

PL6K

6600 POUND CAPACITY LOW RISE PIT

Installation and Operation Manual



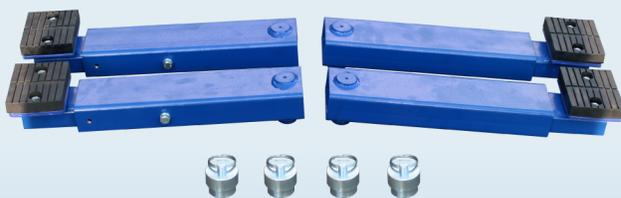
REV A-062813

**6,600 LB.
Low RISE
PIT LIFT**

PL6K
Low rise
Pit lift



Optional: 4 arm kits



SPECIFICATIONS:

	PL6K
Lifting capacity	6,600 lbs.
Lifting Height (Less Lift Blocks)	26-1/8"
Lifting Height (With Lift Blocks)	27-5/8"
Pad Length Overall	53"
Over Width	18"
Overall Length	83-1/4"
Lowered Height	4-1/4"
Motor	110-220V AC/60HZ
Shipping Weight	700 lbs.

Features:

- ◆ 6,600 lb. lifting capacity
- ◆ Surface mounting
- ◆ Open center design
- ◆ Pneumatic lock release
- ◆ Low-profile
- ◆ Dual approach design
- ◆ Electric / hydraulic power system
- ◆ Heavy duty locking system with 15 positions
- ◆ High density rubber lifting blocks included
- ◆ No crossmember
- ◆ Gear driven valve for smoother lifting

6,000 POUND CAPACITY LOW RISE PIT LIFT

This instruction manual has been prepared especially for you. Your new lift is the product of over 20 years of continuous research, testing and development; it is one of the most technically advanced lifts on the market today.

READ THIS ENTIRE MANUAL BEFORE INSTALLATION & OPERATION BEGINS.

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

Power Unit Model # _____

Power Unit Date Of Mfg. _____

Power Unit Serial # _____

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

TUXEDO DISTRIBUTORS LIMITED WARRANTY

Structural Warranty:

The following parts and structural components carry a five year warranty:

Columns	Top Rails	Beams	Uprights	Arms	Swivel Pins
Legs	Carriages	Tracks	Cross Rails	Overhead Beams	

Limited One-Year Warranty:

Tuxedo Distributors, LLC ("Tuxedo") offers a limited one-year warranty to the original purchaser of Tuxedo Lifts and Wheel Service in the United States and Canada. Tuxedo will replace, without charge, any part found defective in materials or workmanship under normal use, for a period of one year after purchase. The purchaser is responsible for all shipping charges. This warranty does not apply to equipment that has been improperly installed or altered or that has not been operated or maintained according to specifications.

Other Limitations:

This warranty does not cover:

1. Parts needed for normal maintenance
2. Wear parts, including but not limited to cables, rub blocks, chains, rubber pads and pulleys
3. Replacement of lift and tire changer cylinders after the first 30 days. A seal kit and installation instructions will be sent for repairs thereafter.
4. On-site labor

Upon receipt, the customer must visually inspect the equipment for any potential freight damage before signing clear on the shipping receipt. Freight damage is not considered a warranty issue and therefore must be noted for any potential recovery with the shipping company.

The customer is required to notify Tuxedo of any missing parts within 72 hours. Timely notification must be received to be covered under warranty.

Tuxedo will replace any defective part under warranty at no charge as soon as such parts become available from the manufacturer. No guarantee is given as to the immediate availability of replacement parts.

Tuxedo reserves the right to make improvements and/or design changes to its without any obligation to previously sold, assembled or fabricated equipment.

There is no other express warranty on the Tuxedo lifts and this warranty is exclusive of and in lieu of all other warranties, expressed or implied, including all warranties of merchantability and fitness for a particular purpose.

To the fullest extent allowed by law, Tuxedo shall not be liable for loss of use, cost of cover, lost profits, inconvenience, lost time, commercial loss or other incidental or consequential damages.

This Limited Warranty is granted to the original purchaser only and is not transferable or assignable.

Some states do not allow exclusion or limitation of consequential damages or how long an implied warranty lasts, so the above limitations and exclusions may not apply. This warranty gives you specific legal rights and you may have other rights, which may vary from state to state.

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

PLEASE READ ENTIRE MANUAL PRIOR TO INSTALLATION.

DEFINITIONS OF HAZARD LEVELS

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



DANGER!

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



WARNING!

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



CAUTION!

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

OWNER'S RESPONSIBILITY

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

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

BEFORE YOU BEGIN

NOTIFY THE CARRIER AT ONCE if any hidden loss or damage is discovered after receipt and request the carrier to make an inspection. If the carrier will not do so, prepare a signed statement to the effect that you have notified the carrier (on a specific date) and that the carrier has failed to comply with your request.

IT IS DIFFICULT TO COLLECT FOR LOSS OR DAMAGE AFTER YOU HAVE GIVEN THE CARRIER A CLEAR RECEIPT. Support claim with copies of the bill of lading, freight bill, invoice, and photographs, if available. Our willingness to assist in helping you process your claim does not make us responsible for collection of claims or replacement of lost or damaged materials.

TABLE OF CONTENTS

Contents	Page No.
Serial Number	2
Warranty	3
Definitions of Hazard Levels.....	6
Owner's Responsibility	6
Before You Begin.....	6
Installer / Operator Agreement/ Protective Equipment.....	8
Introduction.....	9
Safety / Warning Instructions	9
Tools Required.....	10
Step 1 / Selecting Site	10
Step 2 / Floor Requirements	10
Concrete Specifications.....	10
Packing List	11
Main Assembly View / Description of Parts	12
Floor Plan / Specifications	12
Step 3 / Locating Lift	14
Step 4 / Power Unit Location.....	15
Step 5 / Flow Divider/ Hydraulic Hose Installation.....	15-16
Step 6 / Power Unit Installation	16-17
Step 7 / Routing Air Lines	18
Step 8 / Anchoring Lift Assemblies	19
Step 9 / Bleeding	19
Step 10 / Lift Start Up / Final Adjustments	20
Step 11 / Operation/ Maintenance	21-26
Troubleshooting Guide	27-30
Main Parts Listing	31-33
Maintenance Records.....	34
Installation Agreement	35

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

- I have visually inspected the site where the lift is to be installed and verified the concrete to be in good condition and free of cracks or other defects. I understand that installing a lift on cracked or defective concrete could cause lift failure resulting in personal injury or death.
- I understand that a level floor is required for proper installation and level lifting.
- I understand that I am responsible if my floor is of questionable slope and that I will be responsible for all charges related to pouring a new level concrete slab if required and any charges.
- I understand that the lifts are supplied with concrete fasteners meeting the criteria of the American National Standard "Automotive Lifts - Safety Requirements for Construction, Testing, and Validation" ANSI/ALI ALCTV-2006, and that I will be responsible for all charges related to any special regional structural and/or seismic anchoring requirements specified by any other agencies and/or codes such as the Uniform Building Code (UBC) and/or International Building Code (IBC).
- I will assume full responsibility for the concrete floor and condition thereof, now or later, where the above equipment model(s) are to be installed. Failure to follow danger, warning, and caution instructions may lead to serious personal injury or death to operator or bystander or damage to property.
- I understand that this lift is designed to be installed in indoor locations only. Failure to follow installation instructions may lead to serious personal injury or death to operator or bystander or damage to property or lift.



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



Please read entire manual prior to installation. Do not operate this machine until you read and understand all the dangers, warnings and cautions in this manual. For additional copies or further information, contact your distributor.

INSTALLER / OPERATOR PROTECTIVE EQUIPMENT

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

Eye protection is essential during installation and operation activities. Safety glasses with side shields, goggles, or face shields are acceptable. Back belts provide support during lifting activities and are also helpful in providing worker protection.



Consideration should also be given to the use of hearing protection if service activity is performed in an enclosed area, or if noise levels are high.



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

INTRODUCTION

1. Carefully remove the crating and packing materials.

CAUTION! Be careful when cutting steel banding material as items may become loose and fall causing personal harm or injury.

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

IMPORTANT SAFETY INSTRUCTIONS

Read these safety instructions entirely!

IMPORTANT NOTICE!

Do not attempt to install this lift if you have never been trained on basic automotive lift installation procedures. Never attempt to lift components without proper lifting tools such as forklift or cranes. Stay clear of any moving parts that can fall and cause injury.

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

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

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

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

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

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

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

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

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

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

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

12. **GUARD AGAINST ELECTRIC SHOCK**

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



13. **DANGER!** The power unit used on this lift contains high voltage. Disconnect power at the receptacle before performing any electrical repairs. Secure plug so that it cannot be accidentally plugged in during service.



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

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



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

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

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

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

TOOLS REQUIRED

- ◆ Rotary Hammer Drill Or Similar
- ◆ 3/4" ; 1 1/4" Masonry Bits
- ◆ Hammer
- ◆ 4 Foot Level
- ◆ Open-End Wrench Set: 1/2", 15/16" - 1-1/8"
- ◆ Socket And Ratchet Set: 1-1/8"
- ◆ Medium Crescent Wrench
- ◆ Crow Bar
- ◆ Chalk Line
- ◆ Medium Flat Screwdriver
- ◆ Tape Measure: 25 Foot Suggested

NOTE: An air supply (30 PSI Min / 3 CFM Min.) will be required for the safety-lock mechanisms. See Step 11.

IMPORTANT NOTICE!

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

PLEASE READ ENTIRE MANUAL PRIOR TO INSTALLATION!

STEP 1

(Selecting Site)

Before installing your new lift, check the following.

1. **LIFT LOCATION:** Always use architects plans when available. Check layout dimension against floor plan requirements making sure that adequate space is available.
2. **OVERHEAD OBSTRUCTIONS:** The area where the lift will be located should be free of overhead obstructions such as heaters, building supports, electrical lines etc.
3. **DEFECTIVE FLOOR:** Visually inspect the site where the lift is to be installed and check for cracked or defective concrete.
4. **OPERATING TEMPERATURE.** Operate lift only between temperatures of 5° -40°C (41° -104° F.)
5. Lift is designed for **INDOOR INSTALLATION ONLY.**



STEP 2

(Floor Requirements)



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

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



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

CONCRETE SPECIFICATIONS

The min. thickness of the concrete is 4" for this lift.



DANGER

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

IMPORTANT NOTE:

This lift is supplied with installation instructions and concrete fasteners meeting the criteria as prescribed by the American National Standard "Automotive Lifts - Safety Requirements for Construction, Testing, and Validation" ANSI/ALI ALCTV-2006. Lift buyers are responsible for any special regional structural and/or seismic anchoring requirements specified by any other agencies and/or codes such as the Uniform Building Code (UBC) and/or International Building Code (IBC).

 **CAUTION**

CAUTION!

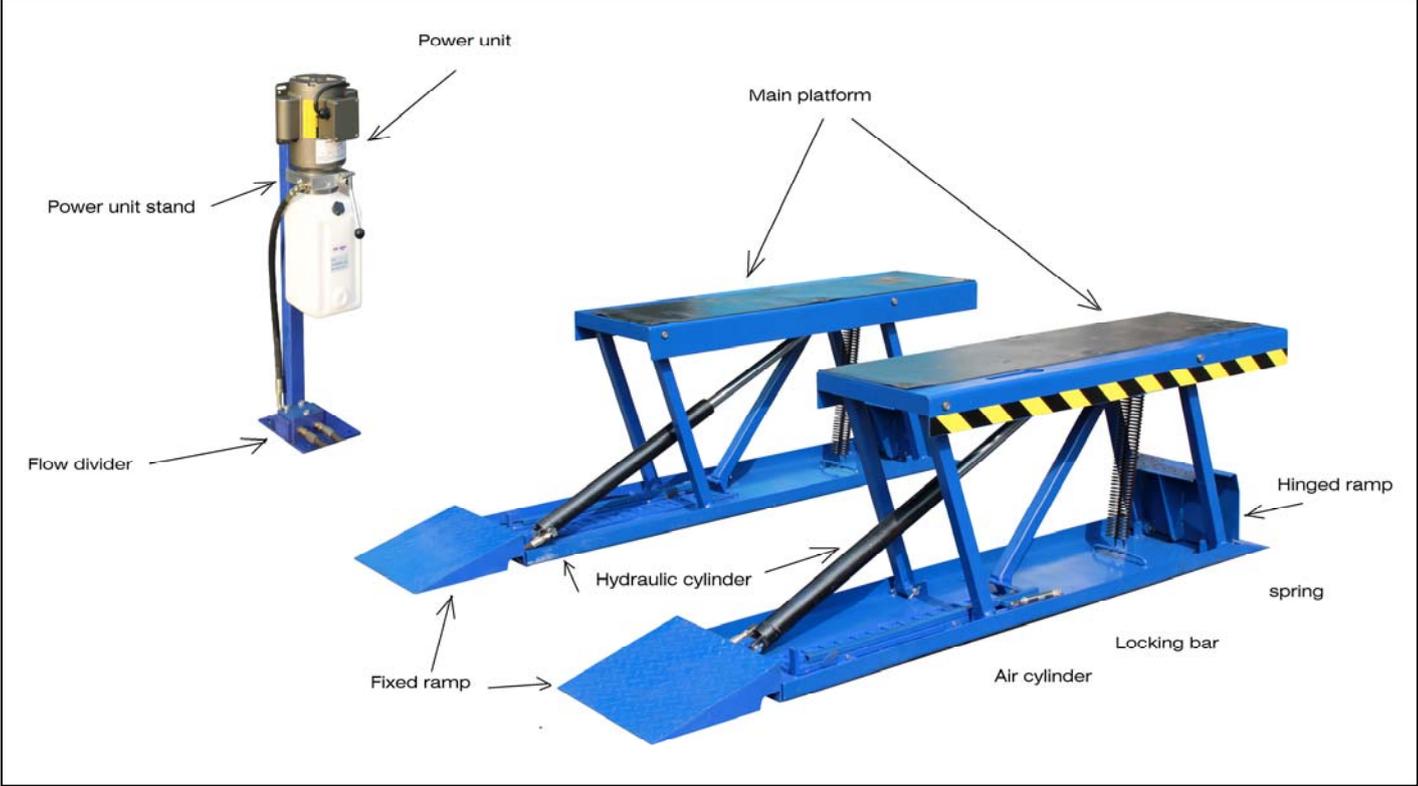
This lift should be installed by qualified lift installers only who are familiar with this particular lift model and the requirements thereof. The frame on this lift **MUST NOT** be twisted, bent or misaligned by un-level floors or improper anchoring. Misalignment may cause damage to the lift.

 **DANGER**

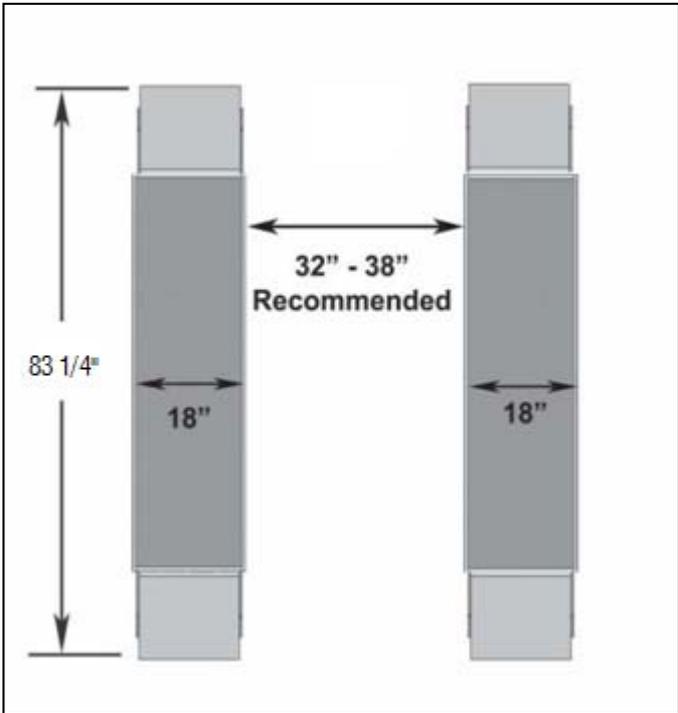
When removing the lift from shipping pallet / angles pay close attention as the lift assemblies can slide and can cause injury.
Prior to removing any strapping or shipping bolts make sure the lift is held securely by a fork lift or some other heavy lifting devise.

PACKING LIST

Main Assembly View



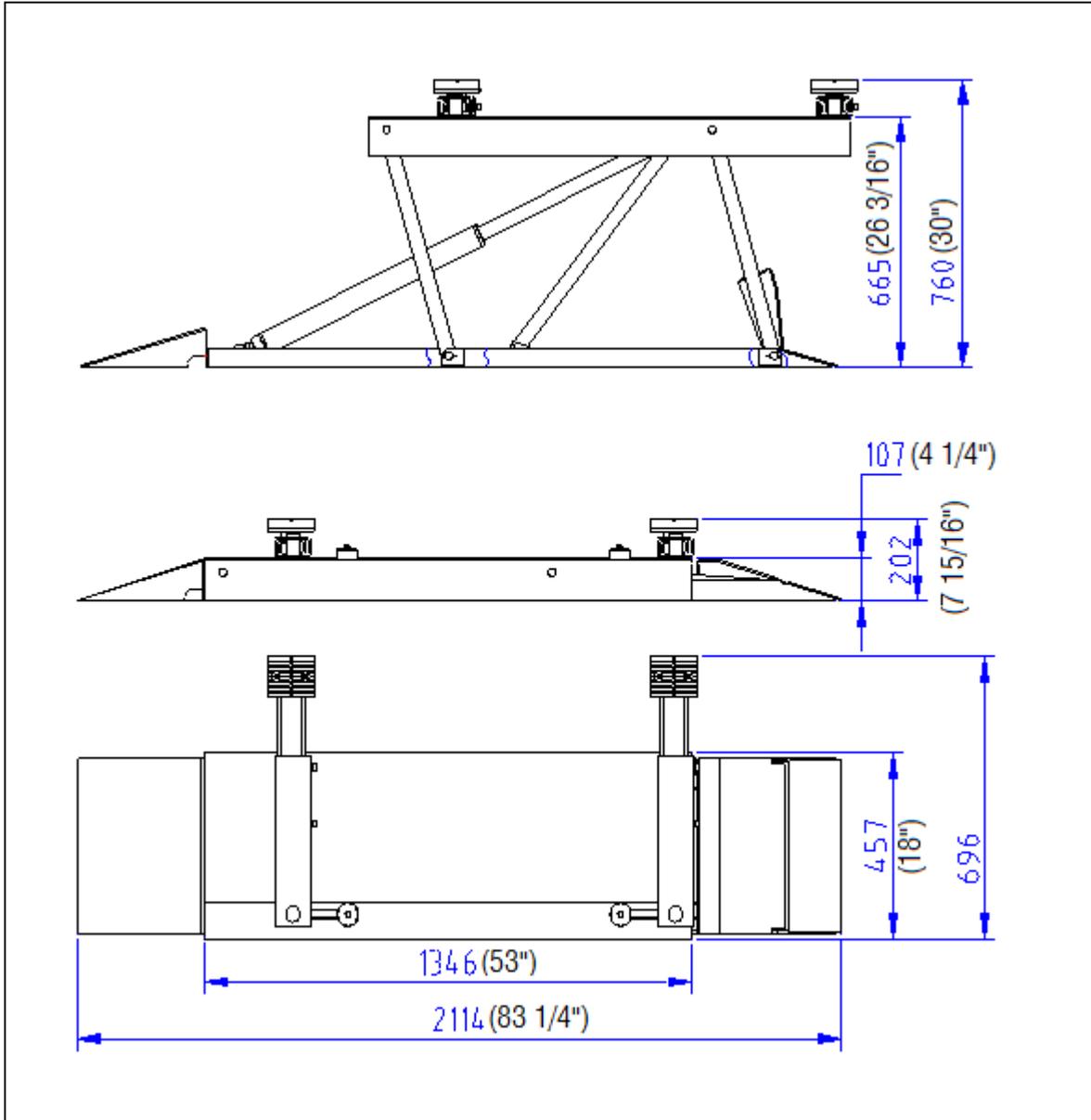
Floor plan



NOTE:

The maximum recommended width between pads is 38". Consult the factory for applications that require installations wider than 38".

Lift size



Basic Specification

Description	Capacity	Lifting Time	Overall Height	Platform Width	Overall Length
Low Rise Pit Lift	3.0 ton 6000lbs	(about) 35 Sec	4 3/16" -- 26 3/16" 107-- 665mm	18" 457 mm	83 1/4" 2114mm

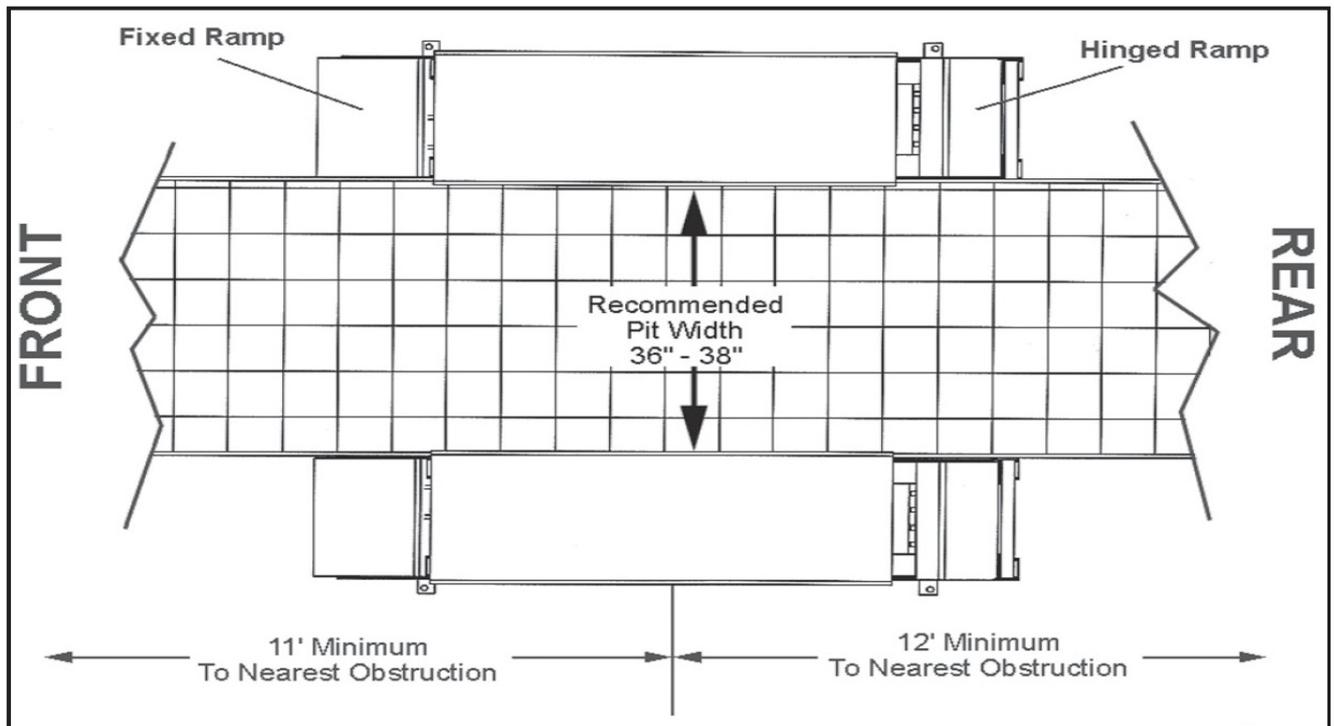


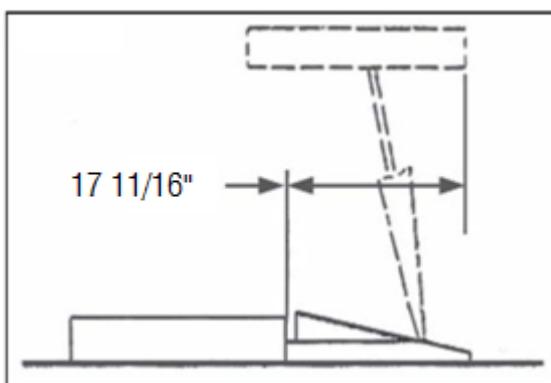
Fig. 3.1

STEP 3 (Locating Unit)

NOTE:

The maximum recommended width between pads is 38". Consult the factory for applications that require installations wider than 38".

1. Before selecting an installation site, check for proper clearance and/or obstructions. (See Fig 3.1)
2. Remember that the lift moves rearward approximately 14" when raised. (See Fig 3.2)



3. Always consult the building engineer before installing this lift to make sure the floor is capable of sustaining the load.



DANGER!
CYLINDERS MUST BE PLACE TOWARDS
THE INSIDE OR DAMAGE TO THE LIFT
MAY OCCUR.

4. After selecting a site, place each unit in position. The Cylinders **MUST** be placed towards the inside. (See Fig 3.3)

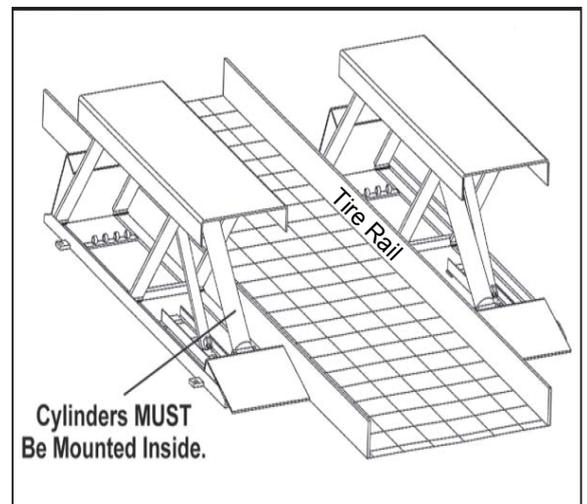
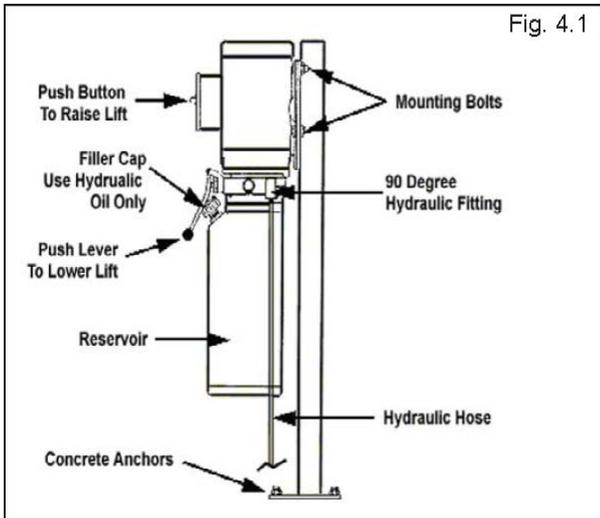


Fig. 3.3

5. It may be necessary to remove the tire rail adjacent to the lift pad and overhang the edge of the rail to maintain the 36"- 38" recommended width between pads.
6. Each lift pad can overhang the edge of the pit a maximum of two inches on each side as long as the inside anchor bolt can be installed properly.

STEP 4 (Locating Power Unit)

1. Select a site for the Power Unit so that operators have a full unobstructed view of the lift.
2. It is recommended that the Hydraulic Hose and Air Safety Line for the lift be routed through the floor at the base of the Power Unit, so check for routing clearances.

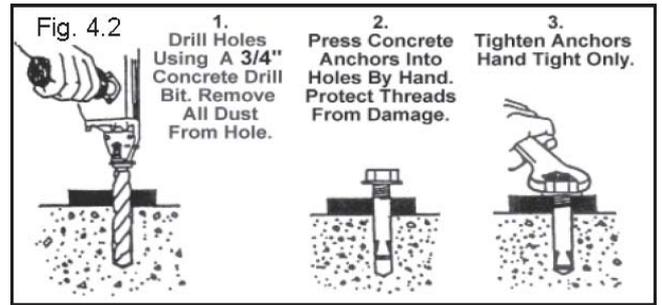


WARNING!
Risk of explosion. DO NOT install the power unit inside or near a paint booth. This equipment has internal arcing or sparking parts which should not be exposed to flammable vapors.



CAUTION !
Check with building plans prior to drilling any holes in floor.

3. Using the Power Unit Stand as a template, mark the locations of the two anchor bolt holes.
4. Drill two holes 3/4" x 4" deep in concrete floor.
5. Remove all dust from hole.
6. Install Anchors as shown below. (See Fig. 4.2)

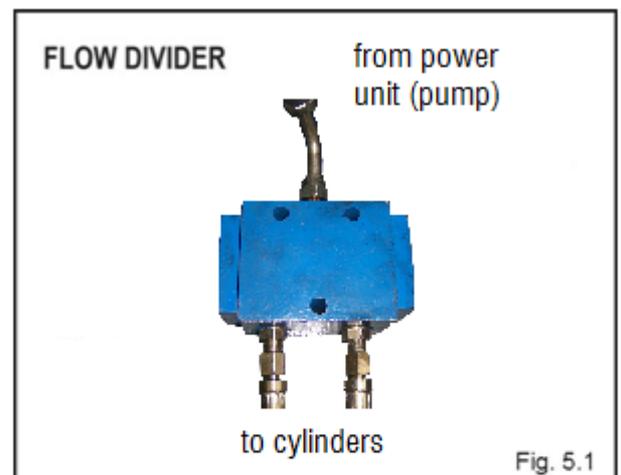


7. Secure Power Unit Stand to the floor using two 3/4" anchor bolts supplied.
8. Attach Power Unit to Stand using four 5/16" hex bolts and nylon nuts supplied. NOTE: Motor must be at least 18" above floor.
9. Install the Air Safety Valve "Z" bracket on the upper left mounting hole of the Power Unit Stand.

STEP 5

(Flow Divider / Hydraulic Hose Installation)

1. Secure the Hydraulic Flow Divider to a permanent wall or fixture (usually below grade) in an area that will allow the Power Hoses (the two hoses that are installed at the lift Cylinders) to be equal length. (See Fig 5.1)



CAUTION!
Power Hose more than 12" different in length may result in unequal lifting of the system.

It may be necessary to add hose extensions to accommodate installation. If so, keep the power hoses as close to equal length as possible to provide equal pressure and lifting.

2. Install the 90 Degree Hydraulic Fitting in the pressure port of the Power Unit. The pressure port is covered with a plastic plug. Use teflon tape on pipe fittings ONLY.

3. After the fitting is installed correctly, connect the 140" Hydraulic Hose making sure to not over-tighten.



CAUTION!
Check with building plans prior to drilling any holes in floor.

(For below grade hose installations a 1-1/4" hole should be drilled through the floor at the base of the Power Unit so the hose can be routed below grade.)

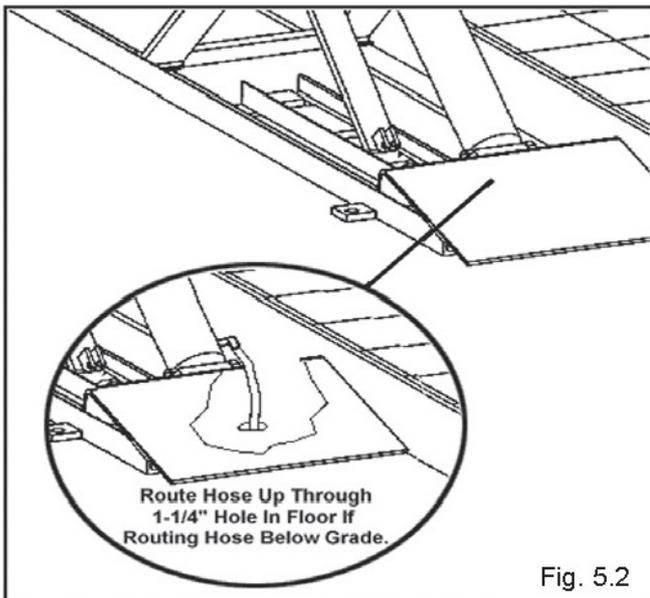


Fig. 5.2

4. Connect the other end of the Power Unit Hose to the fitting marked "IN" on the Flow Divider. (See Fig 5.1)

5. Connect the two remaining equal length Hoses to the Flow Divider. (See Fig 5.1)

3/8" I.D. hydraulic tubing / hose may be used rather than the hose provided as long as it is rated for 3,000 PSI operating pressure with a 12,000 PSI burst.

STEP 6 (Power Unit Installation)



WARNING!
Risk of explosion. DO NOT install the power unit inside or near a paint booth. This equipment has internal arcing or sparking parts which should not be exposed to flammable vapors.

WARNING!
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.**

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.

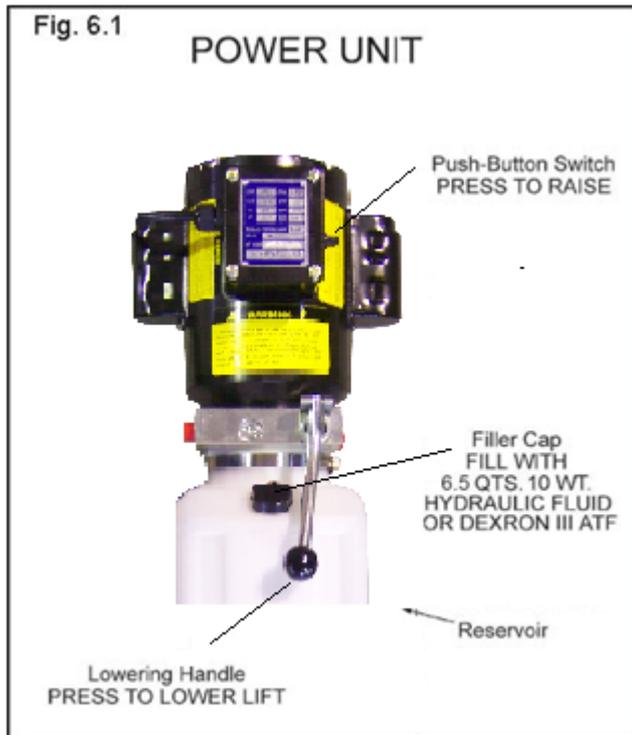
NOTE: The standard power unit can be run on either 110V or 220V. It is already wired for 110V and equipped with a 3-wire power cord with grounding plug. For optional 220V hook up, follow the wiring instructions as shown on the motor data plate. See electrical data below.

Line Voltage	Running Amps	Circuit Breaker
110/115V	11.6	25A
208V	6.4	30A
230V	5.8	30A



IMPORTANT!
Always use a separate circuit for each lift. Be sure to use proper circuit breakers or time delay fuses to protect circuit.

2. Fill the reservoir with 10 WT. HYDRAULIC OIL OR DEXRON TYPE III ATF, approximately 6.5 quarts. Make sure the funnel used to fill the power unit is clean.



3. The standard power unit for your lift is 110 volt, 60HZ, single phase. All wiring must be performed by a certified electrician only. SEE WIRING INSTRUCTIONS AFFIXED TO MOTOR FOR PROPER WIRING INSTRUCTIONS.

DANGER !
ALL WIRING MUST BE PERFORMED
BY A LICENSED ELECTRICIAN.



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.



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.
 - ◆ Protect each circuit with time delay fuse or circuit breaker.
 - ◆ For 208-230 volt, single phase, use a 25 amp fuse.
 - ◆ For 208-230 volt, three phase, use a 20 amp fuse.
 - ◆ For 380-440 volt, three phase, use a 15 amp fuse.

STEP 7 (Routing Air Lines)

Connect the Air Safety Cylinders to the Air Safety Valve using the Tee Fitting and the Airline. 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 towards 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.

Note: An air supply (minimum: 30 psi / 3 CFM) is required for the safety-lock mechanisms to disengage. It is solely the responsibility of the end-user to provide, install and maintain the air supply.

AIR PRESSURE SHOULD BE REGULATED TO 125 PSI MAX. (See Fig. 7.1)

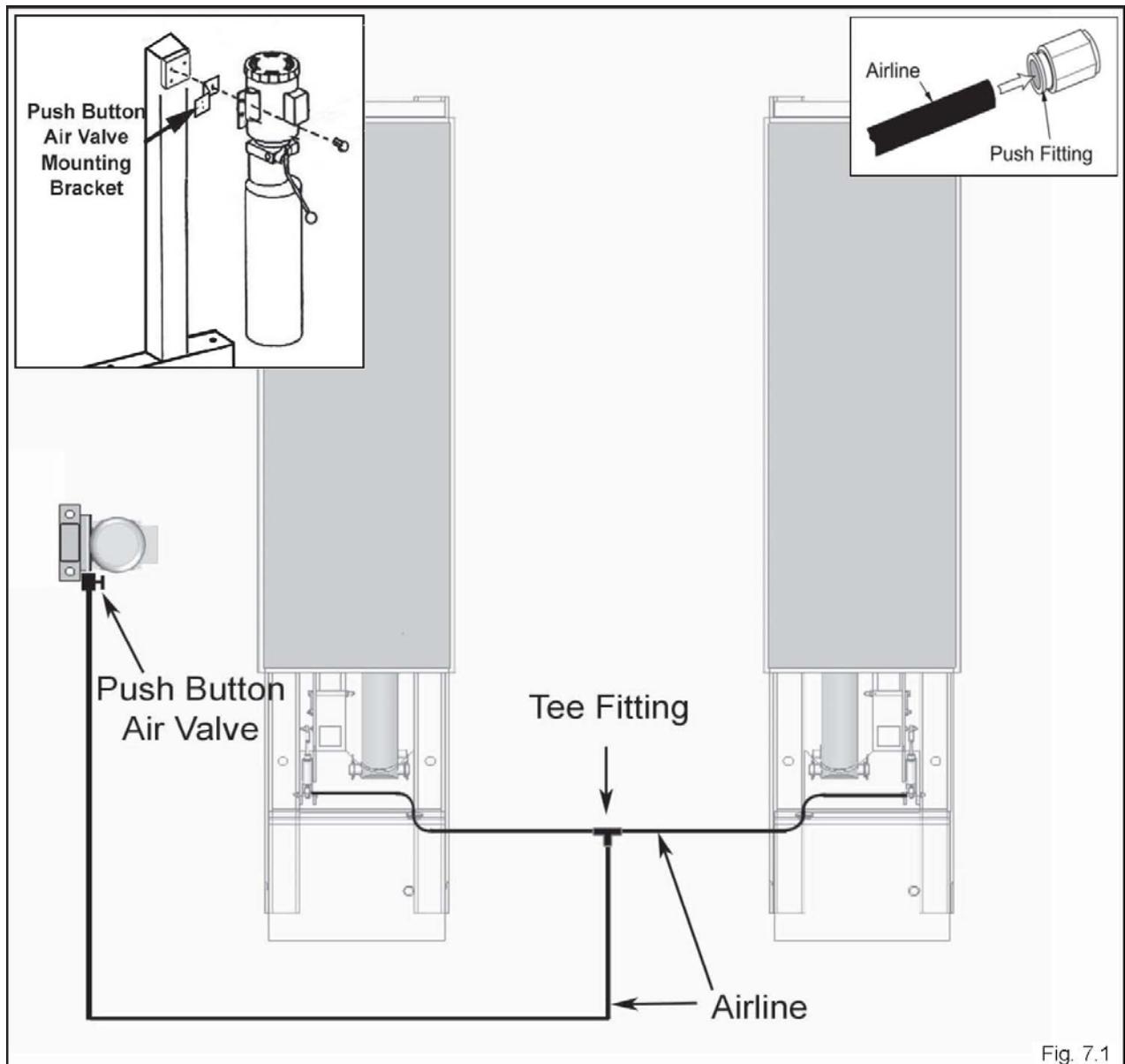


Fig. 7.1

STEP 8

(Anchoring the Lift Assemblies)

IMPORTANT NOTE:

This lift is supplied with installation instructions and concrete fasteners meeting the criteria as prescribed by the American National Standard "Automotive Lifts - Safety Requirements for Construction, Testing, and Validation" ANSI/ALI ALCTV-2006. Lift buyers are responsible for any special regional structural and/or seismic anchoring requirements specified by any other agencies and/or codes such as the Uniform Building Code (UBC) and/or International Building Code (IBC).

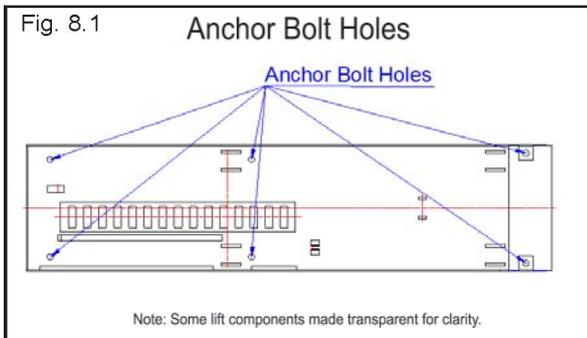


NOTE:

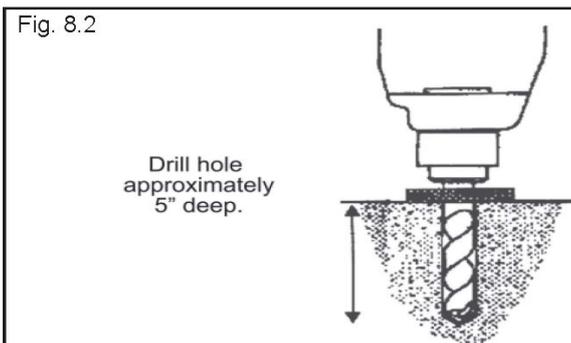
For "pre-fab" or steel grate floors, check with the building engineer for mounting suggestions. It may be necessary to install all-thread rods through floor and secure above and below.

1. Before anchoring lift to the floor, make sure the location is satisfactory. Refer to Section 3.
2. Locate the six anchor bolt holes in the Lift Base Frame. (See Fig 8.1)

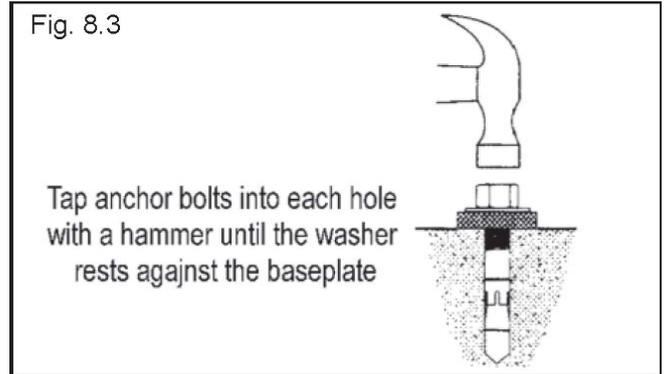
NOTE: The lift must be elevated prior to drilling holes.



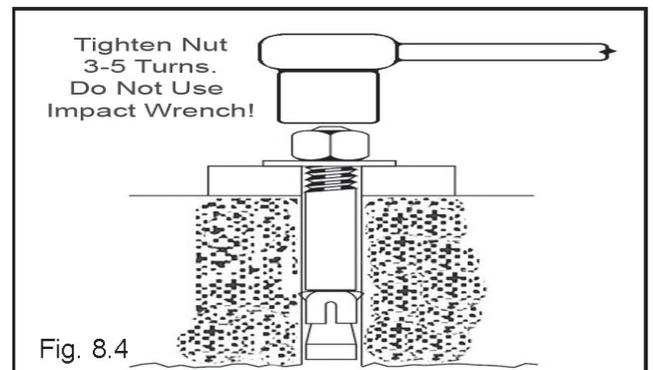
3. Using a 3/4" concrete bit, drill six holes on each pad 5" deep using the holes in the frame as a guide. (See Fig 8.2)



4. Using Compressed air or vacuum, remove all excess dust from holes, then install the anchor bolts. (See Fig 8.3)



5. Tighten the anchor bolts 2-3 turns using an open end wrench or manual ratchet only. DO NOT use an impact wrench to tighten concrete anchors. (See Fig 8.4)



STEP 9 (Bleeding)

1. Lift must be fully lowered before changing or adding fluid.
2. Raise and lower lift six times. The Cylinders are self-bleeding. After bleeding system, fluid level in power unit reservoir may be down. Add more fluid if necessary to raise lift to full height. It is only necessary to add fluid to Raise lift to full height.
3. It may be necessary to disconnect Hoses at the Cylinders and run the Power Unit to completely bleed the system of air. Consult a trained professional if you are not familiar with this type of bleeding procedure.
4. To pressure test, run lift to full rise and run motor for approximately 3-seconds after lift stops. This will place pressure on the hydraulic system. Stop and check all fittings and hose connections. Tighten or reseal if required.
5. Raise lift only HALF WAY then lower completely at least one dozen times. NOTE: during the initial testing, the lift will descend slowly. This is normal. It helps to add a payload, no greater than 500 pounds to help speed up the decent during this process.
6. Check all hoses for leaks. Tighten if necessary.

STEP 10 (Lift Start Up / Final Adjustments)

1. Make sure the Power Unit Reservoir is full with 6.5 quarts of 10-WT hydraulic oil or Dexron-III automatic transmission fluid.
2. 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.
3. **RAISE LIFT UNTIL THE CYLINDER BOTTOMS OUT AND THE LIFT STOPS.**



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

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

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

5. 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.

.POST-INSTALLATION CHECK-OFF

- Main Lift Assemblies Properly Shimmed And Stable
- Anchor Bolts Tightened
- Electric Power Supply Confirmed
- Safety Locks Functioning Properly
- Check For Hydraulic Leaks
- Oil Level
- Lubrication of Critical Components
- Check For Overhead Obstructions
- Runways Level
- All Screws, Bolts, and Pins Secured
- Surrounding Area Clean
- Operation, Maintenance and Safety Manuals on Site.

Fig. 10.1

Safety bar



Safety bar locked

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

STEP 11

(Operating Instructions)



CAUTION!

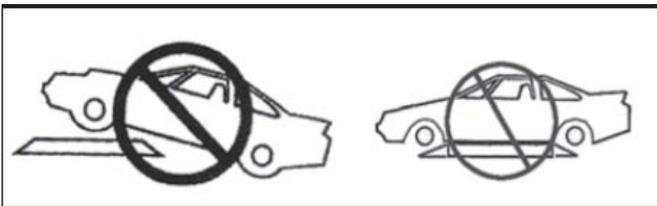
The lift was designed to raise only passenger cars and light duty trucks. Many full size trucks, specialty or modified vehicles can not be raised with this type lift. NEVER use lifting adapters other than those specifically designed for this lift.



WARNING!

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.

- ◆ **SERIOUS DAMAGE** to the lift can occur if used improperly.
- ◆ **NEVER** use the lift to raise just one end of the vehicle only.



- ◆ **NEVER** stop a vehicle with the wheels on top of the lift pads and attempt to raise the lift.
- ◆ **NEVER** remove all wheels off of a vehicle and lower the lift to the ground.
- ◆ Before raising a vehicle, check for leaks, and possible binding of lift components. Make sure that the hydraulic hose is clear of any possible pinch points.
- ◆ If the lift is not operating properly, DO NOT use until repairs or adjustments are made.

Loading the lift;

- ◆ Before loading or raising vehicle, be sure all personnel are clear of the lift and surrounding area. Pay careful attention to overhead clearances.
- ◆ Before raising, make sure the weight of the vehicle does not exceed the rated capacity of the lift.

- ◆ Make sure lift is in fully lowered position.
- ◆ Drive vehicle over the lift making sure that the center-line of the vehicle is positioned properly over the lift pads.
- ◆ Set parking brake or use wheel chock to hold vehicle in position.
- ◆ Position any pads underneath the vehicle making sure that they make secure contact with the frame or other recommended lifting point.

To Raise Lift;

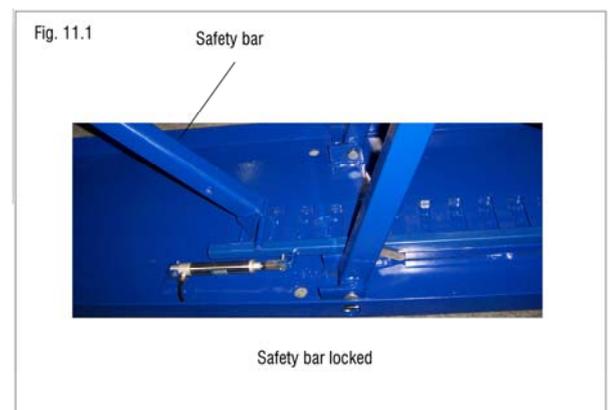
- ◆ Raise the lift by pressing the push button on the power unit.
- ◆ Raise lift until the vehicles tires clear the floor.
- ◆ Stop and check to make sure the vehicle is secure and the lifting pads are still in contact with the frame.
- ◆ Continue raising until the vehicle is at the desired height.



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

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

- ◆ Raise until the safety lock bars drop into position. (See Fig. 11. 1)



Lower the lift onto the nearest safety lock.

ALWAYS INSURE SAFETY LOCKS ARE ENGAGED

before entering work area.

- ◆ Check to make sure safeties are engaged on the **SAME** safety lock position **BEFORE ENTERING** work area.

To Lower Lift;

- ◆ Clear area of personnel and tools above and below before lowering lift.
- ◆ Raise the lift at least two inches to provide adequate clearance for the safety to operate.
- ◆ Press and **Hold** the Air Safety Release Button.
- ◆ Visually confirm that the safety bar has been raised up off the safety locks. (See Fig. 11.2)



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

- ◆ Push the **LOWERING** handle until the lift starts to descend. Stay clear of lift area. Ensure that both safeties are not engaged.



WARNING!

YOU MUST RELEASE THE AIR SAFETY BUTTON WHEN LIFT IS 10 INCHES OFF THE GROUND. FAILURE TO DO SO MAY RESULT IN DAMAGE TO THE LIFT'S SAFETY COMPONENTS.

- ◆ Continue pressing the Lower Handle to Fully lower the lift. Remove all lifting adapters before driving vehicle away.

WEEKLY MAINTENANCE

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

MONTHLY MAINTENANCE

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



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

Safe Lift Operation

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

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

TRAINING SHOULD INCLUDE, BUT NOT LIMITED TO:

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

LIFT OPERATION SAFETY

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



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

DANGER

THE MAXIMUM LIFTING CAPACITY FOR THIS LIFT IS DESCRIBED BELOW

Maximum Lifting Capacity

6600Lbs. / 3000Kg

Maximum Lifting Capacity / Front Axle

3300Lbs. / 1500Kg

Maximum Lifting Capacity / Rear Axle(s)

3300Lbs. / 1500Kg

Exceeding the weight capacity of this lift can damage lift and/or property and may cause personal harm, injury or death to operators and/or bystanders. All vehicles MUST be positioned on lift with CENTER OF GRAVITY midway between adapters and/or centered on runways. Damage to lift due to overloading or misuse IS NOT covered under warranty.

SAFETY INSTRUCTIONS



Read operating and safety manuals before using lift.

SAFETY INSTRUCTIONS



Proper maintenance and inspection is necessary for safe operation.

WARNING



Clear area if vehicle is in danger of falling.

WARNING



Remain clear of lift when raising or lowering vehicle.

SAFETY INSTRUCTIONS



Do not operate a damaged lift.

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

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

They are protected by copyright. Set of labels may be obtained from ALI or its member companies.

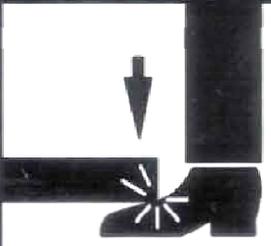
© 1992 by ALI, Inc. ALI/WL200a

WARNING



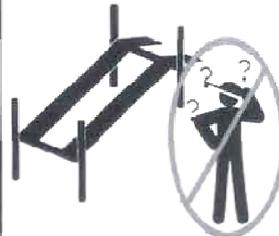
Keep clear of pinch points when lift is moving.

WARNING



Keep feet clear of lift while lowering.

CAUTION



Lift to be used by trained operator ONLY.

CAUTION



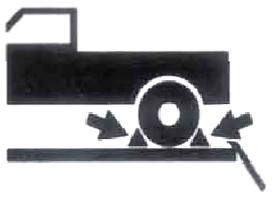
Authorized personnel only in lift area.

WARNING



Do not override self-closing lift controls.

WARNING



Chock wheel to prevent vehicle movement.

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

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

They are protected by copyright. Set of labels may be obtained from ALI or its member companies

© 1992 by ALI, Inc. ALI/WL200c

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

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

They are protected by copyright. Set of labels may be obtained from ALI or its member companies

© 1992 by ALI, Inc. ALI/WL200d

LIFT WILL NOT RAISE

POSSIBLE CAUSE

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

REMEDY

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

INSTRUCTION

- The oil level should be up to the bleed screw in the reservoir with the lift all the way down.
- See Installation Manual
- Hold release handle down and start unit allowing it to run for 15 seconds.
- Replace oil with clean Dexron ATF.
- Tighten fasteners to recommended torques.
- If handle does not move freely, replace bracket or handle assembly
- Compare wiring of motor to electrical diagram on drawing
- Replace oil seal around pump shaft.
- Consult Lift Manufacturer
- Replace with new part.
- Return unit for repair.
- Bolts should be 15 to 18 ft. lbs.
- Clean inlet screen or replace.
- Make sure unit and wall outlet are wired properly.

MOTOR WILL NOT RUN

POSSIBLE CAUSE

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

REMEDY

1. Check for correct voltage.
2. Check motor is wired correctly
3. Don't use extension cords.
4. Replace with new part
5. Reset circuit breaker/fuse.
6. Return unit for repair.
7. See Installation Manual
8. Check wall outlet voltage and wiring.

INSTRUCTION

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

LIFT LOWERS SLOWLY OR NOT AT ALL

POSSIBLE CAUSE

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

REMEDY

1. See Installation Manual
2. Replace with new part
3. Return unit for repair.
4. Check oil
5. Clean release valve.
6. Replace fitting with short thread lead.

INSTRUCTION

- Consult Lift Manufacturer
- Replace with new part.
- Return unit for repair
- Use clean 10-WT hydraulic oil or Dexron-III automatic transmission fluid only. If ATF is contaminated, replace with clean ATF and clean entire system.
- Wash release valve in solvent and blow out with air
- Replace fitting with short thread lead.

WILL NOT RAISE LOADED LIFT

POSSIBLE CAUSE

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

REMEDY

1. Check oil level
2. Check/Tighten inlet tubes
3. Oil seal damaged or cocked
4. Bleed cylinders.
5. See Installation Manual
6. Check vehicle weight
7. Flush- Release valve
8. Replace with new part
9. Return unit for repair
10. Check motor is wired correctly
11. Inlet screen clogged
12. Check wall outlet voltages and wiring

INSTRUCTION

- The oil level should be up to the bleed screw in the reservoir [with the lift all the way down.]
- Replace inlet hose assembly.
- Replace oil seal and install
- See Installation Manual
- Consult Lift Manufacturer
- Compare weight of vehicle to weight limit of the lift.
- Hold release handle down and start unit allowing it to run for 15 seconds.
- Replace with new part.
- Return unit for repair.
- Compare wiring of motor to electrical diagram on power unit drawing
- Clean inlet screen or replace.
- Make sure unit and wall outlet are wired properly.

LIFT WILL NOT STAY UP

POSSIBLE CAUSE

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

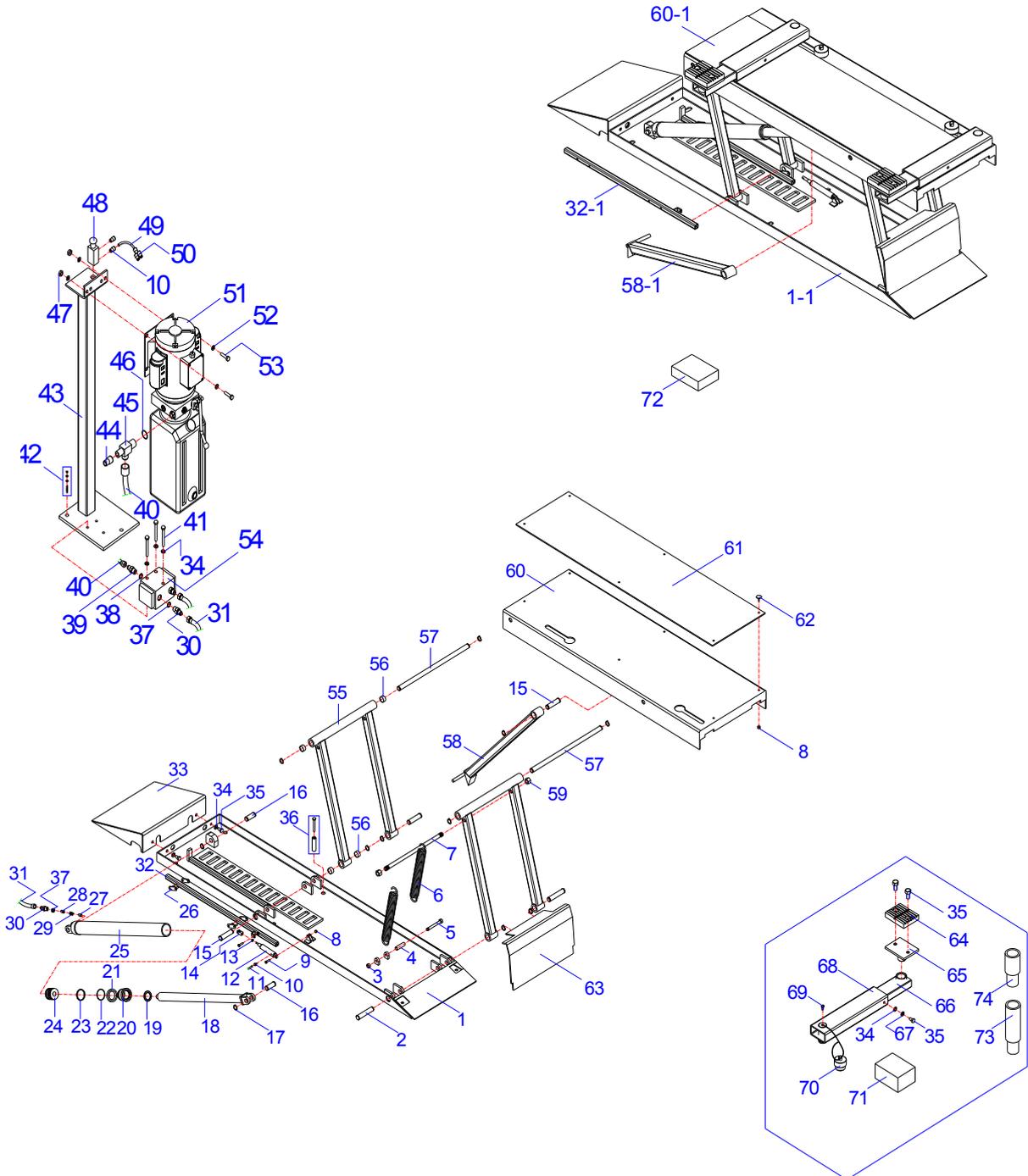
REMEDY

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

INSTRUCTION

- The oil level should be up to the bleed screw in the reservoir [with the lift all the way down.]
- Replace oil seal around pump shaft
- Refer to Installation Manual
- Hold release handle down and start unit allowing it to run for 15 seconds.
- Replace with new valve
- Return unit for repair
- See Installation Manual
- Tighten all hydraulics fittings and inspect all hoses

PARTS DRAWING



Option parts

PARTS LIST

NO	CODE	DESCRIPTION	QTY	NOTE
1	161109E*01-001	left base	1	
1-1	161109E*01-001-1	right base	1	
2	161109E*01-002	long shaft	4	
3	161109E*01-003	self-lock nut	2	M10
4	161109E*01-004	sleeve	2	
5	161109E*01-005	bolt	2	M10*90
6	161109E*01-006	spring	4	
7	161109E*01-007	long threaded rod	2	
8	161109E*01-008	self-lock nut	16	M6
9	161109E*01-009	bolt	4	M6*25
10	161109E*01-010	air fitting	4	1/8 φ6
11	161109E*01-011	air pipe	2	φ6 L=4 meter
12	161109E*01-012	air cylinder	2	
13	161109E*01-013	nut	2	M8
14	161109E*01-014	connection	2	
15	161109E*01-015	short shaft	6	
16	161109E*01-016	cylinder shaft	4	
17	161109E*01-017	Circlip	22	φ20
18	161109E*01-018	cylinder	2	
19	161109E*01-019	dust ring	2	
20	161109E*01-020	guide ring	2	
21	161109E*01-021	guide circle	2	
22	161109E*01-022	O-ring	2	
23	161109E*01-023	seal ring	2	
24	161109E*01-024	piston	2	
25	161109E*01-025	cylinder body	2	
26	161109E*01-026	chain part	4	
27	161109E*01-027	board	2	
28	161109E*01-028	flow-limit valve	2	
29	161109E*01-029	spring	2	
30	161109E*01-030	extension pipe	4	M14*1.5 9/16-18
31	161109E*01-031	oil hose	2	
32	161109E*01-032	left safety-lock	1	
32-1	161109E*01-032-1	right safety-lock	1	
33	161109E*01-033	ramp	2	
34	161109E*01-034	flat washer	11	φ10
35	161109E*01-035	bolt	8	M10*20
36	161109E*01-036	anchor	12	M16*110
37	161109E*01-037	copper washer	4	φ14
38	161109E*01-038	copper washer	1	φ16
39	161109E*01-039	connector(2#)	1	M16*1.5 9/16-18

NO	CODE	DESCRIPTION	QTY	NOTE
40	161109E*01-040	short oil hose	1	
41	161109E*01-041	bolt	3	M10*80
42	161109E*01-042	anchor	3	M8*80
43	161109E*01-043	pump stand	1	
44	161109E*01-044	blocked nut	1	
45	161109E*01-045	T-fitting	1	
46	161109E*01-046	O-ring	1	φ10*2.4
47	161109E*01-047	self-lock nut	2	M8
48	161109E*01-048	air valve	1	
49	161109E*01-049	short air pipe	1	φ6 L=1.5 meter
50	161109E*01-050	Y-fitting	1	1/8 φ6
51	161109E*01-051	motor pump	1	220V 60HZ
52	161109E*01-052	flat washer	4	φ8
53	161109E*01-053	bolt	2	M8*20
54	161109E*01-054	flow divider	1	
55	161109E*01-055	support frame	4	
56	161109E*01-056	bearing	28	φ20*φ23*20
57	161109E*01-057	axle	4	
58	161109E*01-058	left locking bar	1	
58-1	161109E*01-058-1	right locking bar	1	
59	161109E*01-059	self-lock nut	4	M16
60	161109E*01-060	left platform	1	
60-1	161109E*01-060-1	right platform	1	
61	161109E*01-061	rubber pad	2	
62	161109E*01-062	screw	12	
63	161109E*01-063	hinged ramp	2	
64	161109E*01-064	rubber pad	4	
65	161109E*01-065	lift pad	4	
66	161109E*01-066	extension arm	4	
67	161109E*01-067	spring washer	4	φ10
68	161109E*01-068	lifting arm	4	
69	161109E*01-069	bolt	4	M6*10
70	161109E*01-070	blocker	4	
71	161109E*01-071	low rubber block	4	160*120*76
72	161109E*01-072	high rubber block	4	160*120*38
73	161109E*01-073	heigh adaptor	4	
74	161109E*01-074	low adaptor	4	

MAINTENANCE RECORDS

INSTALLATION FORM

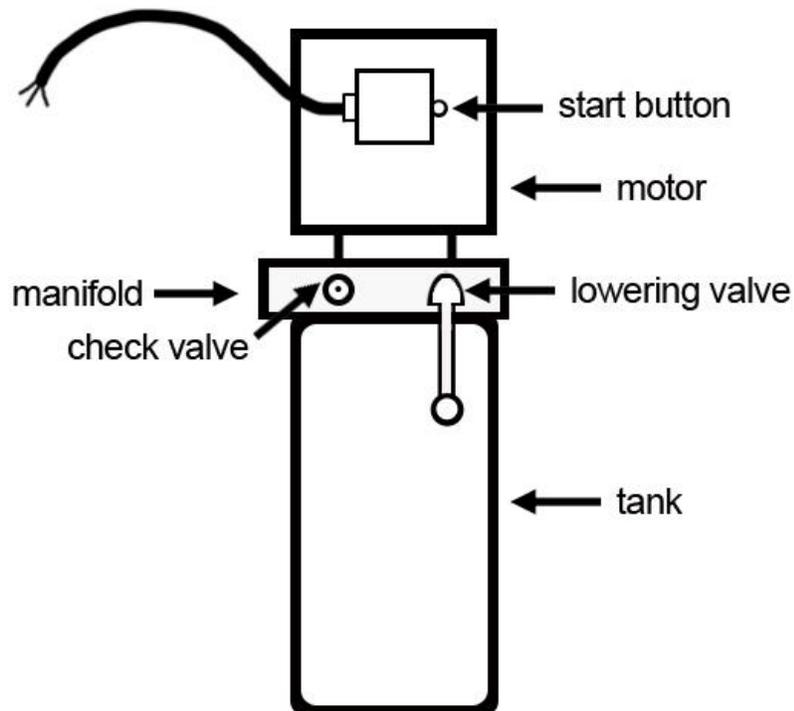
Customer Name:		Date of Installation:	
Company Name:			
Street Address:			
City:	State:	Zip:	
Phone:		Fax:	
Pre-Install Agreement			
<p>I, (the undersigned) acting as the owner of the business listed above assume responsibility for any permits required, either state or county mandated, related to the installation and/or operation of this equipment. I assume responsibility for the concrete floor and condition thereof, now or later, where the above equipment model(s) are installed. I will assume all liability for losses, damages (including loss of use), expenses, demands, claims, and judgments in connection with or arising out of any personal injury or alleged damage to property, sustained or alleged to have been sustained in connection with, or to have arisen out of the condition and/or drilling of the concrete near or adjacent to the equipment model(s) listed above. If my employee(s) offer assistance of any kind during installation of the above equipment model(s) I hold the manufacturer and installation company harmless of all liability for losses, damages, expenses, claims, and judgments in connection with or arising out of any personal injury or alleged damage to property, sustained or alleged to have been sustained in connection with the installation of the above equipment model(s).</p> <p>I understand that the lifts above are supplied with concrete fasteners meeting the criteria of the American National Standard "Automotive Lifts - Safety Requirements for Construction, Testing, and Validation" ANSI/ALI ALCTV-1998, and that I will be responsible for all charges related to any special regional structural and/or seismic anchoring requirements specified by any other agencies and/or codes such as the Uniform Building Code (UBC) and/or International Building Code (IBC).</p>			
Customer Signature:		Print Name:	Date:
Post-Installation Check-Off			
<input type="checkbox"/> Base and Columns Properly Shimmed And Stable	<input type="checkbox"/> Lubrication of Critical Components		
<input type="checkbox"/> Anchor Bolts Tightened	<input type="checkbox"/> Lift Adapters		
<input type="checkbox"/> Runways Properly Attached and Secured	<input type="checkbox"/> Check For Overhead Obstructions		
<input type="checkbox"/> Electric Power Supply Confirmed	<input type="checkbox"/> Runways Level		
<input type="checkbox"/> Cables / Chains Adjusted Properly	<input type="checkbox"/> All Screws, Bolts, and Pins Secured		
<input type="checkbox"/> Safety Locks Functioning Properly	<input type="checkbox"/> Surrounding Area and Lift Clean In Appearance		
<input type="checkbox"/> Check For Hydraulic Leaks	<input type="checkbox"/> Proper Operation, Maintenance and Safety Explained		
<input type="checkbox"/> Oil Level	<input type="checkbox"/> Operation and Safety Manual(s) Left at Site		
<p>I, (the undersigned) confirm that the above installation procedure(s) were completed. I understand that I will be responsible for maintaining this equipment as outlined in the accompanied Installation and Operation Manual and ANSI/ALI ALOIM Safety Requirements for Operation, Inspection and Maintenance. I understand that personal injury and/or damage to property can occur if the above equipment model(s) are not maintained or used improperly and take full responsibility for training my employees on proper use and maintenance of this equipment. I hold the manufacturer and installation company harmless of all liability for losses, damages (including loss of use), expenses, demands, claims, and judgments in connection with or related to improper use, improper training, or lack of required maintenance. I understand that the warranty does not cover replacement of parts worn or damaged due to normal use or lack of required maintenance</p>			
Customer Signature:		Print Name:	Date:
Installer Signature:		Print Name:	Date:
Installer Company Name:			
Street Address:			
City:	State:	Zip:	
Phone:		Phone (Other):	

IMPORTANT

POWER UNIT PRIMING PROCEDURE

THE PROBLEM: Power unit runs fine but will not pump any fluid.

Step 1 – Locate the check valve, the flush plug to the left of the lowering valve.
(See drawing below.)



Step 2 – Using an Allen wrench and shop towel – with shop towel in place to catch fluid – loosen the check valve plug $2 \frac{1}{2}$ turns to allow it to leak.

Step 3 – Push the START button for one second, then release for three seconds.
Repeat these steps until unit starts pumping fluid.

Step 4 – Tighten the check valve plug.

YOUR POWER UNIT SHOULD BE PRIMED