

Forward this manual to all operators. Failure to operate this equipment as directed may cause injury.

Revised 10-06-06

### INSTALLATION AND OPERATION MANUAL

### SURFACE MOUNTED TWO-POST LIFTS

**MODELS:** 

XP-10C

XP-10CX

XP-10AC

XP-10ACX

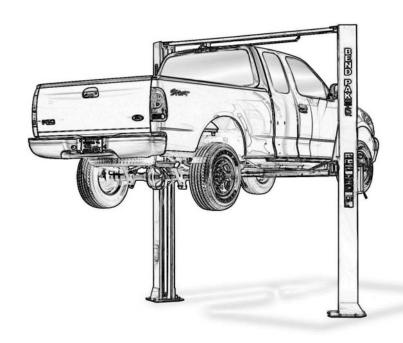
XP-12CTA

XP-12FTA

**XP-15C** 

**XP-18C** 





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.



1645 Lemonwood Dr.
Santa Paula, CA. 93060, USA
Toll Free 1-800-253-2363
Tel: 1-805-933-9970
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# TWO-POST SURFACE MOUNTED AUTO AND LIGHT DUTY TRUCK 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 and is the most technically advanced lift on the market today.

### READ THIS ENTIRE MANUAL BEFORE OPERATION BEGINS.

RECORD HERE THE FOLLOWING INFORMATION
WHICH IS LOCATED ON THE SERIAL NUMBER DATA PLATE

Serial No	<del> </del>
Model No	
Manufacturing date _	

### WARRANTY

Your new lift is warranted for five years on equipment structure; one year on all operating components to the original purchaser, to be free of defects in material and workmanship. The manufacturer shall repair or replace at their option for this period those parts returned to the factory freight prepaid which prove upon inspection to be defective.

The manufacturer will pay labor costs for the first 12 months only on parts returned as previously described.

This warranty does not extend to defects caused by ordinary wear, abuse, misuse, shipping damage, or lack of required maintenance.

This warranty is exclusive and in lieu of all other warranties expressed or implied. In no event shall the manufacturer be liable for special, consequential or incidental damages for the breach or delay in performance of the warranty. The manufacturer reserves the right to make design changes or add improvements to its product line without incurring any obligation to make such changes on product sold previously.

Warranty adjustments within the above stated policies are based on the model and serial number of the equipment. This data must be furnished with all warranty claims.

### **PARTS INVENTORY**

PARTS BOX  1 Power side cover 5210006 Power side safety 1 Power side safety weldment 5210007 Power side safety
Power side cover 5210006 Power side safety Power side safety weldment 5210007 Power side safety
1 Power side safety weldment 5210007 Power side safety
•
1 Off side safety cover 5210009 Off side safety
1 Off side safety weldment 5210010 Off side safety
2 Safety clevis hair pin 5505112 Secure safety clevis pin
2 Safety clevis pin 5505113 Safety weldments
2 Safety torsion spring 5540130 Safety clevis pin
2 Washer 5545255 To tighten safety cable
2 M12 hex nut 5535355 To tighten safety cable
4 M10 hex head bolt 5530755 Secure safety covers to post
4 Washer 5545250 Safety cover bolt
4 XP-9/10 lift head pins 5505270 Lift arms
4 Lift pad Assemblies 5210700 Lift arms
2 3/8 Romex connectors 5520142 Electical; motor & overhead sw.
1 Overhead micro switch 5525110 Top trough assembly
1 Micro switch cable 120" 5525215 Overhead micro switch
2 6-32 slot head bolt 5530117 Secure overhead micro switch
2 6-32 Hex nut 5535190 Secure overhead micro switch
12 Anchor bolts 3/4 x 5 5530450 Secure posts to floor
24 C-Shims 5545535 Level posts
4 M8 hex head bolts 5530753 Mount power unit to post
4 Lock washers 5545254 Mount power unit to post
4 M8 hex nut 5535356 Mount power unit to post
2 3/4-12 hex nylock nut 5535353 Equalizer cable nut
2 3/4" flat washer 5545253 Equalizer cable washer
4 M10 hex head bolt 5530751 Secure top trough assy
4 M10 nylock nut 5535350 Secure top trough assy
4 Washer 5545251 Secure top trough assy
1 3/8" power unit fitting 5550183 Hydraulic fitting for power unit
2 1/4" cylinder fittings 5550113 Hydraulic fitting for cylinders
1 1/4 to 3/8" bulkhead fitting 5550185 Hydraulic tee fitting to cylinders
1 1/4" x 90-1/2" hydraulic hose 5570832 Power side cyl hose all models
1 3/8" x 48" hydraulic hose 5570102 Power unit hose all models
4 3" lift pad extension 5746390 Raise the height of lift pad
4 6" lift pad extension 5746395 Raise the height of lift pad
1 1/4" crossover hose see table Crossover to offside cylinder
1 Safety cable see table Cable to release safety
2 Equalizer cables see table Cable to level lift arms
1 Can Spray Paint Touch Up Paint
1 Instruction Manual Instruction Manual
1 ALI Safety Instructions Safety Instructions

### BE SURE TO TAKE A COMPLETE INVENTORY OF PARTS PRIOR TO INSTALLATION

### SHIPMENT PARTS

#### QTY. PART(S) DESCRIPTION WHERE USED Part Number CHECK AB-1466 Power Unit 5585079 Hydraulic Power Source 1 Powerside Column 5210008 Powerside Column Offside Column Offside Column 5210011 1 Top Trough see table Overhead Beam Lift Arms Lift Arms see table

# HOSE & CABLE CHART

	XP-12/15/18
Power Unit Hose	5570832
	3/8 x 48 Power Unit Hose
Powerside Cyl Hose	5570832
	1/4 x 90-1/2 Powerside Cyl Hose
Crossover Hose	5570111
	1/4 x 378-1/2 Crossover Hose
Equalizer Cable	5595121
	Equalizer Cable 1/2 x 419
Equalizer Cable	5595121
	Equalizer Cable 1/2 x 419
Safety Cable	5595125
	3/32 x 327 Safety Cable
Top Trough	5210123
	Top Trough Assy XP-12/15/18
ift Arms	5210124
	Heavy Arms Assy XP-12/15/18
	5210125
	Triple Telescoping Arm Assy

# HOSE & CABLE CHART

	XP-10C	XP-10CX		
Power Unit Hose	5570102	5570102		
	3/8 x 48 Power Unit Hose	3/8 x 48 Power Unit Hose		
Powerside Cyl Hose	5570832	5570832		
	1/4 x 90-1/2 Powerside Cyl Hose	1/4 x 90-1/2 Powerside Cyl Hose		
Crossover Hose	5570107	5570106		
	1/4 x 316-1/2 Crossover Hose	1/4 x 329 Crossover Hose		
Equalizer Cable	5595111	5595112		
	Equalizer Cable 3/8 x 355-1/2	Equalizer Cable 3/8 x 368		
Equalizer Cable	5595111	5595112		
	Equalizer Cable 3/8 x 355-1/2	Equalizer Cable 3/8 x 368		
Safety Cable	5595110	5595113		
	3/32 x 287 Safety Cable	3/32 x 300 Safety Cable		
Top Trough	5210003	5210114		
	Top Trough Assy XP-10C	Top Trough Assy XP-10CX		
Lift Arms	5210012	5210012		
	Medium Arm Assy XP-Series	Medium Arm Assy XP-Series		
	5210013			
	Short Arm Assy XP-Series			
		XP-10ACX		
Power Unit Hose	5570102	5570102		
	5570102 3/8 x 48 Power Unit Hose	5570102 3/8 x 48 Power Unit Hose		
Power Unit Hose  Powerside Cyl Hose	5570102 3/8 x 48 Power Unit Hose 5570832	5570102 3/8 x 48 Power Unit Hose 5570832		
	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose		
	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose	5570102 3/8 x 48 Power Unit Hose 5570832		
Powerside Cyl Hose Crossover Hose	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose		
Powerside Cyl Hose	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118		
Powerside Cyl Hose  Crossover Hose  Equalizer Cable	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114 Equalizer Cable 3/8 x 351-1/2	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118 Equalizer Cable 3/8 x 364-1/2		
Powerside Cyl Hose Crossover Hose	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114 Equalizer Cable 3/8 x 351-1/2 5595115	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118 Equalizer Cable 3/8 x 364-1/2 5595117		
Powerside Cyl Hose  Crossover Hose  Equalizer Cable	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114 Equalizer Cable 3/8 x 351-1/2 5595115 Equalizer Cable 3/8 x 356-1/2	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118 Equalizer Cable 3/8 x 364-1/2		
Powerside Cyl Hose  Crossover Hose  Equalizer Cable	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114 Equalizer Cable 3/8 x 351-1/2 5595115 Equalizer Cable 3/8 x 356-1/2	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118 Equalizer Cable 3/8 x 364-1/2 5595117		
Powerside Cyl Hose  Crossover Hose  Equalizer Cable  Equalizer Cable  Safety Cable	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114 Equalizer Cable 3/8 x 351-1/2 5595115 Equalizer Cable 3/8 x 356-1/2 5595110 3/32 x 287 Safety Cable	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118 Equalizer Cable 3/8 x 364-1/2 5595117 Equalizer Cable 3/8 x 369-3/4 5595113 3/21 x 300 Safety Cable		
Powerside Cyl Hose  Crossover Hose  Equalizer Cable  Equalizer Cable	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114 Equalizer Cable 3/8 x 351-1/2 5595115 Equalizer Cable 3/8 x 356-1/2 5595110 3/32 x 287 Safety Cable 5210113	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118 Equalizer Cable 3/8 x 364-1/2 5595117 Equalizer Cable 3/8 x 369-3/4 5595113 3/21 x 300 Safety Cable 5210112		
Powerside Cyl Hose  Crossover Hose  Equalizer Cable  Equalizer Cable  Safety Cable	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114 Equalizer Cable 3/8 x 351-1/2 5595115 Equalizer Cable 3/8 x 356-1/2 5595110 3/32 x 287 Safety Cable	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118 Equalizer Cable 3/8 x 364-1/2 5595117 Equalizer Cable 3/8 x 369-3/4 5595113 3/21 x 300 Safety Cable		
Powerside Cyl Hose  Crossover Hose  Equalizer Cable  Equalizer Cable  Safety Cable	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114 Equalizer Cable 3/8 x 351-1/2 5595115 Equalizer Cable 3/8 x 356-1/2 5595110 3/32 x 287 Safety Cable 5210113 Top Trough Assy XP-10-AC	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118 Equalizer Cable 3/8 x 364-1/2 5595117 Equalizer Cable 3/8 x 369-3/4 5595113 3/21 x 300 Safety Cable 5210112		
Powerside Cyl Hose  Crossover Hose  Equalizer Cable  Equalizer Cable  Safety Cable  Top Trough	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114 Equalizer Cable 3/8 x 351-1/2 5595115 Equalizer Cable 3/8 x 356-1/2 5595110 3/32 x 287 Safety Cable 5210113 Top Trough Assy XP-10-AC 5210014	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118 Equalizer Cable 3/8 x 364-1/2 5595117 Equalizer Cable 3/8 x 369-3/4 5595113 3/21 x 300 Safety Cable 5210112 Top Trough Assy XP-10ACX		
Powerside Cyl Hose  Crossover Hose  Equalizer Cable  Equalizer Cable  Safety Cable  Top Trough	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107 1/4 x 316-1/2 Crossover Hose 5595114 Equalizer Cable 3/8 x 351-1/2 5595115 Equalizer Cable 3/8 x 356-1/2 5595110 3/32 x 287 Safety Cable 5210113 Top Trough Assy XP-10-AC 5210014 Long Arm Assy XP-Series	5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106 1/4 x 329 Crossover Hose 5595118 Equalizer Cable 3/8 x 364-1/2 5595117 Equalizer Cable 3/8 x 369-3/4 5595113 3/21 x 300 Safety Cable 5210112 Top Trough Assy XP-10ACX 5210014		

### 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. Inspect the lift for any signs of concealed shipment damage or shortages. Remember to
- report any shipping damage to the carrier and make a notation on the delivery receipt.
- 3. 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!

- 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 on danger of falling.
- 10. Always insure 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 safe 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.



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

### **TOOLS REQUIRED**

- Rotary Hammer Drill Or Similar
- 3/4" Masonry Bit
- Hammer
- 4 Foot Level
- Open-End Wrench Set: 7/16" 1-1/8"
- Socket And Ratchet Set: 7/16" 1-1/8"
- Hex-Key / Allen Wrench Set

- Medium Crescent Wrench
- Medium Pipe Wrench
- Crow Bar For Shim Installation
- Chalk Line
- Medium Flat Screwdriver
- Tape Measure: 25 Foot Minimum
- Needle Nose Pliers

### **IMPORTANT NOTICE**

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 ONE

(Selecting Site)

Before installing your new lift, check the following.

- 1. LIFT LOCATION: Always use architects plans when available. Check layout dimension against floorplan 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 CONCRETE: Visually inspect the site where the lift is to be installed and check for cracked or defective concrete.

### **STEP TWO**

(Floor Requirements)



Specifications of concrete must be adhered to. Failure to do so could cause lift failure resulting in personal injury or death.

A level floor is suggested for proper installation. Small differences in floor slopes may be compensated for by proper shimming. 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 this lift on any asphalt surface or any surface other than concrete.
- DO NOT install this lift on expansion seams or on cracked or defective concrete.
- DO NOT install this lift on a second / elevated floor without first consulting building architect.
- DO NOT install this lift outdoors unless special consideration has been made to protect the power unit from inclimate weather conditions.

### **CONCRETE SPECIFICATIONS**

CONCRETE

MODEL	REQUIREMENT
7,000 Lb. Models	4" Min. Thickness / 3000 PSI
10,000 Lb. Models	4" Min. Thickness / 3000 PSI
12,000 Lb. Models	6" Min. Thickness / 3000 PSI
15,000 Lb. Models	6" Min. Thickness / 3000 PSI
18,000 Lb. Models	8" Min. Thickness / 3000 PSI

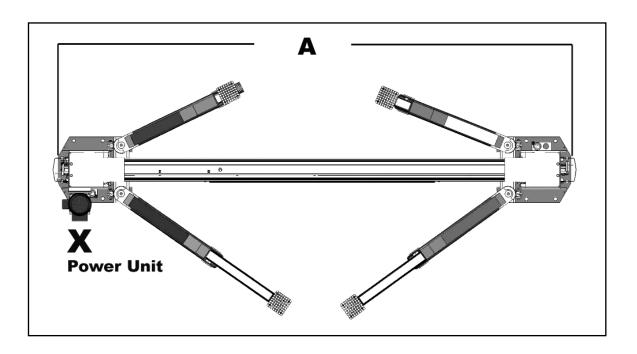
### NOTE

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.

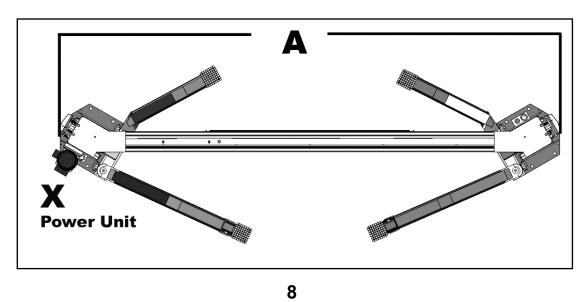
LIFT

## Floor Layout

Model	Α	
VD 400	400"	
XP-10C XP-10CX	132" 145"	
XP-12CTA	155"	
XP-15C	155"	
XP-18C	155"	



Model	Α
XP-10AC	132"
XP-10ACX	145"





When removing the lift from shipping angles pay close attention as the posts can slide and can cause injury.

Prior to removing the bolts make sure the posts are held securely by a fork lift or some other heavy lifting devise.

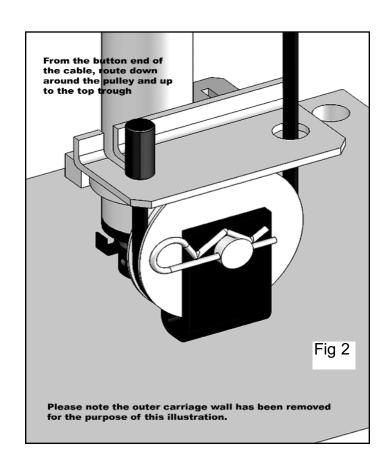
### STEP THREE

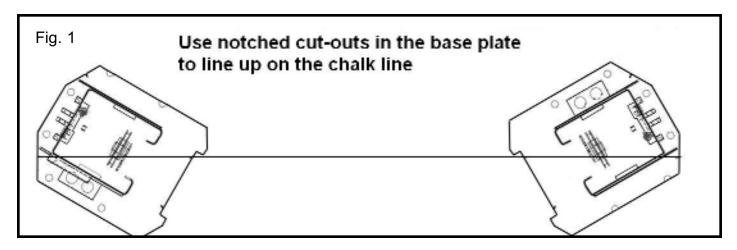
(Site Layout)

- 1. Determine which side will be the approach side.
- 2. Now determine where the power unit will be located. The POWERSIDE column has the power-unit mounting bracket attached to the side.
- 3. Once a location is determined, use a carpenters chalk line to layout a grid for the post locations. Keep all dimensions and squareness within 1/8" or malfunctioning of the lift can occur.
- 4. After the post locations are properly marked, use a chalk or crayon to make an outline of the posts on the floor at each location using the post baseplates as a template. (See below Fig 1)
- 5. Double check all dimensions and make sure that the layout is perfectly square.

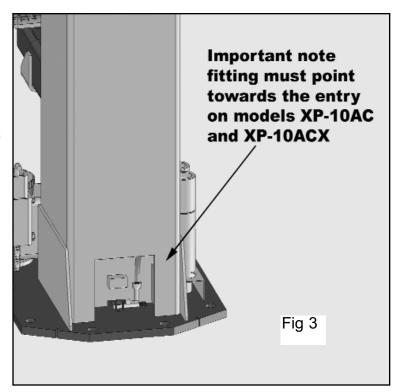
### COMPLETE THE FOLLOWING PRIOR TO STANDING COLUMNS.

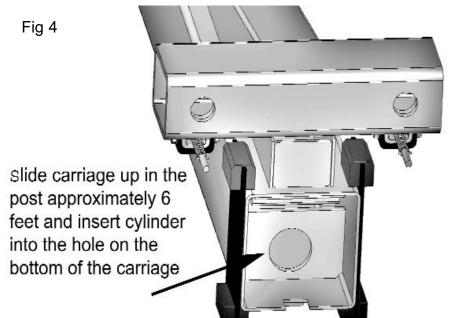
(1) Route the plug end of each equalizer cables around the bottom pulley and lock into bottom plate of carriage. (Fig. 2) Feed threaded end up through carriage. Leave excess cable resting on top of carriage until further steps are required. (NOTE: Asymmetric models have two different length cables.)





- 2. Install the cylinder fittings in cylinder ports so that each fitting points towards the entrance side of lift. (Fig 3).
- 3. At this point install the cylinders into the carriages. With the **post on the ground** slide the carriage towards the top of the post approximately 6 feet. Insert the casing side of the cylinder into the entry hole on the bottom of the carriage. Push the cylinder in all the way until the collar touches on the carriage. Slide the carriage all of the way back down until the cylinder makes contact with the base plate of the post. (Fig 4).





### Important Note

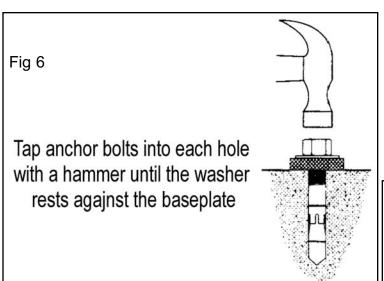
When routing the hydraulic hose through the columns, make sure to route through the retaining clips welded inside each column.

5. Route both hoses in their respective columns PRIOR to raising columns to their vertical position. When routing the hydraulic hose through the columns, make sure to route through the retaining clips welded inside each column. Make sure that the hose is clear of any moving parts. It may be necessary to tie hose clear by using nylon tie straps or wire.

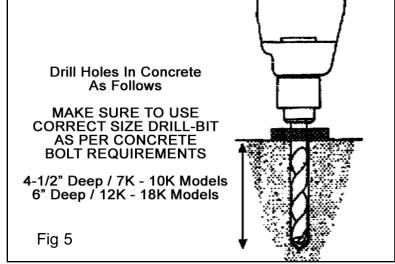
### STEP FOUR

(Installing The POWERSIDE Column)

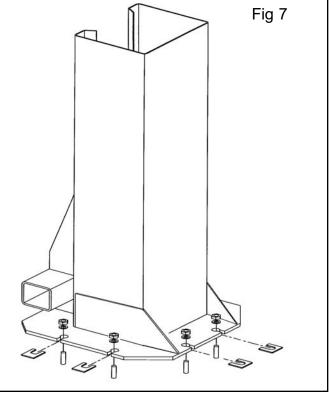
- 1. Before proceeding, double the check measurements and make certain that the bases of each column are aligned with the chalk line.
- 2. Using the baseplate on the POWERSIDE column as a guide, drill each anchor hole in the concrete (approximately 4-1/2" deep for 10K models and 6" deep for 12K and 15K models) using a rotary hammer drill and 3/4" concrete drill-bit. To assure full holding power, do not ream the hole or allow the drill to wobble. (Fig. 5)

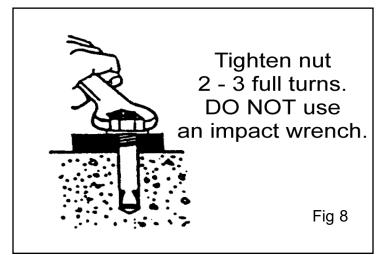


5. If shimming is required, insert the shims as necessary under the baseplate so that when the anchor bolts are tightened, the columns will be plumb. (See Fig. 7)



- 3. After drilling, remove dust thoroughly from each hole making certain that the column remains aligned with the chalk line.
- 4. Assemble the washers and nuts on the anchors then tap into each hole with a hammer until the washer rests against the baseplate. Be sure that if shimming is required that enough threads are left exposed. (See Fig. 6)





### NOTE:

To ease installation of the top beam, it helps to keep the anchor bolts loose on one of the columns until the top beam is mounted.

6. With the shims and anchor bolts in place, tighten by securing the nut to the base then turning 2 - 3 full turns clockwise. DO NOT use an impact wrench for this procedure. (See Fig. 8)

### STEP FIVE

( Mounting The OFFSIDE column. )

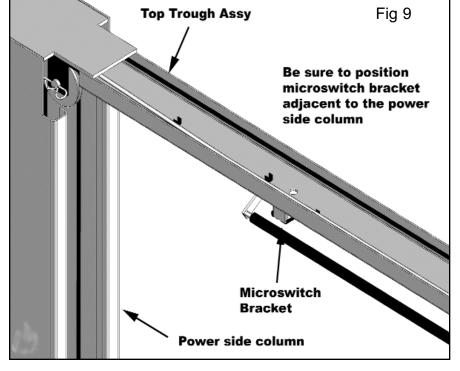
1. Position the OFFSIDE column at the designated chalk locations and secure to the floor following the same procedures as outlined in STEP FOUR

### STEP SIX

( Mounting the OVERHEAD BEAM. )

1. Remove all of the Equalizer pulleys in preparation of installing the Top Trough assy.

# NOTE: In order to route the equalizer cables the pulleys must be removed



2. Using a lifting devise, raise the OVERHEAD beam into position on top of the columns. Bolt to the columns using the 10 mm Hex Bolts, Nuts and Washers. **YOU MUST** POSITION THE SWITCH ENCLOSURE ADJACENT POWERSIDE COLUMN. (Fig 9)

### **Important Note**

YOU MUST POSITION THE SWITCH ENCLOSURE ADJACENT POWERSIDE COLUMN

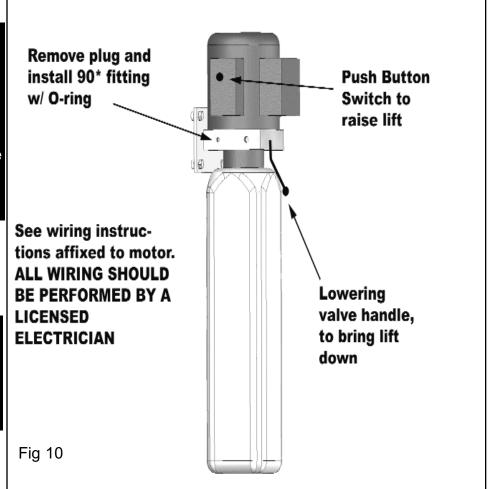
### **IMPORTANT NOTE:**

When installing hydraulic fittings and hoses it is not necessary to use Teflon tape or other sealant.

Teflon tape and other sealing compounds can contaminate the system and cause malfunctioning of lift.



ALL WIRING MUST BE PERFORMED BY A CERTIFIED ELECTRICIAN



### **STEP SEVEN**

( Mounting The POWER UNIT )

- 1. Attach the power unit to the POW-ERSIDE COLUMN using four M8 hex bolts and nuts supplied. Fill the reservoir with 10 WT. HYDRAULIC OIL OR DEXRON TYPE III ATF, approximately four gallons. Make sure the funnel used to fill the power unit is clean.
- 2. Remove plug from power unit and install the 90\* fitting w/ O-ring into the power port on the power unit. (Fig 10)
- 3. The standard power unit for your lift is 220 volt, 60HZ, single phase. All wiring must be performed by a certified electrician only. SEE WIRING INSTRUCTIONS AFFIXED TO MOTOR FOR PROPER WIRING INSTRUCTIONS

### **AWARNING**

"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." 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."

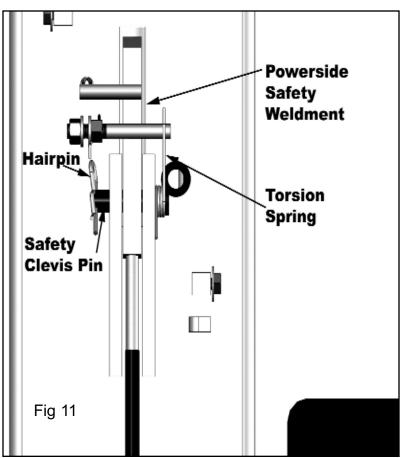
"Use a separate breaker for each power unit."
"Protect each circuit with time delay fuse or circuit breaker."

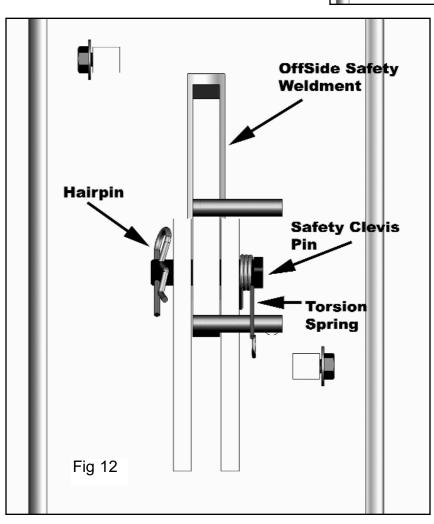
"For 208-230 volt, single phase, use a 25 amp fuse." "For 208-230 volt, three phase, use a 20 amp fuse." "For 380-440 volt, three phase, use a 15 amp fuse."

### **STEP EIGHT**

( Installing the safeties and safety cable )

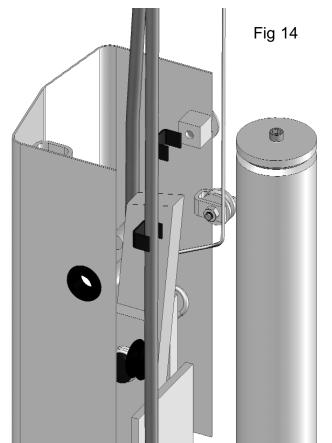
1. Install safety weldments into each respective post. (Fig 11 & 12)

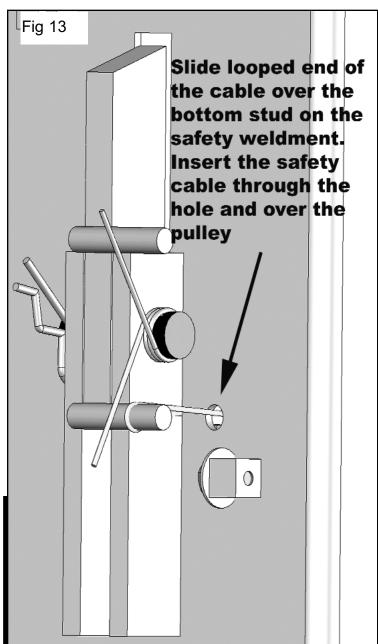




- 2. From the offside column insert the non looped end of the safety cable through the hole located to the right of the offside safety weldment. (Fig 13)
  - 3. Route the cable under the pulley and take it up to the Top Trough. (Fig 14)
- 4. Route the cable through the pulley and across the lift.

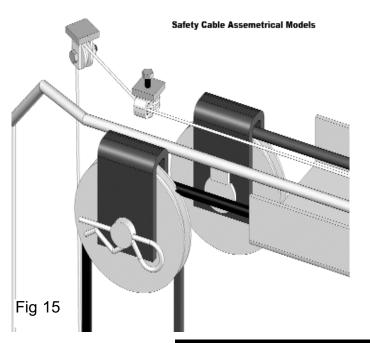
  (Fig 15 & 16)

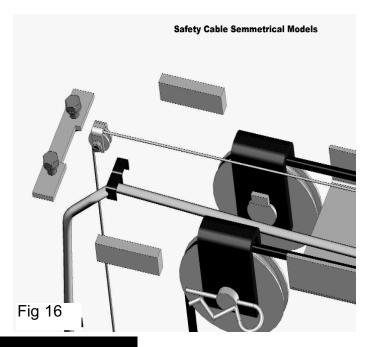






ENSURE THAT BOTH THE POWERSIDE AND OFF-SIDE SAFETYS ENGAGE PROPERLY PRIOR TO OPRERATING THE LIFT



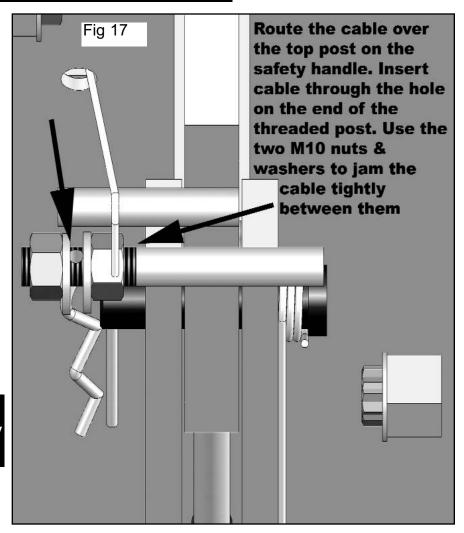


### Note:

Assemetrical models have an additional safety pulley to route the cable out of the path of the cylinder

- 5. Route the cable the same way on the power side going back down the post.
- 6. Route the cable over the top post on the safety handle. Insert the cable end through the hole on the threaded post
- 7. Pull the slack out the safety cable and hold tension as the cable is being tightened.. Tighten jam nuts on either side of the cable to secure it into place. (Fig 17)

Make sure to tighten both nuts equally so as to keep the safety cable centered

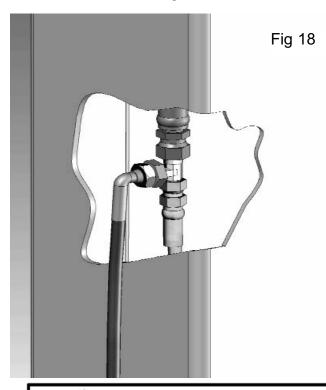


### STEP NINE

(Installing The HYDRAULIC LINES.)

- 1. Install the Bulkhead Tee fitting into the powerside post. The through hole is located approximately 90 inches from the floor on the back wall of the powerside post.
- 2. Connect the power side cylinder hose to the the tee fitting Be sure to route the hose through the retainer rings inside the columns.
- 3. Route the offside cylinder hose (crossover hose) up through the post and across the top trough, down the post and connect it to the bulkhead tee fitting.

Fig 18



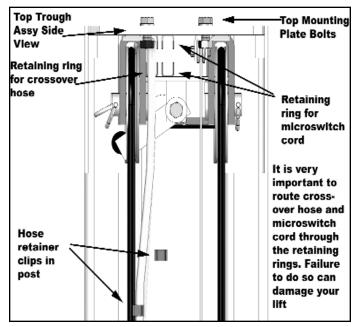
### **WARNING**

#### NOTE:

When routing the hydraulic hose through the columns, make sure to route through the retaining rings welded inside each column. Make sure that the hose is clear of any moving parts. It may be necessary to tie hose clear by using nylon tie straps or wire.



Make sure that the safety locks on each column are fully engaged before attempting to route equalizer cables and/or hoses. Carriages must be equal height from the floor before proceeding

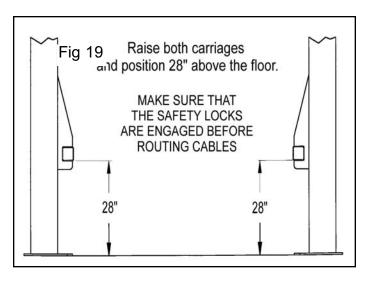


### STEP TEN

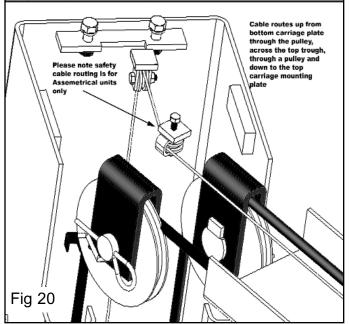
(Routing The EQUALIZER CABLES)

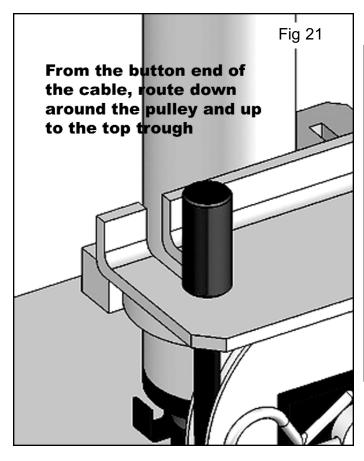
- 1. Raise and lock each carriage approximately 28" above the ground. See Fig. 19

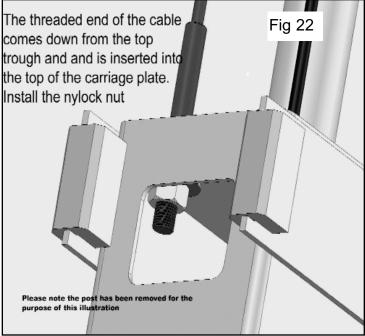
  Make sure that the safety locks on each column are fully engaged before attempting to route equalizer cables and/or hoses. Carriages must be equal height from the floor before proceeding.
- 2. With the carriages in equal position from the floor, route the equalizer cables. If you have already routed them in the post as stated in step 3. Remove the pulley and route the cable around the pulley and reinstall it.



- 3. Take the cable across the top trough, remove the pulley, route the cable around the puley and reinstall it.
- 4. Insert the threaded end of the cable through the hole on top of the carriage put on the equalizer cable nylock nut.
- 5. Route the other cable the same way.



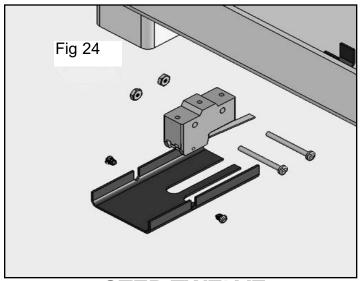




### STEP ELEVEN

(Installing Overhead MICRO SWITCH.)

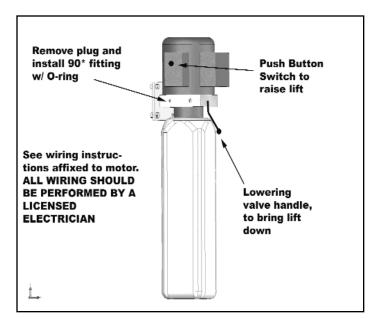
1. Install the overhead Micro Switch as shown below. Be sure to keep wire clear of moving parts. WIRING MUST BE PERFORMED BY A CERTIFIED ELECTRICIAN. Fig 23 & 24

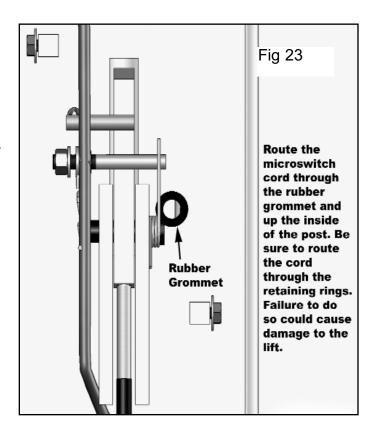


### **STEP TWELVE**

( Power Unit Installation and Start-Up. )

1. The standard power unit for your lift is 220 volt, 60HZ, single phase. All wiring must be performed by a certified electrician only. SEE WIRING INSTRUCTIONS AFFIXED TO MOTOR FOR PROPER WIRING INSTRUCTIONS.





### **AWARNING**

### IMPORTANT POWER-UNIT INSTALLATION NOTES

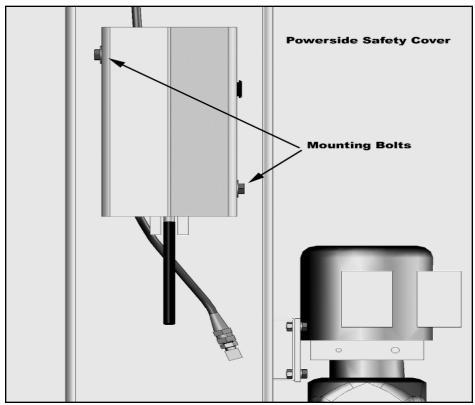
- DO NOT run power unit with no oil. Damage to pump can occur.
- The power unit must be kept dry. Damage to power unit caused by water or other liquids such as detergents, acid etc., is not covered under warranty.
- Improper electrical hook-up can damage motor and will not be covered under warranty.
- 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.

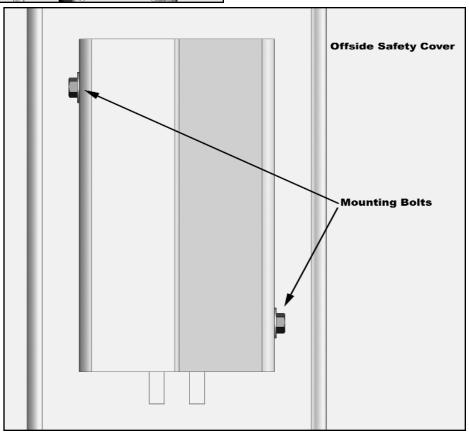
installation and adjustment. DO NOT attempt to raise vehicle until a thorough operation check has been completed.

### **STEP THIRTEEN**

(Installation Of SAFETY COVER.)

1. After safeties have been adjusted and checked for proper operation, install the two cover plates as shown below. (See Fig. 24 & 25)





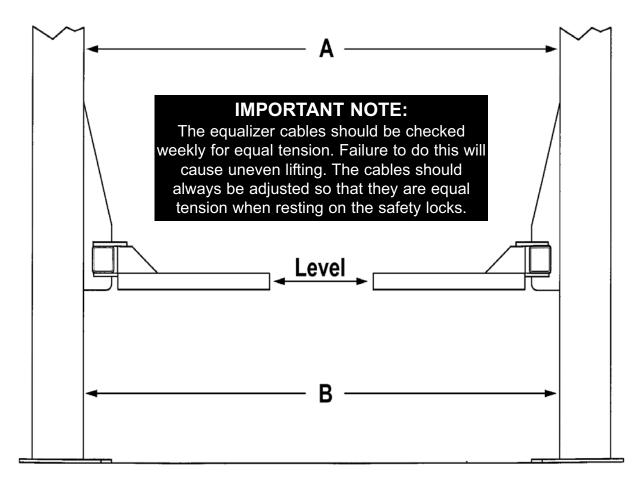


### IMPORTANT LEVELING INSTRUCTIONS

Before operating your lift, check to make sure that both "A" and "B" measurements are EQUAL.

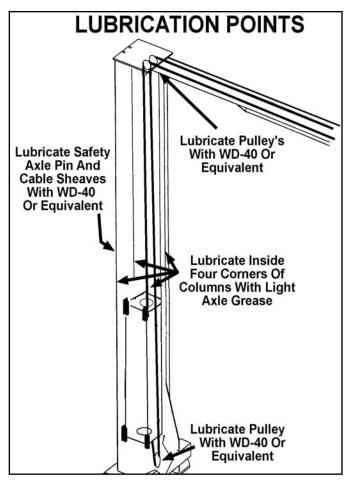
The swing arms must be level before operation.

If your swing arms are not level shim the columns as required.



### LUBRICATION

1. After installation and start up as been completed, lubricate lift components as described below. (See Fig. 26)



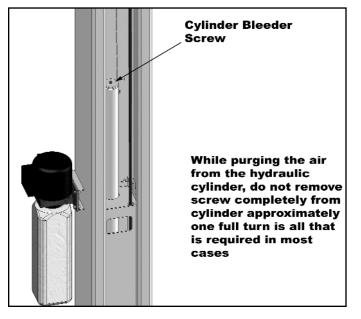
### START-UP AND BLEEDING

- 1. After electrical power is connected and oil reservoir is full press button to raise lift. Cylinders may "jump" upon initial start up which is normal.
- 2. Continue raising until lift cylinders bottom out at full height. DO NOT continue pressing button after lift reaches full height. Damage to motor can occur if continued.
- 3. Lower the lift only HALF WAY by pressing the SAFETY RELEASE handle inward then pressing in the DOWN lever on power unit.

- 4. With the lift at half height, slowly loosen the BLEED SCREWS located at the top of each cylinder (Fig 27) to bleed trapped air. DO NOT completely remove bleed screws. Retighten after trapped air has escaped.
- 5. Lower the lift completely by pressing the SAFETY RELEASE handle inward then pressing the DOWN lever on power unit and repeat bleeding process one additional time.

### **BE AWARE!**

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.





RISK OF EXPLOSION!! This equipment has internal arcing or sparking parts which should not be exposed to flammable vapors.

#### TO RAISE LIFT

- ✓ Read Operating and Safety manuals before using lift.
- Always lift a vehicle according to the manufacturers recommended lifting points.
- Position vehicle between columns.
- Adjust swing arms so that the vehicle is positioned with the center of gravity midway between pads.
- ✓ Use truck adapters as needed. Never exceed 9" of pad height.
- Raise lift by depressing button until supports contact underside of the vehicle. Recheck to make sure vehicle is secure.
- Raise vehicle to desired working height. Lower vehicle into 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 to clear the clear safeties.
- Raise safeties by pulling handles on each column.
- ✓ Be sure tool trays, stands or personnel are removed from under vehicle.
- ✓ Lower vehicle by activating lowering handle.
- ✓ Before removing vehicle from lift area, position lift arms and supports to provide an unobstructed exit.
- ✓ NEVER, drive over lift arms.

### REQUIRED MONTHLY MAINTENANCE

- Check arm restraints for proper operation.
- Check all chain/cable connections, bolts and pins to insure proper mounting.
- ✓ Visually inspect safeties for proper operation.
- Lubricate columns with grease.
- ✓ Inspect all anchor bolts and retighten if necessary.
- Check columns for squareness and plumb.
- ✓ Inspect all arm pivot pins making sure they are properly secured.
- Check equalizer cable tension, adjust if necessary.
- ✓ Inspect all lift pads, replace if necessary.
- If lift is equipped with overhead cut-off switch, check for proper operation.

### WARNING

- WARNING: If cement anchor bolts are loose, or any component of the lift is found to be defective, DO NOT USE LIFT!
- 2. Never operate the lift with any person or equipment below.
- 3. Never exceed rated capacity.
- Always insure safeties are engaged before any attempt is made to work on or near vehicle.
- 5. Never leave lift in an elevated position unless the safeties are engaged.
- 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 WITH LESS THAN FOUR (4) ARMS. RATED CAPACITY OF EACH LIFT ARM IS NO GREATER THAN ONE FOURTH (1/4) OF THE OVERALL LIFTING CAPACITY.



Clear area if vehicle is in danger of falling.



Position vehicle with center of gravity midway between adapters.



Lift to be used by trained operator only.



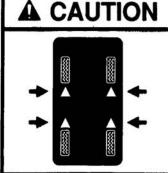
Authorized personnel only in lift area.



Remain clear of lift when raising or lowering vehicle.



Avoid excessive rocking of vehicle while on lift.



Use vehicle manufacturer's lift points.

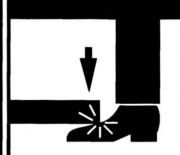
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Always use safety stands when removing or installing heavy components. ©



Do not override self-closing lift controls.



Keep feet clear of lift while lowering.





Use height extenders when necessary to ensure good contact.





Auxiliary adapters may reduce load capacity.

The messages and pictographs shown are generic in nature and are meant to generally represent hazards common to all automotive lifts regardless of specific style.

Funding for the development and validation of these labels was provided by the Automotive Lift Institute, PO Box 33116 Indialantic, FL. 32903.

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### **Utility Air-Electric Workstation**

Utility Station may be mounted on the vertical column of the lift or on a wall.

IMPORTANT: Check State or Local codes for any height requirements for the electrical outlets before mounting.

To mount the Utility Station on a Lift Column, use the Box as a template, mark and drill 11/32" diameter holes. Use 5/16" diameter bolts and lock nuts to

secure to the side of the lift.

IMPORTANT: The hole locations are critical to avoid interference with the carriage slide blocks.

For Wall mounting, mount in the same fashion, use appropriate hardware for either sheet rock or concrete.

IMPORTANT: All electrical wiring shall comply with all State and Local Codes.

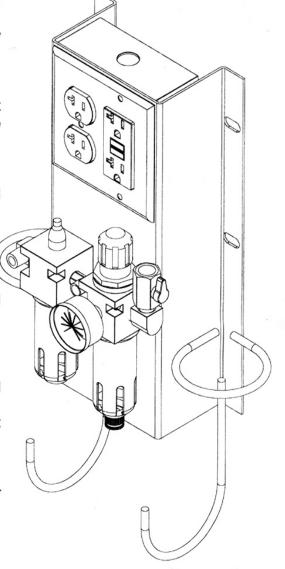
Connect electrical wiring to single phase, 60Hz 115 volt electrical supply using suitable conduit (not supplied). The duplex receptacle must be connected through the GFCI with the input line to the box connected to a circuit breaker or time delay fuse rated at 20 amps. Both receptacles must be grounded to the box.

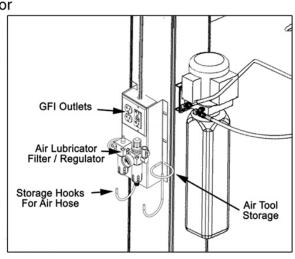
Connect main air supply to 1/4" ball valve inlet on the Utility Station (Run 1/2" line from compressor or main air system to Utility Station.)

Install Quick Couplers to the 1/4" male fittings on the box. The air supply between the filter and the lubricator will be non-lubricated, used for tire inflation or blowing off. The air outlet on the left side will be lubricated for air tool use.

### Regulator Instructions

- Regulate pressure by raising the knob, then turning clockwise to increase and counterclockwise to decrease. Push knob down to lock setting.
- · Adjust the oil mist using the screwdriver slot located on top of the lubricator.
- To fill the lubricator, first depressurize the air system, remove the slotted screw plug in the body. Replace the screw before repressurizing.





### **OPERATION**

#### To Raise Lift;

- Position vehicle tires in the center of each runway.
- ♦ Set parking brake or use wheel chock to hold vehicle in position.
- ♦ Before raising vehicle, be sure all personnel are clear of the lift and surrounding area. Pay careful attention to overhead clearances.
- ♦ Raise the lift to the desired height by pressing the push button on the power unit.
- ♦ After vehicle is raised to the desired height, <u>lower the lift onto the nearest safety lock</u>. Do not allow cables to become slack. ALWAYS INSURE SAFETY LOCKS ARE ENGAGED before entering work area.
- ♦ Check to make sure all four safeties are engaged on the SAME safety lock position BEFORE ENTERING work area.

#### To Lower Lift:

- ♦ Raise the lift off 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.
- ♦ Press the push button air safety valve and HOLD.
- ♦ Push the LOWERING HANDLE on the power unit until the lift has descended completely.

### **WEEKLY MAINTENANCE**

- Lubricate all rollers with general purpose oil or WD-40.
- ♦ Check all cable connections, bolts and pins to insure proper mounting.
- ♦ Lubricate safety lock pivot points with general purpose oil or WD-40.

### **MONTHLY MAINTENANCE**

- ♦ Check safety locks to insure they are in good operating condition.
- ♦ Check all cables for excessive signs of wear
- ♦ Make a visual inspection of ALL MOVING PARTS and check for excessive signs of wear
- ♦ Replace ALL FAULTY PARTS before lift is put back

into operation.

- 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 four safety locks are engaged.

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 FOUR LOCKS are disengaged. If one of the locks inadvertently locks on descent the lift and/or vehicle may disrupt causing personal injury or death.

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 and is the most technically advanced lift on the market today.

RECORD HERE THE FOLLOWING
INFORMATION WHICH IS LOCATED ON THE
SERIAL NUMBER DATA PLATE

### 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

- 1. Check for proper oil level
- 2. Bleed cylinders
- 3. Flush- Release valve to get rid of possible contamination.
- 4. Dirty oil
- 5. Tighten all fasteners
- 6. Check for free movement of release
- 7. Check motor is wired correctly.
- 8. Oil seal damaged or cocked
- 9. See Installation Manual
- 10. Replace with new part
- 11. Return unit for repair
- 12. Check pump-mounting bolts
- 13. Inlet screen clogged
- 14. Check wall outlet voltages and wiring

### **INSTRUCTION**

The oil level should be up to the bleed screw in the reservoir with the lift all the way down.

See Installation Manual

Hold release handle down and start unit allowing it to run for 15 seconds.

Replace oil with clean Dexron ATF

Tighten fasteners to recommended torques.

If handle does not move freely, replace bracket or handle assembly.

Compare wiring of motor to electrical diagram on drawing.

Replace oil seal around pump shaft.

Consult Lift Manufacturer

Replace with new part

Return unit for repair

Bolts should be 15 to 18 ft. lbs.

Clean inlet screen or replace

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 INSTRUCTION

1. Check for correct voltage Compare supply voltage with voltage on motor nametag.

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.

### 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 10-WT hydraulic oil or Dexron-III automatic

transmission fluid only. If ATF is contaminated, replace with

clean ATF 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

### 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)

RE	И	F	D	Y

1. Check oil level

2. Check/Tighten inlet tubes

3. Oil seal damaged or cocked

4. Bleed cylinders

5. See Installation Manual

6. Check vehicle weight

7. Flush release valve

8. Replace with new part

9. Return unit for repair

10. Check motor is wired correctly

11. Inlet screen clogged

12. Check wall outlet voltage and wiring

### INSTRUCTION

The oil level should be up to the bleed screw in the reservoir

with the lift all the way down.]

Replace inlet hose assembly.

Replace oil seal and install

See Installation Manual

Consult Lift Manufacturer

Compare weight of vehicle to weight limit of the lift.

Hold release handle down and start unit allowing it to run for 15

seconds.

Replace with new part

Return unit for repair

Compare wiring of motor to electrical diagram on unit drawing

Clean inlet screen or replace.

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**

- 1. Check oil level
- 2. Oil seal damaged and cocked
- 3. Bleed cylinder
- 4. Flush release valve
- 5. Replace with new valve
- 6. Return unit for repair
- 7. See Installation Manual
- 8. Check complete hydraulic system for leaks

### INSTRUCTION

The oil level should be up to the bleed screw in the reservoir with the lift all the way down.

Replaced oil seal around pump shaft.

Refer to Installation Manual

Hold release handle down and start unit allowing it to run for 15 seconds.

Replace with new valve

Return unit for repair

Consult Lift Manufacturer

### 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.

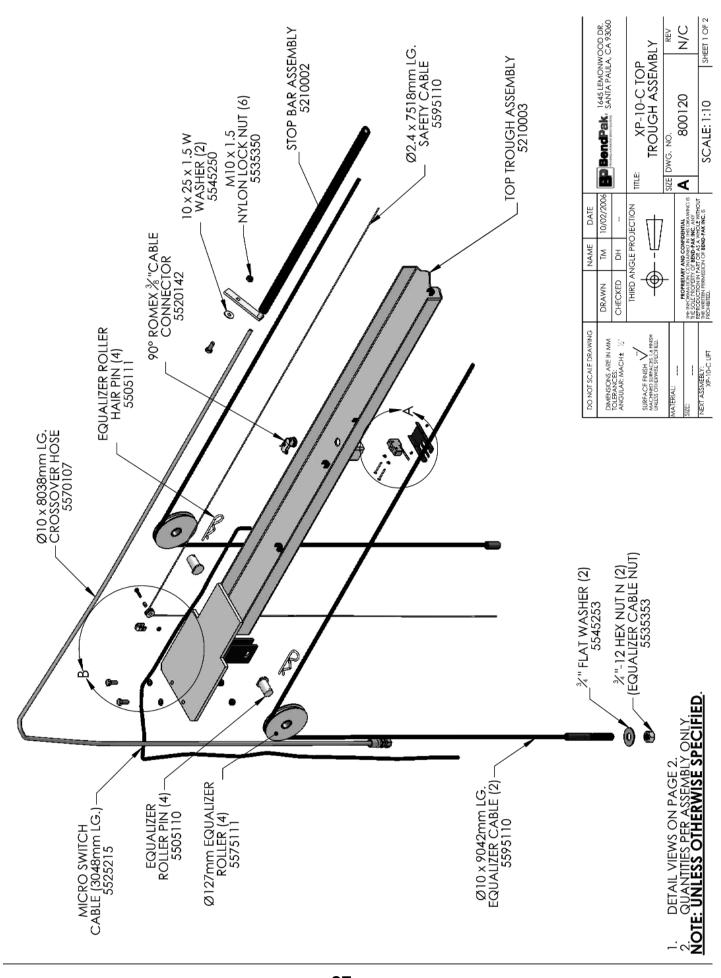
### TRAINING SHOULD INCLUDE, BUT NOT LIMITED TO:

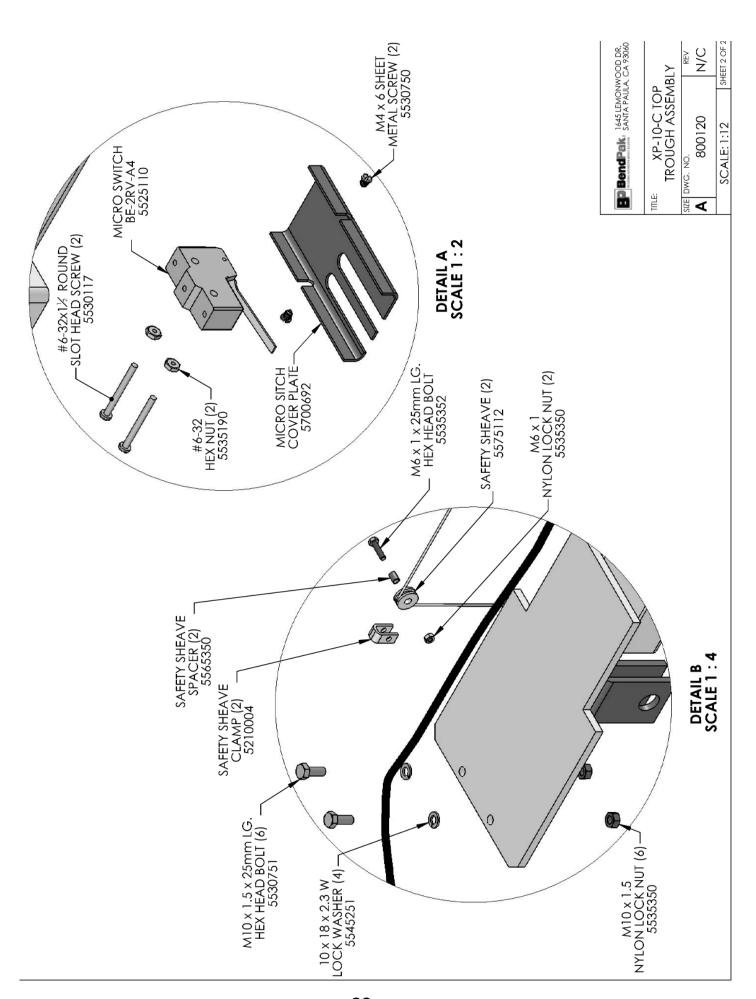
- Proper positioning of the vehicle on the runway. (See manufacturers minimize wheel base loading requirements.)
- Use of the operating controls.
- Understanding the lift capacity.
- Proper use of jack stands or other load supporting devices.
- Proper use, understanding and visital identification of 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.

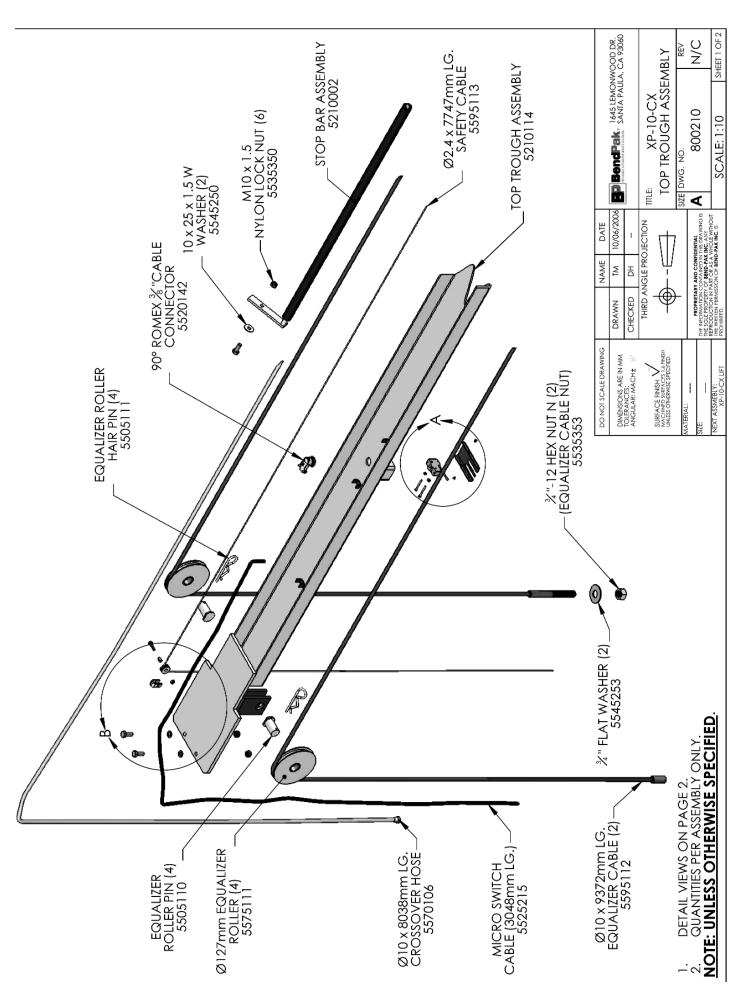
### LIFT OPERATION SAFETY

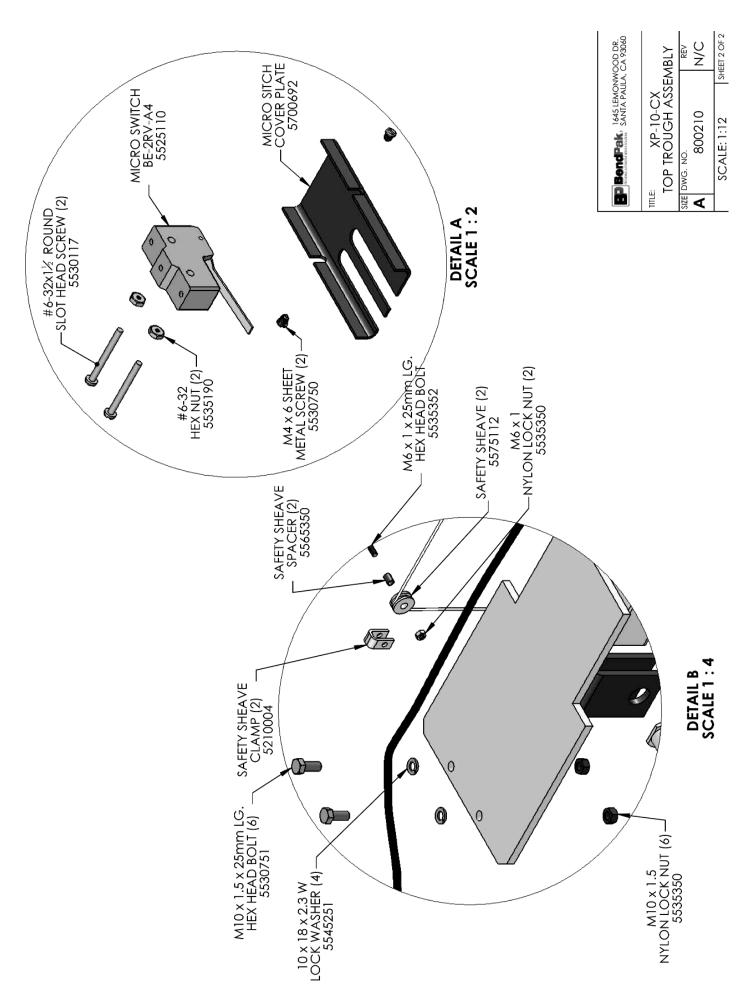
- ♦ It is important that you know the load limit. Be careful that you do not overload the lift. If you are unsure what the load limit is, check the data plate found on one of the lift columns or contact the manufacturer.
- ♦ The center of gravity should be followed closely to what the manufacturer recommends.
- ♦ 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 vheice obn the lift runways, set the emregecny 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 adaptors 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.

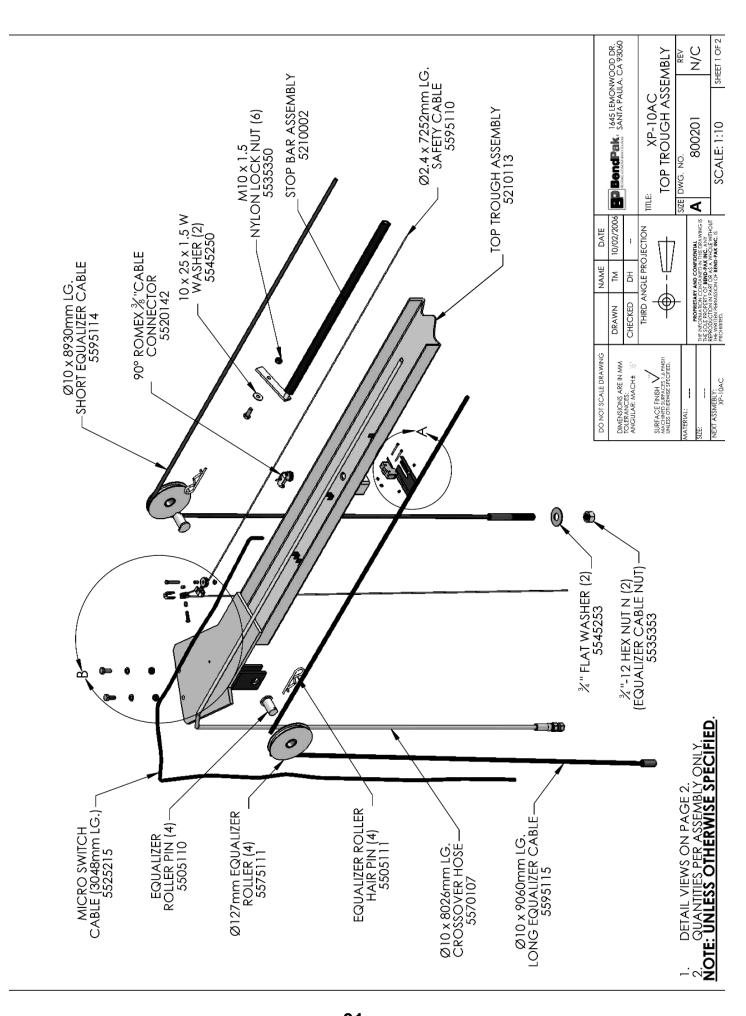
- DO NOT Leave the controls while the lift is still in motion.
- ♦ DO NOT stand directly in front of the vehicle or in the bay when vehicle is being loaded or driven into position.
- ♦ **DO NOT** Go near vehicle or attmpet to work on the vehicle when being raised or lowered. **REMAIN CLEAR** of lift when raising or lowering vehicle.
- ♦ **DO NOT** rock the vehicle while on the lift or remove any heavy compnent from cyhecile that mya casue excessive weight shift.
- ◆ DO NOT lower the vehicle until people, materials, and tools are clear
- ALWAYS INSURE that the safeties are engaged 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.

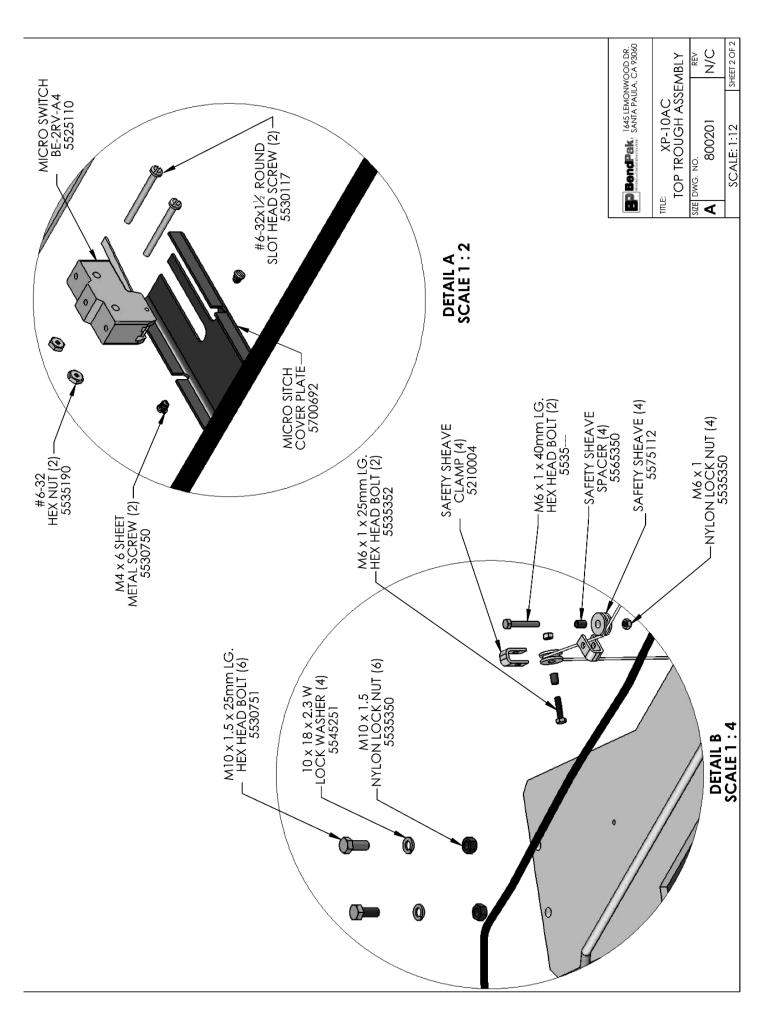


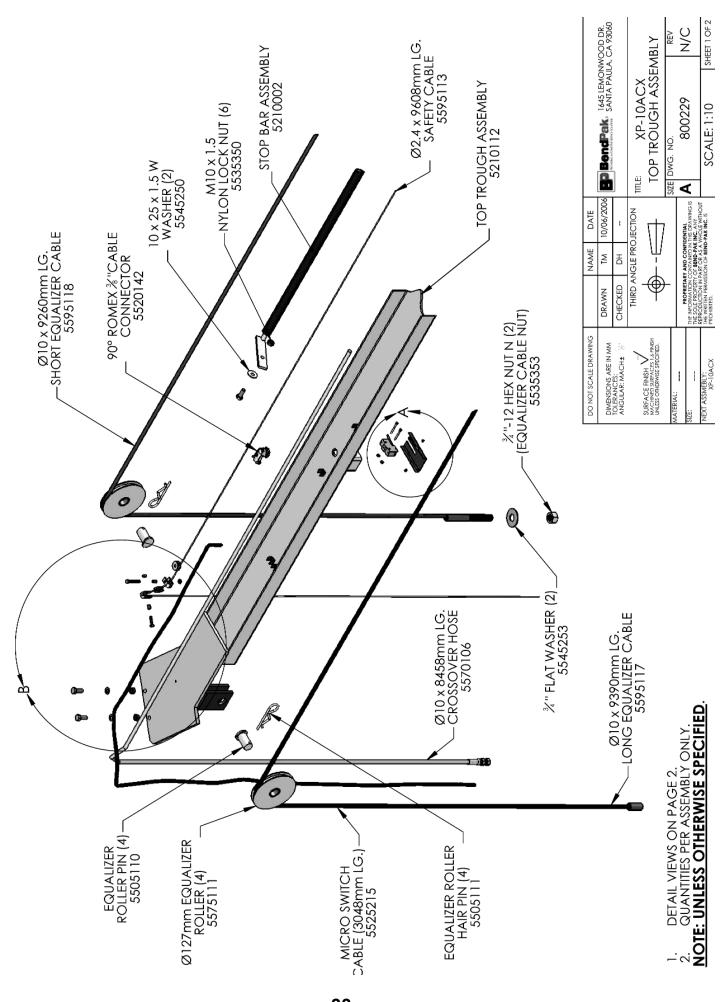


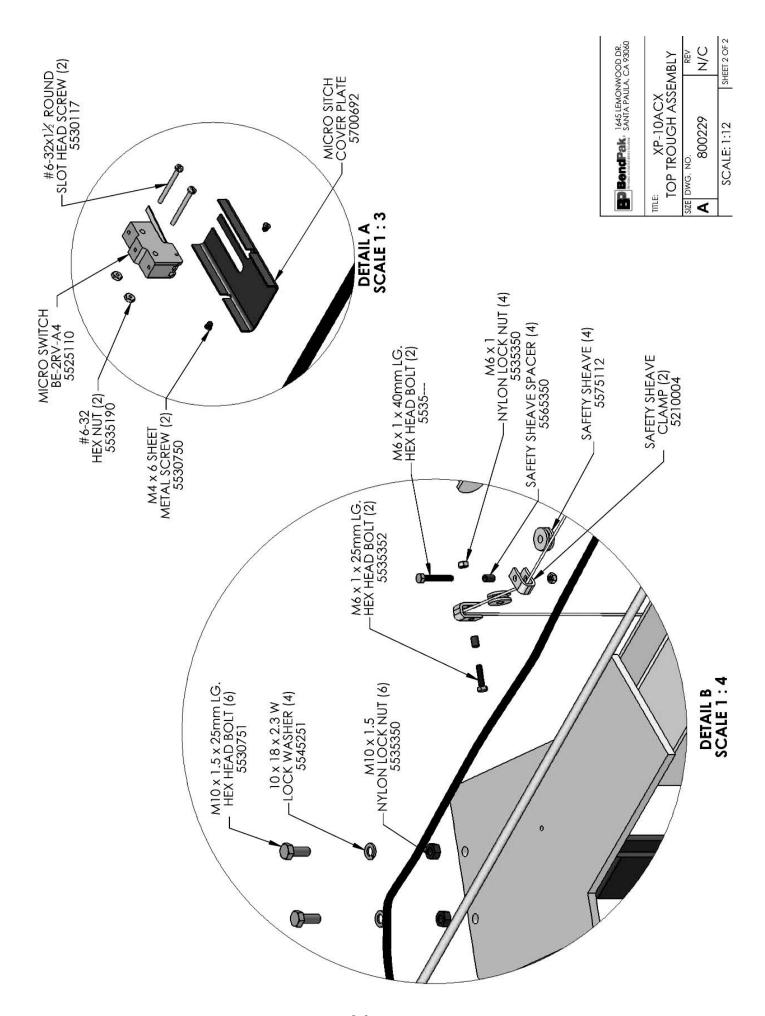


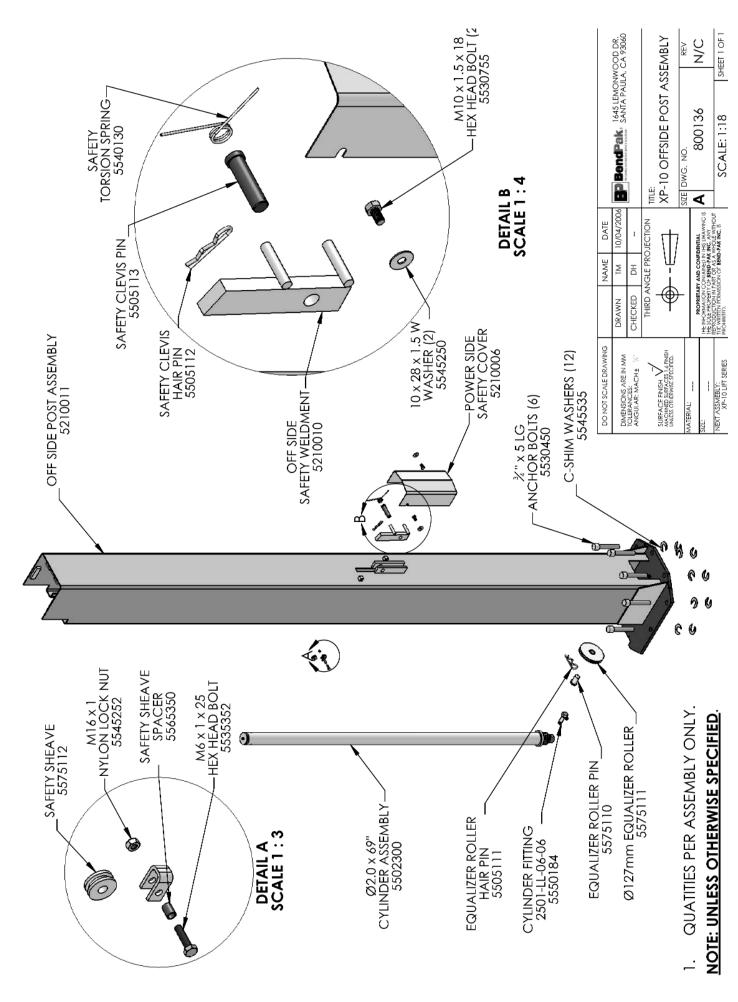


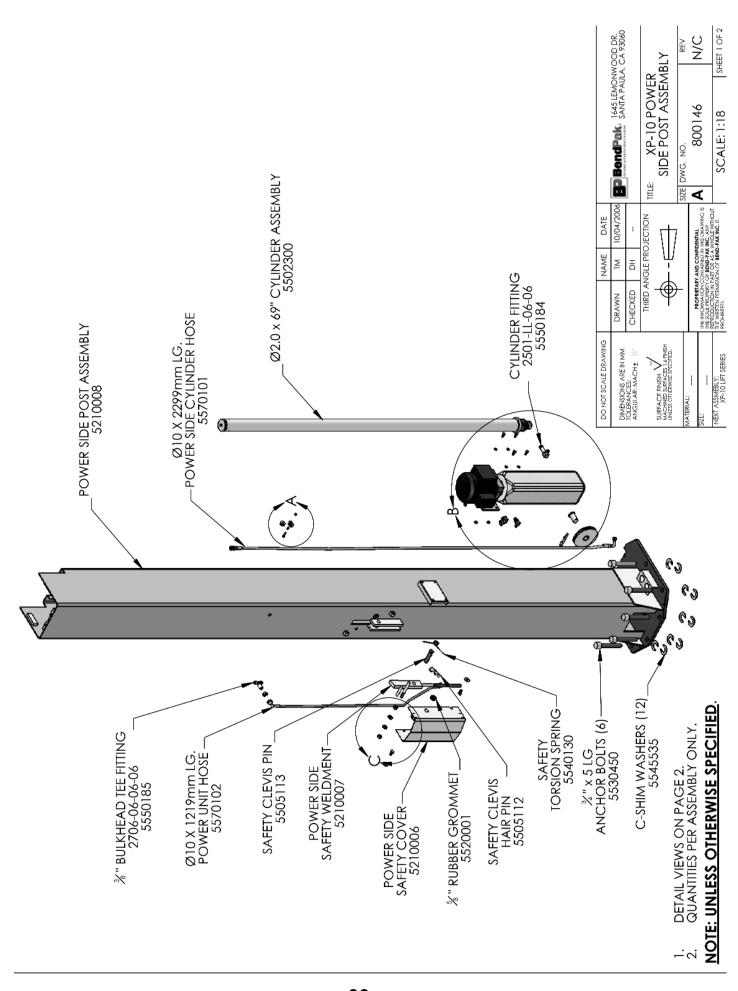


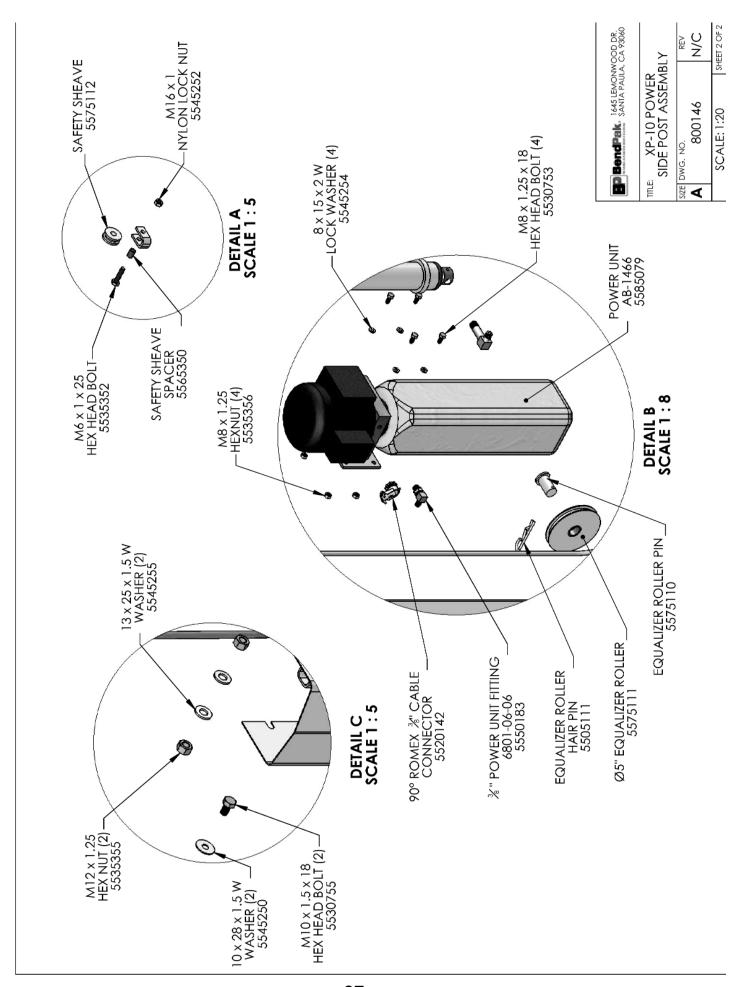


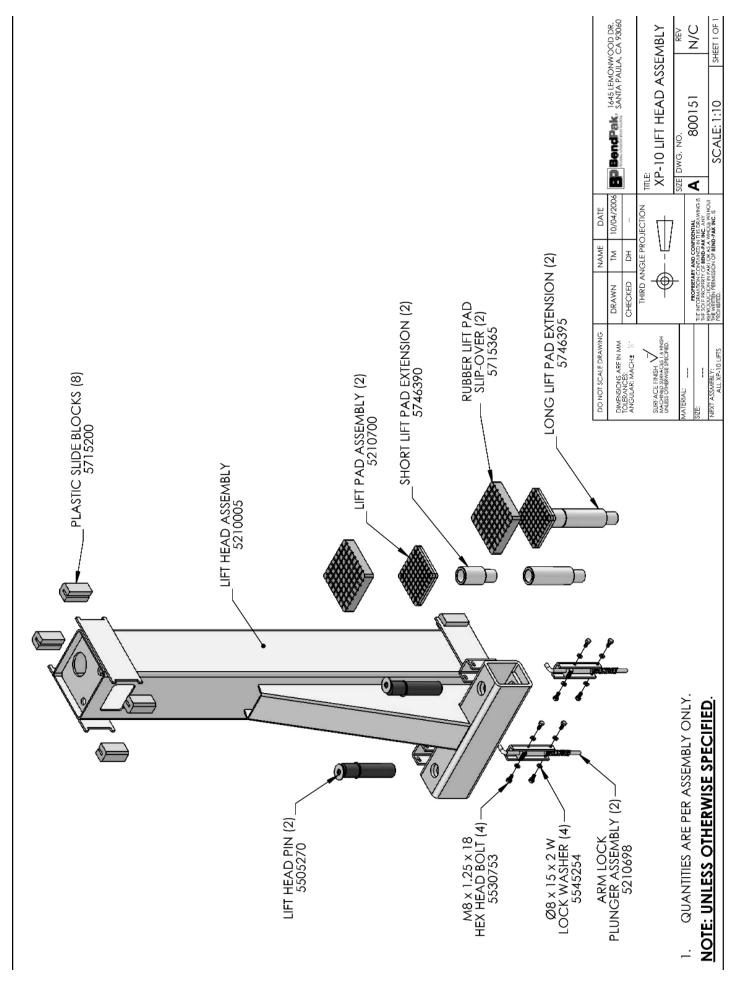














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