	5701733	SP-7XF PIVOT BAR COVER	1	B
5	5215377	POWER UNIT CONSOLE	1	F
6	5905940	PRODUCT DATA LABEL	1	--
7	5905465	MANUFACTURER LABEL	1	--
8	5930609	BLACK AND YELLOW HAZARD 2" x 10ft	1	--
9	5905524	CAUTION MAX LOAD 3500	1	--
10	5905951	SERIAL NUMBER INTERIOR TAG	1	--

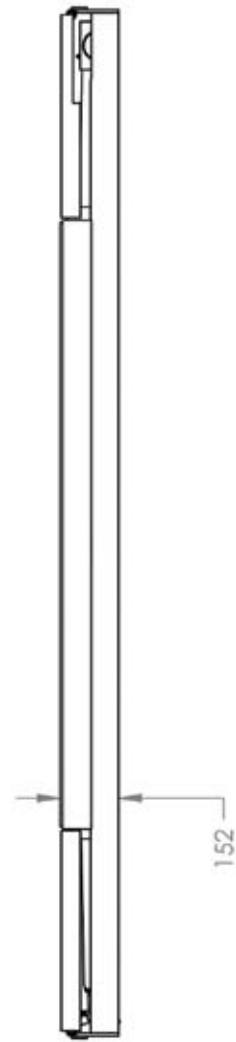
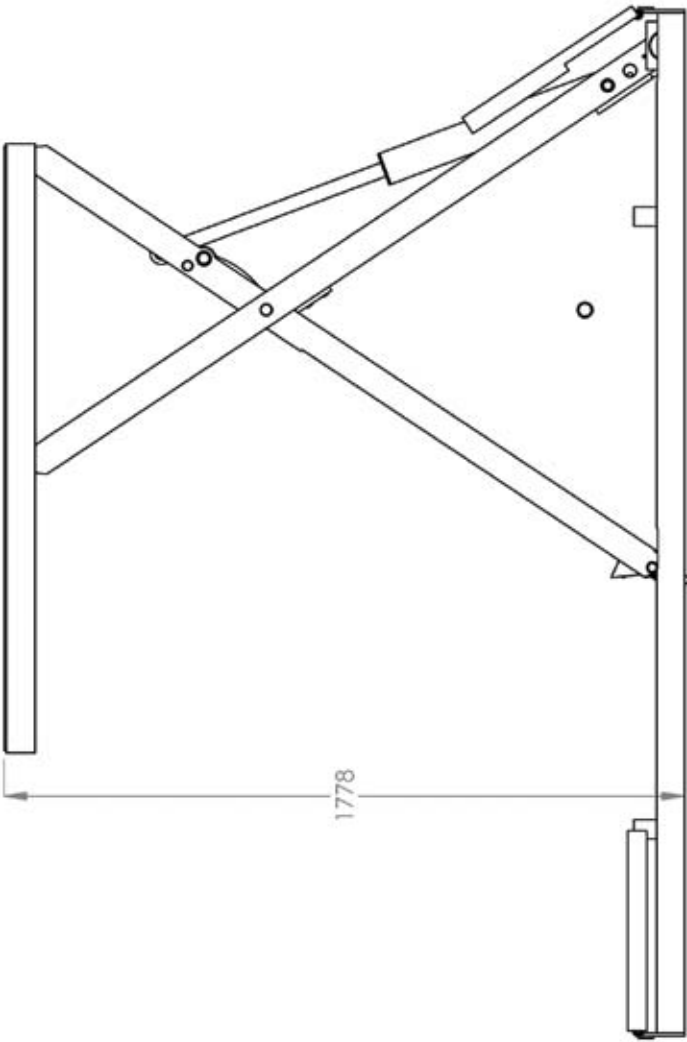
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05/02/2014  
02/15/2016

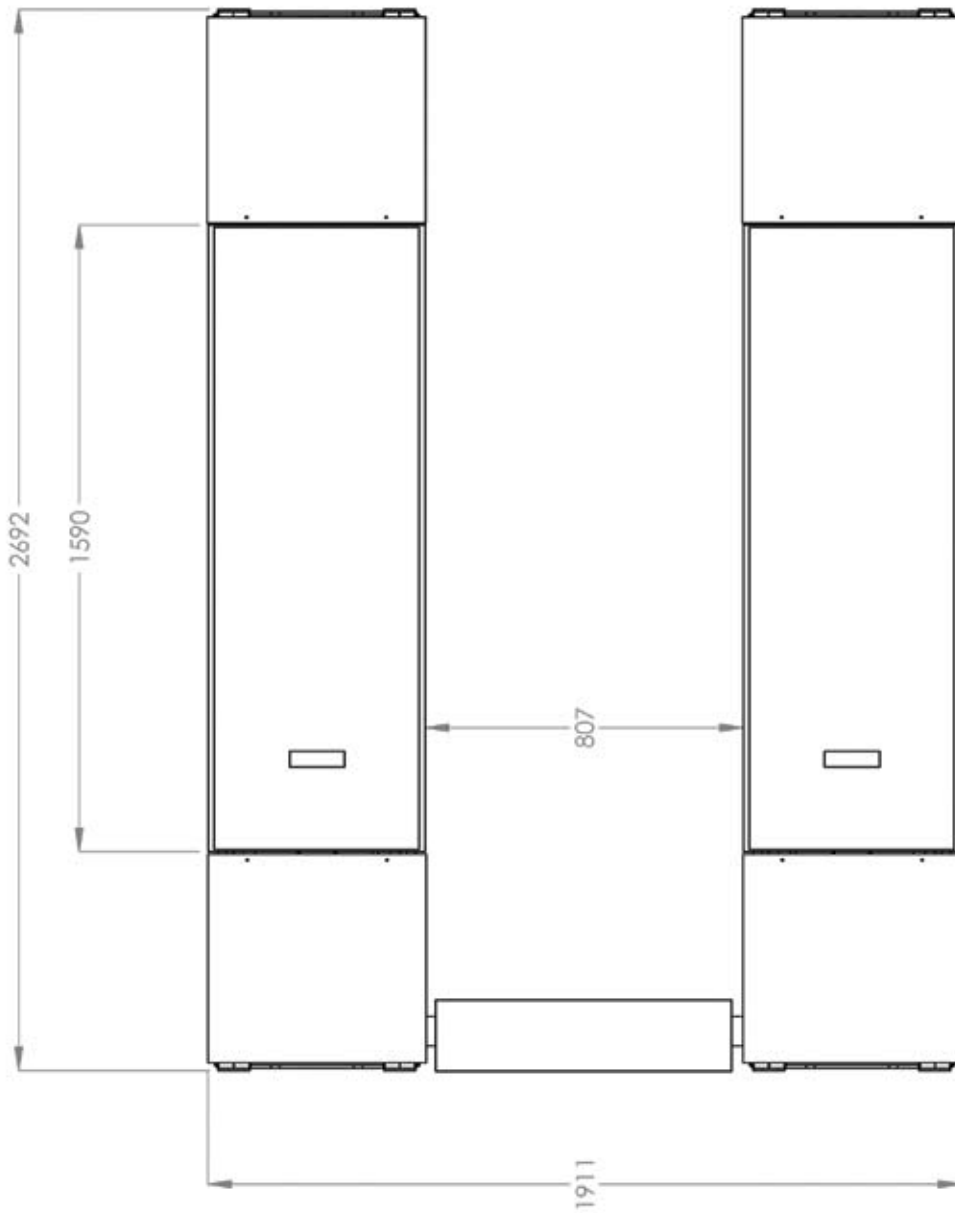
**BendPak** 1645 LEMONWOOD DR.  
SANTA PAULA, CA 93060

TITLE: SP-7XF PRODUCTION  
LIFT VER C

SIZE DWG. NO. A 5260053 REV F

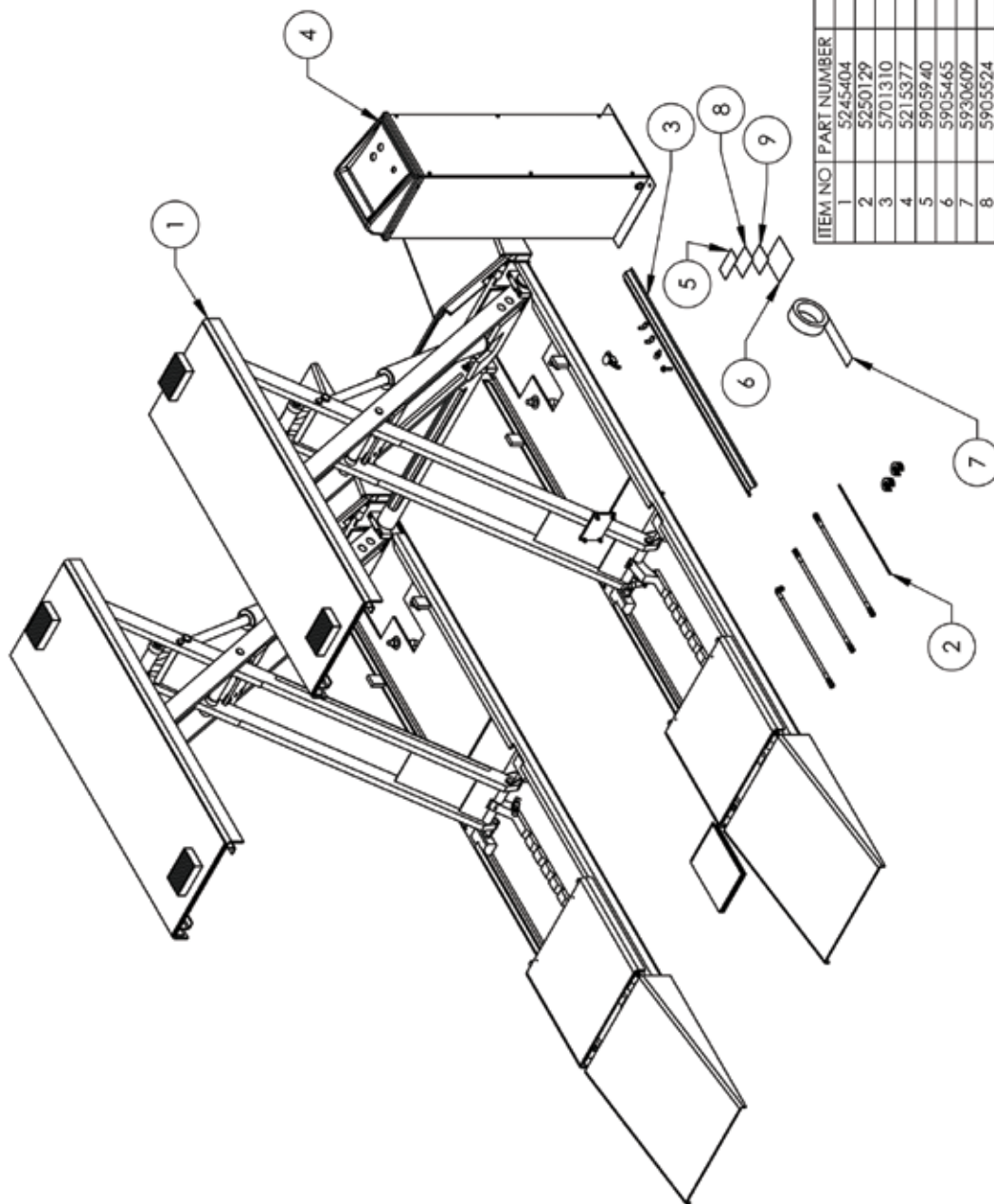


 1645 LEMONWOOD DR. SANTA PAULA, CA 93060		<b>TITLE:</b> SP-7XF PRODUCTION LIFT VER C	
<b>SIZE</b>	<b>DWG. NO.</b>	<b>REV</b>	
<b>A</b>	5260053	F	



 1645 LEMONWOOD DR. SANTA PAULA, CA 93060	
TITLE: SP-7XF PRODUCTION LIFT VER C	
SIZE DWG. NO.	REV
<b>A</b> 5260053	<b>F</b>





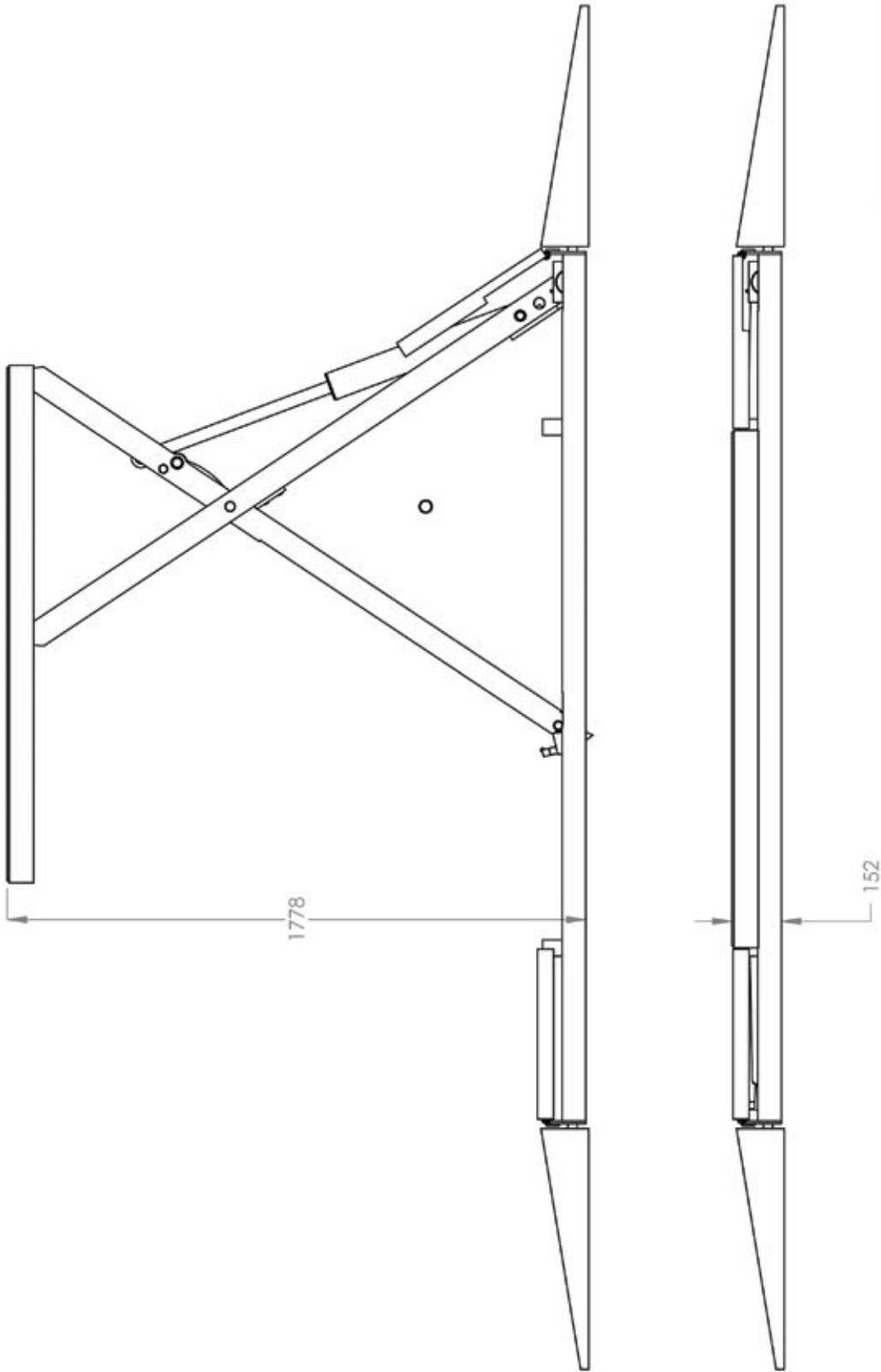
ITEM NO	PART NUMBER	DESCRIPTION	QTY	REV
1	5245404	SP-7X LIFT SUPERSTRUCTURE	1	D
2	5250129	SP-7X PARTS BOX	1	M
3	5701310	SP-7X HYDRAULIC HOSE COVER	1	A
4	5215377	POWER UNIT CONSOLE	1	F
5	5905940	PRODUCT DATA LABEL	1	-
6	5905465	MANUFACTURER LABEL	1	-
7	5930609	BLACK AND YELLOW HAZARD 2" x 10H	1	-
8	5905524	CAUTION MAX LOAD 3500	1	-
9	5905951	SERIAL NUMBER INTERIOR TAG	1	-

DATE  
11/04/2014  
02/15/2016

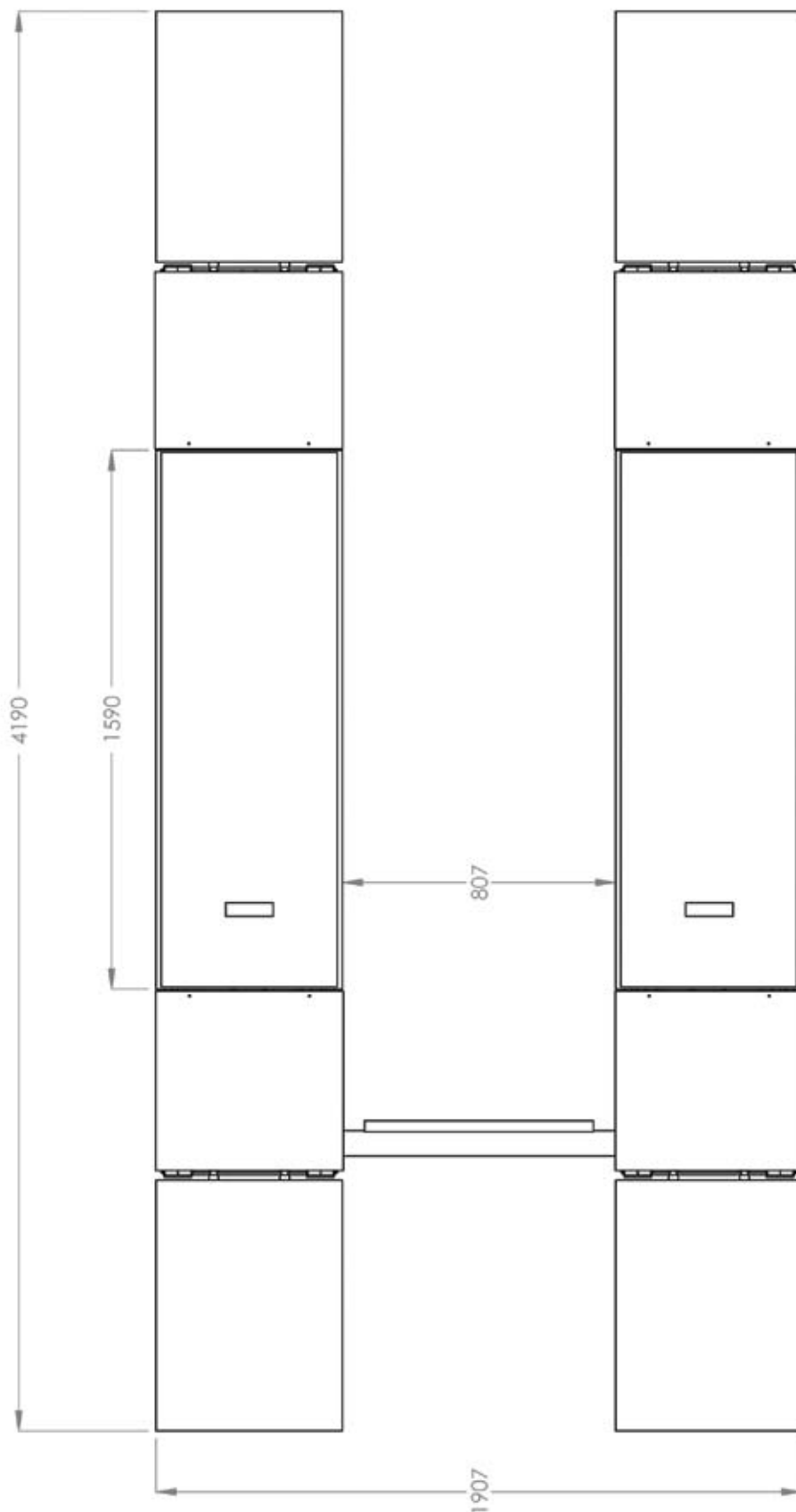
**BendPak** 1445 LEMONWOOD DR.  
SANTA PAULA, CA 93060

TITLE: SP-7X PRODUCTION  
LIFT VER C

SIZE DWG. NO. **A** 5260231 REV **E**



 1445 LEMONWOOD DR. SANTA PAULA, CA 93060			
TITLE:	SP-7X PRODUCTION LIFT VER C		
SIZE	DWG. NO.	REV	
A	5260231	E	



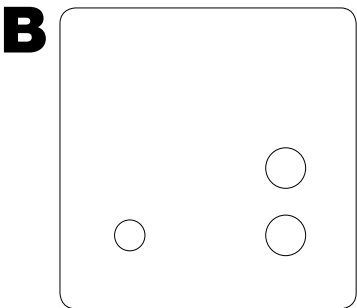
 1645 LEMONWOOD DR. SANTA PAULA, CA 93060	
<b>TITLE:</b> SP-7X PRODUCTION LIFT VER C	
<b>SIZE</b> DWG. NO.	<b>REV</b>
<b>A</b> 5260231	<b>E</b>

SP-7X & SP-7XF MODELS LABELS



Scissor\_Lift\_Console

PN 5905715



Scissor\_Lift\_Console\_Dieline



Hazard Decals on left and right side of the platforms

Hazard\_Decal

PN 5905583



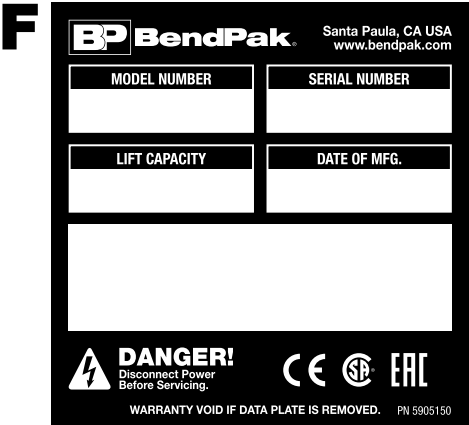
Caution\_Capacity\_Decal

PN 5905524



Product\_Data\_Label

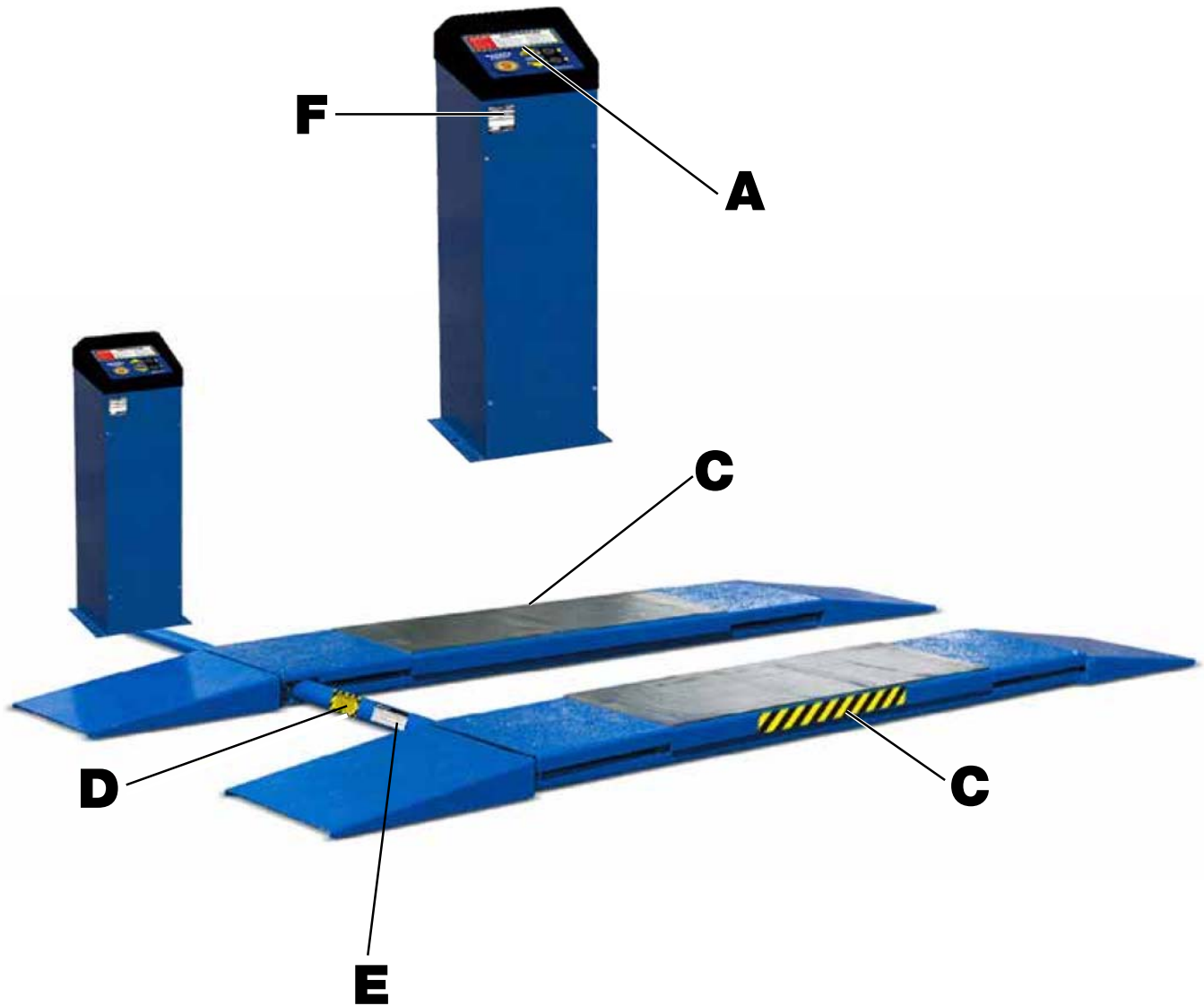
PN 5905940



Serial\_Tag

PN 5905150

## SP-7X & SP-7XF LABEL POSITIONING



## MAINTENANCE RECORDS

[illegible]

## NOTES

[illegible]



1645 Lemonwood Dr. • Santa Paula, CA. 93060, USA  
Toll Free: 1(800) 253-2363

**FOR TECHNICAL SUPPORT**  
1-(800) 253-2363 Ext. 196  
**TO ORDER PARTS**  
1-(800) 253-2363 Ext. 191