

Instruction Manual

4 Post Light Duty Automotive Equipment Lift

PLEASE READ ENTIRE MANUAL PRIOR TO INSTALLATION.



This equipment must never be operated without reading this manual and the safety instructions.
Safe Operating Temperature is between 40°F – 105°F (4°C - 41°C) Operating Temperature

**The manufacturer reserves the rights to make design changes
and or improvements to product lines without notice.**

Warning Paragraph

The operation manual should be kept near the equipment at all times.

Please be sure to make sure that ALL USERS read this manual before use and operation.

Please read carefully the entire contents of this manual prior to installation and operation.

By proceeding you agree that you fully understand and comprehend the full contents of this manual.

Failure to operate this equipment as directed may cause injury or death.

The manufacturer is not responsible for any damages or injury caused by improper use or neglect.

Important Information:

Read this manual thoroughly before installing, operating, or maintaining this lift.

This lift is designed for indoor use only, and should not be installed in a pit or uneven surface.

The floor on which the lift is to be installed must be 4- $\frac{1}{4}$ " inch minimum thickness concrete, with a minimum compressive strength of 3000 psi, and reinforced with steel bar.

(Contact your building architect for information before installing on pre-stress concrete.)

The lifts have specific electrical requirements as described in the Installation Instructions section of this manual.

This lift has a minimum ceiling height requirement as described in the Installation Instructions section of this manual.

Failure by the owner to provide the recommended shelter, mounting surface, electrical supply, and ceiling height could result in unsatisfactory lift performance, property damage, or personal injury.

SHIPPING DAMAGE CLAIMS

Once the equipment/product has been shipped, bill of sale passes to the Purchaser. Materials damaged in shipment claims must be made by the Purchaser against the Freight Carrier at the time of shipment arrival. Any freight damage must be noted on the freight bill before signing and reported to the freight carrier with a freight claim established. Manufacturer is not responsible for freight claims. Identify the components and check for shortages. If shortages are discovered, please contact the Distributor / Sales Representative in your area for service.

It is the customers responsibility to arrange for unloading of products shipped.

HAZARD DESCRIPTIONS

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



Immediate hazards which will result in severe liability or exposure to personal injury or death.



Hazards or unsafe practices which could result in severe personal injury or death.



Hazards or unsafe practices which may result in personal injury, product or property damage.

Use alertness and prudence in a hazardous situation; care; wariness.

OWNER / USER RESPONSIBILITY

DO NOT OPERATE OR REPAIR THIS PRODUCT WITHOUT READING THIS MANUAL.

Read and follow the safety instructions. Keep Instructions readily available for operators. Make certain all operators are properly trained and understand how to safely and correctly operate the product. By proceeding you agree that you fully understand and comprehend the full contents of this manual. Failure to operate this product as intended may cause injury or death. The manufacturer is not responsible for any damages or injury caused by improper use or neglect. Allow product operation only with all parts in place and operating safely. Use only genuine replacement parts. Service and maintain the product only with authorized or approved replacement parts; negligence will make the product unsafe for use and will void the warranty. Carefully inspect the product on a regular basis and perform all maintenance as required. Store these instructions in a protected dry location. Keep all decals on the product clean and visible. Do not modify and/or use for any application other than that for which this product was designed. If you have any questions relative to a particular application, DO NOT use the product until you have first contacted the distributor or manufacturer to determine if it can or should be performed on the product.

For technical questions please call 1-888-448-6746.

Keep a record of your lift here. Record the lift and power unit information.

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

Model # _____

Lift Serial # _____

Date of Mfg. _____

Power Unit Model # _____

Power Unit Date Of Mfg. _____

Power Unit Serial # _____

Operator Training and Safe Practices

Precautions and Safety should always be followed when Installing and Operating this lift.

READ AND UNDERSTAND ALL SAFETY INSTRUCTIONS

AND DECALS INCLUDED ON AND WITH THE LIFT.

READ AND FOLLOW ALL SAFETY WARNING PROCEDURES

IN THIS MANUAL BEFORE OPERATING LIFT.

- **ONLY TRAINED and AUTHORIZED PERSONNEL** should operate the lift. Do not allow customers or unauthorized personnel to operate the lift or remain in the lift area.
- Review regularly the safety rules and guidelines with personnel. All non-trained personnel should be kept away from work area. Never let non-trained personnel come in contact with, or operate lift.
- Understand the vehicle lift operating controls before use.
- Do not leave the operational controls while the lift is still in motion.
- Do not stand in front of the vehicle or in the bay when vehicle is being loaded or driven into position.
- Do not attempt to work on the vehicle or go near vehicle when lift is being raised or lowered.
- Be aware. Watch what you are doing. Use common sense.
- Stay clear of lift when raising or lowering vehicle.
- Clear the area if vehicle is in danger of falling
- Keep hands and feet clear. Remove hands and feet from any moving parts. Keep feet clear of lift when lowering to avoid bodily harm or any pinch points.
- Do not raise or lower the vehicle unless tools, materials and people are clear. Clean up grease and oil spills immediately. 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 when
- Inspect for damaged parts. Do not use lift if any components are broken or damaged. Check all moving parts for any type of damage that may affect misalignment or operation of lift.
- **INSPECT THE LIFT DAILY.** Do not operate if potential problems have been identified or lift malfunctions. Do not operate if lift has damaged or broken components. Never walk or work under the lift unless all safety locks are completely engaged. A daily inspection of the lift should be completed prior to its any use. Safety mechanisms, operating controls, lifting arms, ramps and any other critical parts should be inspected prior to using the lift.
- **ALWAYS KNOW YOUR LOAD LIMIT.** Use caution so that you do not overload the lift. It is important that you know the load limit. To check the rated capacity, decals are located on one of the lift columns or contact the manufacturer. The hydraulic system on this lift is not designed to be a load holding device. Mechanical safety locks must be engaged before proceeding under the lift, with vehicle servicing, or system maintenance. Never override operating controls. This is unsafe and will void the warranty, before driving a vehicle between the columns, position all arms to insure unobstructed entry. Do not hit or run over arms as this could damage the lift and/or vehicle.
- Always make sure you have proper overhead clearance
- **WARNING! RISK OF EXPLOSION.** This equipment has internal arcing or sparking parts which should not be exposed to any flammable vapors. Do not locate this machine in a recessed area or below floor level.

IMPORTANT INFORMATION:

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

After positioning the vehicle on the lift runways, set the emergency brake, make sure the ignition is off, the doors are closed, overhead obstructions are cleared

- Use all 4 arms to raise a vehicle or make sure vehicle is positioned correctly so all four corners of vehicle are stationary with wheel stops. Position all lift pads to contact vehicle manufacturers' recommended lifting points. Raise lift slowly until all pads contact the vehicle. Check all pads for complete and secure contact with the vehicle. Check all arm restraints to insure they are engaged properly. Check that the vehicle is stable on the lift. Only after confirming these procedures, raise the lift to desired working height.
- 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. Special care must be used when lifting light duty trucks. Optional truck adapters may be required for each manufacturer's recommended lifting points. Always use these lifting points. Running boards and other installed accessories may also require optional adapters. Insure vehicle is balanced when lifting light duty trucks failure to do so can cause injury and/or death.
- Removal or installation of heavier parts can change the vehicle's center of gravity on the lift resulting in a critical load shift. The vehicle may then be unstable. Plan ahead for this possibility to insure continued safety and refer to the vehicle manufacturers' service manual for recommended procedures.
- Always keep the lift area free of obstructions and debris.
- Never raise a vehicle with passengers inside. Before lowering a vehicle, check the lift and lift area and remove all obstructions. Before removing vehicle from the lift or lift area, position arms to the drive through position and confirm an unobstructed exit.
- Use of jack stands or other load supporting devices will help in preventing load shifts. Manufacturer recommends that jack stand or other load supporting devices are used at all times for additional security.
- Make sure the vehicles center of gravity is always safe before raising vehicle. Any points of contact on vehicle that are not in good contact with lifting pads or contact with lift should always be double checked. Always make sure the vehicle is secure before lifting using vehicle manufacturers' recommended lifting points.
- Do not rock the vehicle while on working on or around lift.
- Do not remove any heavy component from vehicle that may cause excessive weight shift.
- Verify that all safety latches are engaged and lowered on to the safety ladders before any attempt is made to work on or near vehicle.
- NEVER override self-operating lift controls.
- NEVER remove any safety related components parts from the lift. Does not use the lift if any safety related components parts are damaged or missing.
- Pay attention when walking under a vehicle that is raised on the vehicle lift.

Safety Instructions:

1. Do not raise a vehicle on the lift until the installation is completed as described in this manual.
2. Technicians should be trained to use and care for the lift by familiarizing themselves with the publications listed above. The lift should never be operated by an untrained person.
3. Always position the lifting arms, ramps , adapters and accessories properly out of the way before pulling the vehicle into or out of the bay. Failure to do so could damage the vehicle and/or the lift.
4. Positioning the vehicle is very important. Only trained technicians should position the vehicle on the lift. Never allow anyone to stand in the path of the vehicle as it is being positioned.
5. Position the lifting arms, ramps , adapters and accessories to the vehicle manufacturer's recommended pickup points. Raise the lift until contact is made with the vehicle. Make sure that the lifting arms, ramps , adapters and accessories have been properly engaged the vehicle before raising the lift to a working height.
6. Do not overload the lift. The capacity of the lift is shown on the cover of this document and on the lift's serial number tag.
7. Keep everyone clear of the lift when the lift is in operation, the locking mechanism is disengaged, or the vehicle is in danger of falling.
8. Never override the mechanical workings or components of lift.
9. Unauthorized personnel should never be in the shop area when the lift is in use.
10. Inspect the lift daily. The lift should never be operated if components are damaged or malfunctioning. Only qualified technicians should service the lift. Replace damaged components with manufacturer's certified parts.
11. Keep the area around the lift clean and free of debris.
12. Use additional lifting equipment or stands when removing or installing heavy vehicle components.
13. Avoid rocking of the vehicle when it is on the lift.
14. Large vehicles, such as limousines, RV's, and long wheelbase vehicles, may not be suitable for lifting on this equipment.
15. Warning reduce the risk of personal injury, keep hair, loose clothing, fingers, and all body parts away from moving parts.
16. Warning reduce the risk of electric shock, do not use the lift when wet. The lift should not be exposed to the rain.
17. Warning reduce the risk of fire, do not operate equipment in the close proximity of open containers containing flammable liquids (example: Gasoline, flammable solvents).
18. Use the lift only as described in this manual. use only manufacturer's recommended attachments.
19. Anyone who will be in the vicinity of the lift when it is in use should familiarize themselves with following Caution, Warning, and Safety related decals supplied with this lift and replace them if the are illegible or missing:
20. Anyone who will be in the vicinity of the lift when it is in use should read and refer to publications supplied with this lift:
21. The troubleshooting and maintenance procedures described in this manual can be done by the lift's owner/employer. Any other procedure should only be performed by trained lift service personnel. These restricted procedures include, but are not limited to, the following: cylinder replacement, carriage and safety latch replacement, arm replacement, overhead structure replacement.

Important

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

ALWAYS wear safety glasses. Every day eyeglasses only have impact resistant lenses. They are not safety glasses.

READ AND UNDERSTAND ALL SAFETY WARNINGS & PROCEDURES BEFORE OPERATING LIFT. POST THESE SAFETY TIPS WHERE THEY WILL BE A CONSTANT REMINDER TO YOUR LIFT OPERATOR. FOR INFORMATION SPECIFIC TO THE LIFT, ALWAYS REFER TO THE LIFT MANUFACTURER'S MANUAL.

Improper installation can cause accelerated wear, resulting in catastrophic failure which may cause property damage and / or bodily injury. Manufacturer will assume no liability for loss or damage of any kind, expressed or implied, resulting from improper installation or use of this product. Read this installation manual in its entirety before attempting to install or operate the lift.

Safety Requirements

DO NOT operate or repair this equipment without reading this manual. Failure to comply with these Instructions can result in serious bodily harm and void product warranty. Make sure you have extra help or heavy duty lifting equipment when unloading and assembling the lift. Please read the safety procedures and operating instructions in this manual before installing or operating the equipment. Keep this manual near lift at all times. Make sure all operators read this manual.

Manufacturer will assume no liability for loss or damage of any kind, expressed or implied resulting from improper installation or use of this product. Do not attempt to install equipment unless you have been trained on 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.

Contact a Certified Installer today by dialing (1-800-000-0000 Need Number)

Safety Sticker Identification

Use care when identifications and markings are on lift. These identification are put in place to help with your safety and the safety of others. Always use caution when working around vehicle lift.



Safety #1 SAFETY WARNING LABELS





Lockout Procedure

Purpose

This procedure establishes the minimum requirements for the lockout of energy that could cause injury to personnel by the operation of lifts in need of repair or being serviced. All employees shall comply with this procedure.

Responsibility

The responsibility for assuring that this procedure is followed is binding upon all employees and service personnel from outside service companies (i.e., authorized installers, contactors, etc.). All employees shall be instructed in the safety significance of the lockout procedure by the facility owner/manager. Each new or transferred employee along with visiting outside service personnel shall be instructed by the owner/manager (or assigned designee) in the purpose and use of the lockout procedure.

Preparation

Employees authorized to perform lockout shall ensure that the appropriate energy isolating device (i.e., circuit breaker, fuse, disconnect, etc.) is identified for the lift being locked out. Other such devices for other equipment may be located in close proximity of the appropriate energy isolating device. If the identity of the device is in question, see the shop supervisor for resolution. Assure that proper authorization is received prior to performing the lockout procedure.

Sequence of Lockout Procedure

- 1) Notify all affected employees that a lockout is being performed for servicing or maintenance and that the lift must be shut down and locked out to perform the servicing or maintenance
- 2) Unload the subject lift (remove vehicle). Shut it down and assure the disconnect switch is "OFF" if one is provided on the lift.
- 3) The authorized lockout person operates the main energy isolation device removing power to the lift being taken out of service. Stored or residual energy (such as capacitors, springs, elevated machine members, hydraulic systems, air, or etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc. If this is a lockable device, the authorized lockout person places the assigned padlock on the device to prevent its unintentional reactivation. An appropriate tag is applied stating the person's name, at least 3" x 6" in size, an easily noticeable color, and states not to operate device or remove tag. If this device is a non-lockable circuit breaker or fuse, replace circuit with a "dummy" device and tag it appropriately as mentioned above.
- 4) Ensure that the equipment is disconnected from the energy sources' by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating controls' or by testing to make certain the equipment will not operate. . Be sure to return any switches to the "OFF" position.
- 5) The equipment is now locked out and ready for the required maintenance or service.

Restoring Equipment to Service

- 1) Check the lift and the immediate area around the lift to ensure that nonessential items have been removed (clear all tools, vehicles and personnel) and that the completion of all lift components are operationally intact.
- 2) The authorized person can now remove the lock (or dummy circuit breaker or fuse) and tag. Activate the energy isolating device so that the lift may again be placed into operation.

Rules for Using Lockout Procedure

All employees are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized employees are required to perform the lockout in accordance with this procedure. All employees, upon observing a piece of lifting equipment which is locked out to perform servicing or maintenance shall not attempt to start, energize, or use that machine or equipment. The Lockout Procedure should be used whenever the lift is being repaired or serviced, waiting for repair when current operation could cause possible injury to personnel, or for any other situation when unintentional operation could injure personnel. No attempt shall be made to operate the lift when the energy isolating device is locked out.

Wire Rope Inspection

(Knowing when to replace your cables!)

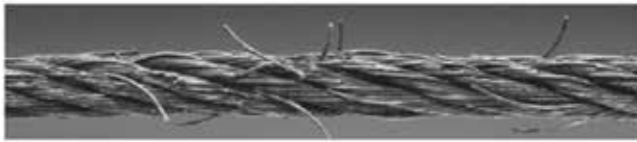
These pictures will help you assess when you will need to replace wire rope.



Good Cable



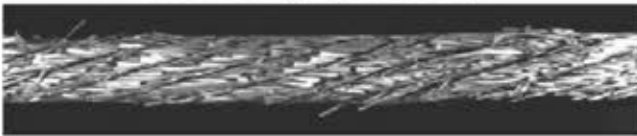
Cable with Broken wires (Replace Cable)



Cable with Corrosion (Replace Cable)



Cable Twisting (Replace Cable)



Cable Damage (Replace Cable)

Know when to replace your cables!!

Recommended every 3 years.

WIRE ROPE INSPECTION MAINTENANCE

⚠ CAUTION



- ✓ Equalizing and Lifting Cables should be replaced every three years when visible signs of damage are apparent. **DO NOT USE THE LIFT WITH DAMAGED OR WORN CABLES.**
- ✓ A lubricant suited to the conditions under which the rope is operating should then be applied. Several methods are suggested, and the one most suited to the installation and lubricant being used may be chosen. It is better to lubricate lightly and frequently than heavily and infrequently. For best results lubricate to core of cables.
- ✓ Improve rope performance and overall effectiveness
- ✓ Check all guide rollers, sheaves and hardware that are in operational contact are visually checked for wear and lubrication.
- ✓ Visually Inspect and Apply lubricants to all contact points using a heavy weight lubricant using the methods as described: spray, pump, brush or hand lubrication.
- ✓ Recommended Lubrication Product:
- ✓ Silver Streak Wire Rope Lubricant (#199) is a heavy duty extreme pressure lubricant specially formulated to provide extended service life over a wide range of temperatures to all types of wire ropes

All wire rope, sheaves and guide rollers in continuous service should be observed during normal operation and visually as per the scheduled maintenance. A complete and thorough inspection of all ropes in use must be made as below and all rope which has been idle for a period of a month or more should be given a thorough inspection before it is put back into service.

Factors such as abrasion, wear, fatigue, corrosion, improper winding and kinking are often of greater significance in determining if a wire rope is usable. Use the pictures as shown as guide for determining when to replace your wire rope.

Recommended Lubrication Product:

Silver Streak Wire Rope Lubricant (#199) is a heavy duty extreme pressure lubricant specially formulated to provide extended service life over a wide range of temperatures to all types of wire ropes.

Check all guide rollers, sheaves and hardware that are in operational contact are visually checked for wear and lubrication

Concrete Foundation Specifications and Requirements

Less than 10,000 lbs 2-Post Models 4 Inch Min. Thickness / 3,000 PSI (4000 PSI Recommended)

FOUNDATION and ANCHORING REQUIREMENTS

Before installing your new lift, check the following.

Selecting Lift Location: Always use architects building plans when available. Check layout dimension against floor plan requirements making sure that adequate space is available.

Floor Requirements: The lift should be located on a relatively level floor of less than 2 degrees slope. If slope is questionable, consider a survey of the site and/or the possibility of pouring a new level concrete slab. Failure to do so could cause personal injury or death.

Ceiling Requirements: The area where the lift will be located should be free of overhead obstructions such as heaters, building supports, electrical lines, etc...

Defective Concrete: Visually inspect the site where the lift is to be installed and check for cracked or defective concrete. If site is in question contact a local inspection agency before installing lift.

DO NOT install on asphalt or other similar unstable surface. Columns are supported only by anchoring to concrete floor.

Manufacturer will not be held responsible for any concrete that may not meet slope requirements and will not be responsible for any charges relating to new concrete slabs pouring or leveling or damage.

IMPORTANT INFORMATION AND GENERAL NOTES FOR EXPANSION ANCHORS

General Instructions for the Installing Concrete Anchors

These general instructions for the installer are provided to ensure the proper selection and installation of Anchor Products and must be followed carefully. These general instructions are in addition to the specific design and installation instructions and notes provided for each particular product, all of which should be consulted prior to and during the installation Anchor Products.

Use proper safety equipment.

Most concrete mixes are designed to obtain the desired properties within 28 days after being cast(28-day cure). Concrete shall have compression strength of at least 3,000 PSI and a minimum thickness of 4" in order to achieve a minimum anchor embedment of 3 ¼". NOTE: When using the standard supplied ¾" x 5 ½" anchors; if the top of the anchor exceeds 2 ¼" above the floor grade you DO NOT have enough embedment.

Maintain a 6" minimum distance from any slab edge or seam. Hole to hole spacing should be a minimum 6 ½" in any direction. Hole depth should be a minimum of 4".

Do not modify Mechanical Wedge Anchor products. The performance of modified products may be substantially weakened. Manufacturer will not warrant or guarantee the performance of such modified products.

Do not alter installation procedures from those set forth in this Manual.

Drill holes for mechanical anchors with carbide-tipped drill bits meeting the diameter requirements of ANSI B212.15 shown in the table below. A properly-sized hole is critical to the performance of mechanical anchors.

Rotary-hammer drills with light, high frequency impact are recommended for drilling holes.

Do not use excessively worn bits or bits which have been incorrectly sharpened.

Please note that the use of oversized holes' is NOT permitted for anchoring lift. DO NOT USE Anchor Adhesive to fill spacing of oversized holes'. Move lift location or fill holes with Anchor Adhesive (see manufacturer for proper curing time) and Re-drill to correct Hole Specification.

POST TENSION CONCRETE

DO NOT CUT OR DRILL THROUGH A POST TENSION CABLE.

Do not disturb, bolt up, or apply load to adhesive anchors prior to the full cure of the adhesive.

Metal anchors and fasteners will corrode and may lose load-carrying capacity when installed in corrosive environments or exposed to corrosive materials. There are many environments and materials which may cause corrosion including ocean salt air, fire-retardants, fumes, fertilizers, preservative-treated wood, dissimilar metals, and other corrosive elements.

Finished Diameters for Rotary and Rotary Hammer Carbide Tipped Concrete Drills per ANSI B212.15

(Locate any post tension cables before you drill)

Detailed Installation Instruction for Expansion Anchors.

CAUTION: Anchors must be at least 6" from the edge of the slab or any seam.

1. Measure Lift Placement. (see figure) (Recommended use columns as template before drilling and mark holes.)

2. Keep the drill in a perpendicular line while drilling.

Let the drill do the work. Do not apply excessive pressure. Lift the drill up and down occasionally to remove residue to reduce binding.

3. Drill the hole to depth equal to the length of anchor. Note: Drilling thru concrete (recommended) will allow the anchor to be driven thru the bottom of foundation if the threads are damaged or if the lift will need to be relocated. (Example A.1)

4. For better holding power blow dust from the hole. (Example A.2)

6. Repeat Steps 4 thru 5 (Qty x 10).

7. Move column into place carefully.

8. Place flat washer and hex nut over threaded end of 3/4" x 5 1/2" wedge anchor, leaving approximately 1/16 inch of thread exposed carefully tap anchor (use a hammer Example A.3). Do not damage threads. Tap anchor into the concrete until nut and flat washer are against base plate. Tighten the nut, two or three turns on average concrete (28-day cure). Check each anchor bolt with torque wrench set to 100 foot pounds torque. (Example A.4)

8.1 Using the horseshoe shims provided, shim each column base as required until each column is plumb. If one column has to be elevated to match the plane of the other column, add shim plates. Torque anchors to 100 ft-lbs. Shim thickness MUST NOT exceed 1/2" when using the 5 1/2" long anchors provided with the lift. Adjust the column extensions plumb.

8.2 Mechanical Anchors: Expansion anchors that have been set to the required installation torque in concrete will experience a reduction in pre-tension (due to torque) within several hours Re-torque the anchor to the initial installation torque is not recommended, or necessary.

8.3 For mechanical anchors that require a specific installation torque: Failure to apply the recommended installation torque can result in excessive displacement of the anchor under load or premature failure of the anchor. These anchors will lose pre-tension after setting due to pre-load relaxation.

8.4 If anchors do not tighten to 100 ft-lbs. installation torque, replace the concrete under each column base with a 4' x 4' x 6" thick (Recommended 4,000 PSI) 3000psi minimum concrete pad keyed under and flush with the top of existing floor. Allow concrete to cure before installing lifts and anchors (typically 28 days).

See pictures below.

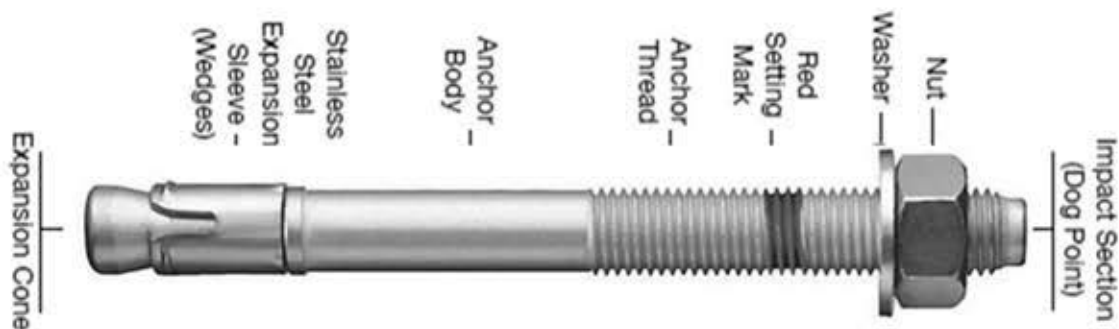
Expansion Anchor 3/4" x 5-1/2"

Anchor size is same as drill bit size (.775" to .787")

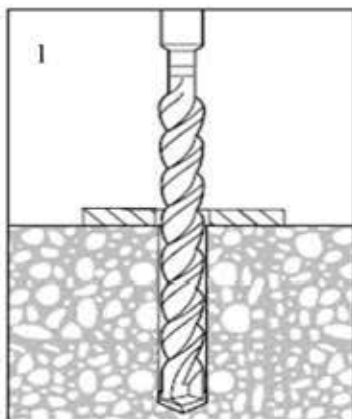
Use a hammer drill with a Carbide tip, 3/4" diameter, solid drill bit. The bit tip diameter should be to

ANSI Standard B95.12-1977.

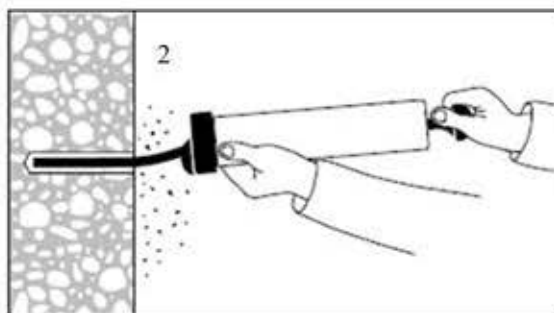
2003 and 2006 IBC compliant high-performing medium-duty expansion anchor. Especially suited for seismic and cracked concrete applications. ICC-ES ESR-1917 supports ACI 318 design.



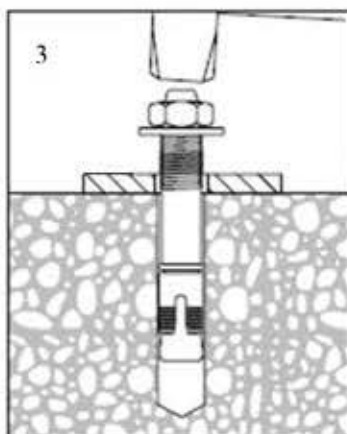
Steps to install Expansion Anchor.



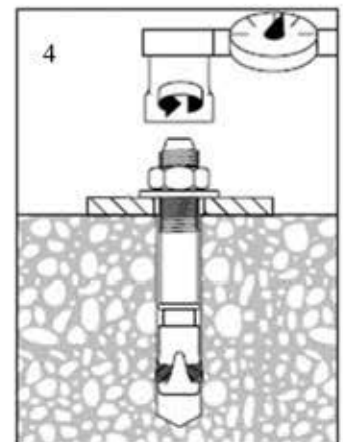
1. Hammer drill a hole to the same nominal diameter as the expansion anchor. The hole depth must exceed the anchor embedment at least 1/4". Use the Baseplate may be used as a drilling template to ensure proper anchor location. Remove Baseplate before drilling! (Drill completely through concrete floor in case movement of lift is required.)



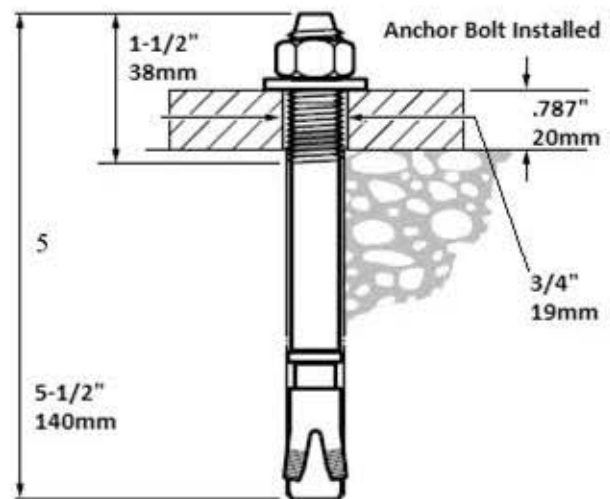
2. Clean Hole



3. Assemble the flat washer and nut flush on the anchor bolt. Drive the Expansion Anchor into the hole using a hammer. If shimming is required make sure to leave threads exposed for proper shimming.



4. Tighten the nut to the recommended installation torque.



5. Completed Installation.

Troubleshooting

The power unit does not run:

- Check electrical supply breaker or fuse.
- Check to see if limit switch is being contacted by a tall vehicle.
- Check micro-switch and connections in motor control box.
- Check voltage to the motor.
- Check micro-switch and connections on the overhead switch.

The power unit runs but does not raise the lift:

- Check the oil level.
- Check that the lowering valve is not stuck open.
- Check the connections and components on the suction side of the pump.

The power unit raises the lift empty but will not lift a vehicle.

- Make sure the vehicle is not above the rated capacity of the lift.
- Make sure the vehicle is positioned properly.
- Clean the lowering valve by running the power unit for 30 seconds while holding the lowering valve open.
- Check the motor voltage.

Lift lowers slowly down.

- Check for oil leaks.
 - Clean the lowering valve by running the power unit for 30 seconds while holding the lowering valve open.
- Repeat this procedure a few times.

- Clean the check valve seat .

Slow Lifting and/or oil foaming up.

- Check that oil used meets the specification in the Installation Instruction section of this manual.
- Tighten all suction line fittings.
- Not enough oil in tank and air has been transferred into the hoses and cylinder. (Complete bleed system and replace oil.)

Anchors continually work loose

- If holes were drilled too large, relocate the lift per the Installation Instruction section of this manual.
- Floor is not sufficient to provide the necessary resistance. Remove an area of concrete and re-pour as described in the Expansion Anchor Installation Instruction section of this manual.

Lift does not raise and lower smoothly.

- Reposition vehicle for a more even weight distribution.
- Check the four inside corners of the two columns for roughness. Any rust or burrs must be removed with emery cloth.
- Lubricate the four corners with heavy duty bearing grease.
- Use a level to check the columns for vertical alignment both side to side and front to back. Shim the columns as necessary per the Installation Instruction section of this manual.
- Check the oil level.
- Inspect that there is no air in the hydraulic lines. Bleed the hydraulic system as described in the Installation Instruction section of this manual.

Troubleshooting

The lift will only lower completely to 1" from the floor.

-Check that the safety latches are disengaged.

- Adjust cable as needed to assure that cables have not been over tightened and check that both safety latches are disengage.

Safety lock are out of adjustment.

- If the equalization cables are out of adjustment, the carriages are out of sync. When the lift is at full rise, one of the safety latches may not have the clearance to disengage and allow the lift to lower. Readjust cables as described in manual.

At full rise the safety latch will not disengage and the lift cannot be lowered.

- Check oil level.

- If the equalization cables are out of adjustment, the carriages are out of sync. When the lift is at full rise, one of the safety latches may not have the clearance to disengage and allow the lift to lower.

-Other issues please contact a Service Representative

Power Unit will not stop running

- Switch is damaged. Turn off power to the lift and replace switch.

Monthly Maintenance

Automotive vehicle lifts an important part to the operation and profitability of your business.

Make sure safety is used with this lift and other lifts in your shop is critical in preventing employee injuries and damage to customer's vehicles. Automotive lifts should always be used safely. This will help increase the profitability, productivity and safety in your shop.

- Lubricate the four inside corners of the columns with heavy duty bearing grease.
- Check safety latch synchronization: Safety latches should click at the same time. If necessary adjust equalizing cables as described in the Installation Instruction section of this manual.
- Check tightness of all bolts.
- Check expansion anchor tightness. If the anchor bolts are loose, they should be re-torque to 100ft/lbs.
- Check the Hardware for tightness monthly per inspection schedules.
- Replace damaged, broken or wearing parts with lift manufacturer's OEM parts or their equivalent.
- While lift is lowered, check the hydraulic fluid level. If necessary, add oil as described in the Installation Instruction section of this manual.

Service Calls

The manufacturer can provide on site service to your lift product by a qualified lift service technician. The owner is responsible for all costs and direct payment to the contractor at the time the work is completed. It is the owner's responsibility to return any parts to the manufacturer for warranty validation. Repairs should only be completed by a qualified lift technician.

Pre-Installation Procedures

Before beginning your installation make sure you read the installation manual and insure all instructions are fully understood. Check that all component parts are accounted for. Locate the installation area, identify the center line of the bay and mark the floor. Also mark the center of bay entrance door. Connect these two points with a short chalk line in the area where lift will be located. Draw a second chalk line at 90° to locate the positions of all lift columns.

Installation Tools Required:

25ft. Measuring Tape
Chalk Line and Chalk
Heavy Duty Metal Wire Cutters
3 ft Crow Bar
Full set of Metric Wrenches and Ratchet Set
Full set SAE Wrenches and Ratchet Set
Metric and SAE Allen Key Sets
Hammer
Rubber Mallet
Screwdrivers
2—12 ft. Step Ladders
2— 4 ft. Level
1—Rotary Hammer Drill with 3/4" diameter Masonry Drill Bit
Lifting Devices
Use proper lifting devices such as Cranes or a Forklift.
4" x 4" Wooden Blocks (use for unpacking)



Use safety protective clothing and protective wear when installing lift. protec-



Use safety protective clothing and protective wear when installing lift.

INSTALLATION PROCEDURE

DO NOT install this lift outdoors unless special consideration has been made to protect the power unit from weather conditions. **The Power unit is not water proof!!!**

DO NOT begin installation with lift close to wall. It is necessary to leave adequate clearance for installing safety linkage rods. Allow 1524mm for clearance. **(See Fig.1)**

NOTE The power unit can be placed in one of two locations, front left or rear right **(See Fig. 1)**

STEP 1: After unloading the lift, place it near the intended installation location.

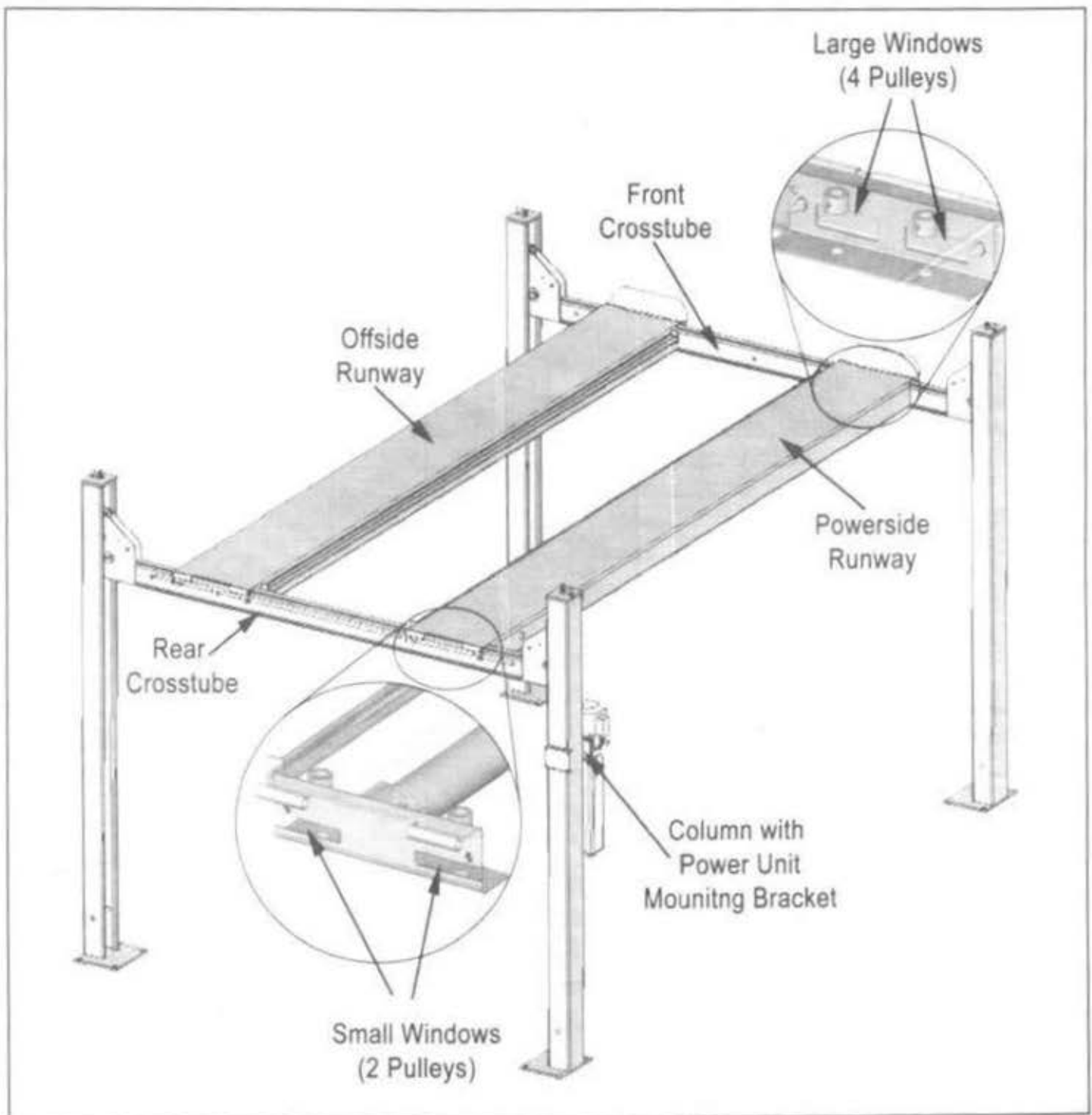
STEP 2: Remove the shipping bands and packing materials from the lift. The power unit will be unpacked from the top. Note: Be care-ful not to drop power unit on heavy end

STEP 3: Open the wrapping, remove the parts and parts boxes from the packaging. Unbolt the structure from the shipping brackets. (Use proper lifting devices, cranes or a forklift to lift off of shipping brackets.)

Step 4: Before assembling lift stand the columns in place making sure to position the power unit mounting bracket at the correct location and the lock blocks are positioned facing outward. The power unit column will be positioned with the power unit ramp



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 device.

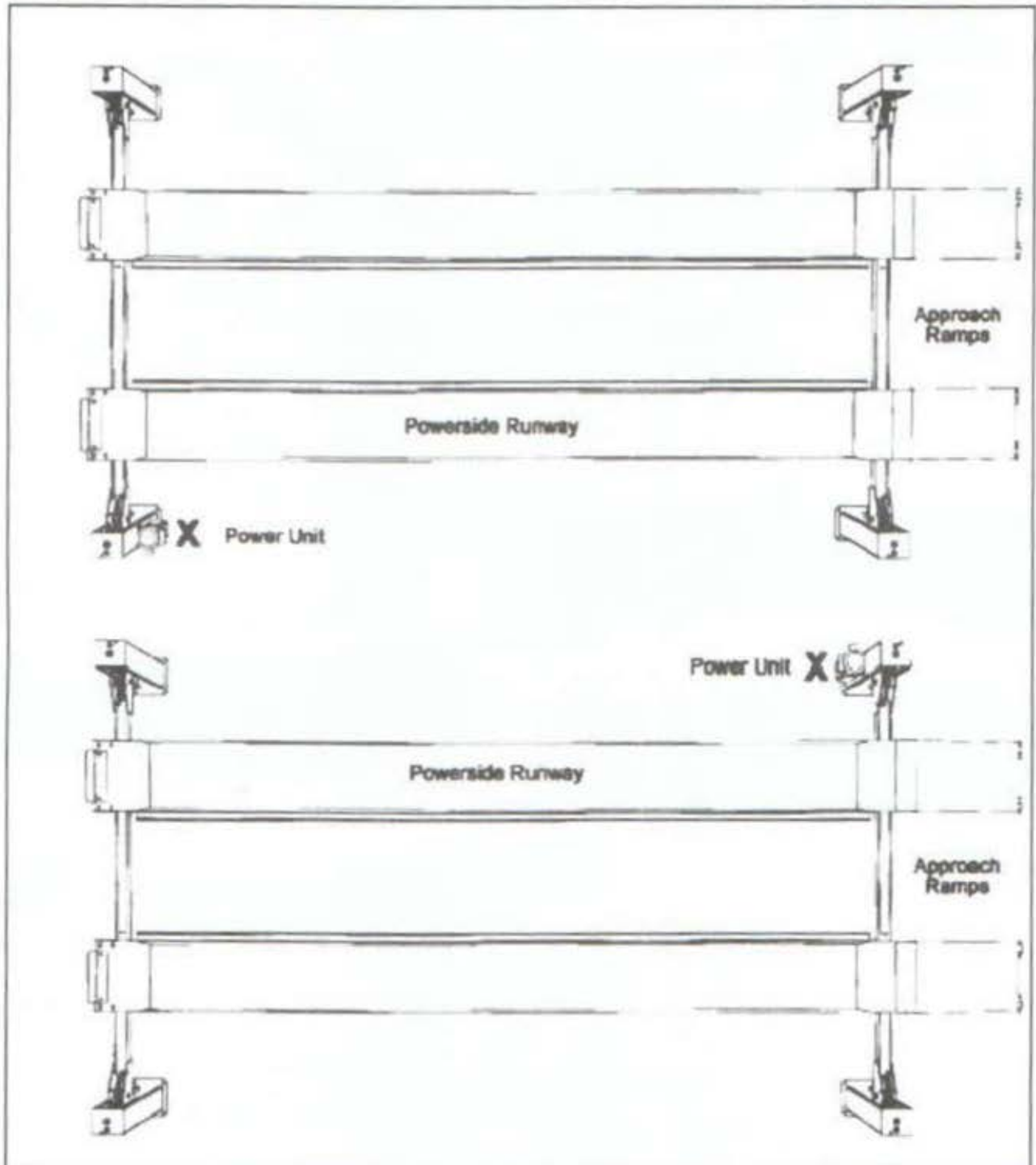


POWER UNIT LOCATION

IMPORTANT NOTE

The Power Unit can be located at either "X" location shown below. It is important to locate the POWERSIDE Runway (with Cylinder) on the SAME SIDE as the power unit location. Utility rails on the side of each Runway MUST be installed to the inside.

For the remainder of this instruction we will illustrate the Power Unit mounted at the DRIVER-SIDE (LEFT) FRONT Column - TOP ILLUSTRATION. For Power Unit at right rear, rotate lift 180° leaving Approach Ramps and Front Tire Stops in original position.



STEP 1

(Column & Cross Tube Installation)

1. Place a chalk line on the floor according to the floor plan layout. Pay attention to the power Unit location. Locate and stand the columns at their respective locations. **DO NOT BOLT** Columns down at this time. Use caution to prevent the Columns from falling over. (See Fig. 1.1)



Fig 1.1

2. To estimate the shim requirements, place a target on floor at each Column position and record the readings. Find the highest of the four locations then find the difference between each of the remaining Columns. This difference is the estimated amount of shim thickness that will be required at each Column. (See Fig. 1.2)

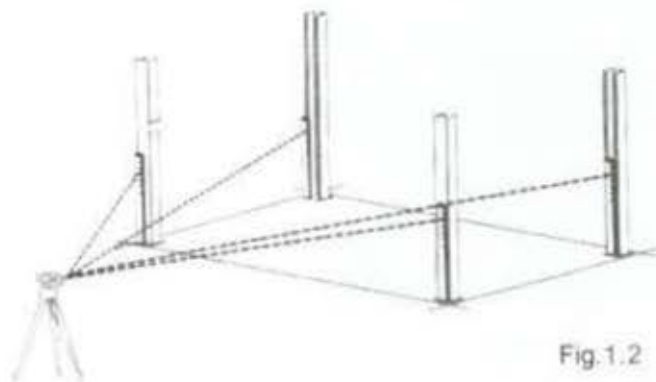


Fig.1.2

Note: The maximum shim thickness recommended by the factory is no more than 1/2" per Column using shims and anchors provided with the lift.

3. Using a forklift or crane, raise the cross tubes (making sure the Plastic Slide Blocks are still in position) and drop down into the top of the Columns. NOTE: The Sheave Windows should be positioned inward and adjacent the Power Unit Column. (See Fig.1.3)

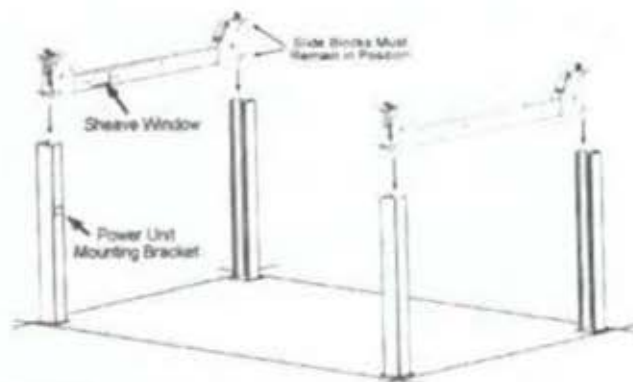
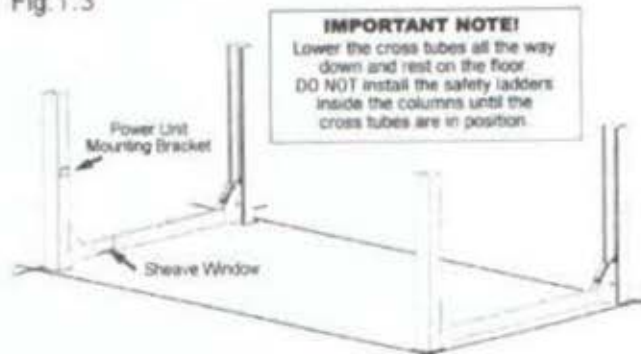


Fig.1.3



4. With the Columns standing and the cross tubes in position, install the Safety Ladders. Pass the Ladders through the Column openings and drop down through the Slide Block guide slots on the Cross Tube until the Ladders come to rest on the Base Plates. If bolting, **DO NOT BOLT** Columns down at this time. (See Fig. 1.4 - 1.5)

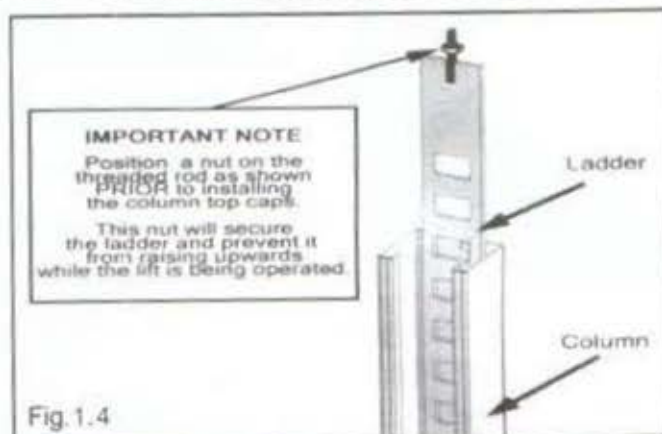


Fig.1.4

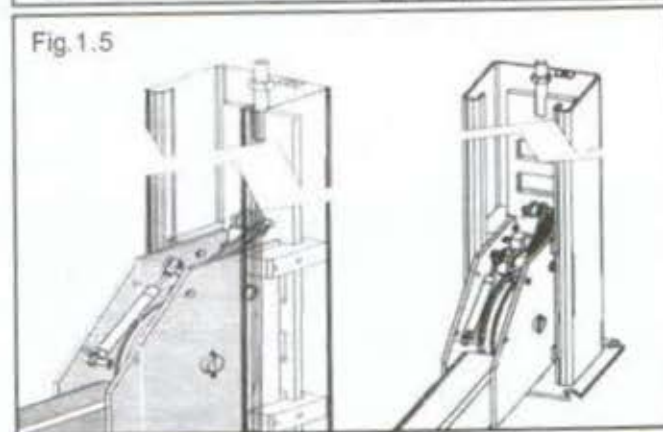
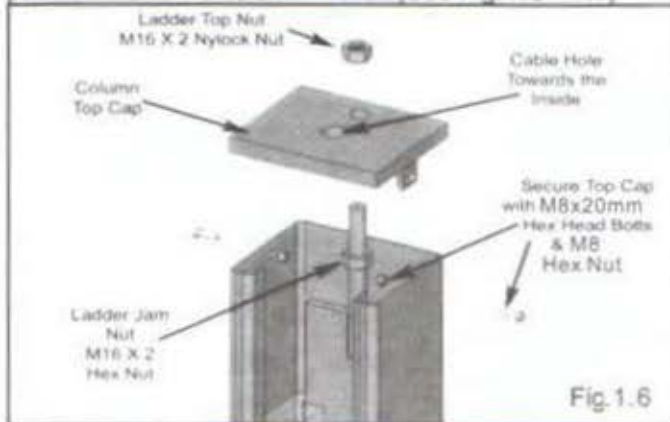


Fig.1.5

5. The Columns and Cross Tubes will now be in position and spaced properly for the Runways.

6. Install the Column TOP CAPS using the M16 X 2 Hex Bolts, nuts & washers. Install the nut on each Safety Ladder until 1/2" of threads are exposed and the Ladder is raised at least 1/2" off of the base of the Column.
NOTE: Raise the Ladder at least 1/2" off of the base of the Column or damage to the lift will occur. Be sure to position the cable hole INWARD. (See Fig.1.6 - 1.7)



STEP 2

(Raising The Cross Tubes)

1. Before proceeding it will be necessary to first raise the Cross Tubes off the ground to facilitate Cable routing and final assembly.

! DANGER

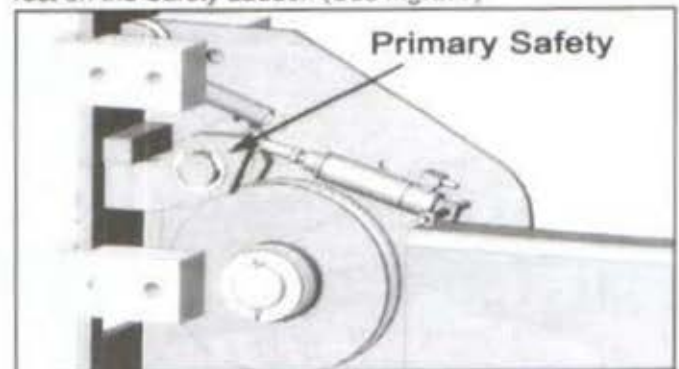
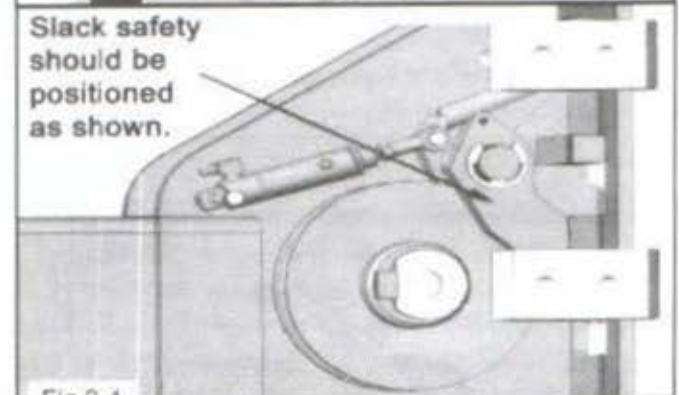
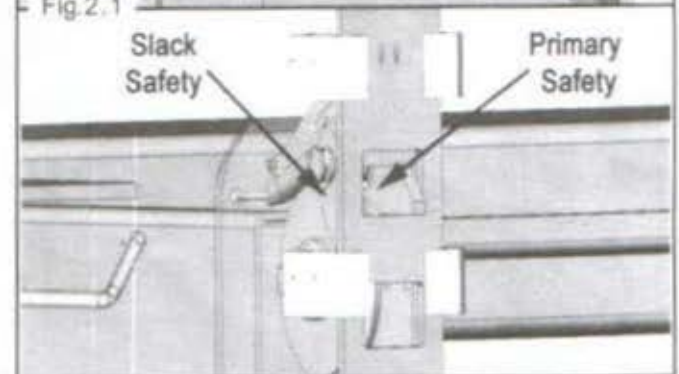
DANGER!

Be careful not to disturb the Columns and Cross tubes as they may tip over causing personal injury or harm.

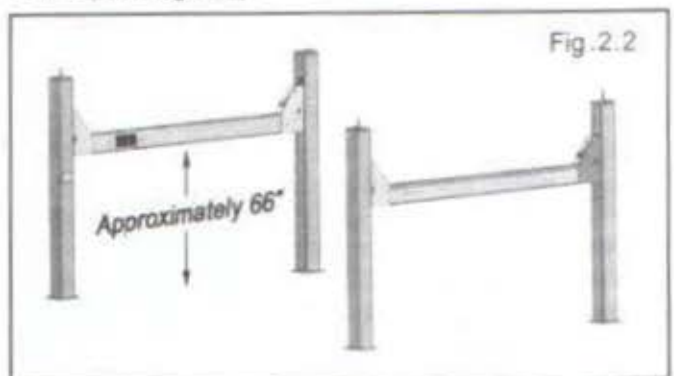
IMPORTANT NOTE !

It is important that the SLACK SAFETY LOCK IS CLEARED. The Slack Safety Lock must never rest on the Safety Ladder.

2. Manually raise the Cross Tubes until the primary Safety Locks engage and rest on the lock position second down from the top of the Ladder or approximately 66" off the ground. It is important that the SLACK SAFETY LOCK IS CLEARED. The Slack Safety Lock must never rest on the Safety Ladder. (See Fig.2.1)



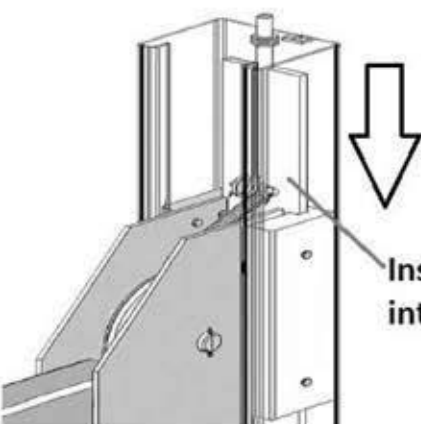
3. The Columns and Cross Tubes will now be in position and spaced properly for the Runways. Be very careful not to disturb the Columns and Cross Tubes at this time as they may tip over causing personal injury or harm. (See Fig.2.2)



This Information is only for the Dual Safety Latch Assembly for Tall 7000 lbs Lift.

Dual Safety Locking Mechanism

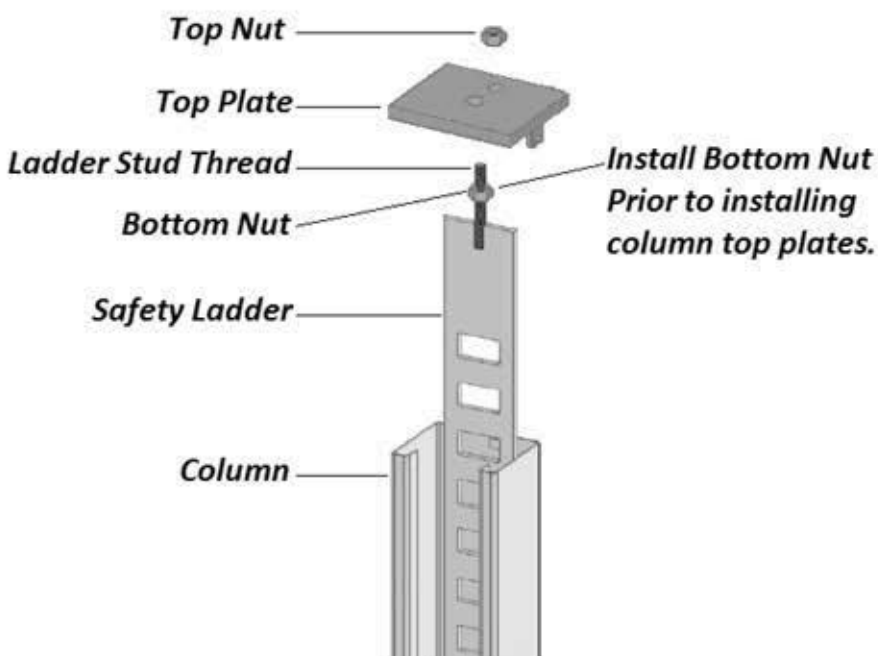
Step 5.3 : Install Safety Ladder Safety Assembly.



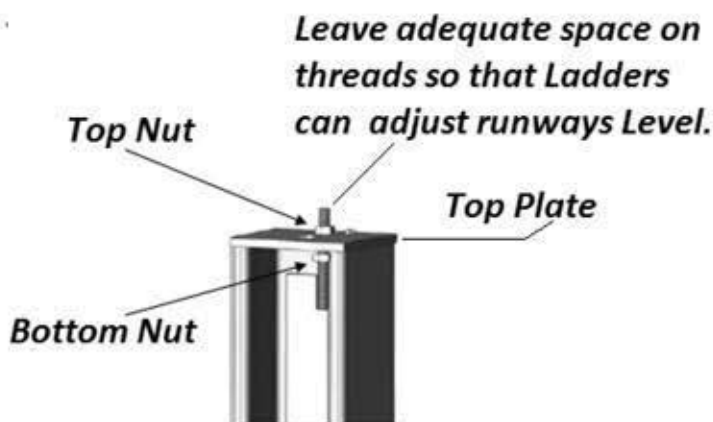
Insert Safety Ladder into Slide Blocks.

Step 5.5 : Make sure to install bottom nut on safety ladder stud thread before installing top plate. Install top plate and secure top plate with the (4) mounting bolts, nut and washers.

Safety Ladder Installation



Step 5.4 : Slide Safety Ladder into column and cross-beam slide blocks.



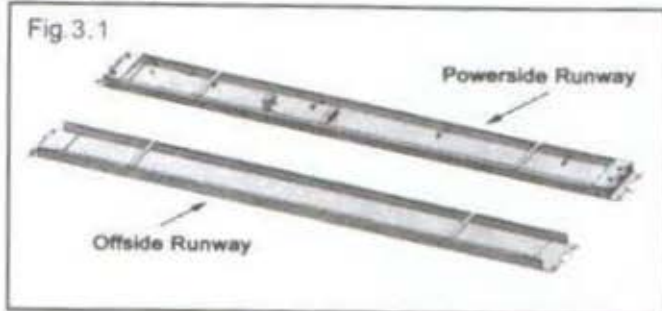
Important Note:

The top and bottom nuts will secure the safety ladder and prevent it from raising upward when in operation.

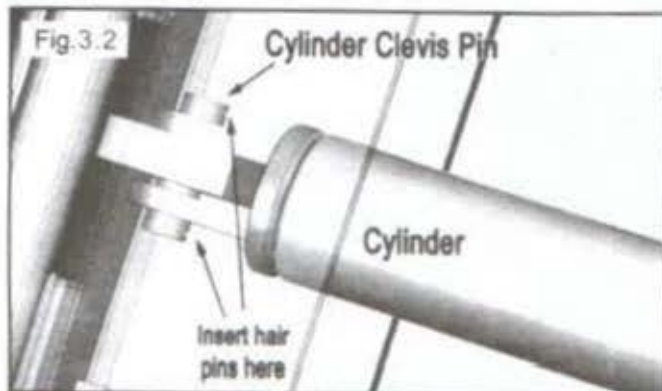
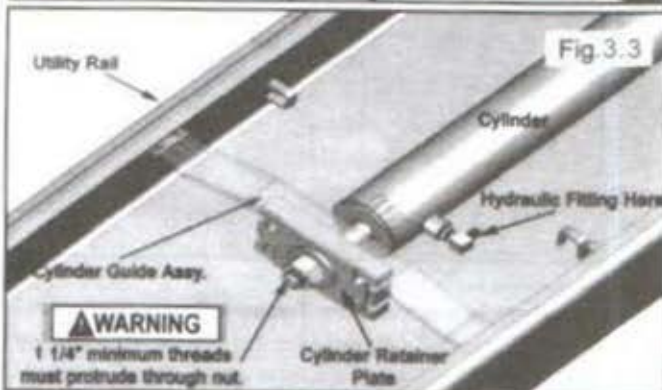
STEP 3

(Powerside Runway Installation)

1. Locate the Powerside Runway easily identified by the Cylinder and Sheave roller mounting structures welded on the underside. The Powerside Runway will be positioned on the side of the lift where the power unit is installed. (See Fig.3.1)

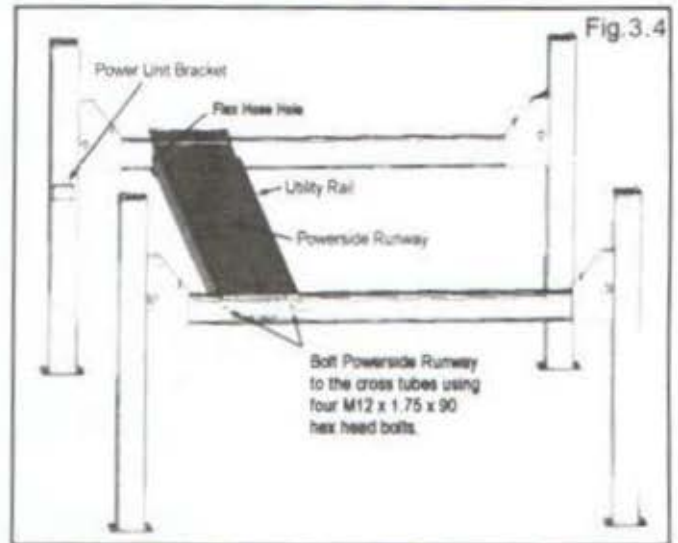


2. Install Cylinder and Cable Block as shown. (See Fig.3.2-3.3)



3. Remove any pre-installed Cable Sheaves from the Powerside Runway making sure to pay attention to the order in which they are removed. (This will help at the time of re-installation.)

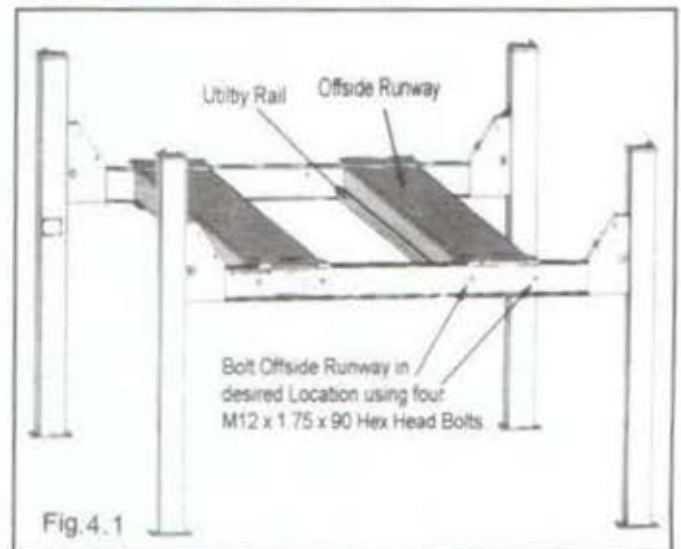
4. Position the Powerside Runway on top of the Cross Tubes with the utility rail towards the center. The Flex Tube Holes located at the side of the Powerside Runway should be adjacent to the Power Unit Column. Align the holes in the Runway with the holes on the Cross Tubes and bolt together using four M12 x 1.75 x 90 Hex Head Bolts and Washers. Lubricate bolts with WD-40 or equivalent and torque to 55 ft/lbs.



STEP 4

(Offside Runway Installation)

1. Position the Offside Runway on top of the Cross Tubes with the Utility Rail located inside. Determine the desired location of the Offside Runway. Align the holes in the Runway with the desired holes on the Cross Tubes and bolt together using four M12 x 1.75 x 90 Hex Head Bolts and Washers. Lubricate bolts with WD-40 or equivalent and torque to 55 ft/lbs. (See Fig.4.1)



! DANGER

DANGER !

DO NOT PROCEED with Cable installation or go near the lift work area unless visual confirmation is made of ALL Safety Locks. ALL locks MUST be engaged before proceeding. Failure to comply with these instructions may result in severe personal injury or death.

STEP 5

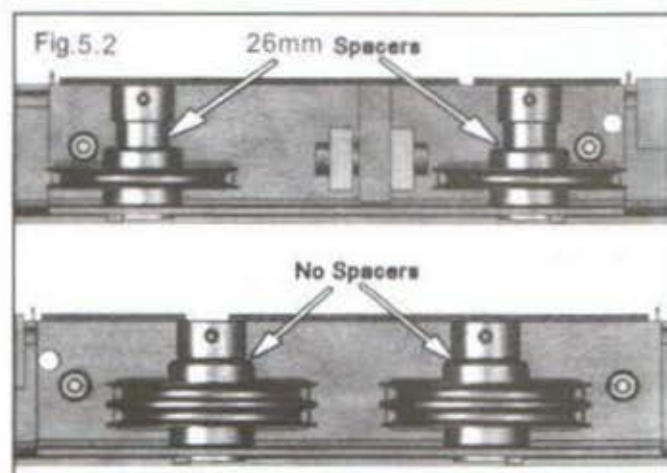
(Cable / Sheave Installation)

1. Inspect Cables to insure proper lengths. All Cables should have ID tags showing proper Cable lengths.
2. In order to install the Cables it is necessary to first extend the Hydraulic Cylinder. Remove both Cylinder port plugs then use an air gun or come-along to extend the Cylinder.

IMPORTANT! - Be careful not to damage the chrome rod during this step. (See Fig.5.1)



3. You must reinstall the Sheaves, Spacers and Pins in the same order as they are removed. (See Fig.5.2)



DANGER

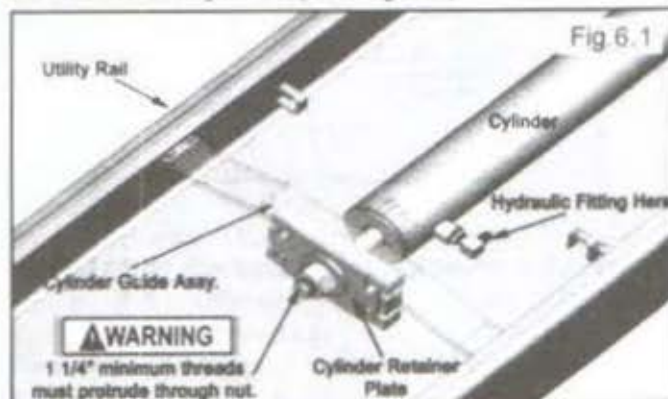
DANGER!

Failure to route Lifting Cables as described may lead to serious personal injury and/or death to operator or bystander and/or may cause damage to property.

STEP 6

(Cable Installation)

1. Make sure the Cylinder Flange Plate is installed with the guide assembly facing down and the Cylinder Retainer plate on the outside of the guide. Lug ends of Cables start at Cylinder. (See Fig.6.1)



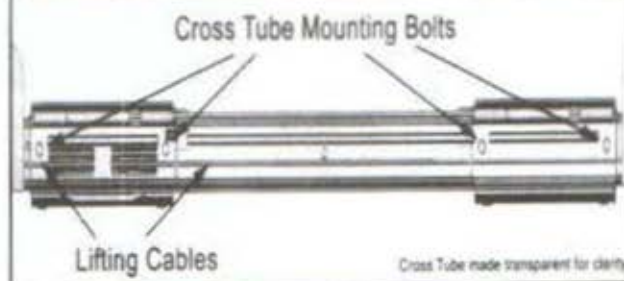
2. Route the threaded Cable ends through the ends of each Cross Tube. Care must be taken when routing the Lifting Cables to ensure they are routed **below** the Cross Tube Mounting Bolts. (See Fig.6.2)

Fig.6.2



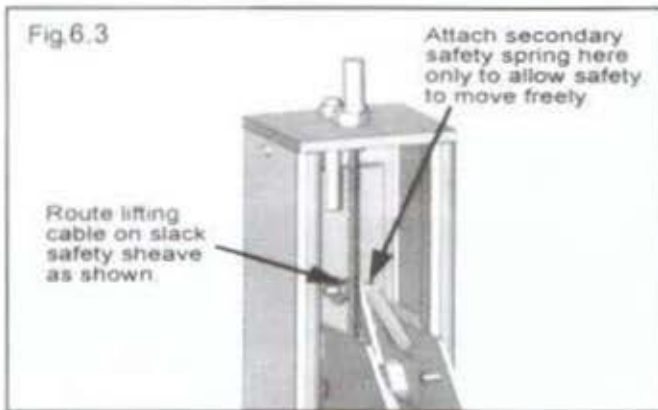
DANGER

Care must be taken when routing Lifting Cables through the Cross Tube. Lifting Cables must be run **BELOW** Cross Tube Mounting Bolts. Serious damages or injury may occur if Cables are not routed properly.



3. Route Cables over the Slack Safety Sheaves then to the top of each Column. Secure using the M18 Hex Head Nuts and Flat Washers. (See Fig.6.3)

Fig.6.3



4. Tighten each Nut until there is at least one inch of threads protruding through the top of the nut. The Cables will remain loose until start up and final Cable adjustments are made. (See Fig.6.4)

1" Minimum

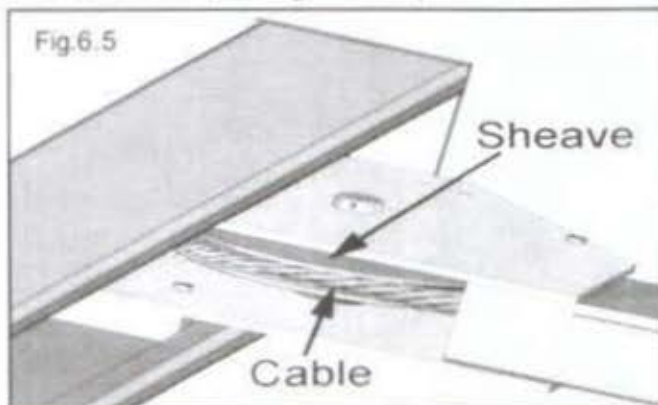
Install each Nut until 1" Minimum of threads are exposed.



Fig.6.4

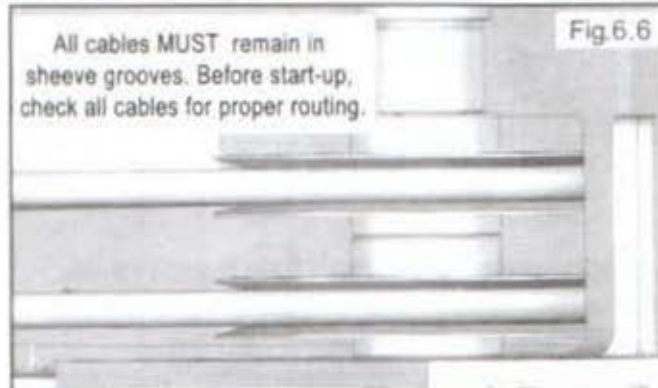
5. After routing the Cables double-check to make sure all are properly positioned and remain within the grooves of ALL Sheaves. (See Fig.6.5 - 6.6)

Fig.6.5



All cables MUST remain in sheave grooves. Before start-up, check all cables for proper routing.

Fig.6.6



STEP 7

(Power Unit Installation)

1. Mount the Power Unit to the Mounting Bracket using the M8 Hex Head Bolts and Nylock Nuts then fill the reservoir with 12 quarts of 10-WT hydraulic oil or Dexron III automatic transmission fluid. (See Fig.7.1)

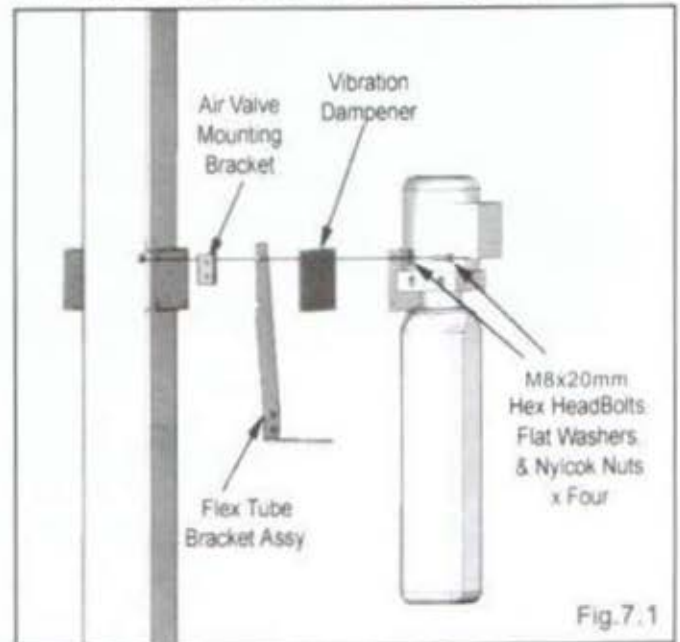


Fig.7.1



DANGER

DANGER !

ALL WIRING MUST BE PERFORMED BY A LICENSED ELECTRICIAN.



DANGER



DANGER!

DO NOT PERFORM ANY MAINTENANCE OR INSTALLATION OF ANY COMPONENTS WITH OUT FIRST ENSURING THAT ELECTRICAL POWER HAS BEEN DISCONNECTED AT THE SOURCE OR PANEL AND CANNOT BE RE-ENERGIZED UNTIL ALL MAINTENANCE AND/OR INSTALLATION PROCEDURES ARE COMPLETED.

Runway Installation

Step 8 : Start with the runway with the cylinder. This runway will be located with the hose connection facing out toward the column with power unit bracket attached. **NOTE** The power unit can be located in two locations shown.

With an crane, lifting device or forklift pick up and place one end of the powerside runway on the crossbeam, and then pick up and place the other end on the opposite crossbeam (with your assistants, lift at the same time).

Use a large screwdriver or aligning punch to align the mounting holes in the cross rails with the mounting holes in the track. **Do not leave the runways unbolted – install the mounting bolts immediately!**

Install **M12X100 mounting bolts and M12 washers** thru the ramp brackets and wheel stops. Make sure the bolt head is on the flat side of the bracket.

Install the two ramp brackets and two wheel stop with bolts and washers as you secure the powerside runway to the crossbeam. Secure the bolts with M12 washers and nuts placed hand tight.

Install the offside track and again secure with ramp brackets, wheel stops with **M12X100 bolts and nuts**.

After both tracks are installed, tighten all bolts M12X100 bolts -torque to 30lbs.

Fig. 7

Crossbeam

w/2-sheave cut out.

Install Non-Powerside Runway

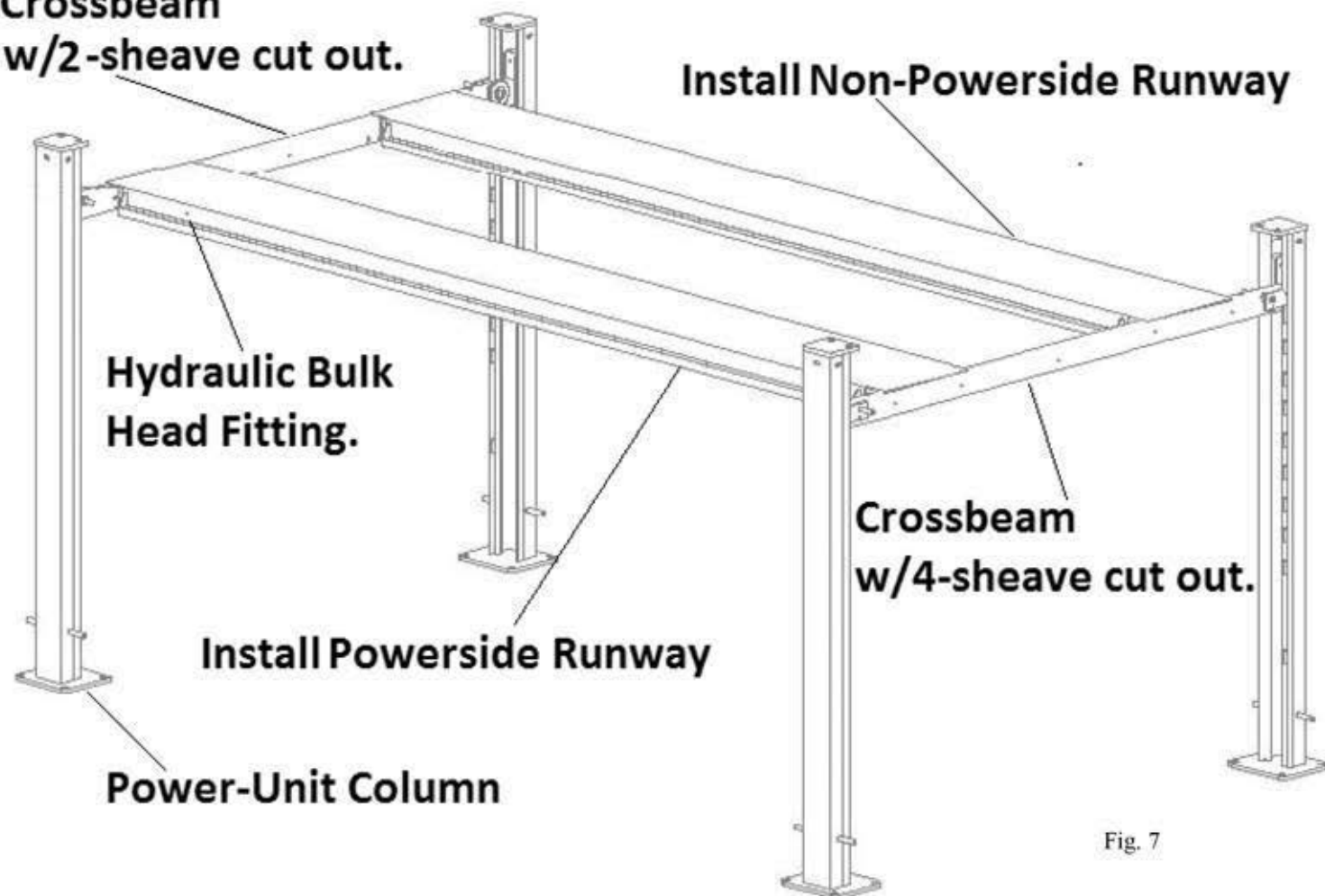
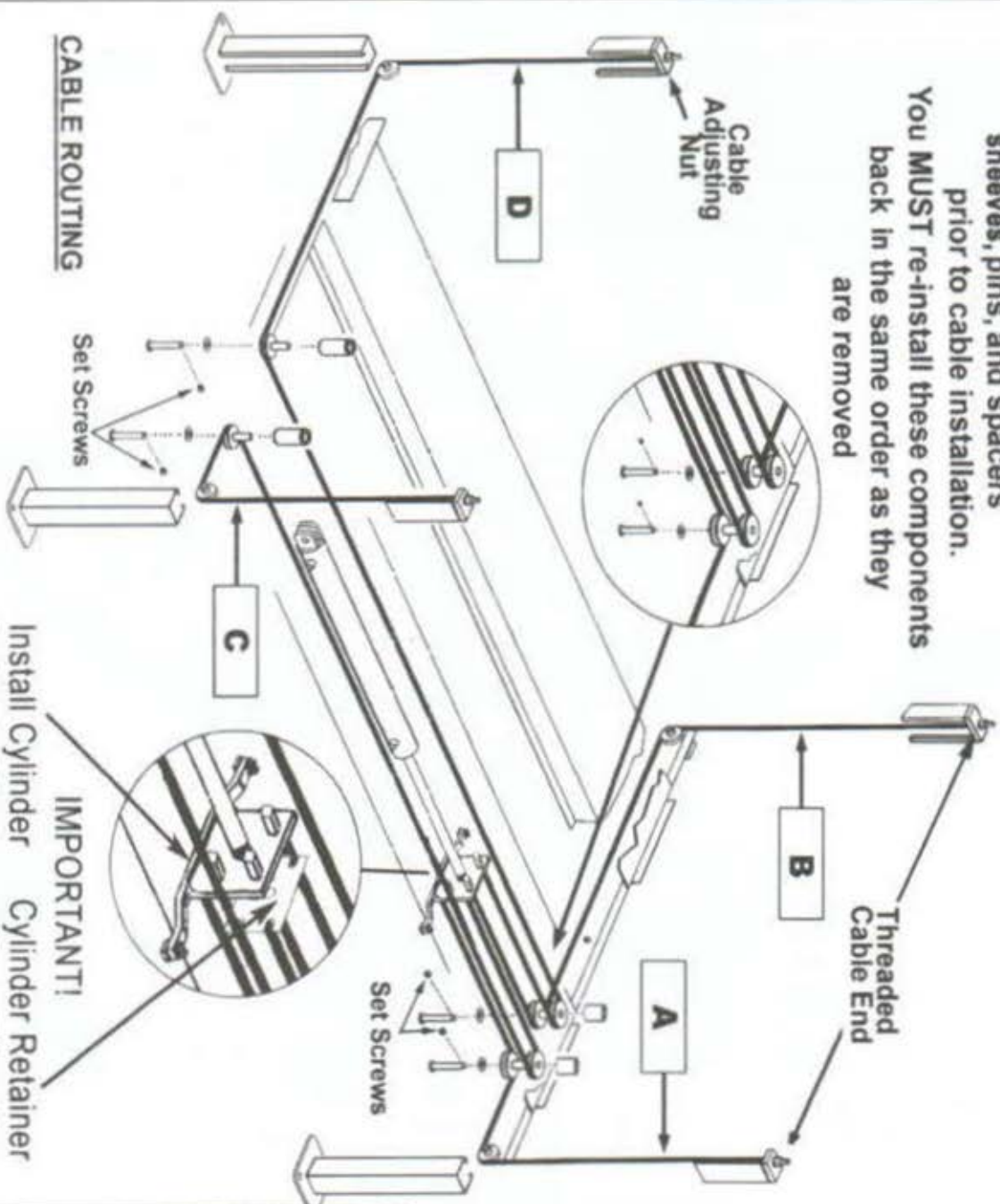


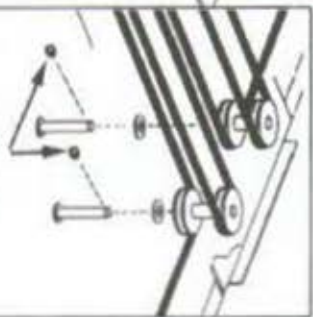
Fig. 7

IMPORTANT
 It will be necessary to remove sheaves, pins, and spacers prior to cable installation. You **MUST** re-install these components back in the same order as they are removed



CABLE ROUTING

IMPORTANT!
 Install Cylinder Retainer Guide As Shown Plate This side



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.

WARNING

WARNING !

DO NOT run Power Unit with no oil. Damage to pump can occur.
The Power Unit must be kept dry. Damage to Power Unit caused by water or other liquids such as detergents, acid etc., is not covered under warranty.

Operate lift only between temperatures of 41 °- 104° F.

Improper electrical hook-up can damage motor and will not be covered under warranty.

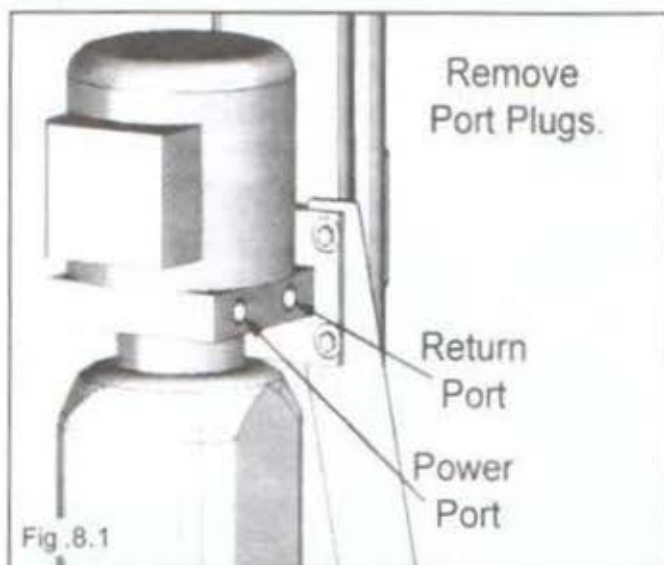
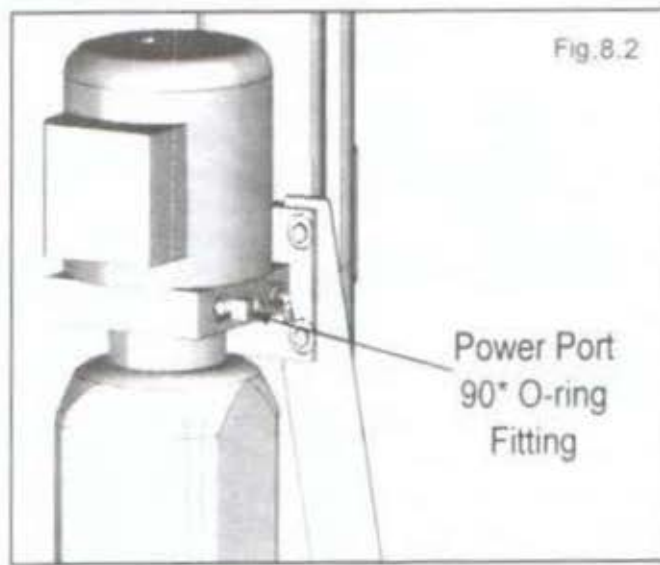
Motor can not run on 50HZ without a physical change in motor.

Use a separate breaker for each Power Unit.

STEP 8

(Routing Hydraulic Hoses)

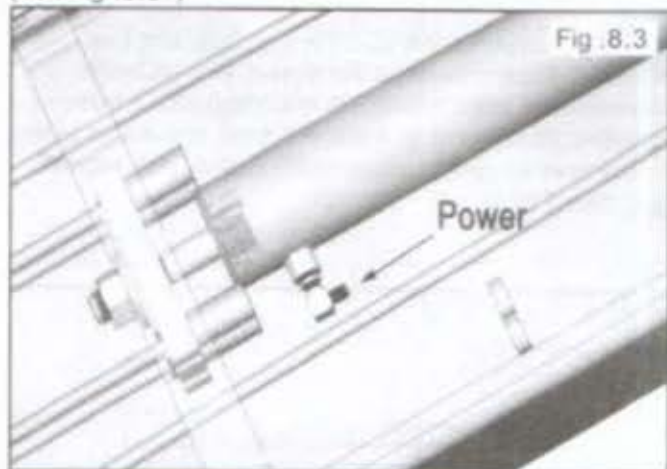
1. Install the 90-degree Hydraulic Fitting to the POWER PORT and the 90° return Air Line Fitting to the RETURN PORT of the Power Unit and connect the Hoses as described below. It will be necessary to remove the shipping plugs from both ports prior to installing the Fittings. (See Fig .8.1 - 8.2)



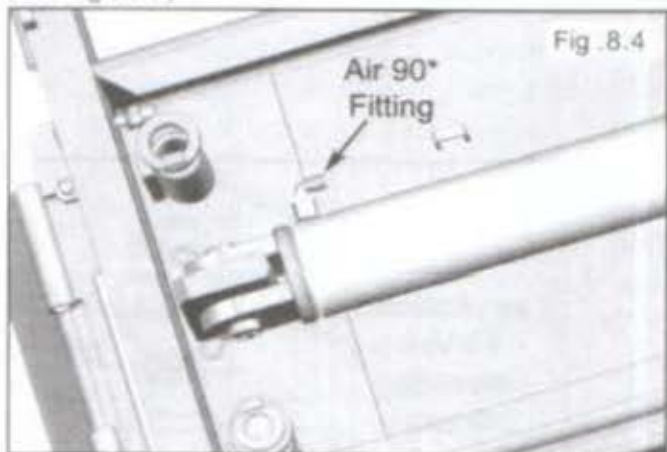
NOTE:

Check the Power Unit to determine proper connection ports for Power and Return lines. It will be necessary to remove shipping plugs from both ports prior to installing Fittings.

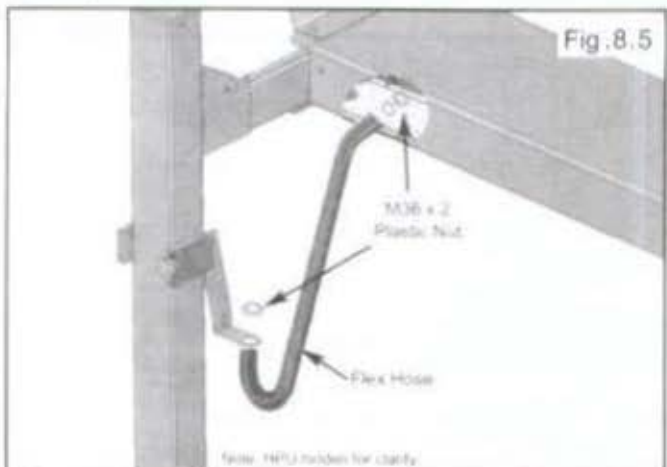
2. Install the 90-degree Hydraulic Fitting in the port at the ram end of the Cylinder. On the pipe thread side of the Fitting it is recommended to use Teflon Tape or pipe sealer. DO NOT USE TEFLON TAPE on the JIC flared end. (See Fig .8.3)



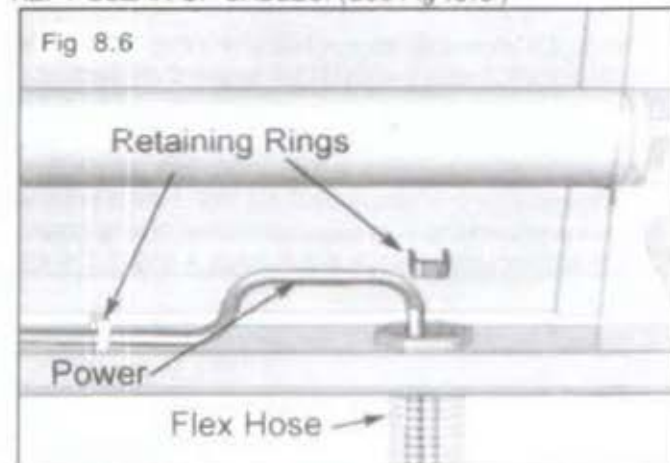
3. Install the 90-degree Air Line Fitting in the port at the base end of the Cylinder. On the pipe thread side of the Fitting it is recommended to use Teflon Tape or pipe sealer. (See Fig .8.4)



4. Install one end of Flex Hose to into hole in the POWERSIDE RUNWAY adjacent to the power unit. Install the other end of the Flex Hose to the Flex Hose Bracket Assembly. Tighten the Plastic Nuts securely. (See Fig .8.5)



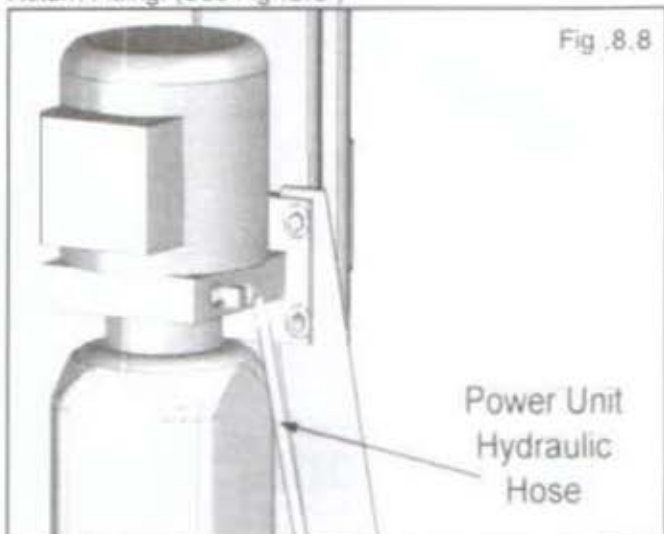
5. Connect Hoses as shown below making sure to pass through the retaining rings. MAKE SURE HOSES ARE KEPT CLEAR OF CABLES. (See Fig .8.6)



6. Run the Power Unit Hydraulic Hose, (90° End towards HPU) and the Return Air Line through the Flex Hose to the Power Unit. (See Fig .8.7)



7. Connect the Power Unit Hydraulic Line to the 90° Power Unit Fitting. Connect the Return Air Line Hose to the 90° Return Fitting. (See Fig .8.8)



STEP 9

(Routing Air Lines)

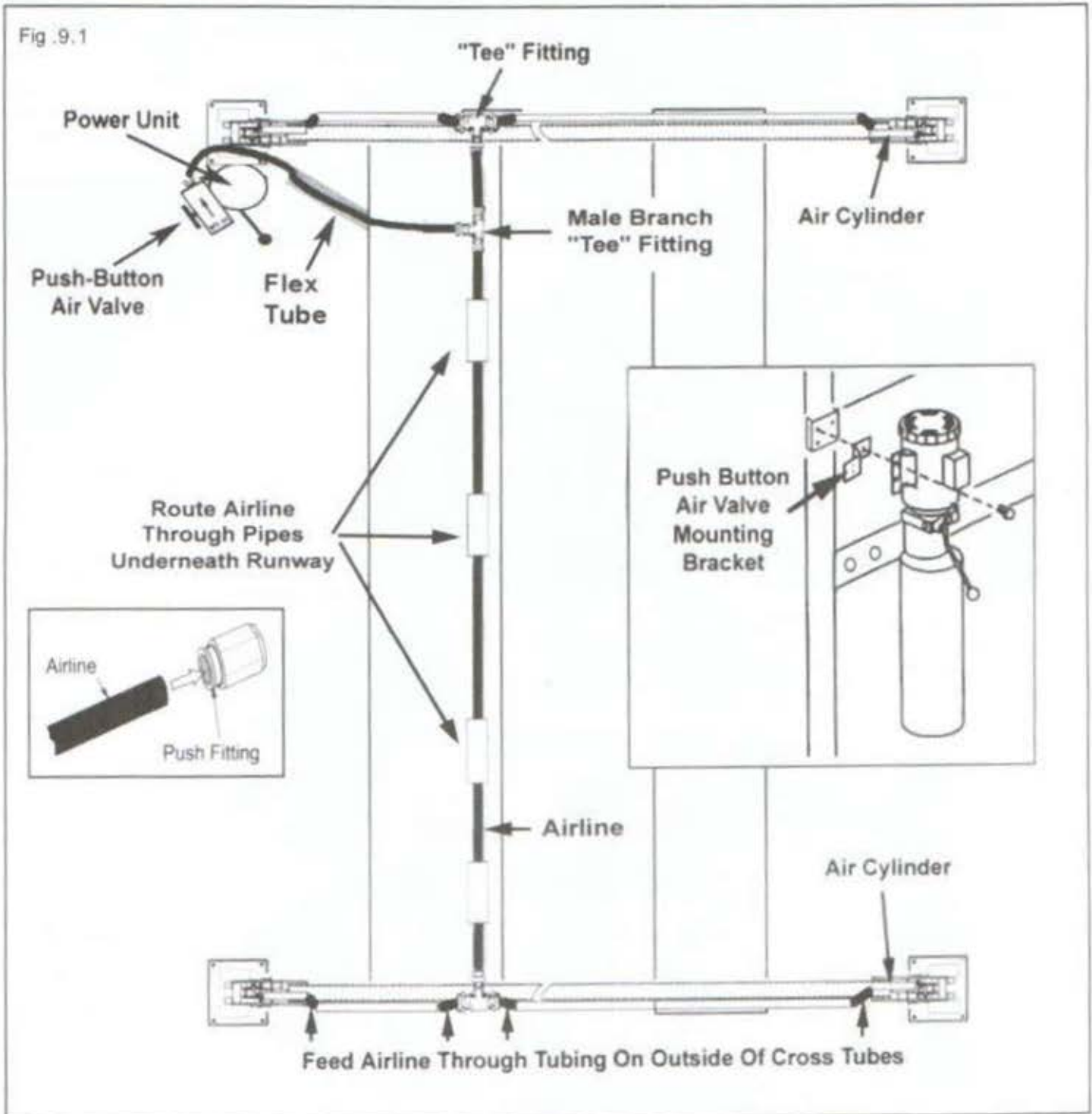
Route the air line as shown below making sure to position the push button air valve with the INLET facing towards the AIR SOURCE and the OUTLET facing the direction of the LIFT.

A filter/regulator/lubricator must be installed on air supply at lift. Failure to do so will void the warranty. Cut the provided 1/4" air line tubing with a sharp blade to lengths as required. Tubing must be cut square with no burrs.

Note: To assemble air line tubing into fitting, use firm, manual pressure to push tubing into the fitting until it bottoms out. To remove air line tubing from the fitting, hold push sleeve in (against fitting) and, at the same time, pull out on tubing. Pay careful attention to keep air line clear of any pinch points. Improper assembly may result in safety lock failure.

AIR PRESSURE SHOULD BE REGULATED TO 125 PSI MAX. (See Fig .9.1)

Fig .9.1





DANGER

DANGER!

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



IMPORTANT POWER-UNIT INSTALLATION NOTES

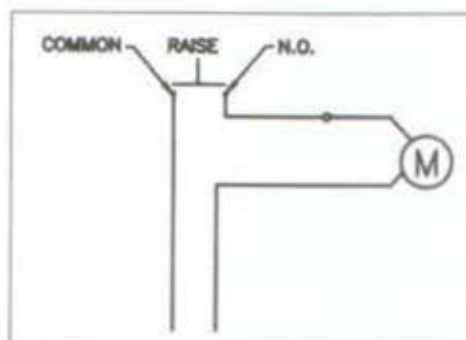
- DO NOT run power unit with no oil. Damage to pump can occur.
- The power unit must be kept dry. Damage to power unit caused by water or other liquids such as detergents, acid etc., is not covered under warranty.
- Improper electrical hook-up can damage motor and will not be covered under warranty.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

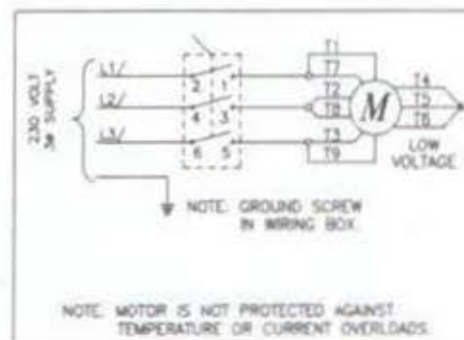
DO NOT attempt to raise vehicle until a thorough operation check has been completed.

All wiring must be performed by a certified electrician only.

Single Phase



Three Phase



SEE WIRING INSTRUCTIONS AFFIXED TO
MOTOR FOR PROPER WIRING INSTRUCTIONS.

STEP 10

(Power Unit Hook Up)

1. Have a certified electrician run the power supply to motor. Refer to the data plate found on the motor for proper power supply and wire size.



RISK OF EXPLOSION!

This equipment has internal arcing or parts that may spark and should not be exposed to flammable vapors. Motor should not be located in a recessed area or below floor level. NEVER expose motor to rain or other damp environments. DAMAGE TO MOTOR CAUSED BY WATER IS NOT COVERED UNDER WARRANTY.

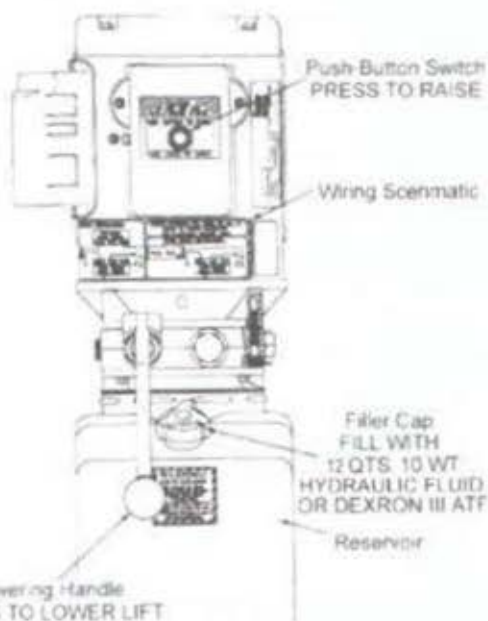
IMPORTANT NOTE:

CAUTION Never operate the motor on line voltage less than 208V. Motor damage may occur which is not covered under warranty. Have a certified electrician run appropriate power supply to motor. Size wire for 25amp circuit. See Motor Operating Data Table.

IMPORTANT: Use separate circuit for each power unit. Protect each circuit with time delay fuse or circuit breaker. For single phase 208-230V, use 25 amp fuse. Three phase 208-240V, use 25 amp fuse. For three phase 400V and above, use 15 amp fuse. All wiring must comply with NEC and all local electrical codes.

Fig.10.1

POWER UNIT



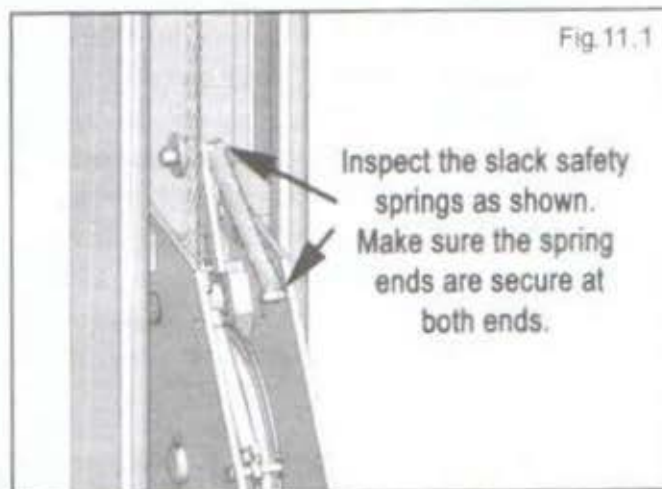
STEP 11

(Inspecting The Slack Safety Springs)



The following steps involve the SLACK CABLE SAFETY DEVICE and MAIN SAFETY. Failure to follow these steps could result in serious injury or death in the event of cable failure.

1. Inspect the ends of the SLACK SAFETY LOCK SPRINGS as shown. Make sure the spring ends are secure at both ends. **DO NOT ATTEMPT TO RAISE THE LIFT UNTIL THE SLACK SAFETY SPRINGS ARE ATTACHED AND THE ROLLERS ARE PULLED CLEAR FROM THE LADDER.** (See Fig.11.1)

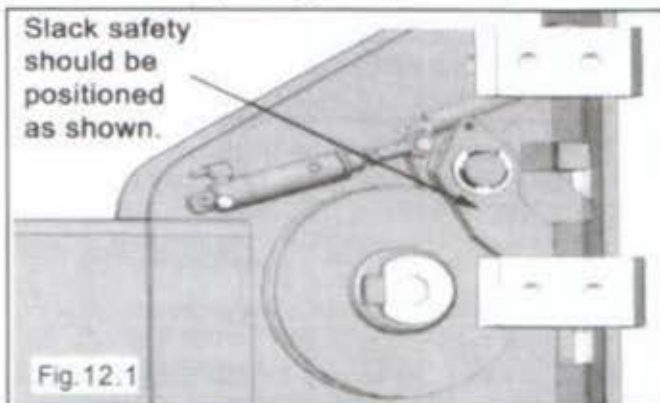


STEP 12

(Lift Start Up / Final Adjustments)

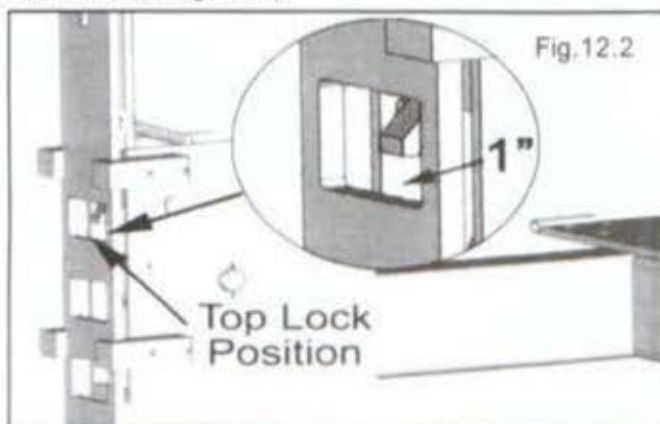
1. Make sure the Power Unit reservoir is full with 12 quarts of 10-WT hydraulic oil or Dexron-III automatic transmission fluid.
2. Spray the inside of the Columns where the Slide Blocks glide with a light lubricant or WD-40.
3. Test the Power Unit by pressing the push-button switch. If the motor sounds like it is operating properly, raise the lift and check all Hose connections for leaks. If the motor gets hot or sounds peculiar, stop and check all electrical connections.
4. Before proceeding, double-check to make sure all cables are properly positioned within the grooves of ALL Sheaves. Make sure all Cable Sheave retaining Pins and/or Clips are secure.

5. Check to make sure that all Slack Safety Locks are cleared and free. (See Fig. 12.1)



6. Continue pressing the raise button until the Cables get taught and the lift starts to move.

7. RAISE LIFT UNTIL THE CYLINDER BOTTOMS OUT AND THE LIFT STOPS. ADJUST EACH CABLE SO THAT EACH SAFETY LOCK RESTS AT ONE INCH ABOVE THE TOP SAFETY LOCK POSITION. It may be necessary to tighten or loosen each Cable to reach the proper height. The Cable Nuts **MUST** be tightened until there is at least one inch of threads protruding through the nut. (See Fig. 12.2)

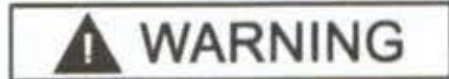


All cable nuts **MUST** be tightened on each end until there is at least one inch of threads protruding through the nut. Failure to do so could result in serious injury or death.

NOTE:

There will be initial stretching of the cables in the beginning and/or with increased loads. Adjust the Cables as outlined above a week after first use, then every three to six months thereafter depending on usage and/or to compensate for stretch.

8. After connecting the air supply, press the **PUSH BUTTON AIR VALVE** and check that all Safety Locks are functioning properly. Lower the lift by pressing the push button air valve and power unit lowering valve simultaneously.



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

9. Check all **MAIN SAFETY LOCKS** to make sure they move freely and spring back to the lock position when released. Lubricate all **SAFETY PIVOT** points with WD-40 or equal.

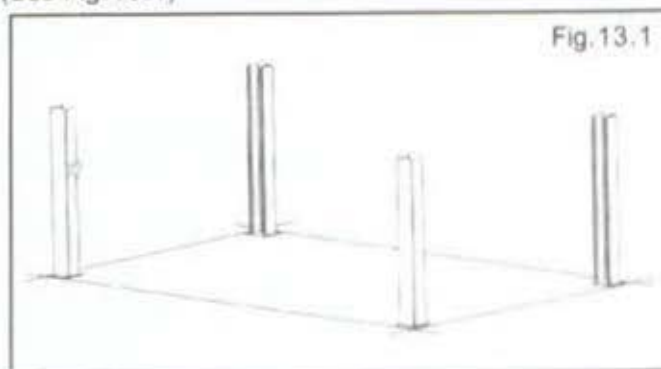
10. Run the lift up and down a few times to insure that the Locks are engaging uniformly and that the safety release mechanisms are functioning. Re-adjust if necessary.

STEP 13

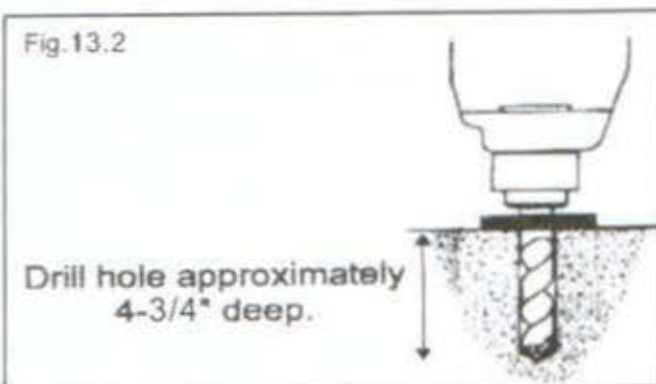
(Anchoring The Columns)

Proceed to Step 16 if Not Anchoring to Floor

1. Before proceeding, double check the measurements and make certain that the bases of each Column are square and aligned with the chalk line. Raise the lift up and down and make sure it operates properly at the locations prescribed by the markings on the floor. (See Fig. 13.1)



2. Using the Base plate on each Column as a guide, drill each anchor hole approximately 4-1/2" deep using a rotary hammer drill and 3/4" concrete bit. (See Fig. 13.2)



3. After drilling, remove dust thoroughly from each hole using compressed air and/or bristle brush. Make certain that the Columns remain aligned with the chalk line.

ALWAYS WEAR SAFETY GOGGLES.

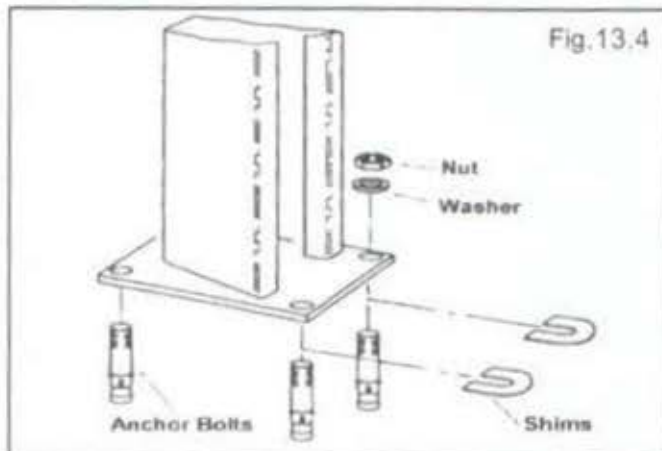
4. Assemble the Washers and Nuts on the anchors then tap each hole with a hammer until the washer rests against base plate. Be sure that if shimming is required, enough threads are left exposed. (See Fig.13.3)

Fig.13.3

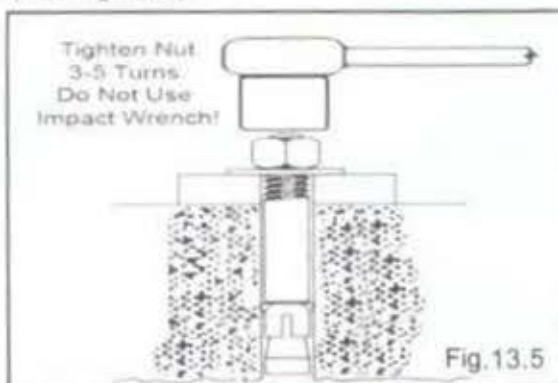
Tap anchor bolts into each hole with a hammer until the washer rests against the baseplate



5. If shimming is required, insert the shims as necessary the base plate so that when the anchor bolts are tightened, the columns will be plumb. (See Fig. 13.4)



6. After any necessary shims are installed, tighten each nut 3-5 turns past hand tight. **IMPORTANT** - If anchor bolts do not hold when torqued to required amount, concrete must be replaced. Saw cut and remove 24" x 24" square area each column base then re-pour with reinforced 2500 PSI concrete to a depth of six inches minimum, keying new concrete under existing floor. (See Fig. 13.5)



STEP 14

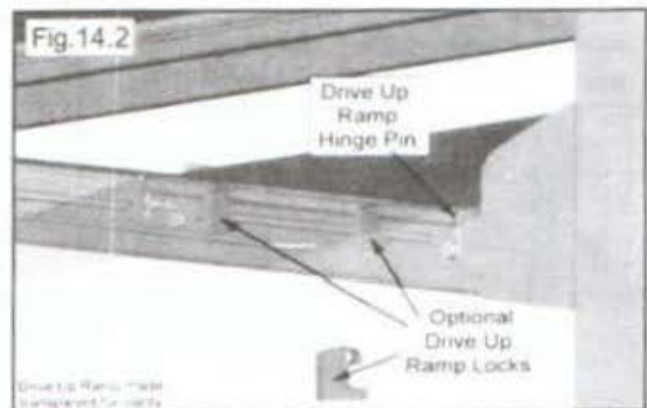
(Attaching the Approach Ramp /Tire Stops)

1. Install the Front Tire Stops at the forward side of the lift using the M14 x 2 Hex Bolts, Nuts and washers.
(See Fig.14.1)

Install the Front Tire Stops using four
M14 x 2 x 40 Hex Bolts, Nuts and Washers



2. Install the Approach Ramps on the entry side of the lift. (Install the 4 Optional Drive Up Ramp Locks, if desired to keep the Drive Up Ramps from Flipping down.) (See Fig. 14.2)



Step 20 : Relocating or changing components may cause problems. Each component in the system must be compatible; an undersized or restricted line will cause a drop in pressure. All valve, pump, and hose connections should be sealed and/or capped until just before use. All parts should be supplied from manufacture. Air hoses can be used to clean fittings and other components. However, the air supply must be filtered and dry to prevent contamination. **Most important -cleanliness** -contamination is the most frequent cause of malfunction or failure of hydraulic equipment.

Step 21 : Check Pulley Cover and Lock Collars: Before proceeding, double check to make sure the locking shaft collars for the crossbeam cable pulleys are tight and secure. Check the pulley cover (2-RIGHT and 2 LEFT) over the shaft located on the pulley side of each crossbeam. CHECK the pulley and cover are firm against the locking shaft collar already in place. Check the additional lock collar on the outside of the shaft is tight and secure. To prevent personal injury or death, crossbeam lock collars must be tight. If they are ever removed -always make sure the locking shaft collars are tight and secure.

Step 22 : Check the crossbeam locking assembly before use. Make sure all bolts and collars are tight. The assembly is pre-installed from the factory but parts may come loose during shipping.

Step 23 : After installation is completed, before start up, be sure to inspect and tighten all bolts.

Step 24 :Start Up: Make sure power unit reservoir is full with 10L of 10-wt hydraulic oil and spray the inside of the columns where the slide blocks glide with a light lubricant.

Step 25 : Initial Operation: Connect power unit 110 v Single Phase Motor to power source . If you are using an extension cord to power source make sure to use 12 AWG wire or above. Neglect will cause breaker to pop. Press the UP SWITCH on the power unit. Raise the lift slowly until all the slack in the cables is taken out. Raise the lift until the safety latch closest to the power unit comes within 25MM to the bottom of the lowest lock position. Tighten the cable-adjusting nut on top of each leg cap until all remaining safety latches come within 25MM to the bottom of the lowest lock position. If cables are adjusted evenly the lift should be raising level and all four safety latches engage or audibly click simultaneously.

IF LIFT DOES NOT RISE: Check hose connections. Fluid should be pumping through the hose. Check fluid level.

NOTE: There will be some initial stretching of the cables in the beginning. It will be necessary to readjust the cables a week or so after first use.

Run the lift up and down a few times to make sure that the safety latches is engaging uniformly and that the safety latch release is functioning properly. Re-adjust if necessary.

When lowering the lift **PAY CAREFUL ATTENTION. ALWAYS** make sure that all **FOUR SAFETY LATCHES** are disengaged. If one of the latches locks on descent **STOP** immediately and raise until it is clear of the stop and adjust the heim joint rod ends on that latch.

IMPORTANT: ALL SAFETY LATCHES MUST OPERATE SIMULTAIOUSLY AT THE SAME TIME.

Step 26 :Install the approach ramps on the entry side of the lift. Drive a vehicle onto the runways then install the rear wheel chocks. Run the lift up and down a few times to insure that the latches are engaging uniformly and that the safety latch release is functioning properly. Re-adjust if necessary.

Step 27 : Run the lift up and down at least three times, before putting a vehicle on it for the first time. This is to bleed the air out of the cylinder and power unit.

Power Unit Information:

The Standard supplied power unit is a 110v Single Phase Motor with 3 prong plug. A recommended 30 amp fuse is to be installed for use wire capable of supporting a 30-amp circuit. This will keep power flow continuous and strong. Do not use other powered items to be ran at same time of lifting this will cause breaker to flip or pop.

In order to meet recommended electrical requirements a Professional Electrical Contractor must install and connect any breakers or changes to needed for your electrical requirements. Manufacturer is not responsible for these changes or any charges or damages that may be incurred from malfunction, operation of lift or contractor error to electrical system.

Connect the Electrical hookup to the power unit

If a 220V Single Phase motor is used. It is recommended that a 220 Volt, 30 Amp twist lock plug be installed at the power connection point. Use wire capable of supporting a 30-amp circuit.

Warning:

A Certified Electrician must install any and all electrical wiring or breakers. Protect each circuit with time delay fuse or circuit breaker; Verify that wiring must comply with local code.

If your unit is supplied with a 208v-230v single phase 60 Hz 20 amp Power Unit or you do not have a 30 amp breaker installed for a 110 volt single phase 60Hz 20 amp Power Unit. A Certified Electrician must install any and all electrical wiring or breakers.

Power Unit



Fig. 12

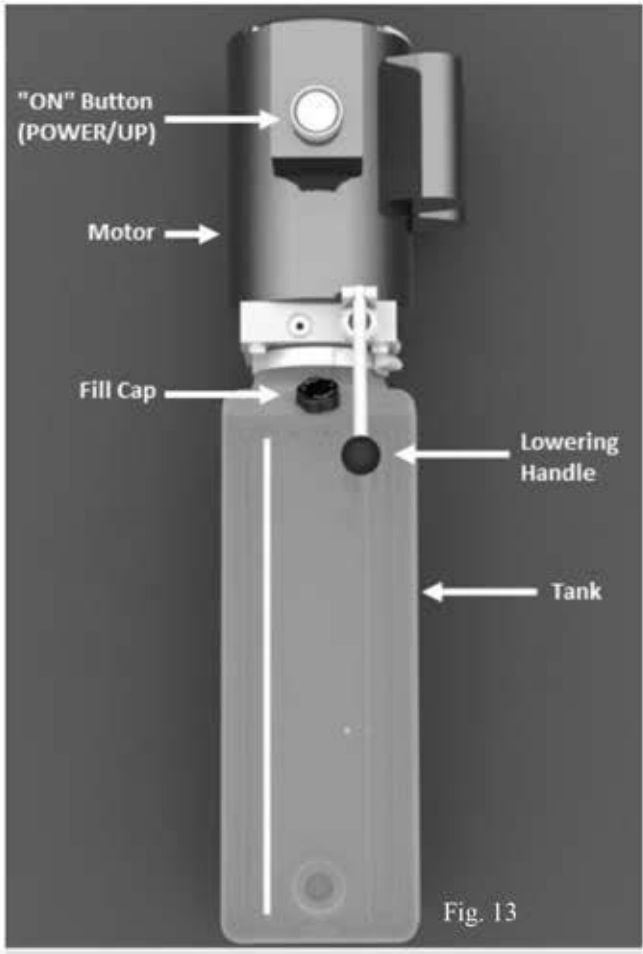


Fig. 13

Description of Lift Controls

Description:	Purpose:
Safety Release Handle	Used to release safety latches when lowering vehicle.
Power “ON” Button	Controls electrical power to the hydraulic power unit. Push to turn-on.
Lowering Handle	Used to relieve hydraulic pressure when pressed to lower lifting carriages.
Fill Cap	Power unit fill Cap for the power unit fluid reservoir. Remove to add fluid.
Tank	Used to store hydraulic fluid.

OPERATION Do not use this lift unless you know the proper operation of the lift and its safety devices, and the hazards involved. See Safety Instructions.

1 Drive the vehicle onto lift platform. Set the vehicle's parking brake and leave the transmission in park / gear. Chock the vehicle's wheels.

2 Stand clear -Push the top UP button to raise vehicle to desired height. Push the rod handle on the power unit to open release valve and lower tracks until it stops, check the all four latches for full engagement in the rack on each leg.

3 To lower – push UP button to raise – rotate latch release rod handle and hold-push rod handle on power unit to lower. Warning: Make sure all four latches release – if not STOP, raise higher until latch is clear, if it does not work now the hemin -tie rod end on that latch needs adjustment.

4 Any hydraulic oil leakage, unusual noise, or excessive wear must be fixed before using lift.

PRE OPERATION CHECK The user should perform daily check. *ATTENTION! LOOK OUT!*

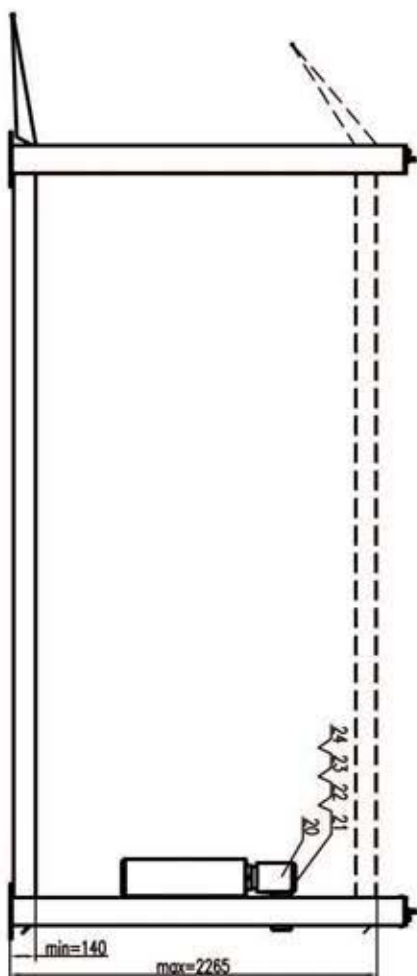
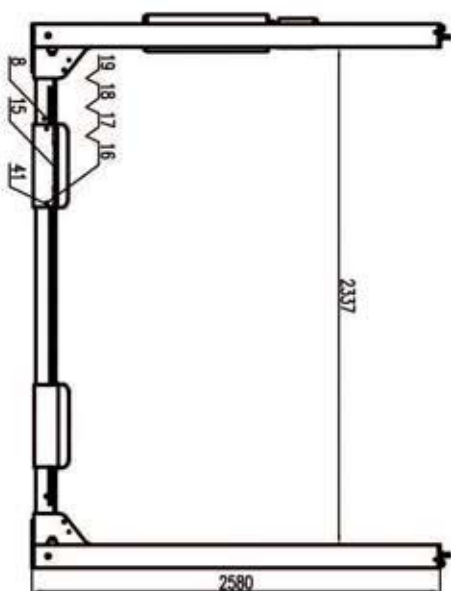
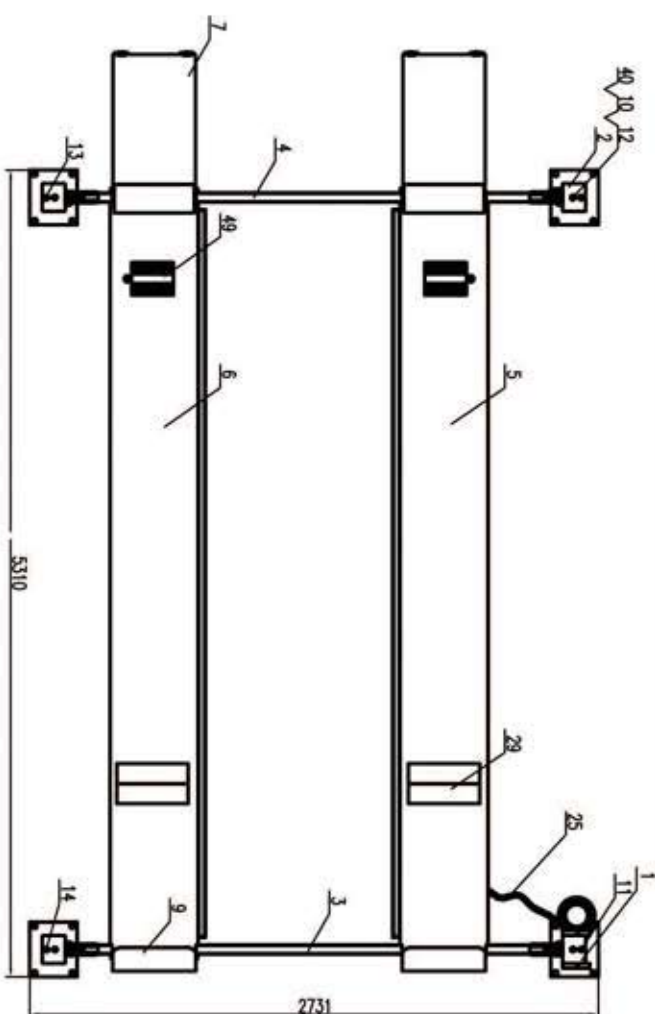
Daily check of safety latch system is very important -the discovery of device failure before needed could save you from expensive property damage, lost production time, serious personal injury and even death.

- 1 Check safety latches for free movement and *full engagement with rack*.
- 2 Check hydraulic connections, and hoses for leakage.
- 3 Check cables for damage and that they are in the groove on cable sheave.
- 4 Check lock collars at all rollers and sheaves.
- 5 Check bolts, nuts, and screws and tighten.
- 6 Check wiring & switches for damage.
- 7 Keep base plate free of dirt, grease or any other corrosive substances.

SEE PAGES 5 THRU 12 FOR PROPER SAFETY AND OPERATING PROCEDURES.

Special Note:

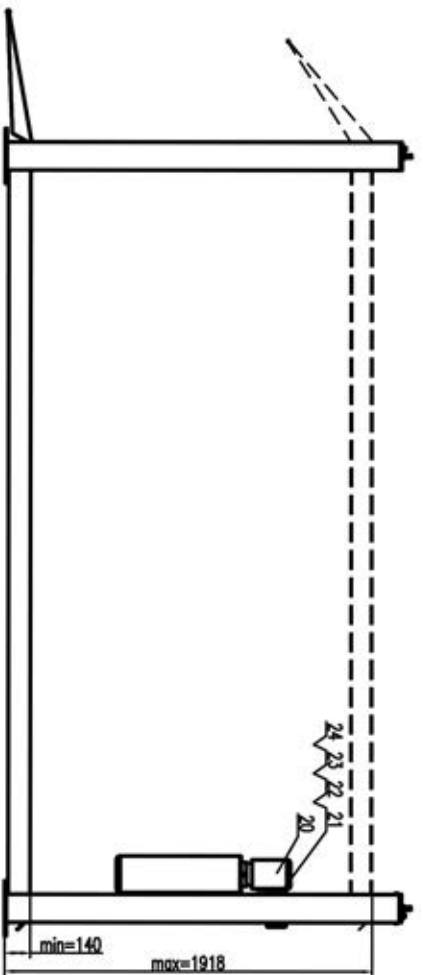
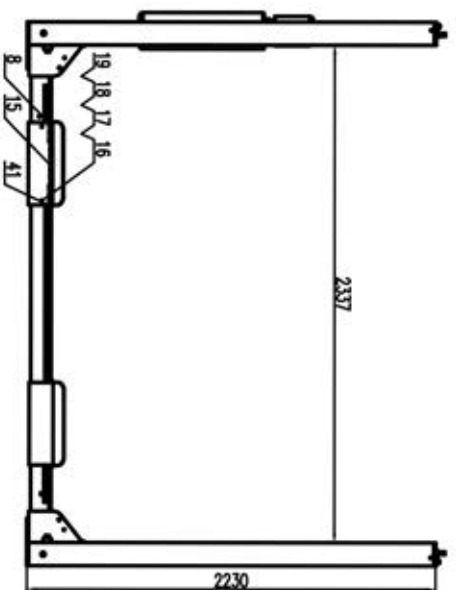
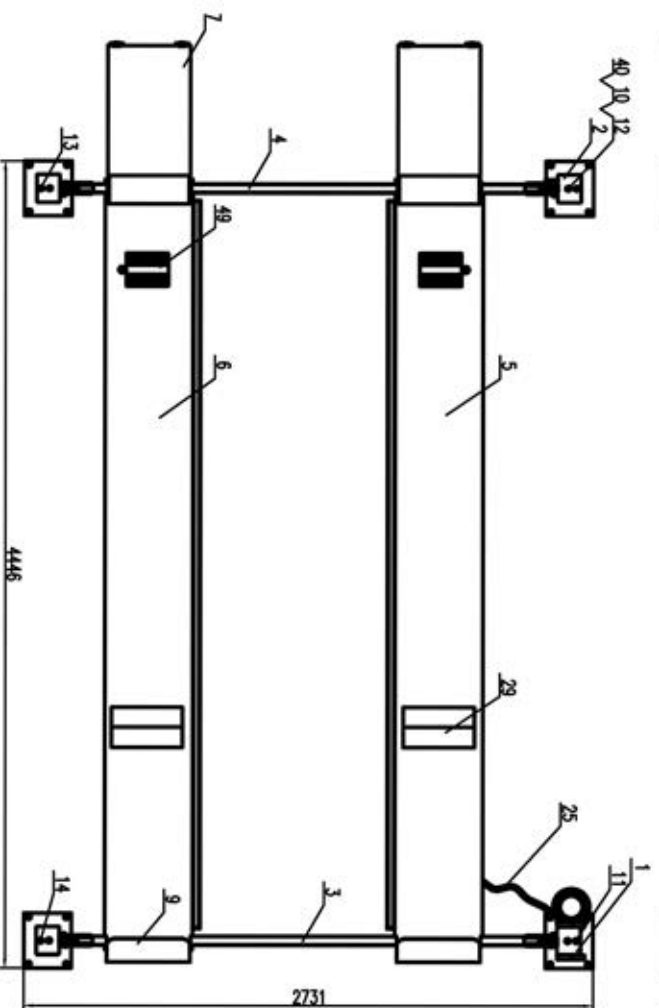
**This lift is not required to be anchored to the floor.
If you do desire to bolt this lift to the floor follow the
Expansion Anchor Instruction on page 12—14.**



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26	QJY230C-07	16
25	QJY4030H-06	1
24	QJY4030H-04	1
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T7000-4NT

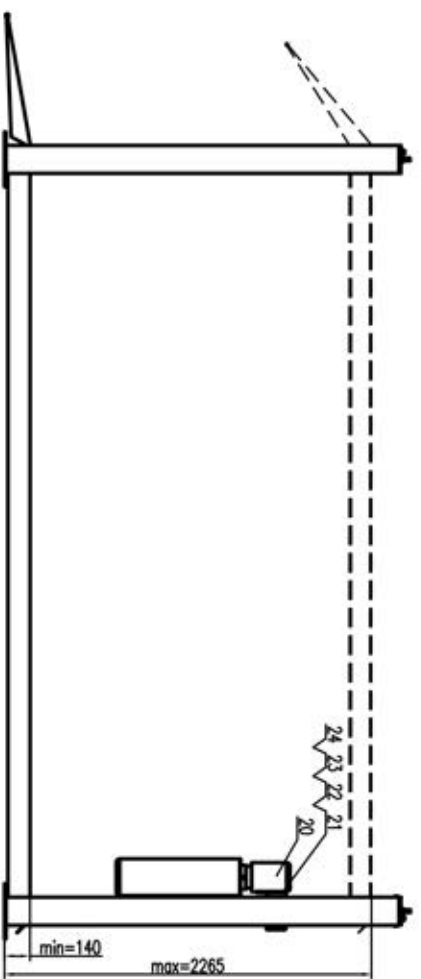
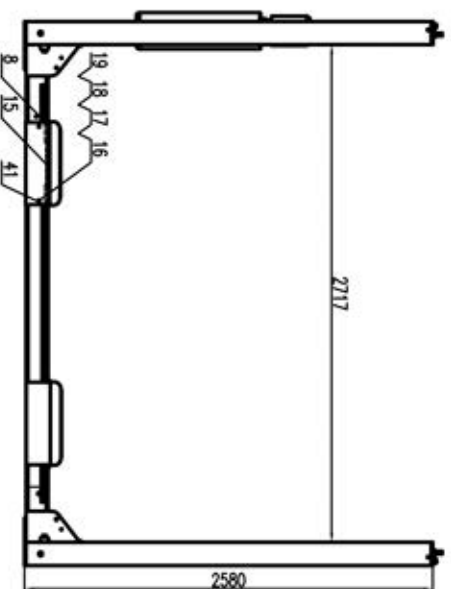
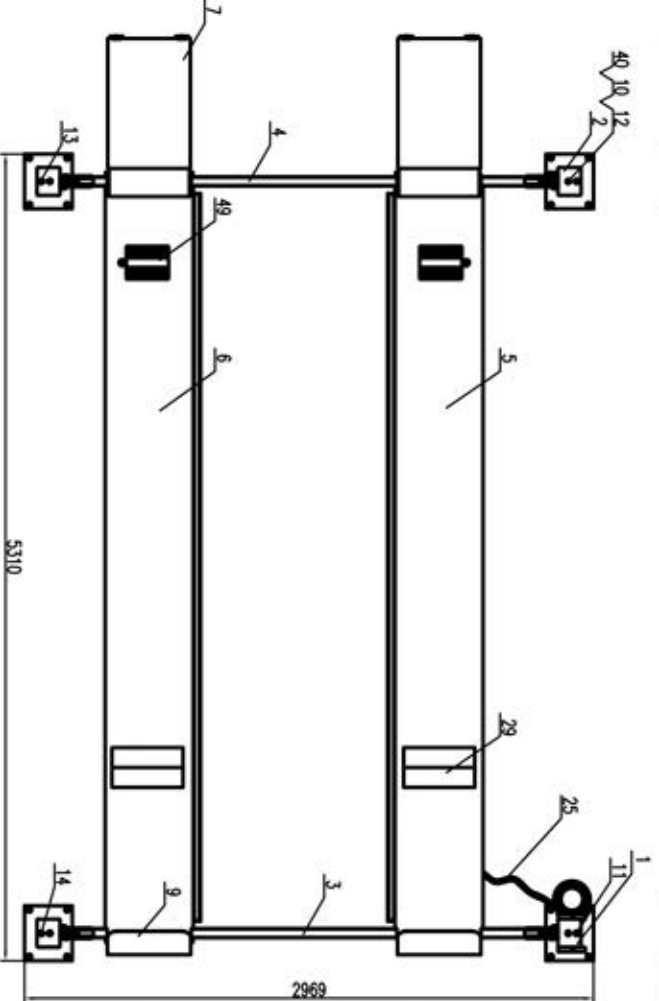


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T9000-4ST

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22	GB93	33	GB/T 70.1	44	GB70.1
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NOTES:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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REPLACEMENT PARTS

Consumers for replacement parts and technical questions call us Monday – Friday between 8am and 5:00pm EST at 1-888-448-6746.

www.torinjacks.com

Please contact our Customer Service Department with any questions you may have concerning parts, use, or maintenance. Not all equipment components are available for replacement, but are illustrated as a convenient reference of location and position in the assembly sequence. Contact Customer Service for equivalent component. When you contact us, please have your Product's Model number, Serial Number and Description ready so that we may help you efficiently. This information can be found on a sticker on the product.

The manufacturer or distributor reserves the right to make design changes and or improvements to product lines and manuals without notice.

TWO YEAR LIMITED WARRANTY

All products sold are felt to be of the highest quality and are covered by the following warranty: With proof of purchase for a period of one year from the date of that purchase, the manufacturer will repair or replace, at its discretion, without charge, any of its products or parts thereof which fail due to a defect in material or workmanship.

This warranty does not cover damage or defects caused by improper use, careless use or abuse of the equipment. This warranty does not cover parts normally considered to wear out or be consumed in the normal operation of the equipment.

Except where such limitations and exclusions are specifically prohibited by applicable law,(1) the CONSUMER'S SOLE AND EXCLUSIVE REMEDY SHALL BE THE REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS AS DESCRIBED ABOVE, and (2) THE MANUFACTURER SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGE OR LOSS WHATSOEVER, and (3) THE DURATION OF ANY AND ALL EXPRESSED AND IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IS LIMITED TO A PERIOD OF ONE YEAR FROM DATE OF PURCHASE.





Torin Jacks, Inc.

Ontario, CA 91761

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