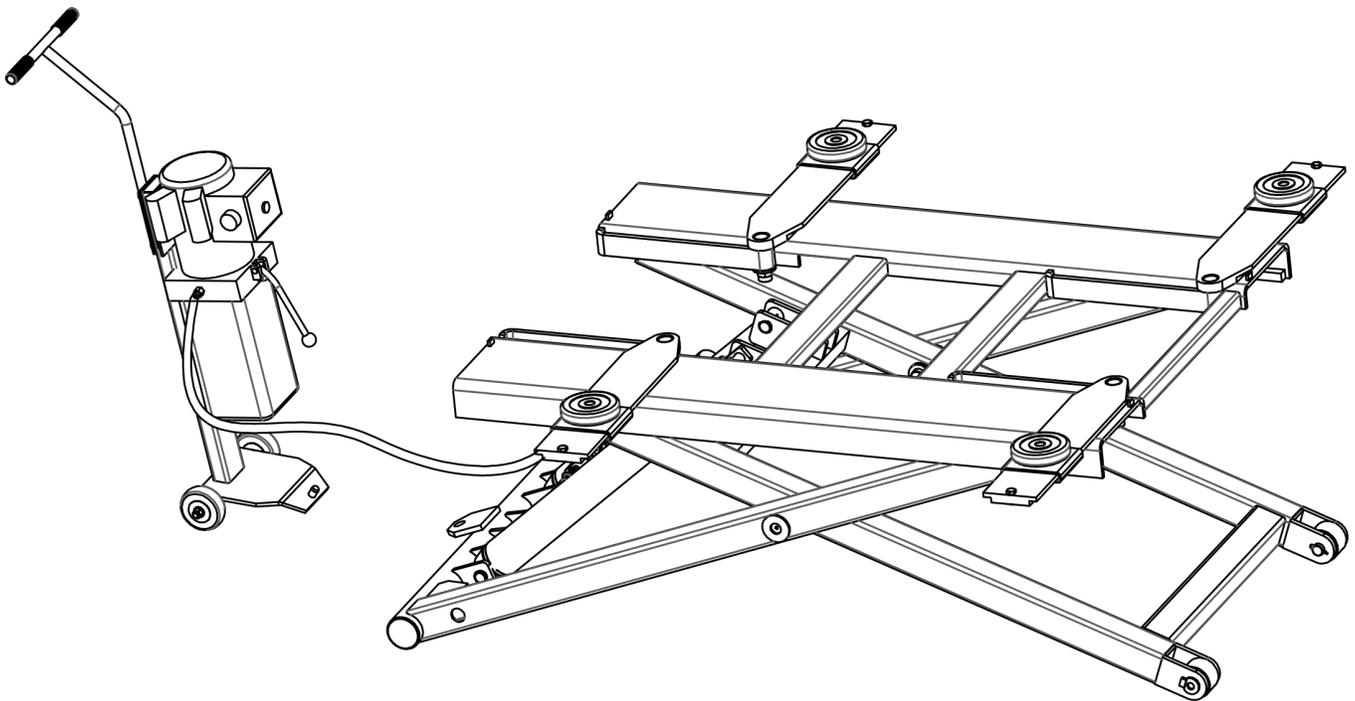


6,000 lb PORTABLE SCISSOR CAR LIFT

MODEL: TMG-ALS61



- Please read the product manual completely before assembly
- Check against the parts list to make sure all parts are received
- Wear proper safety goggles or other protective gears while in assembly

Missing parts or questions on assembly?

Please call: 1-877-761-2819 or email: cs@tmgindustrial.com

Do not return the product to dealer, they are not equipped to handle your requests

IMPORTANT NOTICE

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

PLEASE READ ENTIRE MANUAL PRIOR TO INSTALLATION.

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, 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 decals on the unit clean and visible.

BEFORE YOU BEGIN

Receiving:

The shipment should be thoroughly inspected as soon as it is received. The signed bill of lading is acknowledgement by the carrier of receipt in good condition of shipment covered by your invoice. If any of the goods called for on this bill of lading are shorted or damaged, do not accept them until the carrier makes a notation on the freight bill of the shorted or damaged goods. Do this for your own protection.

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. File your claim with the carrier promptly.

Support your 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 responsible for collection of claims or replacement of lost or damaged materials.

TABLE OF CONTENTS

Contents	Page No.
Definitions of Hazard Levels.....	2
Owner's Responsibility.....	2
Before You Begin.....	2
Table Of Contents.....	3
Installer / Operator Instructions.....	4
Safety / Warning Instructions.....	5
Tools Required.....	8
Step 1 / Selecting Site.....	8
Step 2 / Floor Requirements.....	8
Concrete Specifications.....	8
Assembly View / Description of Parts.....	9
Specifications.....	10
Step 3 / Power Unit Set Up.....	11
Step 4 / Connecting Hydraulic Hoses Fittings.....	11
Step 5 / Lift Arm Installation.....	12
Step 6 / Installing/ Changing Lift Pads.....	12
Step 7 / Wiring Power Unit.....	13
Step 8 / Lift Start Up / Final Adjustments.....	14
Step 9 Bleeding.....	15
Post Installation Check-Off.....	15
Step 10 / Operation/ Maintenance.....	16
Troubleshooting Guide.....	23
Parts Breakdown.....	27

**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 the lifts are 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.

**INSTALLER / OPERATOR
PROTECTIVE
EQUIPMENT**

Personal protective equipment helps makes installation and operation safer, however, it 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.

SAFETY WARNING 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 ENSURE** that the safeties are engaged before any attempt is made to work on or near vehicle.

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

12. **GUARD AGAINST ELECTRIC SHOCK.** This lift must be grounded while in use to protect the 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.

CAUTION	CAUTION
 Clear area if vehicle is in danger of falling	 Remain clear of the lift when raising or lowering vehicle
CAUTION	CAUTION
 Keep clear of pinch points when lift is moving	 Keep feet clear of lift while lowering
CAUTION	CAUTION
 Do not override self-closing lift controls	 Chock wheel to prevent vehicle movement

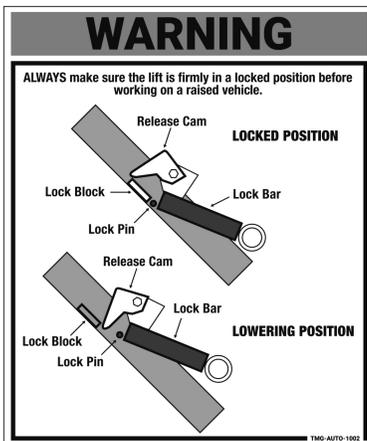
TMG-AUTO-1004

A

CAUTION	CAUTION
 Read operating and safety manuals before using lift	 Proper maintenance and inspection is necessary for safe operation
CAUTION	CAUTION
 Do not operate a damaged lift	 Do not exceed lifting capacity
CAUTION	CAUTION
 Lift to be used by trained operator only	 Authorized personnel only in lift area

TMG-AUTO-1005

B



C

WARNING

Read and understand all Danger, Warning, and Caution messages and operation procedures before using lift. Keep hands and feet away from moving parts. Do not work under or near a raised vehicle unless the lift is in the locked position.

OPERATION INSTRUCTIONS

Before raising a vehicle, make sure the weight of the vehicle does not exceed the rated capacity of the lift, that all persons and obstacles are away from the lift, and that the lift is lowered.

TO RAISE LIFT:

1. Drive vehicle over lift; there must be at least 1 inch of clearance between vehicle and lift.
2. Raise the lift until the tires are off the ground.
3. Make sure the vehicle is balanced and the pads are in contact with the vehicle's lifting points.
4. Raise the lift just past the desired height.
5. Lower the lift down onto the most recently passed locking position. Lock Pin needs to firmly rest against Lock Block, as shown in Figure A.

TO LOWER LIFT:

1. Before lowering a vehicle, make sure the area around and under the lift is clear of people and obstacles. Raise the lift up for a second or two. This moves the Release Cam into position so that it can push the Lock Pin over the Lock Block, allowing the lift to lower, as shown in Figure B.
2. Lower the lift to the ground.
3. Remove all pads, check under the vehicle for obstacles, then drive the vehicle off the lift.

TMG-AUTO-1003

D

ATTENTION

**6000lb
2722kg**

MAXIMUM LIFTING CAPACITY

⚠ DANGER ⚠

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 the 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.

TMG-AUTO-1001

E

TMG™ INDUSTRIAL

6000lb PORTABLE SCISSOR AUTO LIFT

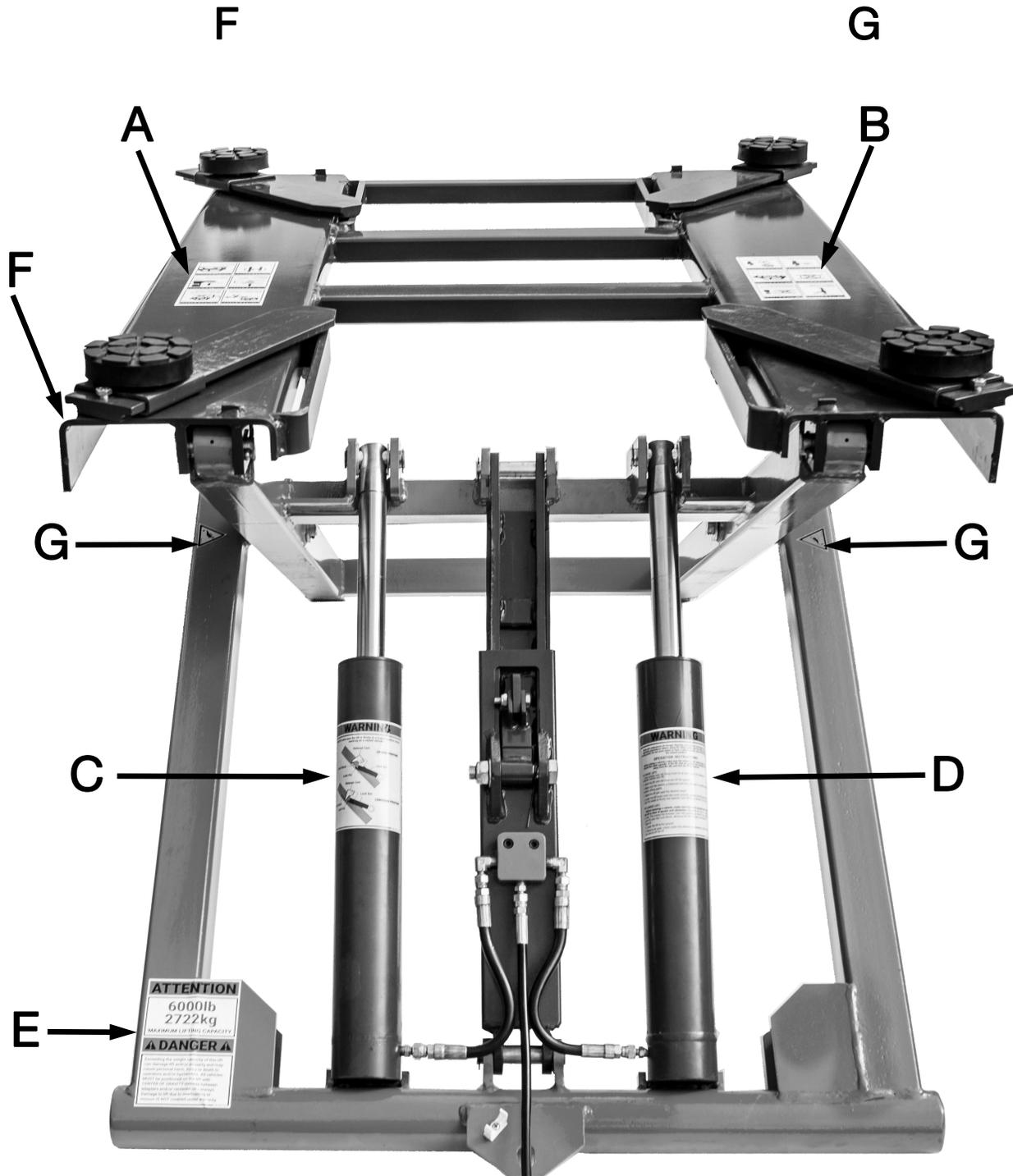
MODEL TMG-ALS61

www.tmgindustrial.com

Headquarters in Richmond BC, Canada



CUSTOMER SERVICE & PARTS 1-877-761-2819 cs@tmgindustrial.com



TOOLS REQUIRED

- ◆ 4 Foot Level
- ◆ Small Adjustable Wrench
- ◆ Large Adjustable Wrench
- ◆ 12mm Hex Key

IMPORTANT NOTICE !

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

PLEASE READ ENTIRE MANUAL PRIOR TO INSTALLATION !

STEP 1

(Selecting Site)

Before installing your new lift, check the following.

1. **LIFT LOCATION:** Always use architects plans when available. Check layout dimension against floorplan requirements making sure that adequate space if 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 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

LIFT MODEL	CONCRETE REQUIREMENTS
TMG-ALS61	3.5" Min. Thickness / 2,500 PSI

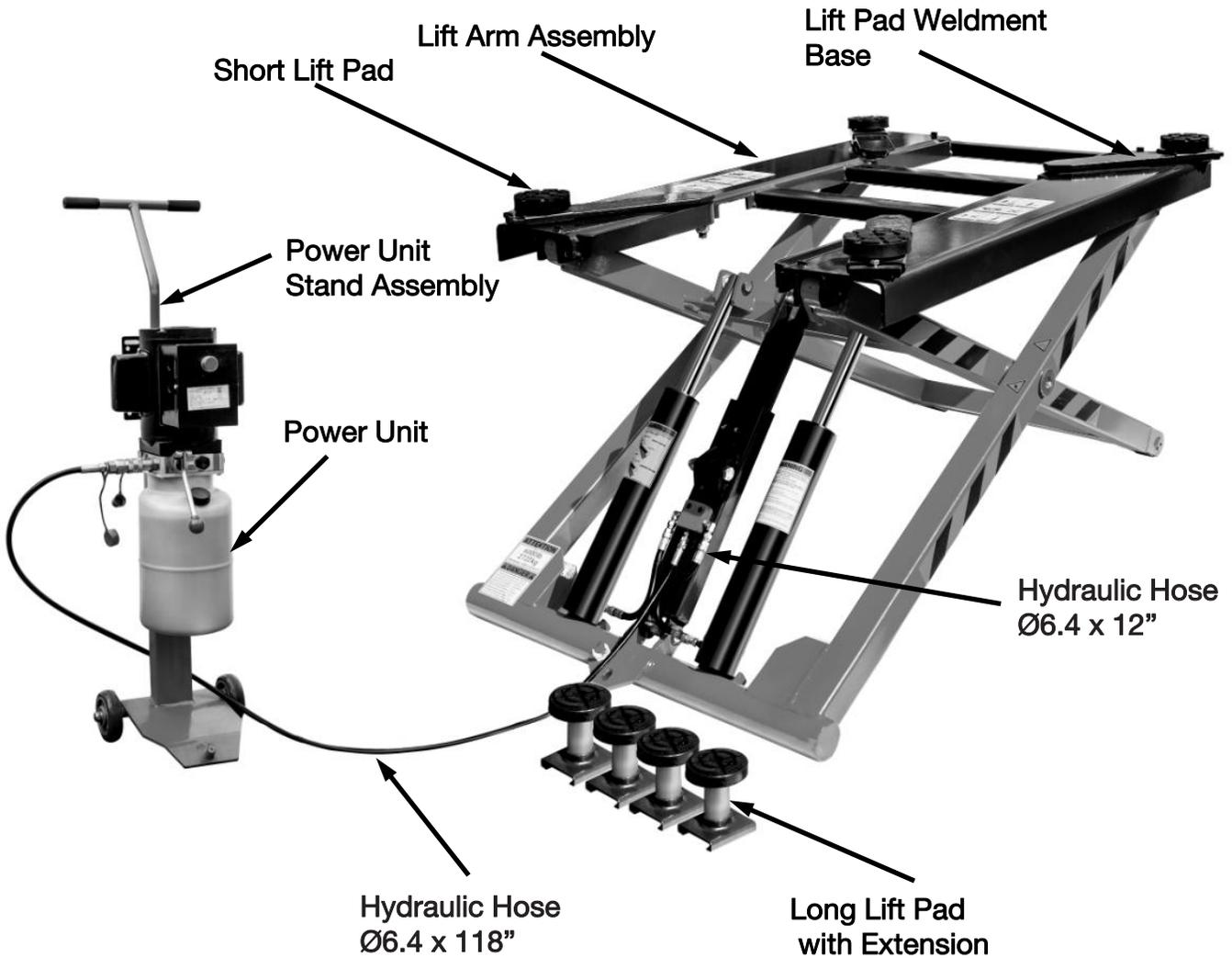


DANGER!

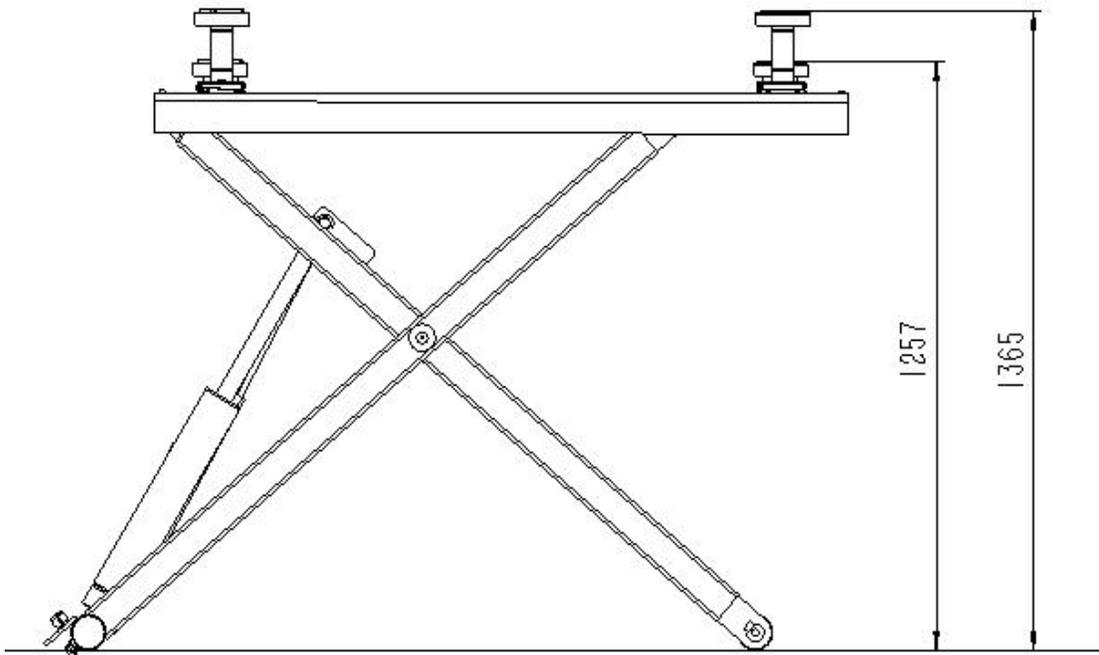
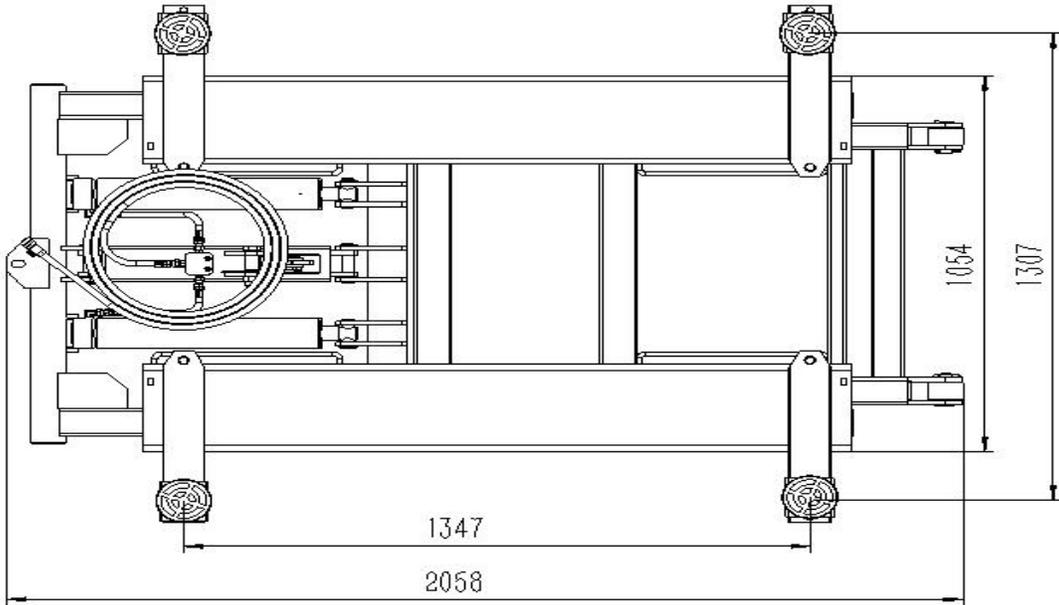
All models **MUST** be installed on 3,000 PSI concrete only conforming to the minimum requirements shown above. New concrete must be adequately cured by at least 28 days minimum.

Assembly View

DESCRIPTION	QTY
LIFT ARM ASSEMBLY	4
SHORT LIFT PAD ASSEMBLY	4
LIFT PAD WELDMENT BASE	4
LONG LIFT PAD WITH EXTENSION	4
HYDRAULIC HOSE ASSEMBLY Ø6.4 x 118"	1
HYDRAULIC HOSE ASSEMBLY Ø6.4 x 12"	2
POWER UNIT 110 Volt, 60HZ, 1 Phase	1
POWER UNIT STAND ASSEMBLY	1



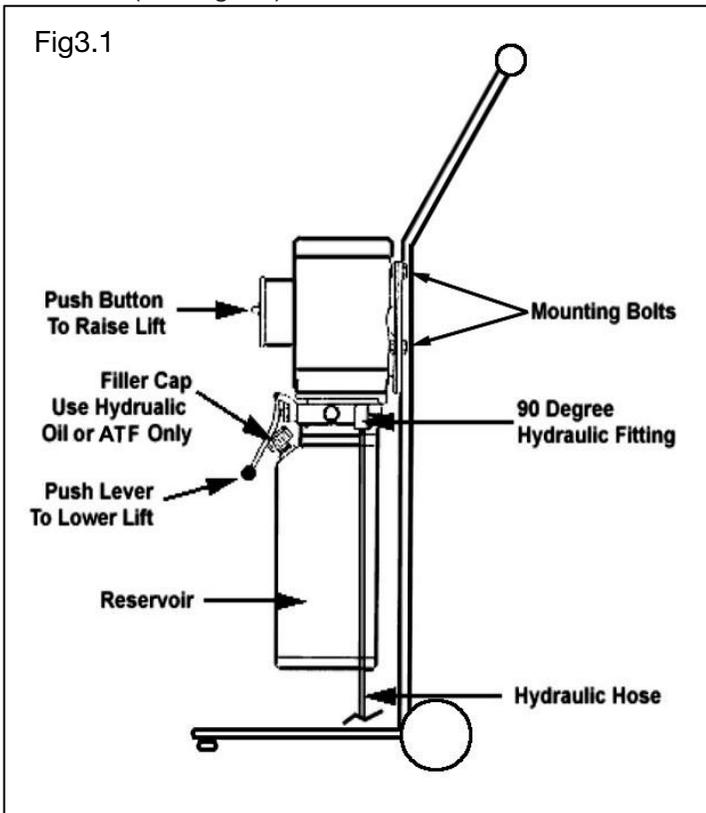
SPECIFICATIONS



Lifting Capacity	Lifting Time	Power Unit
6,000 Lbs. / 2721 Kgs.	45 Sec.	110VAC/60Hz

STEP 3 (Power Unit Set Up)

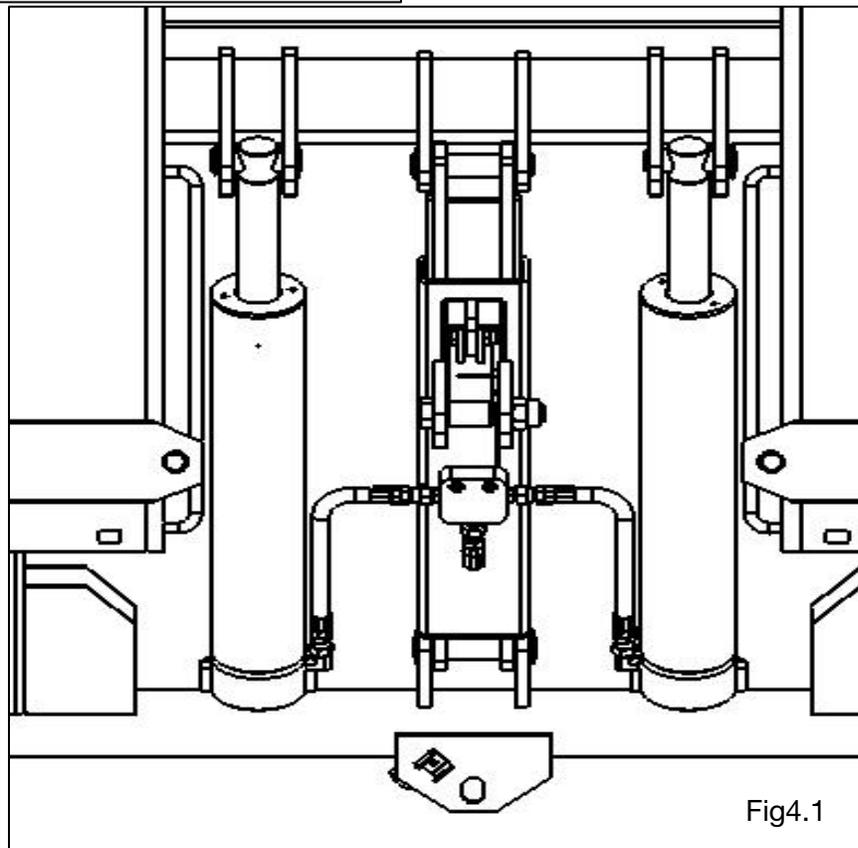
1. Set the Power Unit on the Stand/Tow Handle and mount using the four M8 x 1.25 x 20mm Bolts, Nuts and Washers. (See Fig 3.1)



2. Remove plug from power unit and install the Straight Fitting into the power port on the Power Unit.
3. Connect the 144" Hydraulic Hose to the Straight Fitting.
4. Fill the reservoir with 6 Quarts/ 1.5 gals of Dexron III ATF or 10W Non-foaming hydraulic fluid.

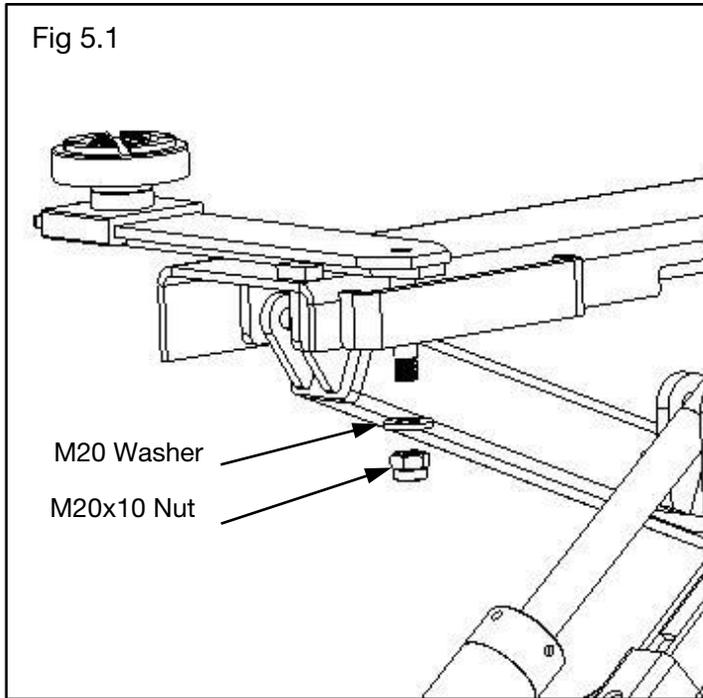
STEP 4 (Connecting Hydraulic Fittings / Hoses)

1. Remove the plastic plug from the hand Cylinder.
2. Install the Straight Hydraulic Fitting in the Cylinder.
3. Attach the 144" Hydraulic Hose to the Straight Fitting in the port of the Hydraulic Shunt.
4. Attach the 17" Hydraulic Hose to the Straight Fitting in the Hydraulic Shunt and the Hydraulic Cylinder. (See Fig 4.1)

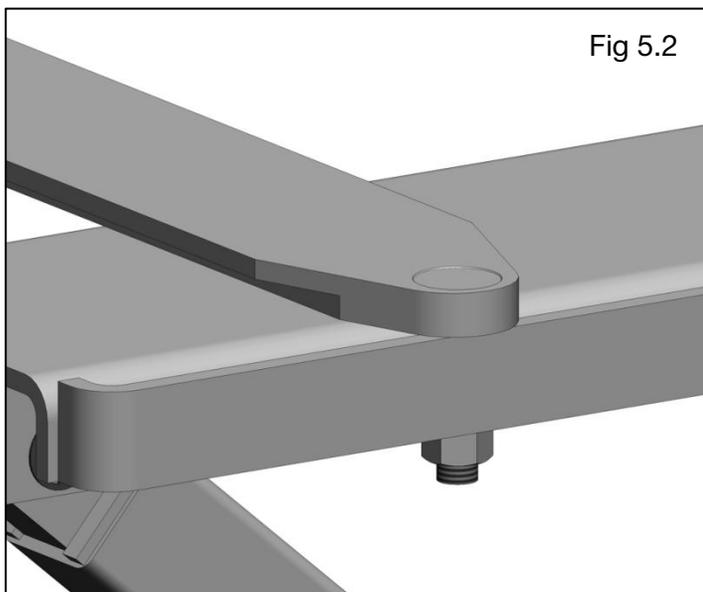


STEP 5 (Lift Arm Installation)

1. Set the Adjustable Arm on the Ramp ensuring that the Bolt on the arm is inserted through the arm holder channel on the side of the ramp. (See Fig 5.1)

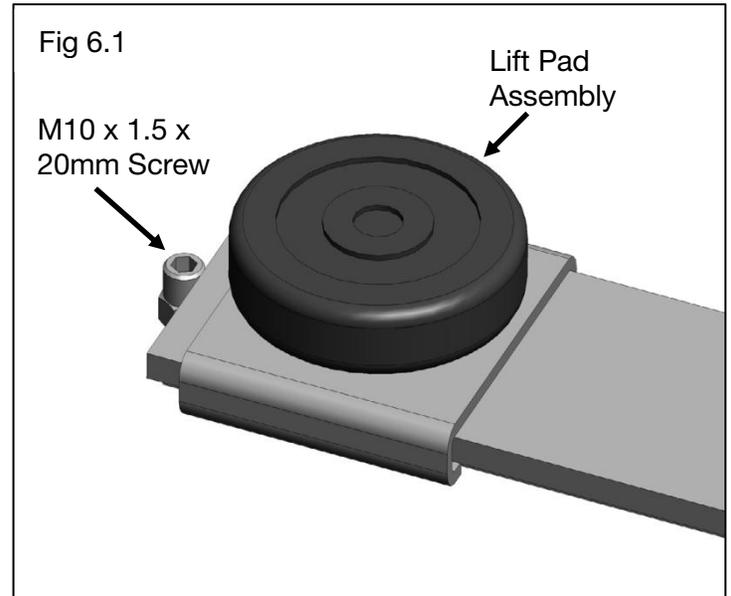


3. Tighten the M20-10 nut until the arm cannot pivot, then back the nut off until the arm is just loose enough to pivot freely. (See Fig.5.2)



STEP 6 (Installing / Changing Lift Pads)

1. Remove the Socket Head Screw from the end of the lift arm.
2. Slide the desired height Lift Pad riser onto the lift arm. Replace and tighten the Socket head Screw. Drop in the Lift Pad if applicable. (See Fig 6.1)



3. Repeat the above procedure for the other three arms.
4. Use the 5" Lift Pad Extension as necessary to reach proper lifting points on the vehicle.



WARNING!
ALWAYS set the adjustable arms and pads under the proper lifting points as indicated in the Lifting Guide or owners manual of the vehicle.

STEP 7

(Wiring Hydraulic Power Unit)



WARNING!

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.



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.

DANGER!

ALL WIRING MUST BE PERFORMED BY A LICENSED ELECTRICIAN.

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.



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 110-120 volt, single phase, use a 25 amp fuse.

STEP 8

(Lift Start Up / Final Adjustments)

1. Make sure the Power Unit reservoir is full with 6 quarts/ 1.5 gal of 10-WT hydraulic oil or Dexron-III automatic transmission fluid.
2. Check the MAIN SAFETY LOCK to make sure it moves freely and springs back to the lock position when released. Lubricate all SAFETY PIVOT points with WD-40 or equal.
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. Raise lift until THE CYLINDER BOTTOMS OUT AND THE LIFT STOPS.



Keep hands and feet clear. Remove hands and feet from any moving parts. Keep feet clear of lift when lowering. Avoid pinch points.

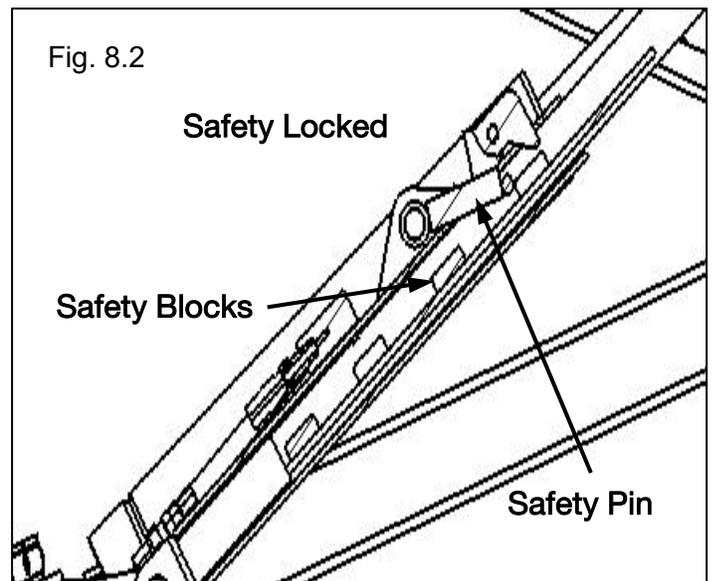
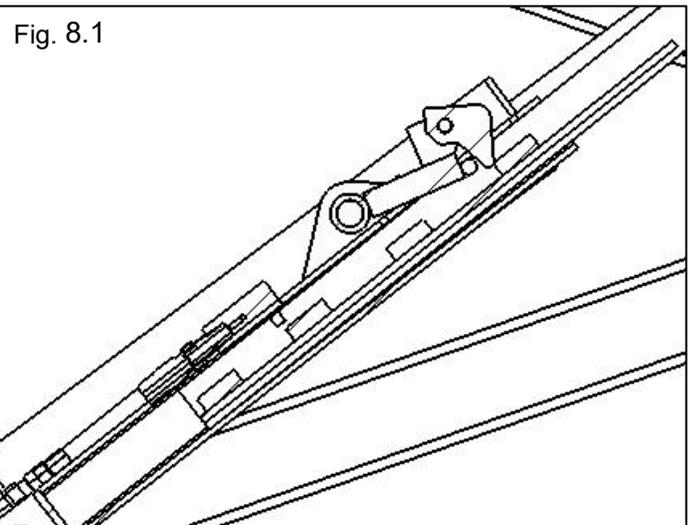
ALWAYS WEAR SAFETY GOGGLES.



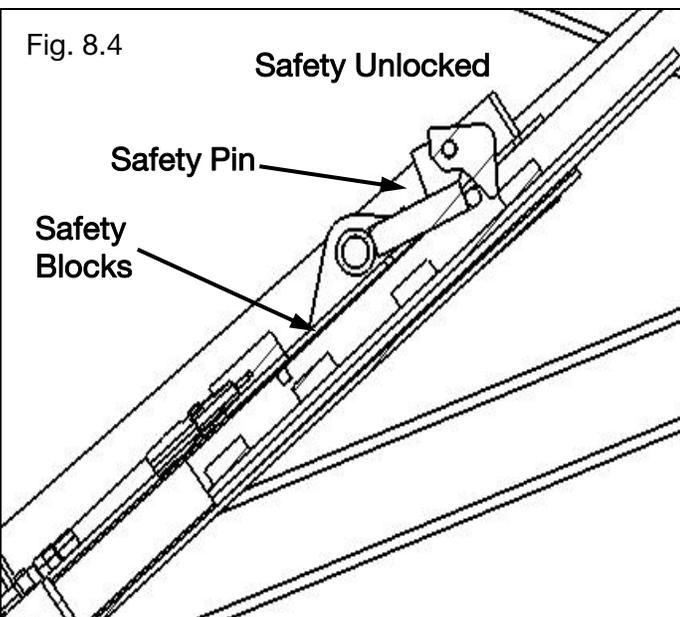
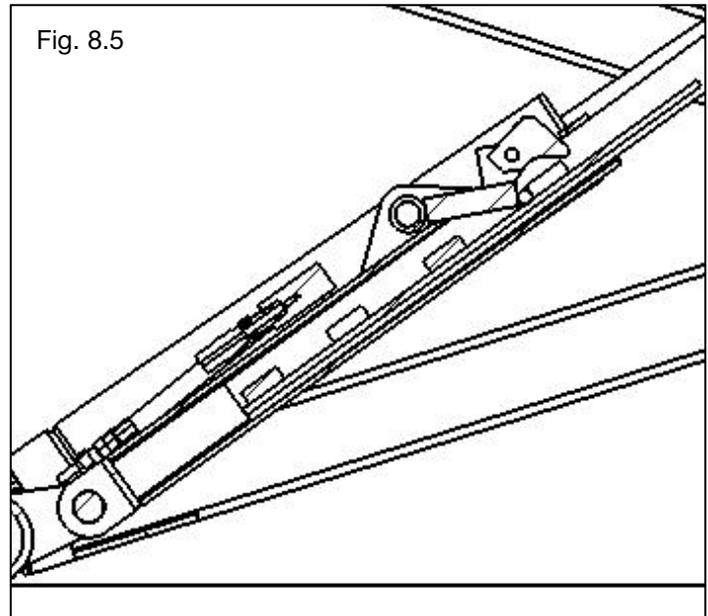
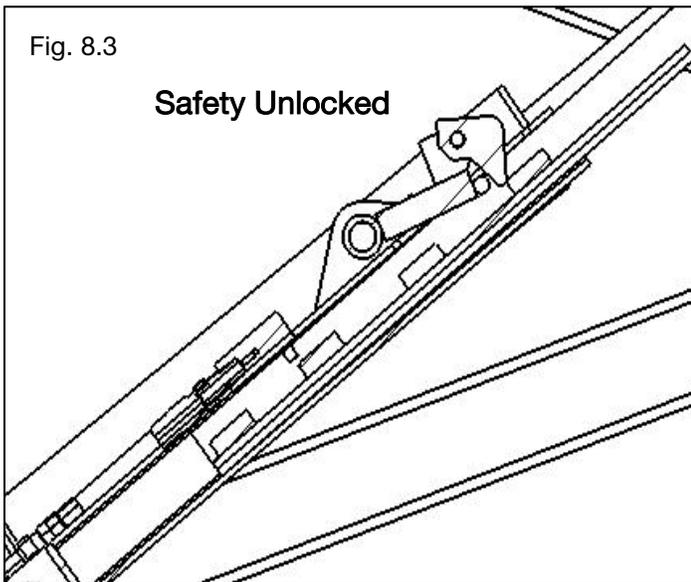
DANGER!
VISUALLY CONFIRM THAT ALL PRIMARY SAFETY LOCKS ARE ENGAGED BEFORE ENTERING WORK AREA.

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

5. Verify that the safety rests in the locked position at each safety stop. Safety is locked when a Safety Block is resting on Safety Pin. (See Fig. 8.1 & 8.2)



6. Raise the lift off the safety locks by pressing the push button on the power unit. Make sure you raise the lift by at least two inches to allow adequate clearance for the safety lock to clear. (See Fig. 8.3 - 8.5)



8. Lower lift by depressing lowering valve on power unit.

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

Fig. 8.5

STEP 9 (Bleeding)

1. Lift must be fully lowered before changing or adding fluid.
2. Raise and lower lift six times. The cylinder is 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. 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.

POST-INSTALLATION CHECK-OFF

- ◆ Lift Assembly, Level And Stable
- ◆ Arm Assemblies Properly Attached
- ◆ 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

STEP 10

(Operation Instructions)

- **DO NOT** go under raised vehicle if safety locks are not engaged.

LIFT OPERATION SAFETY

- **DAILY** inspect your lift. Never operate if it malfunctions or if it has broken or damaged parts. Use only qualified lift service personnel and genuine parts to make repairs.
- **THOROUGHLY** train all employees in use and care of lift, using manufacturer's instructions and "Lifting It Right" and "Safety Tips" supplied with the lift.
- **NEVER** allow unauthorized or untrained persons to position vehicle or operate lift.
- **PROHIBIT** unauthorized persons from being in shop area while lift is in use.
- **DO NOT** permit anyone on lift or inside vehicle when it is either being raised or lowered.
- **ALWAYS** keep area around lift free of tools, debris, grease and oil.
- **NEVER** overload lift. Capacity of lift is shown on nameplate affixed to the lift.
- **DO NOT** stand in front of the vehicle while it is being positioned in lift bay.
- **DO NOT** hit or run over lift arms or adapters. This could damage lift or vehicle. Before driving vehicle into lift bay, position arms and adapters to provide unobstructed entrance onto lift.
- **ALWAYS** load vehicle on lift carefully. Position the lift adapters to contact at the vehicle manufacturer's recommended lift points. Raise lift until adapters contact vehicle. Check adapters for secure contact with vehicle. Raise lift to desired working height.
- **DO NOT** block open or override self-closing lift controls; they are designed to return to the "Off" or Neutral position when released.
- **DO NOT** remove or disable arm restraints.
- **ALWAYS** remain clear of lift when raising or lowering vehicles.
- **ALWAYS** use safety stands when removing or installing heavy components.



DANGER!
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

- **NEVER LEAVE LIFT IN ELEVATED CONDITION** unless all Safety Locks are engaged.
- **AVOID** excessive rocking of vehicle while on lift.
- **ALWAYS CLEAR AREA** if vehicle is in danger of falling.



- 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,**
- **ALWAYS REMOVE** tool trays, stands, etc. before lowering lift.
 - **ALWAYS RELEASE** safety locks before attempting to lower lift.
 - **ALWAYS POSITION** the lift arms and adapters to provide an unobstructed exit before removing vehicle from lift area.

TO RAISE THE LIFT



WARNING!

To avoid personal injury and/or property damage, permit only trained personnel to operate lift. After reviewing these instructions, get familiar with lift controls by running the lift through a few cycles before loading vehicle on lift. Always lift the vehicle using all four adapters. **NEVER** raise just one end, one corner, or one side of vehicle.

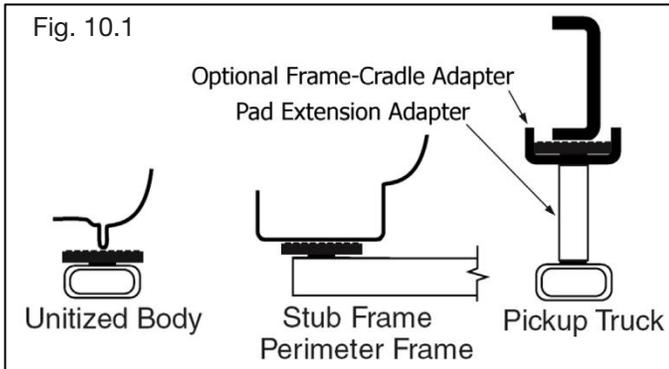


WARNING!

Many specialty or modified vehicles cannot be raised on a two-post frame engaging lift. Contact vehicle manufacturer for raising or jacking details.

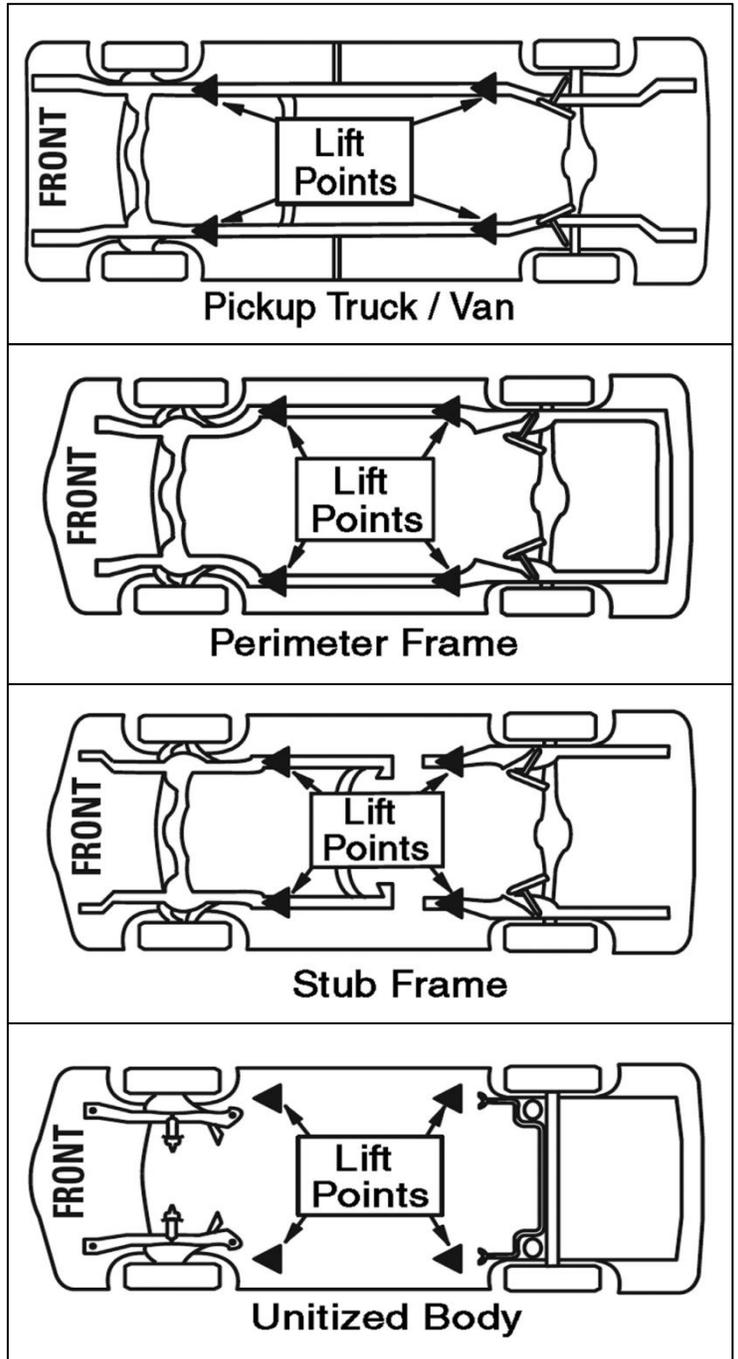
1. Before Loading: Lift must be fully lowered and service bay cleared of all personnel before the vehicle is brought on lift with the arms (if used) set to the full drive-thru position.

2. Loading: Position arms under vehicle and position adapters at vehicle manufacturer's recommended lift points. Use height extenders or optional frame-cradle adapters (if applicable) when necessary to ensure good contact. (See Fig 10.1)



3. Some vehicles may have the manufacturer's Service Garage Lift Point locations identified by triangle shape marks on the undercarriage (reference ANSI/SAE J2184-1992). Also, there may be a label located on the right front door jamb area showing specific vehicle lift points.

TYPICAL LIFTING POINTS



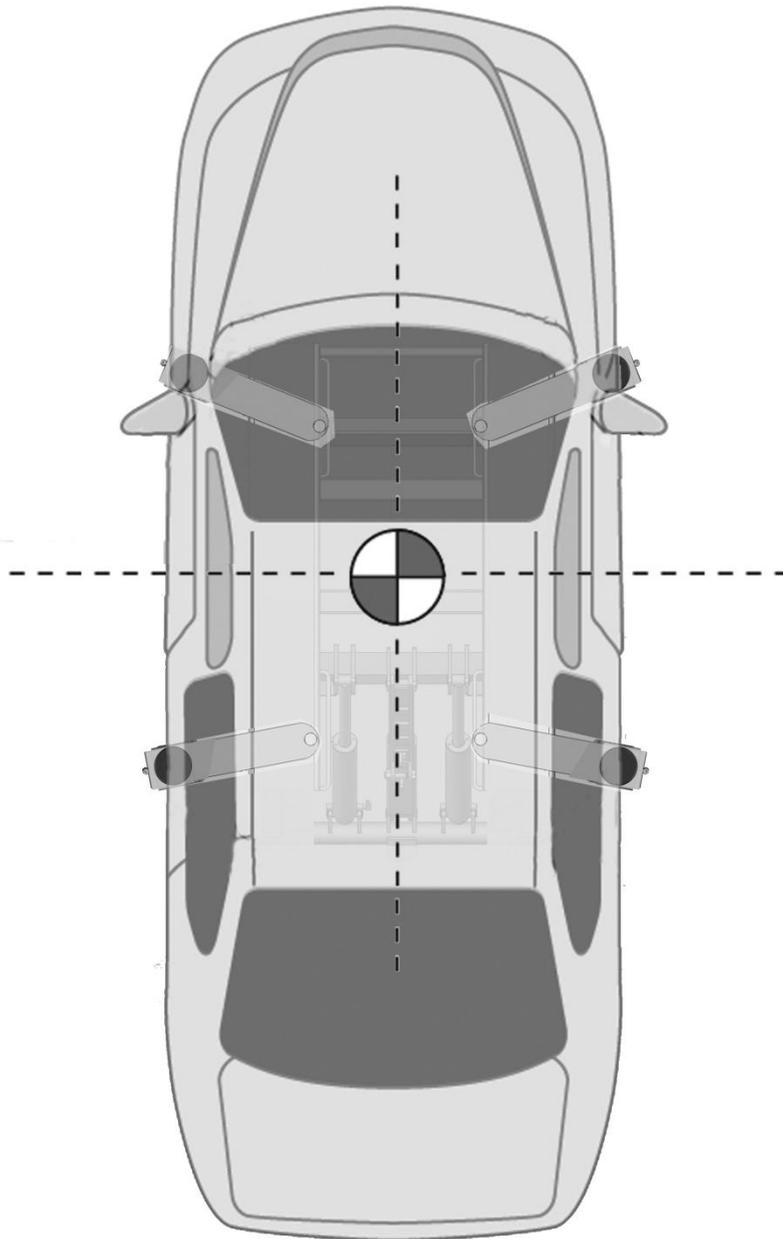
4. Position vehicle for proper weight distribution arms under vehicle to allow adapters /pads to contact at the manufacturer's recommended pick up points.

5. If the specific vehicle lift points are not identified, or if the vehicle has additional or uniquely positioned payload, have a qualified person calculate the vehicle center of gravity or have the vehicle center of gravity determined at a vehicle scale. Load the vehicle with the center of gravity midway between adapters.

6. Set parking brake or use wheel chock to hold vehicle in position.

! WARNING

Make sure vehicle is neither front nor rear heavy and select the proper configuration for the vehicle to be lifted as shown below. Center of balance should be midway between adapters and centered over the lift.



7. Push the **RAISE** button or rotate the control switch on the power unit.

Important Note:

**Allow (2) seconds between motor starts.
Failure to comply may cause motor burnout.**

8. Stop before making contact with vehicle. Check contact points. If required, slightly move arms or vehicle to allow restraint gear and pawl to mesh.

9. Raise vehicle until tires clear the floor.

10. Stop and check adapters for secure contact at vehicle manufacturer's recommended lift points.

11. Continue to raise to desired height only if vehicle is secure on lift.

12. **DO NOT** go near or under a raised vehicle if all four adapters are not in secure contact with vehicle at vehicle manufacturer's recommended lift points.

13. Repeat entire loading and raising procedures if required.

14. Lower lift onto safety locks.

• **DO NOT** enter work area or go under vehicle if safety locks are not engaged.

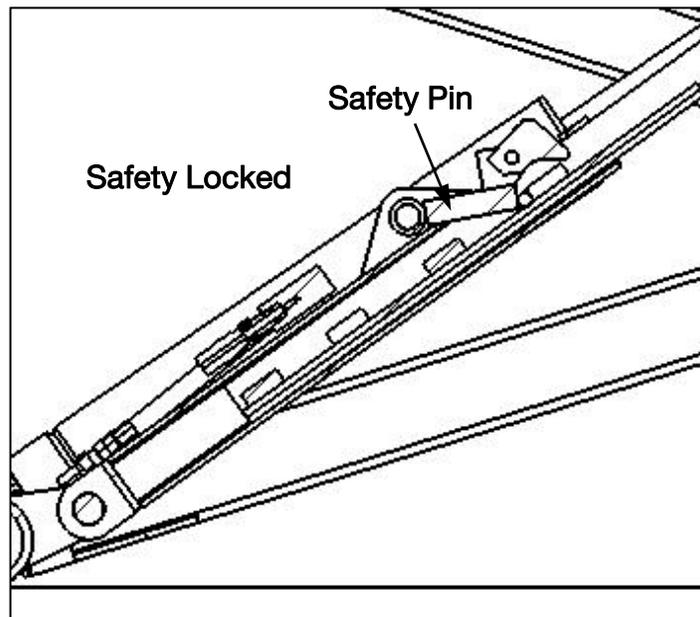


DANGER!

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.



- **CLEAR AREA** if vehicle is in danger of falling.
- **DO NOT** position yourself between a wall and the lift. If the vehicle falls in that direction, you may be severely injured.
- Before attempting to lift pickup trucks or other truck frame vehicles, be sure that:
 - ◆ Vehicle frame is strong enough to support its weight and has not been weakened by modification or corrosion.
 - ◆ Vehicle individual axle weight does not exceed one-half lift capacity.
 - ◆ Adapters are in secure contact with frame at vehicle manufacturers recommended lift points.
 - ◆ Vehicle is stable on lift and neither front nor "tail" heavy.

WHILE USING LIFT

- Avoid excessive rocking of vehicle while on lift.
- Always use safety stands as needed or when removing or installing heavy components.

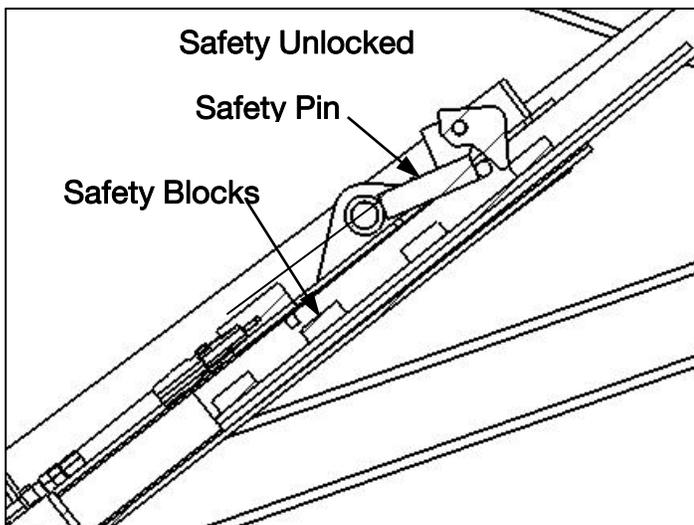
TO LOWER THE LIFT



WARNING!

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.

1. Remove all tools or other objects from the lift area.
2. Raise lift off safety locks. Make sure you raise the lift by at least two inches to allow adequate clearance for the locks to clear.
3. Confirm safety lock is in unlocked position.



4. Push LOWERING valve handle to lower. Do not override self-closing lift controls.
5. Remain clear of lift when lowering vehicle. Observe pinch point warning decals.
6. Remove adapters from under vehicle and arms to full drive-thru position before moving vehicle.
7. If lift is not operating properly, **DO NOT** use until adjustment or repairs are made by qualified lift service personnel.

MAINTENANCE INSTRUCTIONS



CAUTION!

If you are not completely familiar with automotive lift maintenance procedures; **STOP**: Contact factory for instructions. To avoid personal injury, permit only qualified personnel to perform maintenance on this equipment.

- Always keep bolts tight. Check periodically.
- Always keep lift components clean.
- Always if oil leakage is observed, call local service representative.
- Always if electrical problems develop, call local service representative.
- Always replace **ALL FAULTY PARTS** before lift is put back into operation.
- Daily: Make a visual inspection of **ALL MOVING PARTS** and check for excessive signs of wear.
- Daily: Check Safety Locks to ensure they are in good operating condition.
- Daily: Check pivot points and hinges for wear. Replace worn parts as required with genuine parts.
- Daily: Inspect adapters for damage or excessive wear. Replace as required with genuine parts.
- Weekly: Lubricate any rollers with general purpose oil or WD-40. Lubricate arm Hinge Pins with grease.
- Weekly: Check bolts and pins to ensure proper mounting.
- Monthly: Lubricate locking latch shafts. Push latch handle several times for oil to penetrate pivot points.
- Semi-Annually: Check fluid level of lift power unit and refill if required per lift installation instructions.
- Replace all caution, warning or safety related decals on the lift if unable to read or missing.
- Refer to ANSI/ALI ALOIM booklet for periodic inspection checklist and maintenance log sheet.

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 ensure 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 found on one of the lift columns or contact the manufacturer.
- ◆ The center of gravity should be followed closely to what the manufacturer recommends.
- ◆ Always make sure you have proper overhead clearance. Additionally, check that attachments, (vehicle signs, campers, antennas, etc.) are not in the way.
- ◆ Be sure that prior to the vehicle being raised, the doors, trunk, and hood are closed securely.
- ◆ Prior to being raised, make sure there is no one standing closer than six feet from the lift.
- ◆ After positioning the 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 ENSURE** that the safeties are engaged and lowered on to the safety ladders 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.

LIFT WILL NOT RAISE

POSSIBLE CAUSE

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

REMEDY

INSTRUCTION

- | | |
|--|--|
| 1. Check for proper oil level..... | The oil level should be up to the bleed screw in the reservoir with the lift all the way down. |
| 2. Bleed cylinders..... | See Installation Manual |
| 3. Flush- Release valve to get rid of.....
possible contamination | Hold release handle down and start unit allowing it to run for 15 seconds. |
| 4. Dirty oil..... | Replace oil with clean Dexron ATF. |
| 5. Tighten all fasteners..... | Tighten fasteners to recommended torques. |
| 6. Check for free movement of release..... | If handle does not move freely, replace bracket or handle assembly. |
| 7. Check motor is wired correctly. | Compare wiring of motor to electrical diagram on drawing. |
| 8. Oil seal damaged or cocked..... | Replace oil seal around pump shaft. |
| 9. See Installation Manual..... | Consult Lift Manufacturer. |
| 10. Replace with new part..... | Replace with new part. |
| 11. Return unit for repair..... | Return unit for repair. |
| 12. Check pump-mounting bolts..... | Bolts should be 15 to 18 ft. lbs. |
| 13. Inlet screen clogged..... | Clean inlet screen or replace. |
| 14. Check wall outlet voltages and wiring..... | 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..... | 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. |
| 2. Check motor is wired correctly..... | Compare wiring of motor to electrical diagram on drawing. |
| 3. Don't use extension cords..... | According to N.E.C. : " The size of the conductors... should be such that the voltage drop would not exceed 3% to the farthest outlet for power..." Do not run motor at 220 VAC – damage to the motor will occur. |
| 4. Replace with new part..... | Replace with new part. |
| 5. Reset circuit breaker/fuse..... | Reset circuit breaker/fuse. |
| 6. Return unit for repair..... | Return unit for repair. |
| 7. See Installation Manual..... | See Installation Manual. |
| 8. Check wall outlet voltage and wiring..... | Make sure unit and wall outlet is wired properly. Motor must run at 110 VAC. |

INSTRUCTION

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..... | Consult Lift Manufacturer. |
| 2. Replace with new part..... | Replace with new part. |
| 3. Return for repair..... | Return for repair. |
| 4. Check oil..... | Use clean 10-WT hydraulic oil or Dexron-III automatic transmission fluid only. If ATF is contaminated, replace with clean ATF and clean entire system. |
| 5. Clean release valve..... | Wash release valve in solvent and blow out with air. |
| 6. Replace fitting with short thread lead..... | Replace fitting with short thread lead. |

INSTRUCTION

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

INSTRUCTION

- | | |
|---|--|
| 1. Check oil level..... | The oil level should be up to the bleed screw in the reservoir with the lift all the way down. |
| 2. Check/Tighten inlet tubes..... | Replace inlet hose assembly. |
| 3. Oil seal damaged or cocked..... | Replace oil seal and install. |
| 4. Bleed cylinders | See Installation Manual. |
| 5. See Installation Manual..... | Consult Lift Manufacturer. |
| 6. Check vehicle weight..... | Compare weight of vehicle to weight limit of the lift. |
| 7. Flush release valve..... | Hold release handle down and start unit allowing it to run for 15 seconds. |
| 8. Replace with new part..... | Replace with new part. |
| 9. Return unit for repair..... | Return unit for repair. |
| 10. Check motor is wired correctly..... | Compare wiring of motor to electrical diagram on power unit drawing. |
| 11. Inlet screen clogged..... | Clean inlet screen or replace. |
| 12. Check wall outlet voltage and wiring..... | Make sure unit and wall outlet is wired properly. |

LIFT WILL NOT STAY UP

POSSIBLE CAUSE

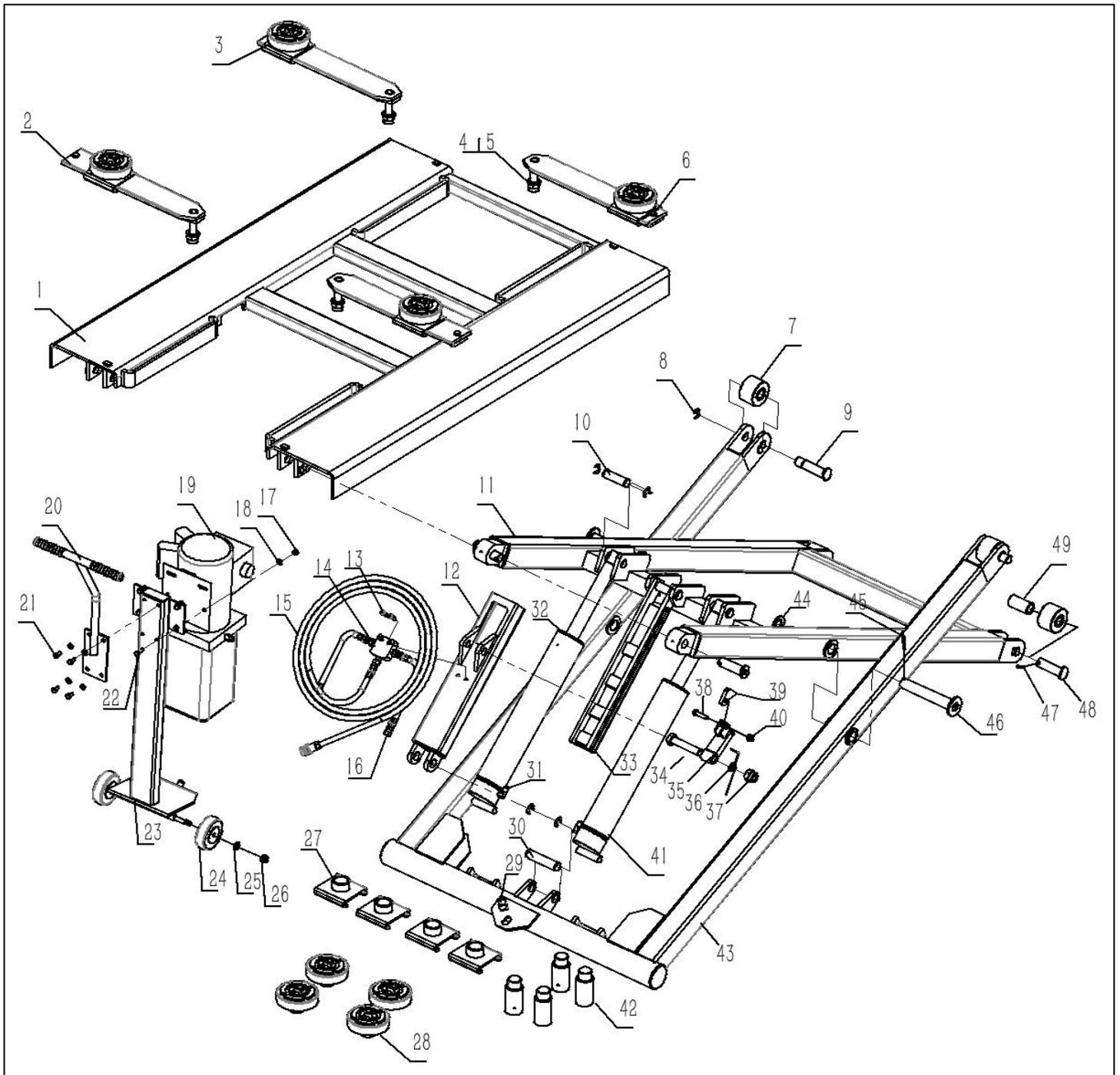
1. Air in oil, (1,2,3)
2. Check valve leaks, (6)
3. Cylinders leak internally, (7)
4. Lowering valve leaks, (4,5,1,7,6)
5. Leaking fittings, (8)

REMEDY

INSTRUCTION

- | | |
|---|--|
| 1. Check oil level..... | The oil level should be up to the bleed screw in the reservoir with the lift all the way down. |
| 2. Oil seal damaged and cocked..... | Replace oil seal around pump shaft. |
| 3. Bleed cylinder..... | Refer to Installation Manual. |
| 4. Flush release valve..... | Hold release handle down and start unit allowing it to run for 15 seconds. |
| 5. Replace with new valve..... | Replace with new valve. |
| 6. Return unit for repair..... | Return unit for repair. |
| 7. See Installation Manual..... | Consult Lift Manufacturer. |
| 8. Check complete hydraulic system for leaks..... | Tighten all hydraulics fittings and inspects all hoses. |

PARTS BREAKDOWN



PARTS LIST

Ref#	Description	Qty	Ref#	Description	Qty
1	Platform	1	26	Lock nut M12	2
2	Lift arm assembly	4	27	Adjust the tray	4
3	Rubber pallet	4	28	Low tray	4
4	Washer M20	4	29	Plastic clamp	1
5	Lock nut M20	4	30	Axle	2
6	Bolt M10*20	4	31	L-fitting	2
7	Wheel	4	32	Left hydraulic cylinder	1
8	E-ring ϕ 25	10	33	Lock bar	1
9	Axle	2	34	Bolt M20*100	1
10	Axle	2	35	Safety assembly	1
11	Inner arm weldment	1	36	Spring	1
12	Security base	2	37	Lock nut M20	1
13	Screw M8*25	2	38	Bolt M10*40	1
14	Hydraulic shunt assembly	1	39	Ratchet wheel	1
15	Hydraulic hose 118"	1	40	Lock nut M10	1
16	Hydraulic hose 12"	2	41	Right hydraulic cylinder	1
17	Nut M8	4	42	Extension set	1
18	Washer M8	8	43	Outer arm weldment	1
19	Power unit	1	44	Washer M30	2
20	Handrail	1	45	Split pin 6*50	2
21	Bolt M8*16	4	46	Arm pivot pin	2
22	Bolt M8*20	4	47	Split pin	4
23	Power unit stand assembly	1	48	Axle	4
24	Wheel	2	49	Bush	4
25	Washer M12	2			