

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

P-Series Lifts

MODELS: XP-10C XP-10CX XP-10AC XP-10ACX XP-12CTA XP-12FTA XP-12FTA XP-15C XP-18C



Keep this operation manual near the machine at all times. Make sure that <u>ALL USERS</u> 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 Fax: 1-805-933-9160

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. _____

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

QTY.	PART(S) DESCRIPTION	Part Number	WHERE USED	CHECK
PART	S BOX			
1	Power side cover	5210006	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

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

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
Lift 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 356	Equalizer Cable 3/8 x 369
Equalizer Cable	5595111	5595112
	Equalizer Cable 3/8 x 356	Equalizer Cable 3/8 x 369
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-10AC	XP-10ACX
Power Unit Hose	XP-10AC 5570102	XP-10ACX 5570102
Power Unit Hose	XP-10AC 5570102 3/8 x 48 Power Unit Hose	XP-10ACX 5570102 3/8 x 48 Power Unit Hose
Power Unit Hose Powerside Cyl Hose	XP-10AC 5570102 3/8 x 48 Power Unit Hose 5570832	XP-10ACX 5570102 3/8 x 48 Power Unit Hose 5570832
Power Unit Hose Powerside Cyl Hose	XP-10AC 5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose	XP-10ACX 5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose
Power Unit Hose Powerside Cyl Hose Crossover Hose	XP-10AC 5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570107	XP-10ACX 5570102 3/8 x 48 Power Unit Hose 5570832 1/4 x 90-1/2 Powerside Cyl Hose 5570106
Power Unit Hose Powerside Cyl Hose Crossover Hose	XP-10AC 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	XP-10ACX 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
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable	XP-10AC 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	XP-10ACX 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
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable	XP-10AC 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	XP-10ACX 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
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable Equalizer Cable	XP-10AC 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	XP-10ACX 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
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable Equalizer Cable	XP-10AC 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	XP-10ACX 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
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable Equalizer Cable Safety Cable	XP-10AC 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	XP-10ACX 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
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable Equalizer Cable Safety Cable	XP-10AC 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	XP-10ACX 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
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable Equalizer Cable Safety Cable	XP-10AC 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	XP-10ACX 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
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable Equalizer Cable Safety Cable Top Trough	XP-10AC 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	XP-10ACX 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
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable Equalizer Cable Safety Cable Top Trough	XP-10AC 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	XP-10ACX 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
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable Equalizer Cable Safety Cable Top Trough Lift Arms	XP-10AC 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	XP-10ACX 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 Long Arm Assy XP Series
Power Unit Hose Powerside Cyl Hose Crossover Hose Equalizer Cable Equalizer Cable Safety Cable Top Trough Lift Arms	XP-10AC 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 5210020	XP-10ACX 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 Long Arm Assy XP Series 5210019

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
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.

Floor Layout

Model	Α
XP-10C	132"
XP-10CX	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 powerunit 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). Also 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.



(3) 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



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.

models and 6" deep for 12K and 15K models) using a rotary hammer drill and 3/4" concrete drillbit. To assure full holding power, do not ream the hole or allow the drill to wobble. (See Fig. 4) 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. 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. 6)



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. 7)

(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. 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. <u>YOU MUST</u> POSITION THE SWITCH ENCLOSURE ADJACENT



1. Attach the power unit to the POWERSIDE COLUMN using four 8 mm hex bolts and nylock nuts supplied. **Fill the reservoir with 10 WT. HYDRAULIC OIL OR DEXRON TYPE III ATF.** Make sure the funnel used to fill the power unit is





STEP EIGHT

(Installing The SAFETY LOCKS)

1. Install the safety lock latches on both columns and route safety release cable as show below. Adjust safety release cable so that cable is tight



with no slack. (Figure 10 & 14)

STEP NINE

(Installing The HYDRAULIC LINES.) 1. Connect the two COLUMN hoses to the "Tee" fitting on the inside of the POWERSIDE column. Be sure to route the hose through the retainer







rings inside the columns. (See Fig. 15 - 16)

STEP TEN

(Routing The EQUALIZER CABLES)

1. Raise and lock each carriage approximately





28" above the ground. (See Fig. 17)
 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 as shown in Fig.18 - 20.



3. After the equalizer cables have been routed adjust each cable "guitar-string tight" with equal tension.

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. (See Fig. 21 & 22)





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. (See Fig. 23)

WARNING

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)





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 bleed-ing 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.



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.



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

- 1. 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.



RECOMMENDED OILS AT VARIOUS TEMPERATURES



TEMPERATURE LIMITS BASED ON MAXIMUM VISCOSITY OF 1000 CENTISTOKES (5000 SSU) AND MINIMUM VISCOSITY OF 15 CENTISTOKES (80 SSU)

Lift Will Not Raise

Air In Oil

A, C, J, K

Cylinder Binding M

Cylinder Leaks Internally M

Motor Runs Backwards under Pressure B

Lowering Valve Leaks D, E, H, N, O

Motor Runs Backwards I, O

Pump Damaged M, N, O

Pump won't Prime A, J, K, M, O, P

Relief Valve Leaks L, M, N, O

Voltage to motor incorrect I, M

		The oil level should be up to the bleed screw
А	Check for proper oil levels	in the reservoir with the lift all the way down
	Remove check valve and	Wash check valve in solvent and blow out
В	inspect fo contamination	with air re-install check valve
С	Bleed cylinders	See installation manual
	Flush release to get rid of	Hold release down and start unit allowing it to
D	possible contamination	run for 15 seconds
Е	Dirty oil	Replace oil with clean Dextron III ATF
		Tighten fasteners per engineering
G	Tighten all fasteners	specification
	Check for free movement of	If handle does not move freely replace bracket
Н	release handles	or andle assembly
	Check motor is wired	Compare wiring of motor to electrical diagram
I	correctly	on unit
J	Check inlet tube length	Replace inlet hose assembly
K	Oil seal damaged or cocked	Rplace oil seal around pump shaft
L	Relief valve hung up on cap	Remove valve and free up valve
М	See installation manual	
Ν	Replace with new part	
0	Return unit for repair	
P	Check pump mounting bolts	Bolts should be 15 to 18 ft lbs.

Motor Will Not Run

Fuse Blown

А	Check for correct voltage
	Check motor is wired
В	correctly
С	Don't use extension cords
D	Replace with new part
Ε	Reset Circuit breaker / fuse
F	Return unit for repair
G	See installation manual

E,B,A,C,D

Limit Switch Burned Out A,B,C,D

Microswitch Burned out

A, B, C, D

Motor Burned Out

A, B, C, D, F

Voltage To Motor

Incorrect

A, B

Lift Will Not Raise Loaded Lift

Air In Oil

A, B, D, F

Cylinder	Binding
G	

Cylinder Leaks Internally

. . .

G

Lift overloaded

G, H

Lowering Valve Leaks I, J, K, A G

Motor Runs Backwards E, K, L

Pump Damaged G, J, K

Pump won't Prime A, B, D, F, G, K

Relief Valve Leaks M, J, K, G

Voltage to motor incorrect

ı I	\sim
L,	G

		The oil level should be up to the bleed screw
А	Check for oil levels	in the reservoir with the lift all the way down
		Replace inlet hose assembly and suction
В	Check / tigten inlet tubes	Cover
	Oil soal damaged or cocked	Poplaco oil coal around numn shaft
U		
	Remove cneck valve and	Wash check valve in solvent and blow out
E	inspect for contamination	with air re-install check valve
F	Bleed cylinders	See installation manual
G	See installation manual	
		Compare weight of vehicle to weight limit of
Н	Check vehicle weight	the lift
		Hold Release handle down and start unit
	Flush Valve	allowing it to run for 15 seconds
J	Replace with new part	
Κ	Return unit for repair	
	Check motor is wired	Compare wiring of motor to electrical diagram
L	correctly	on unit
М	Relief valve hung up on cap	Remove valve and free up valve

Lift Will Not Stay Up

			The oil level should be up to the bleed screw
Air In Oil	А	Check for oil levels	in the reservoir with the lift all the way down
Λ, Ο, Ι	D	Oil seal damaged or cocked	Replace oil seal around pump shaft
		Remove check valve and	Wash check valve in solvent and blow out
	E	inspect for contamination	with air re-install check valve
Check Valve Leaks	F	Bleed cylinders	See installation manual
			Hold Release handle down and start unit
E, H, I, J	G	Flush Valve	allowing it to run for 15 seconds
	Н	Replace with new part	
Cylinder Leaks Internally		Return unit for repair	
J	J	See installation manual	
Check complete hydraulic			
	К	system for leaks	
Lowering Valve Leaks			

G, H, I, Ă, J,

Leaking Fittings K

Lift Lowers Slowly Or Not At All

Cylinder Binding	А	See installation manual	
A	D	Replace with new part	
	Е	Return unit for repair	
Release valve screen			If ATF is contaminated, replace with clean
clogged	F	Use clean Dextron III ATF	ATF
			Wash release valve in solvent and blow out
E, B, D, C	G	Clean release valve screen	with air

External Oil Leak

AII II	Oil
А, В,	C, D
Allen	plugs loose
-	
E	
Loos	e tank
K	
Oil c	omes out breather
А, В,	C, D, F
• "	
Oil c	omes out tank
mour	nting
C	
Hose	s / loose fittings
1 11 1. 1.	
C, G	
C, G	
C, G Air in	Oil

		The oil level should be up to the bleed screw
Α	Check for proper oil levels	in the reservoir with the lift all the way down
В	Replace with new part	
С	See installation manual	
D	Use Clean Dextron III Atf	
		Tighten fasteners per engineering
Ε	Tighten all plugs	specification
F	Return unit for repair	
G	Tighten all hydraulic fittings	
Η		
	Oil Seal Leaks	Replace oil seal around pump shaft
J	Bleed cylinders	See installation manual
K	Tighten tank mounting bolts	Tighten per manufacturers specifications



























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