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

INSTALLATION AND OPERATION MANUAL

TWO POST LIFT

MODEL NO.

DTPO610VC

Lifting Capacity：4.5T/10000lbs
Lifting Height：71in/1800mm
Motor：2.2kw./3hp

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. 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.

TWO POST HYDRAULIC LIFT

This instruction manual has been prepared especially for you.

Your new lift is the product of many years of our 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 NAMEPLATE

FOR OUR FOLLOW-UP SERVICE

Serial No. _____

Model No. _____

Manufacturing Date _____

WARRANTY

Your new lift is warranted for one 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.

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

PART(S) DESCRIPTION	QTY.	WHERE USED	CHECK
Lift Pads	4	Lift Pads for Arms	
3″ Lift Pads Adapters	4	For Lift Pad Extensions	
6″ Lift Pads Adapters	4	For Lift Pad Extensions	
Fixing Pin	4	To link the Lifting Arm and Carriage	
Balancing Cables	2	Equalize Carriages	
Expansion Bolt	12	To concrete Columns	
Tee	1	Fixed on the Oil Cylinder	
Thread connected inside	1	Fixed on the Oil Cylinder	
Varying-thread	1	Fixed on the Power Unit	
Limit Switch (with wire)	1	Fixed on the Overhead Beam	
Enclosure	2	Lock the Switch	
Plastic Lid	2	Fixed on the Sliding Carriage	
B-Type Clap	8	Used for the Safety Shaft and Steel Cable Pulley	
Locking Block（with handle）	1	Fixed on Powerside Column	
Locking Block （without handle）	1	Fixed on Offside Column	
3/8″ Hex Bolts And Hex Nuts	4	To concrete Enclosure	

3/8″ Hex Nuts	4	To fix Release Steel Cable Pulley	
3/8″ Hex Bolts And Hex Nuts	4	To fix Columns and Overhead Beam	
5/8″ Hex Nuts	2	To equalize the cable	
5/16″ Hex Bolts and Nuts	4	To fix Power Unit	
Oil pipe with 90 degree elbow	2	Connect the power unit and oil cylinder	Long, short each respectively
3/4″ Pin	2	To fix Unlock Block	
Spring	2	To fix Unlock Block	
Oil cylinder	2	Fixed inside the column	
3/8″ Hex Nuts	4	To fix Release Cable	
ϕ2.5 Cable	1	For release	
Instruction Manual	1	Instruct operation	
Packing List			
Hydraulic Power Unit	1		
Powerside Column	1	Power side Column with Carriage, Cable, and Cylinder	
Offside Column	1	Offside Column with Carriage Cable, and Cylinder	
Coverplate / Floorplate	1	With limit switch and wire	
Lift Arms	4		

Before installation, first check whether every element is in perfect condition.

INTRODUCTION

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

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
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 rising or lowering vehicle.
9. **CLEAR AREA** if vehicle is on danger of falling.
10. **ALWAYS ENSURE** that the safeties are engaged before any attempt is made to work on or near vehicle.
11. **DRESS PROPERLY.** Non-skid steel - toe footwear is recommended when operating lift.
12. **GUARD AGAINST ELECTRIC SHOCK**. This lift must be grounded while in use to protect the

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 MAY CAUSE PERSONAL INJURY OR DEATH. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE THIS MACHINE.

TOOLS REQUIRED

- **Percussion Drill**
- **Masonry Bit(16mm)**
- **Hammer**
- **Gradienter**
- **Open-End Wrench Set(8mm ～ 25mm)**
- **Square**
- **Monkey Wrench (350mm)**
- **Crow Bar**
- **Chalk Line**
- **Flat Screwdriver**
- **Tape Measure(5m)**
- **Needle Nose Pliers**

IMPORTANT NOTICE

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

PLEASE READ ENTIRE MANUAL PRIOR TO INSTALLATION.

STEP 1

(Selecting Site)

Before installing your new lift, check the following:

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

STEP 2

(Floor Requirements)

This lift must be installed on a solid, even concrete floor with less than 3-degrees of slope, consider a survey of the site and/or the possibility of pouring a new level concrete slab

Model No.: DTPO610VC

SOLEPLATE LAYOUT

A 145″/3686mm

B 17″ /432mm

STEP 3

(Site Layout)

1. Determine which side will be the approach site.
2. Now determine which side you prefer the power unit to be located on. The POWERSIDE column has the power-unit mounting bracket attached to the side. (See diagram above for power unit location)
3. Once a location is determined, use a carpenter's chalk line to layout a grid for the post locations.

WARNING

"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 climate weather conditions.

NOTE

All models MUST be installed on 2500 PSI concrete only conforming to the minimum requirements shown above. New concrete must be adequately dried by at least 28 days.

Keep all dimensions and squareness within 1/8"or malfunctioning of the lift will 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.
5. Check all dimensions twice and make sure that the layout is perfectly correct.
6. Before continuing with the installation it is helpful to stand the posts up at their respective locations and get a visual of the shop, aisles and other clearances. Also, this is a good time to drive a vehicle into position and check for adequate clearance

STEP 4

(Installing The POWERSIDE Column)

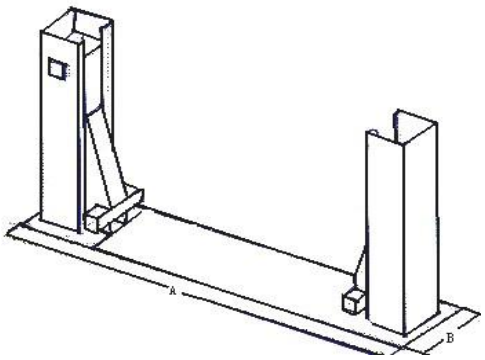
1. Before proceeding, double check measurements and make certain that the bases of each column are square and in line with the chalk line.

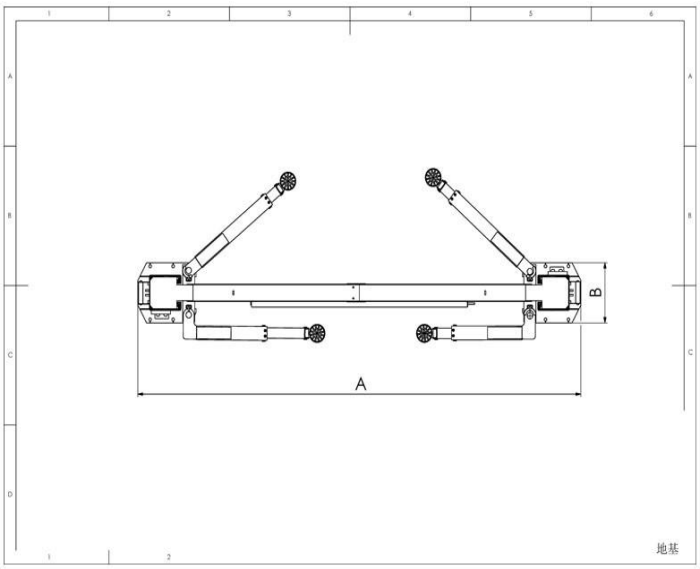
2. Using the baseplate on the POWERSIDE column as a guide, drill each anchor hole on the concrete approximately 7-1/2" deep using a Percussion Drill and 3/4" concrete drill-bit. To assure full holding power, do not ream the hole or allow the drill to wobble. (See Fig. 1)
3. After drilling, remove dust thoroughly out of each hole using compressed air and/or wire brush. Make certain that the column remains anchor bolts are tightened, the columns will be plumb. (See Fig. 3)

aligned with the chalk line during this process.

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. 2)





5. If shimming is required, insert the shims as necessary under the baseplate so that when the

Fig. 1

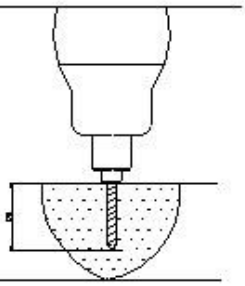

Hole of
approximately 110mm

Fig. 2

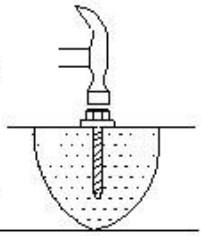

Assemble the washers
and nuts on the
anchors then tap
into each hole with
a hammer until the
washer rests against
the baseplate.

Fig. 3

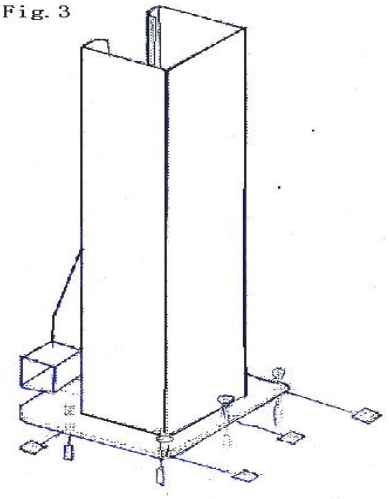
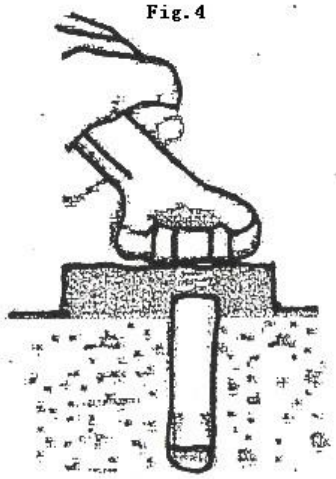


Fig. 4



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. 4)

STEP 5

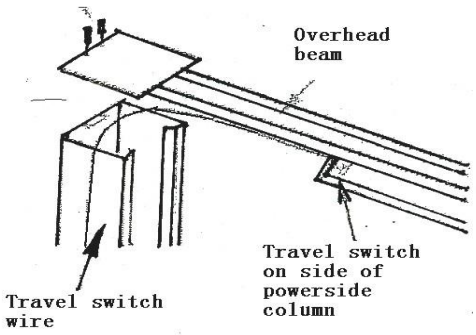
(Mounting The OFFSIDE column)

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

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

Bolts and nuts

Fig. 5



STEP 6

(Mounting the OVERHEAD BEAM.)

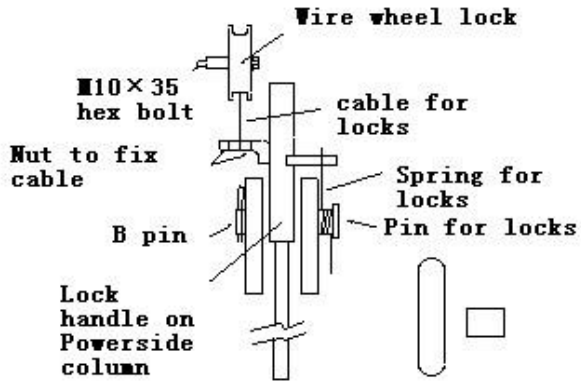
Using a lifting device, raise the OVERHEAD beam in position on top of the columns. Bolt to the columns using the 3/8" x 40 Hex Bolts, Nuts and Washers. (See Fig. 5) NOTE: Limit Switch is on side of the Powerside Column.

STEP 7

(Mounting The HYDRAULIC POWER UNIT)

Attach the power unit to the POWERSIDE COLUMN using four 5/16" hex bolts and lock nuts supplied. Fill the reservoir with 3.5 gallons 10 L. HYDRAULIC OIL OR DEXRON TYPE III ATF. Make sure the funnel used to fill the power unit is clean. (**NOTE**：The hydraulic oil must be clean, if not ,the filtrated oil is needed. Or it may cause damage to power unit and jam to hydraulic cylinder. (See Fig. 6)

Fig.7 Lock set of the powerside column

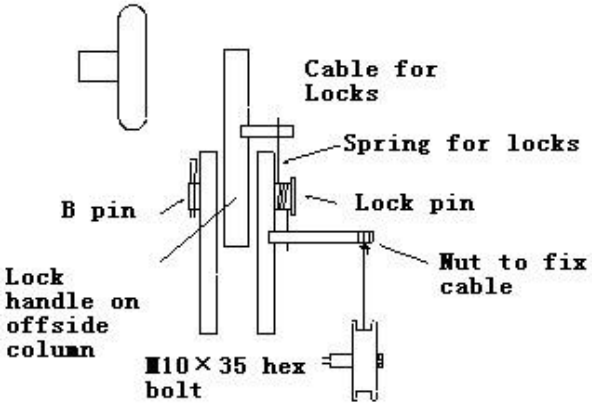


are fully engaged before attempting to route equalizer cables. Carriages must be equal height from the floor before proceeding.

3. With the carriages in equal position from the floor, route the equalizer cables as shown below. (See Fig. 10&11)

4. After the equalizer cables have been routed. Adjust each cable so that they are of equal tension

Fig.8 Lock set of the Offside Column



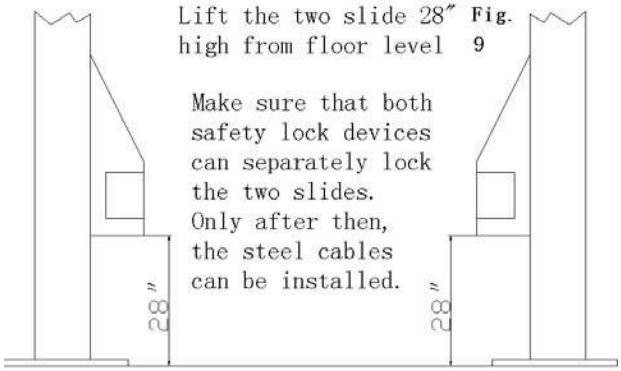
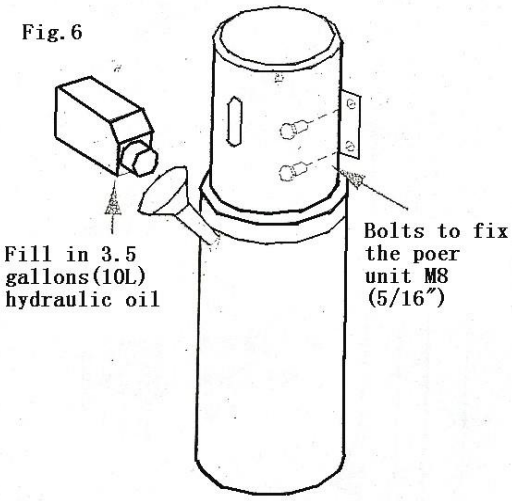


Fig. 9

Fig.6

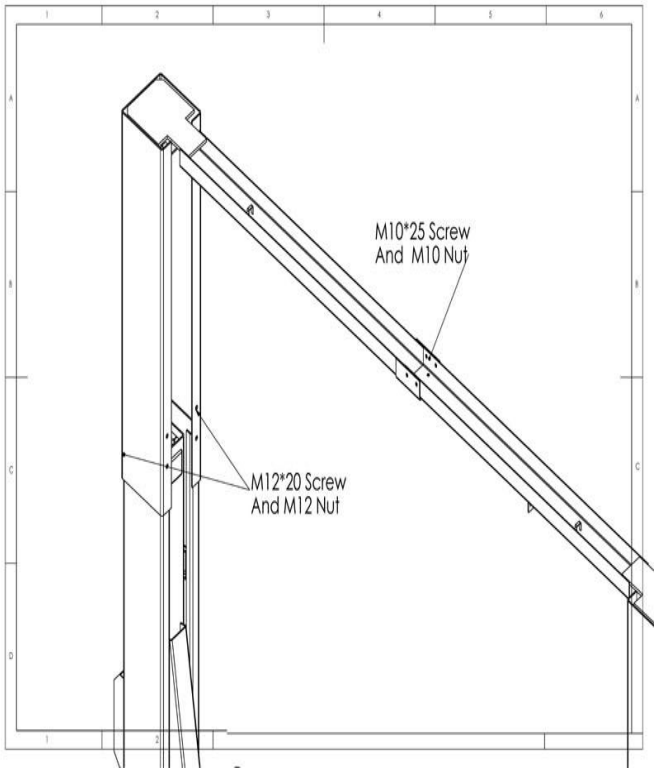


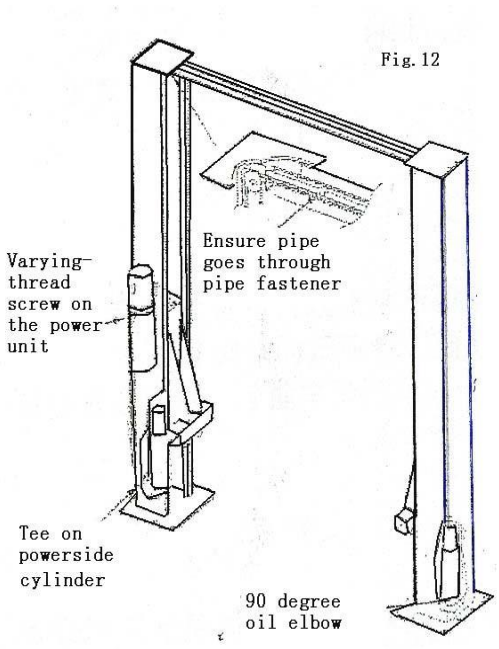
STEP 8

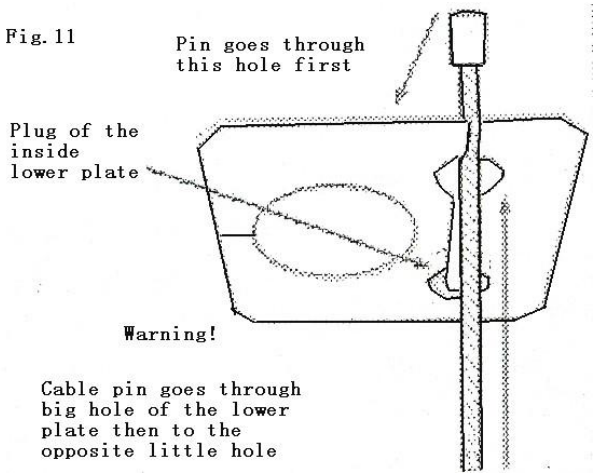
(Routing The EQUALIZER CABLES)

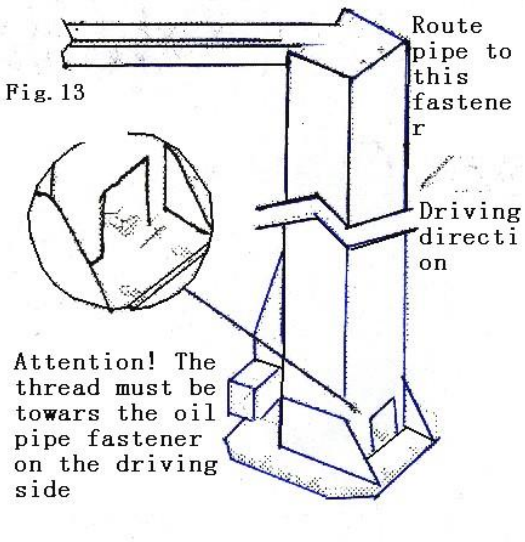
Route the equalizer cables on each column(See Fig. 7 & 8). Adjust each cable so that they are of equal tension.

1. Raise and lock each carriage approximately 28” above the ground. (See Fig.9)
2. Make sure that the safety locks on each column







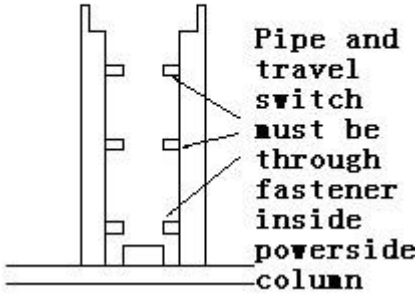


STEP 9

(Installing The Hydraulic Lines)

Install the hydraulic lines as shown below, paying careful attention to keep the hoses clean and free of impurities. (See Fig. 12~15)

Fig. 15



NOTE

1. When routing the hydraulic hose through the columns, make sure to route through the retaining rings welded inside each column.
2. Make sure that the hose is clear of any moving parts.
3. It may be necessary to tie hose clear by using Nylon tie straps or wire. Failure to keep hydraulic lines clear may result in hydraulic line failure which may further result in damage or personal harm.

Install the overhead Limit switch as shown below.

AQUALIFIED ELECTRICIAN. (See Fig. 16)

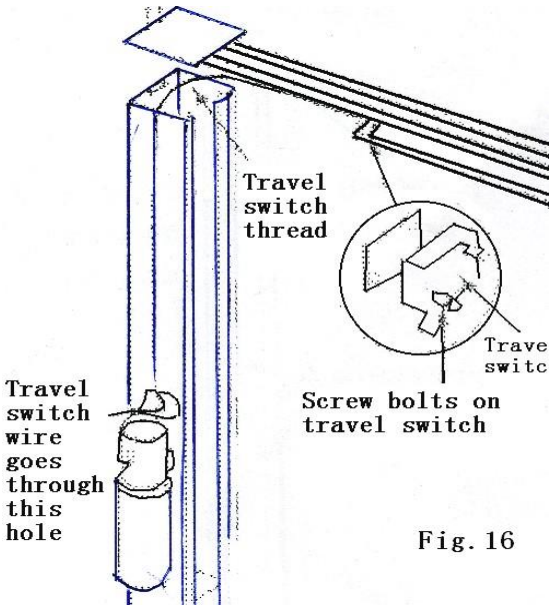


Fig. 16

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.

STEP 10

(Installing Overhead Limit Switch)

STEP 11

(Installing the Power Unit)

The standard power unit for your lift is 220 volt, 50HZ and single phase. All wirings must be performed by qualified electricians only. SEE WIRING INSTRUCTIONS ATTACHED ON MOTOR FOR PROPER WIRING INSTRUCTIONS. (See Fig. 17)

Be sure to keep wire clear of moving parts. WIRING MUST BE PERFORMED BY

IMPORTANT INSTALLATION NOTES

- **DO NOT run power unit without 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.

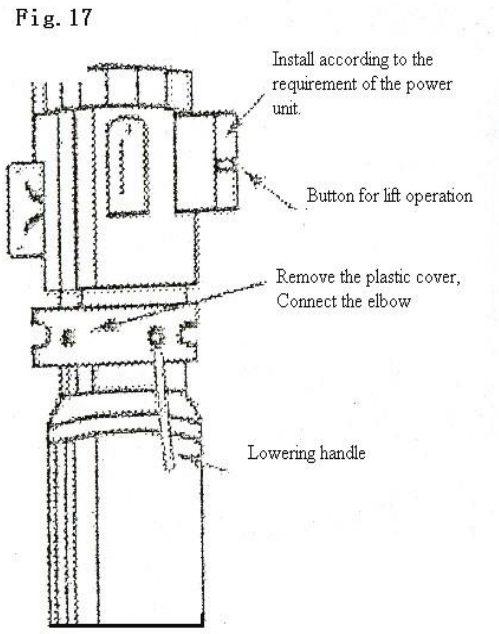
WARNING

RISK OF EXPLOSION!! This equipment has internal arcing or sparking parts that should not be exposed to flammable vapors. Motor should not be located in a recessed area or below floor level.

TRIAL RUNNING AND EXHAUSTING AIR

1. Connect circuit, fill up with lubricate, press down power unit button. The lift raises and cylinder begins to work.
2. Let the lift climb to the maximum height. DO NOT press the button if the lift rises to the maximum height, or it may result in power unit damage.
3. Keep 5-6 seconds after the maximum height.
4. Withdraw the release cable; press the lowering handle to lower the lift.

Fig. 17



5. Repeat the following course.

WARNING

During the whole lifting operation, observe all the operational units to check the correctness of operation. DO NOT lift vehicle when there is improperness.

GREASING

After trial run, grease (using supramoly) the lift as described below. (See Fig. 18)

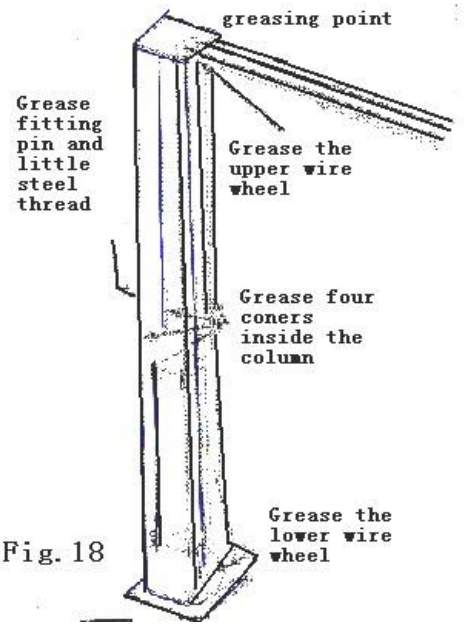


Fig. 18

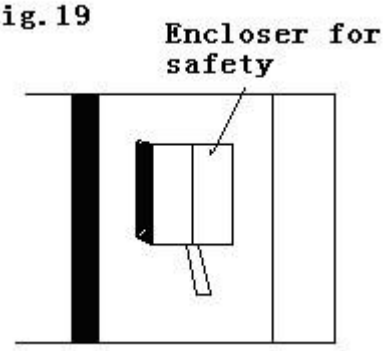
following figure. (See Fig. 19)

STEP 12

(Installing the Encloser)

After installing of Locks and Release Device, fit the shield (encloser) according to the

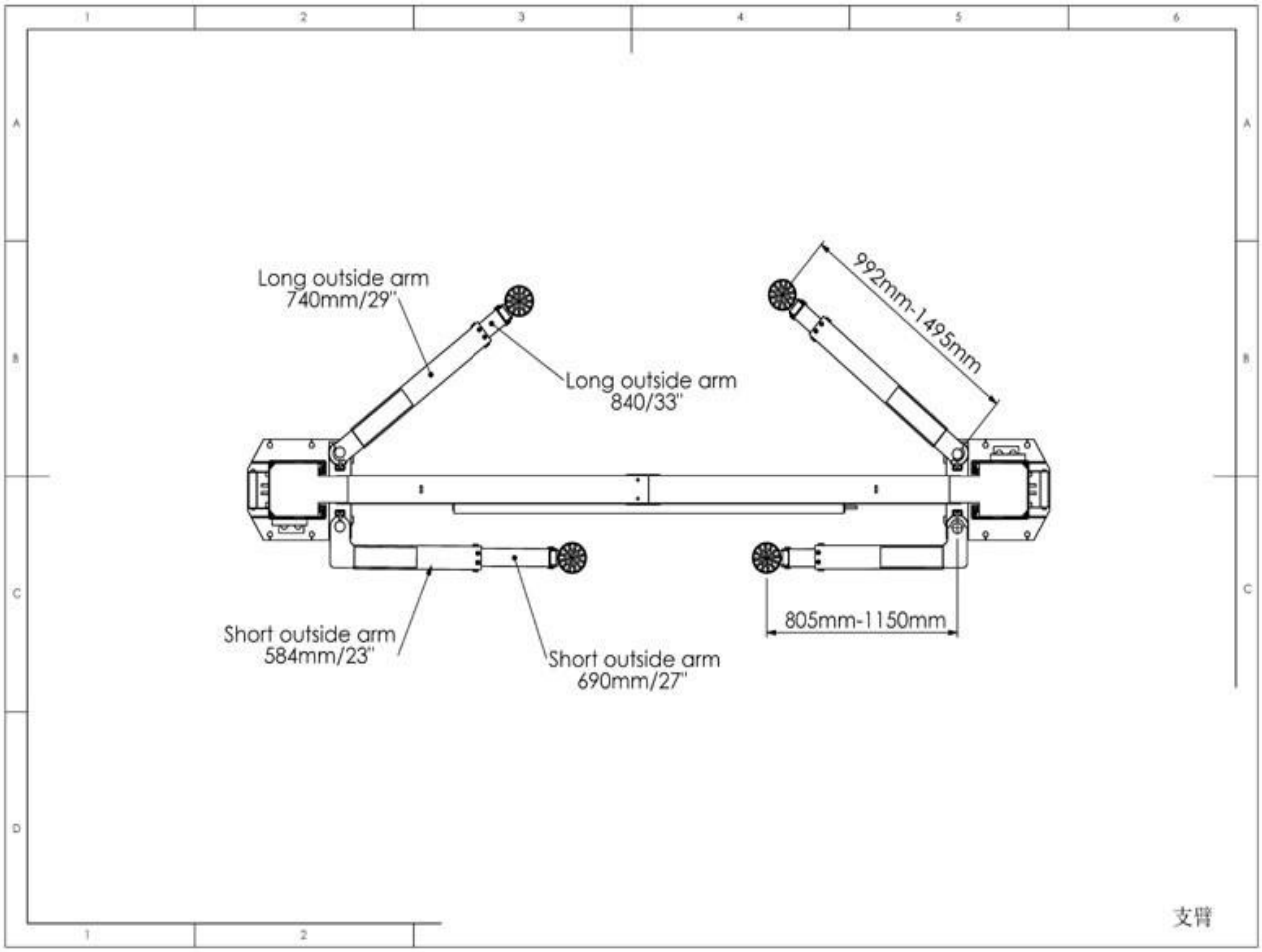
Fig. 19



STEP 13

(Installing Swing Arms.)

1. Install swing arms as described below. Lubricate the carriage tube and all pivot point and pins prior to installation.

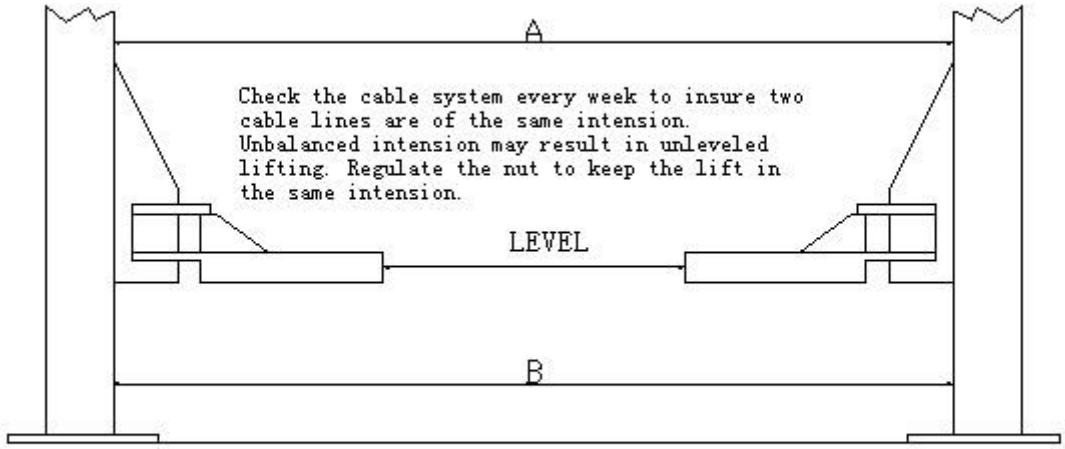


WARNING

IMPORTANT LEVELING INSTRUCTIONS

Before operating your lift, Make sure that both "A" and "B" measurements are EQUAL The swing arms must be Level before operation

Maximum of tolerance is 5mm. If your swing arms are not leveled, Wedge the columns as required.



TO RAISE LIFT

- **Read Installation and operating manuals (this manual) before using the lift.**
- **Always lift a vehicle according to the manufacturer's recommended lifting points**.
- **Position vehicles 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 pressing down button until supports contact the bottom of the vehicle. Re-check to make sure that the vehicle is secure.**
- **Raise vehicle to desired working height. Lower the vehicle into the safest position.**

TO LOWER LIFT

- **First, raise the lift to the clear safeties.**
- **Raise safeties by pulling handles on each column**.

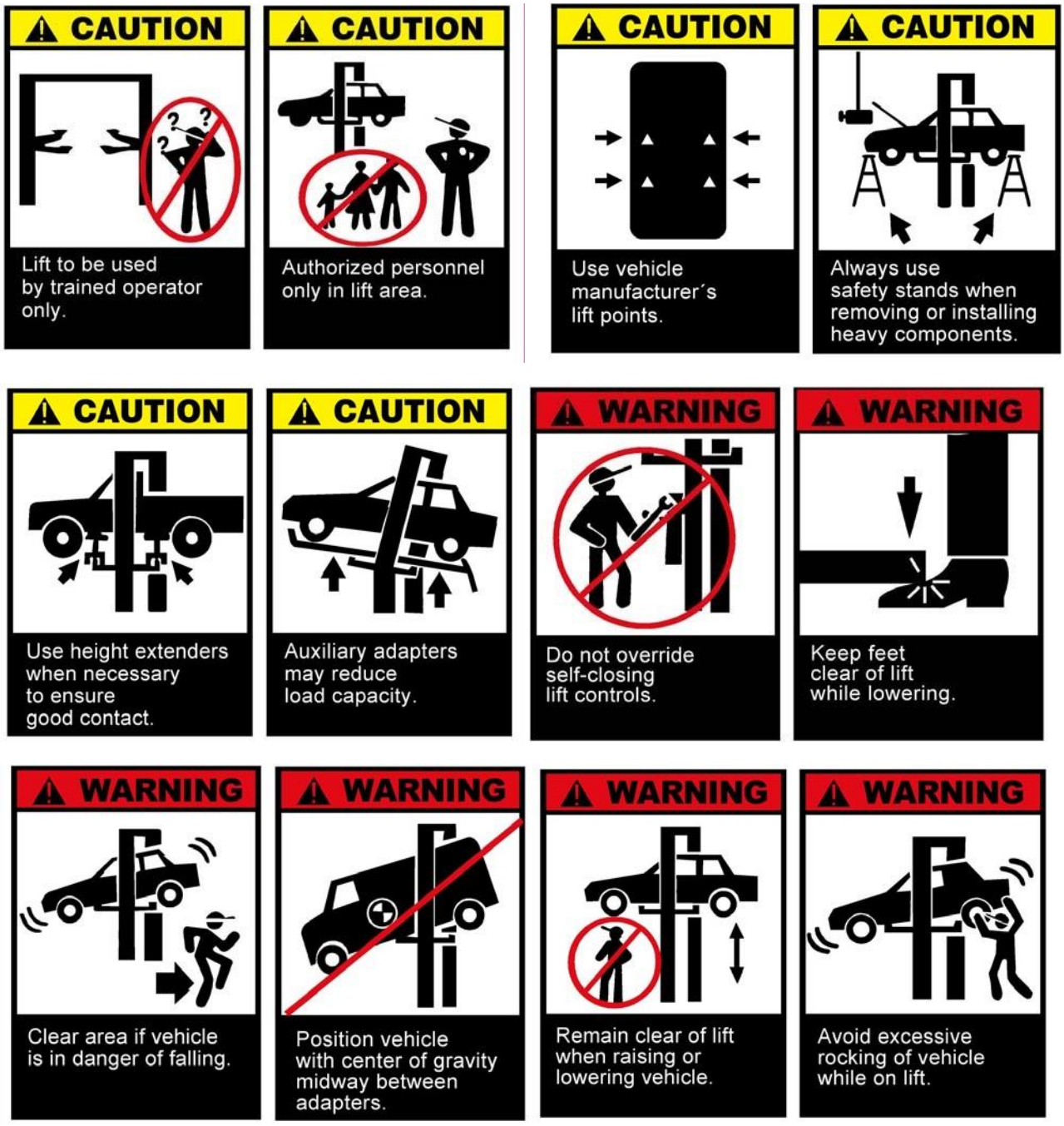
- **Make sure that tool trays, stands or persons are removed or evacuated from under vehicle. ● Lower vehicle by activating lowering handle.**
- **Before removing vehicle from lift area, position the lift arms and the supports to provide** an **unobstructed exit. ● NEVER, drive over lift arms.**

REQUIRED MONTHLY UPKEEP

●Check arm restrains for proper operation.
●Check all chain/cable connections, bolts and pins to ensure 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 erectness.
●Inspect all arm pivot pins to make sure that they are all properly secured.
●Check the tensions of equalizer cables, adjust if necessary.
●Inspect all lift pads, replace if necessary.
●If lift is equipped with overhead cut-off switch, check for proper operation.

1. **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.**
4. **Always ensure that safeties are engaged before any attempt to work on or near the lift.**
5. **Never leave lift in an elevated position unless the safeties are engaged.**
6. **Do not permit electric motor to be damp! Motor damage caused by dampness is not covered under the warranty.**

NEVER LIFT ANY VEHICLE IN ANY MANNER WITH LESS THAN FOUR (4) ARMS. RATED CAPACITY OF EACH LIFT ARM IS NOT GREATER THAN ONE FOURTH (1/4) OF THE OVERALL LIFTING CAPACITY.



LIFT WILL NOT RAISE

POSSIBLE CAUSE	ELIMINATE
Air in hydraulic oil	Lift to the maximum height for 5-6 seconds, then lower, repeat it if necessary.
Cylinder binding	Wash check valve in solvent and blow out with air. Re-install check valve.
Cylinder leaking	Check all the pipe joints to ensure that they are tightened.
	Check cylinder and oil seal not to be distorted or warped.
Motor runs backward	Compare wiring of motor according to electrical wiring scheme on the unit to check that motor is wired correctly.
Motor stops work	Motor is out of work. Replace with new one.
	Incorrect voltage
	Fuse melted
	Replace with new limit switch.

MOTOR WILL NOT RUN

Air in hydraulic oil	Elevate to maximum height, lower down after several seconds. Repeat this procedure if necessary.
Cylinder leaking	Tighten the loose pipe joint.
	Replace oil seal around pump shaft.
Incorrect voltage	Install voltage regulating system
Lift overloaded	Check lifting weight.

LIFT LOWERS SLOWLY OR NOT LOWERS AT ALL

Lift locked	Raise lift, release, press lowering bar
Too glutinous grease	Replace proper grease.
Jammed power unit joint	Disconnect the joint and wash it.
Jammed pipes	Screw off pipe, check and wash it.

CYLINDER LEAKS OUTSIDE

Loose joint	Re-screw down the pipe joint.
Oil seal leaks	Replace with new part.
Oil leaks from air hole	Oil seal is out of work, replace with new part.
Overabundant oil flowing out	Decrease oil to proper content

ABNORMAL NOISE

Air in hydraulic oil	Follow instruction above.
Lift overloaded	Check the lifting weight.
Loose fixing bolt of the motor	Screw up bolt.
Carriages lack of lubrication	Fill up lubricant