

***Triumph Mobile Two Post
C-7000 Portable Column Lift System
7,000 lb. Capacity***

INSTRUCTION MANUAL



SHIPPING DAMAGE CLAIMS

When this equipment is shipped, title passes to the purchaser upon receipt from the carrier. Consequently, claims for the material damaged in shipment must be made by the purchaser against the transportation company at the time shipment is received.

Please read the entire contents of this manual prior to installation and operation. By proceeding, you agree that you fully understand and comprehend the full contents of this manual. Deliver this manual to the owner / user / employer with all other instructional material supplied with the lift. Failure to operate this equipment as directed may cause injury or death.

TABLE OF CONTENTS

Important Notice	3
Definitions Of Hazard Levels	3
Important Safety Instructions	4
Tools required	6
Owner / Employer Responsibilities	7
Parts Inventory	8
C-7000 Mobile Parts List	9
C-7000 Mobile Assembly Diagram.....	10
Installation Instructions	11
Selecting Site	11
Floor Requirements	11
Mounting The Hydraulic Power Unit	12
Site Layout	13
Installation Of Anchors	14
Installing The Lift Arms	21
Connecting Hydraulic Lines	22
Hydraulic Power Unit Set Up	22
Lift Start Up / Final Adjustments	24
Bleeding.....	25
Post Installation Check Off	25
Operation	26
Safe Lift Operation	28
Lift Removal	30
Lift - Re-Installation.....	31
Warranty Information & Maintenance Records.....	

IMPORTANT NOTICE

1. Read this manual thoroughly before installing, operating, or maintaining this lift.
2. This lift is designed for indoor use only, and should not be installed in a pit or depression.
3. The floor on which the lift is to be installed **must be 4" inch minimum thickness concrete, with a minimum compressive strength of 3000 psi, and reinforced with steel bar.**
4. The lifts have specific electrical requirements as described in the Installation Instructions section of this manual.
5. This lift has a minimum ceiling height requirement as described in the Installation Instructions section of this manual.
6. Failure by the owner to provide the recommended shelter, mounting surface, electrical supply, and ceiling height could result in unsatisfactory lift performance, property damage, or personal injury.
8. 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.
9. National Auto Tools, Inc. will assume no liability for loss or damage of any kind, expressed or implied resulting from improper installation or use of this product.

DEFINITIONS OF HAZARD LEVELS

Identify the hazard levels used in this manual with the following definitions and signal words: Watch for this symbol: It Means: Immediate hazards which will result in severe personal injury or death.

DANGER

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

WARNING

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

CAUTION

Lubricate all cable sheaves, bearings, and shafts with grease prior to operating the lift. Lubricate all on an annual basis.

Motors and all electrical components are not sealed against the weather and moisture. Install this lift in a protected indoor location. Failure by the owner to provide the recommended shelter could result in unsatisfactory lift performance, property damage, or personal injury.

IMPORTANT SAFETY INSTRUCTIONS READ THESE SAFETY INSTRUCTIONS ENTIRELY!

READ ALL INSTRUCTIONS.

READ AND UNDERSTAND all safety warning procedures before operating lift.

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.

DO NOT raise vehicle on the lift until installation is completed as instructed in this manual.

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

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.

REMAIN CLEAR of lift when raising or lowering vehicle.

CLEAR AREA if vehicle is on danger of falling.

ALWAYS ENSURE that the safety latches are engaged before any attempt is made to work on or near vehicle.

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

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.

DO NOT operate equipment with a damaged power cord or if the equipment has been dropped or damaged until it has been examined by a qualified service person.

DO NOT let the power cord come in contact with hot manifolds or moving fan blades.

IF AN EXTENSION CORD IS NECESSARY, a cord with a current rating equal to or more than that of the equipment should be used. Cords rated for less current than the equipment may overheat. Care should be taken to arrange the cord so that it will not be tripped over or pulled.

ALWAYS UNPLUG EQUIPMENT FROM ELECTRICAL OUTLET WHEN NOT IN USE. Never use the power cord to pull the power plug from the outlet. Grasp the plug and pull to disconnect.

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.

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.

LET EQUIPMENT COOL COMPLETELY BEFORE PUTTING AWAY. Loop power cord loosely around equipment when storing.

TO REDUCE THE RISK OF FIRE, do not operate equipment in the vicinity of open containers of flammable liquids (i.e., gasoline).

ADEQUATE VENTILATION SHOULD BE PROVIDED when working on operating internal combustion engines.

TO REDUCE THE RISK OF ELECTRIC SHOCK, do not use on wet surfaces or expose to rain.

USE ONLY AS DESCRIBED IN THIS MANUAL. Use only manufacturer's recommended attachments.

CAUTION The safe operating temperature range for this product is 41° F. - 104° F

KEEP WORK AREA CLEAN. Cluttered work areas invite injuries.

CONSIDER WORK AREA ENVIRONMENT. Do not expose equipment to rain. DO NOT use in damp or wet locations. Keep area well lighted.

ALWAYS WEAR SAFETY GLASSES. Everyday eyeglasses only have impact resistant lenses. They are not safety glasses.

KEEP HAIR, LOOSE CLOTHING, FINGERS, AND ALL PARTS OF THE BODY AWAY FROM MOVING PARTS.

DRESS PROPERLY. Nonskid steel toe footwear is recommended when operating lift.

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

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.

KEEP CONTROL HANDLES AND / OR BUTTONS DRY, CLEAN AND FREE FROM GREASE AND OIL.

CARE MUST BE TAKEN as burns can occur from touching hot parts.

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.

NOTE: If attachments, accessories, or configuration modifying components that are located in the load path, affect operation of the lift, affect the lift electrical listing or affect intended vehicle accommodation are used on this lift and, if they are not certified for use on this lift, then the certification of this lift shall become null and void. Contact National Auto Tools, Inc. for information pertaining to certified attachments, accessories, or configuration modifying components.

TOOLS REQUIRED

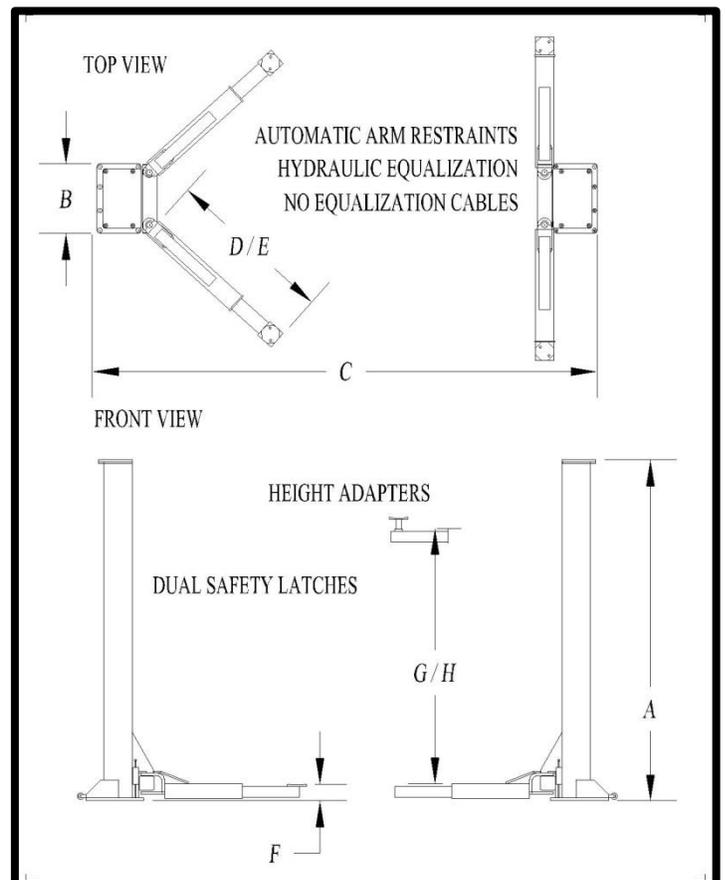
Rotary Hammer Drill Or Similar (If Anchoring)
 3/8" Masonry Bit
 1" Masonry Bit
 Hammer
 4 Foot Level
 Open End Wrench Set: Metric
 Socket & Ratchet Set: Metric

Hex Key / Metric Allen Wrench Set
 Large Crescent Wrench
 Large Phillips Screwdriver
 Chalk Line
 Medium Flat Screwdriver
 Tape Measure: 25 Foot Minimum

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.

Lifting Capacity	7000#
Max Capacity / Front Axle:	3500#
Max Capacity / Rear Axle:	3500#
Max Load per Arm:	1750#
A - Height Overall:	93.5"
B - Width Base Plate	18"
C - Outside of Base Plates:	74"-150" max
D - Arm Reach (Min.):	24"
E - Arm Reach (Max.):	53"
F - Min. Pad Height:	4.5"
G - Max Lift Height (Pad only):	72"
H - Max Height (With 3" Adapter):	77"
Motor:	110- VAC / 50-60 Hz. 1Ph.
Length of Hose(s):	144"
Time of full Rise:	30-Seconds
Individual Column Weight:	360#
Shipping Weight:	1011#
Shipping Dimensions:	16"x33"x97"



SAVE THESE INSTRUCTIONS

OWNER / EMPLOYER RESPONSIBILITIES

- Shall ensure that lift operators are qualified and that they are trained in the safe use and operation of the lift using the manufacturer's operating instructions
- Shall establish procedures to periodically inspect the lift in accordance with the lift manufacturer's instructions
- Shall establish procedures to periodically maintain the lift in accordance with the lift manufacturer's instructions.
- Shall maintain the periodic inspection and maintenance records recommended by the manufacturer
- Shall display the lift manufacturer's operating instructions; in a conspicuous location in the lift area convenient to the operator.
- Shall not modify the lift in any manner without the prior written consent of the manufacturer.
- Shall provide necessary lockout / tagout means for energy sources per ANSI Z244.1-1982 (R1993), safety requirements for the lockout / tagout of energy sources, before beginning any lift repairs.

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 National Auto Tools, Inc. lifts are supplied with concrete fasteners meeting the criteria for this specific application.
- 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 cautions may lead to serious personal injury or death to operator or bystander or damage to property.
- I understand that National Auto Tools, Inc. 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.

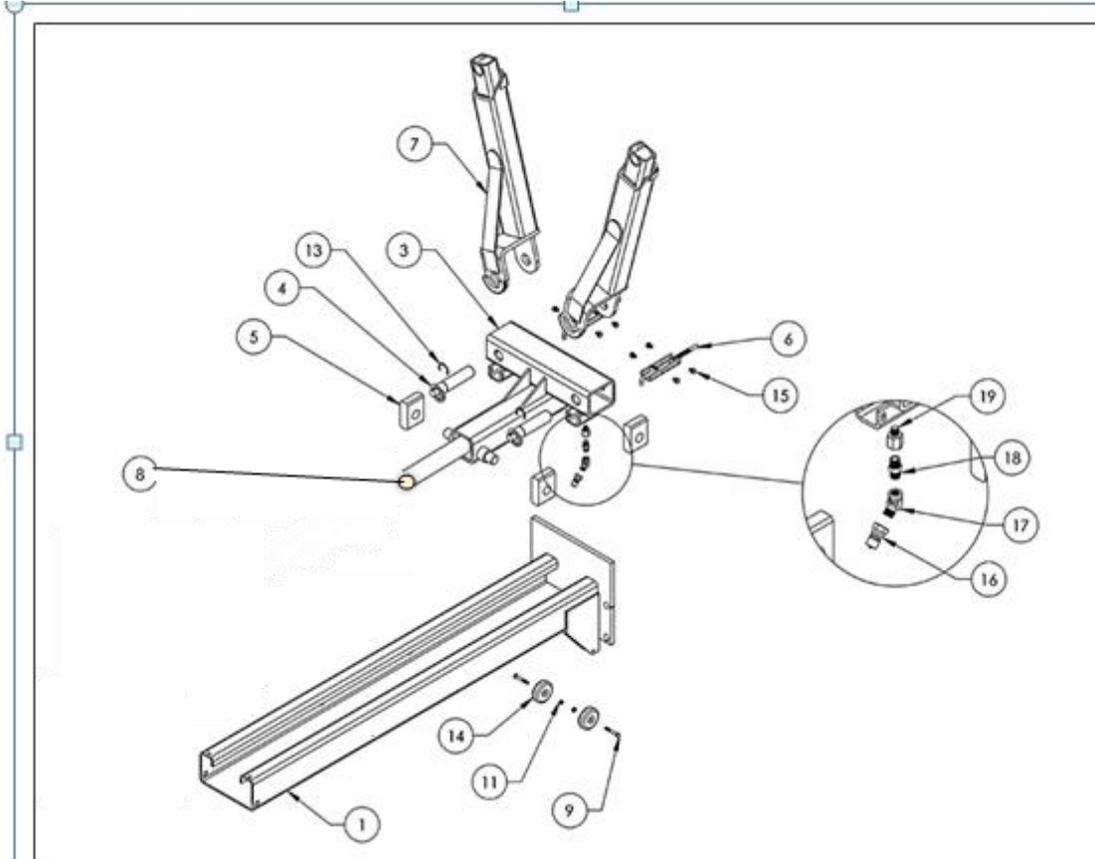
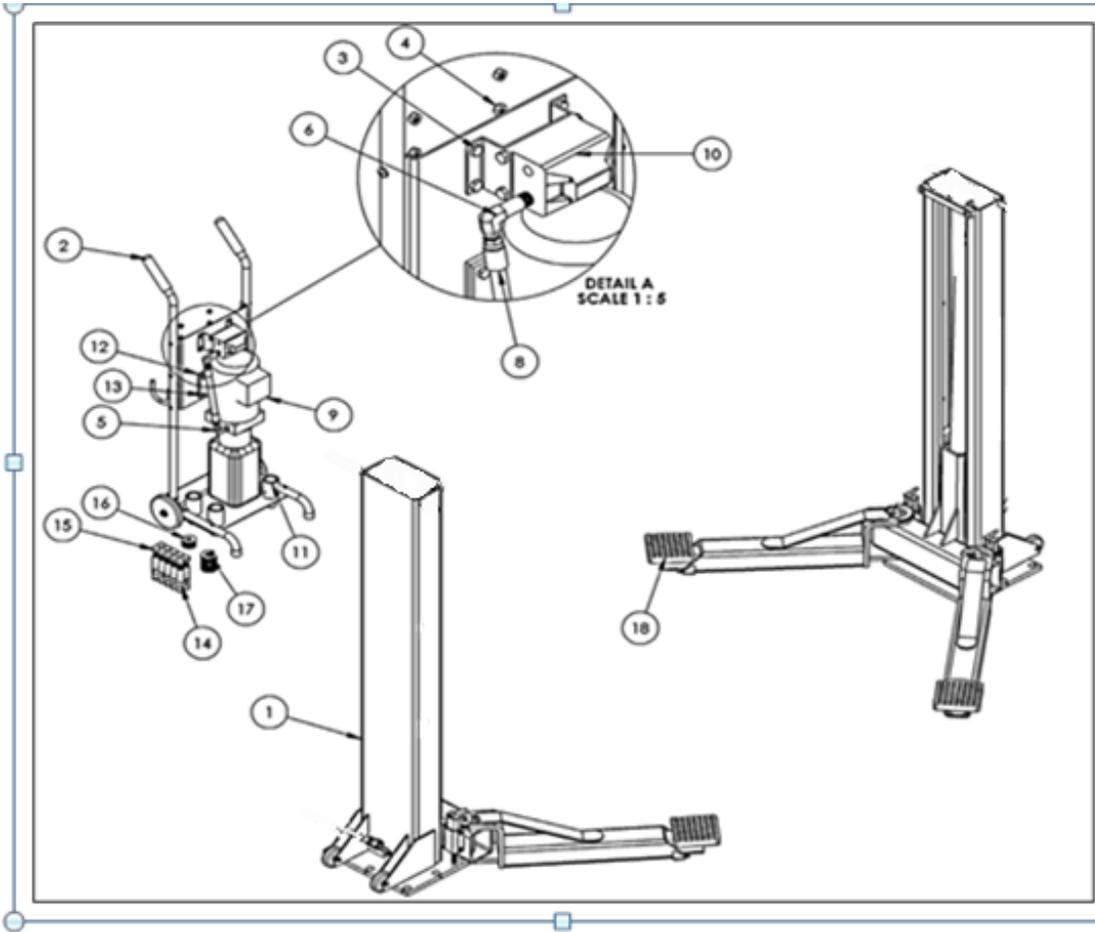
PARTS LIST

ASSEMBLY

ITEM NO	PART NUMBER	DESCRIPTION	QTY
1		POST ASSEMBLY	2
2		POWER UNIT STAND ASSEMBLY	1
3		M8 x 20 HEX HEAD BOLT	4
4		M8 NYLON LOCK NUT	8
5		90~ LONG 6801-LL-06-06-NWO	1
6		MALE 90° ELBOW, EXTRA LONG 2501-LL-06-06	1
7		HYD. HOSE ASSEMBLY Ø10 x 4520mm	2
8		HYDRAULIC HOSE ASSEMBLY Ø10 x 295mm	1
9		110 VOLT, 1HP POWER UNIT	1
10		HYDRAULIC FLOW DIVIDER	1
11		SHORT LIFT PAD EXTENSION	4
12		POWER UNIT VIBRATION DAMPENER	1
13		M8 x 25 HEX HEAD BOLT	4
14		SLIP ON LIFT PAD ASSEMBLY	4

POST ASSEMBLY

ITEM NO	PART NUMBER	DESCRIPTION	QTY
1		POST WELDMENT	1
2		SAFETY PIN ASSEMBLY	1
3		LIFT HEAD WELDMENT	1
4		LIFT HEAD PIN WELDMENT	2
5		SLIDE BLOCK	4
6		ARM LOCK ASSEMBLY	2
7		ARM WELDMENT	2
8		CYLINDER ASSEMBLY Ø2.0 x 42	1
9		HEX HEAD BOLT M8 x 55mm	2
10		M10 x 45 HEX HEAD BOLT	2
11		M8 NYLON LOCK NUT	2
12		M10 NYLON LOCK NUT	2
13		C RING Ø38mm OD 5103-150	2
14		WHEEL	2
15		SERRATED HEX FLANGE SCREW M8 x 12	8
16		3/8-18 NPT MALE QUICK DISCONNECT COUPLING	1
17		45° STREET ELBOW 5503-06-06	1
18		HEX NIPPLE 5404-06-06	1
19		STRAIGHT EXPANDER 5405-04-06	1
20		POST CAP	1



INSTALLATION INSTRUCTIONS

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.

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 41° -104° F.
5. Lift is designed for **INDOOR INSTALLATION ONLY.**

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.

DANGER

DO NOT install this lift on any asphalt surface or any surface other than concrete.

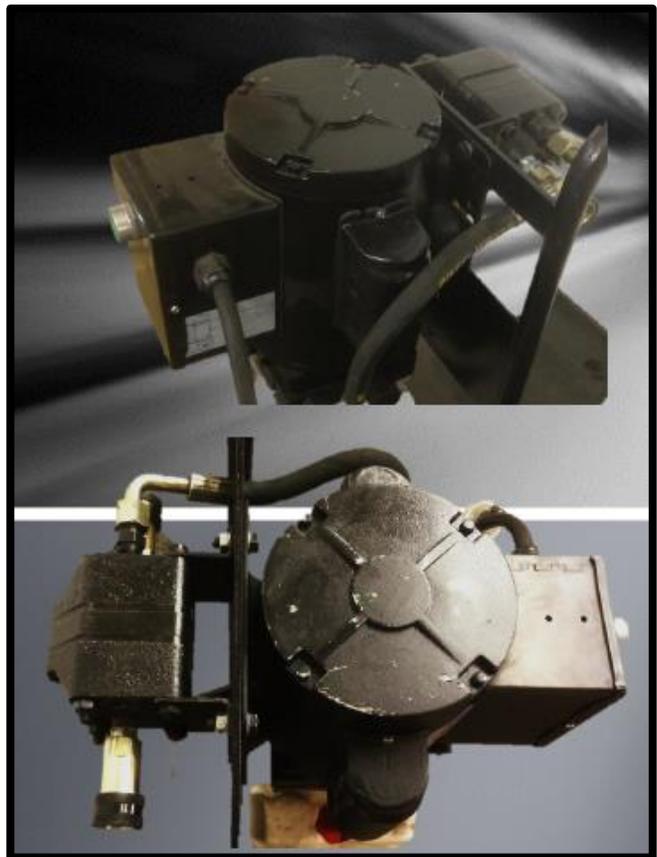
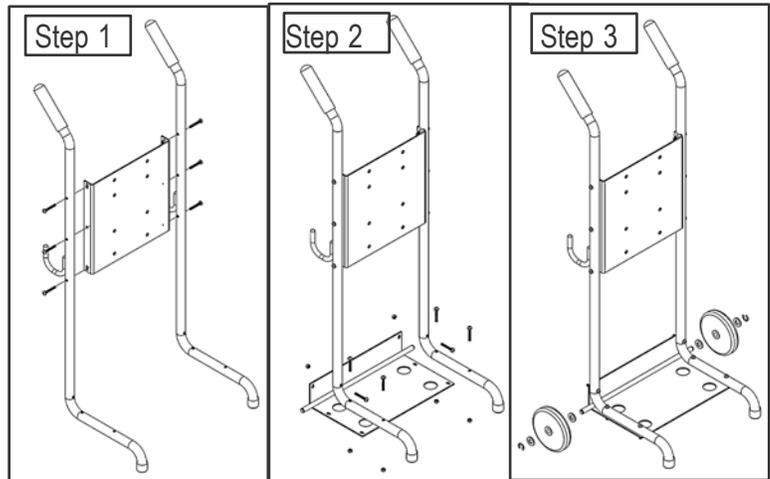
DO NOT install this lift on expansion seams or on cracked or defective concrete.

DO NOT install this lift on a second / elevated floor without first consulting building architect.

DO NOT install this lift outdoors.

Mounting The Hydraulic Power Unit

1. Assemble cart as shown in the figured below:
2. After installing the cart wheels, attach the power unit and rubber power unit dampener pad to the power unit cart using the four 8 x 25mm hex bolts and nylon lock nuts supplied.
3. Attach the hydraulic flow divider to the power unit cart using the four 8 x 20mm hex bolts and nylon lock nuts supplied.
4. Install flow divider with the "in" port on the bottom left corner.
6. Remove the plastic plug in the "IN" port on the flow divider. In- stall the long 90 degree npt fitting in that port. Use teflon tape on pipe threads only. When tightening the fitting, tighten by hand first and then using a wrench turn 3 full turns past hand tight.
6. Remove the plastic plug from the power unit. Install the long 90 degree o-ring fitting.
7. Attach the short power unit hose as shown. Do not use teflon tape on the JIC fittings.



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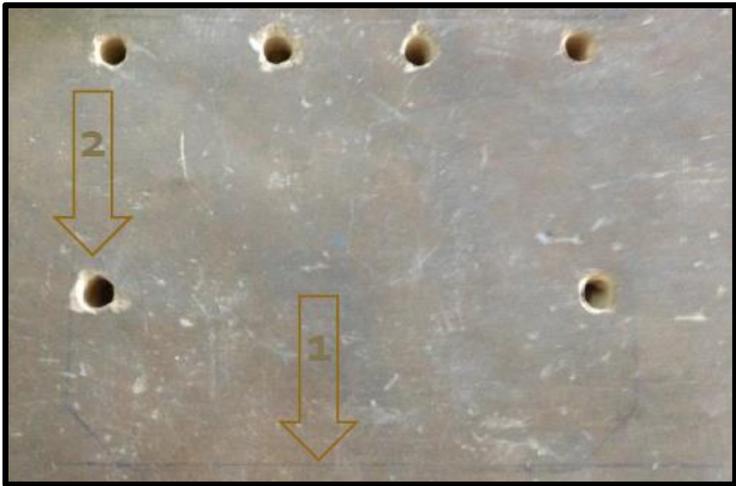
1. Based on the vehicles you will be servicing and the size of the shop space determine the desired width and location of the lift.
2. Once a location is determined, use a carpenter's chalk line to layout a grid for the post locations. Keep all dimensions and squareness within 1/8" or malfunctioning of the lift can occur.
3. After the post locations are properly marked, use a chalk or crayon to make an outline of the columns on the floor at each location using the post base plates as a template.
4. Double check all dimensions and make sure that the layout is perfectly square.

Note: Wide or narrow installation is possible. The lift can be installed at a width that suits the vehicles you will be raising. You may even choose to install additional anchors at varied column positions for adaptability to multiple vehicle configurations. 48"-115"

Installing Anchors

Before proceeding, double check location and measurements, make certain that the base plates of each column are aligned with the chalk.

Using the base plate on the column as a guide, hold the drill perpendicular to the concrete surface and drill pilot anchor holes in the concrete approximately 2" deep using a rotary hammer drill and 3/8" concrete drill-bit.



Move the column out of the way.

Hold the drill perpendicular to the concrete surface drill out the pilot holes to a minimum depth of 4" deep using a rotary hammer drill and 1" concrete drill-bit

After drilling, thoroughly clean hole using a vacuum cleaner.

Drop inserts for **Powers 6312SD 3/4" Smart Drop In Anchor** in to holes with **threads facing up**.



Drive anchor insert into hole with blunt hammer.



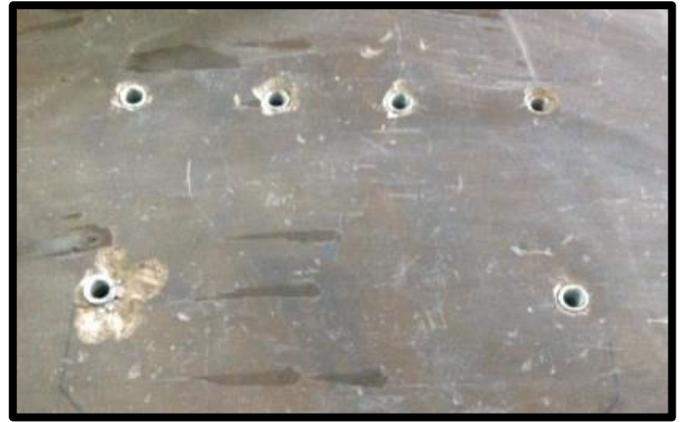
Expand inserts with driver to secure.



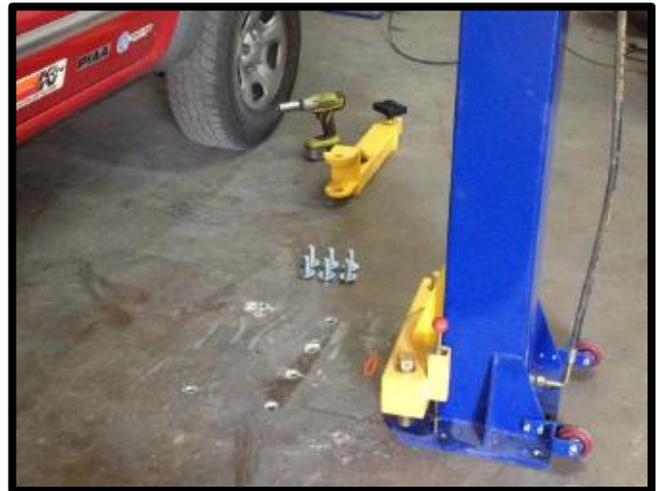
Use blunt hammer to expand insert.



Threaded inserts installed and ready to use.



Set leg near mounting holes.



Roll Lift Into Position



Check For Proper Hole Alignment

Some Reaming May Be Necessary If the Holes are Not Exact



Start All 6 Bolts to Insure Proper Fit



Tighten All 6 Bolts In a Cross Pattern.

If shimming is required, insert the shims as necessary under the base plate so that when the provided 3/4" x 2" anchor bolts are tightened, the columns will be plumb both side to side and front to rear.

With the shims and anchor bolts in place, tighten all 3/4" x 2-1/2" anchor bolts tight to the base plate. Turn 3 to 3-3/4 turns. Do not use an impact wrench for this procedure.

Note:

It will be helpful to mark on or otherwise note the location of shims used at each anchor to assist at time of reinstallation.



WARNING

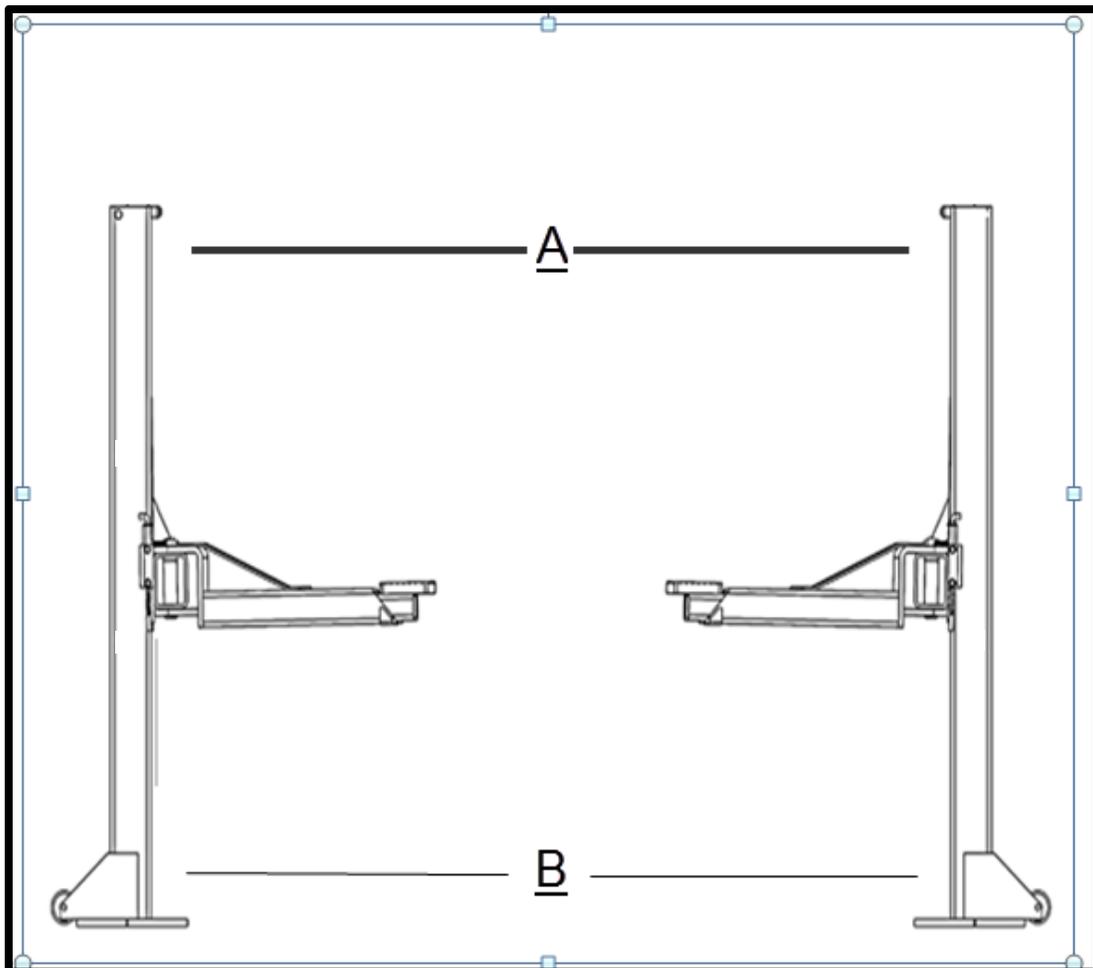
Inspect all anchors for proper setting and or damage each time the lift is re-installed. Inspect the concrete for cracks defects and/or damage. Do not reinstall the lift if any of the anchors are defective or the concrete is cracked or defective.

WARNING

It may be necessary to shim the columns to ensure that the columns are plumb. The columns must be plumb and square or damage or injury may occur when using the lift. Do not exceed 1/8" total shim thickness when using the supplied Drop in anchors.

WARNING**IMPORTANT LEVELING INSTRUCTIONS**

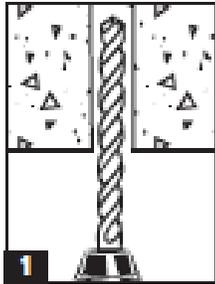
Before operating your lift, check to make sure both "A" and "B" measurements are equal. The lift arms must be level before operation. If your lift arms are not level, shim the columns as required.



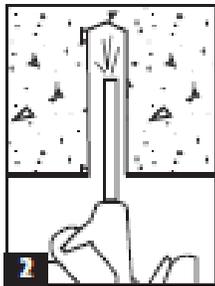
Powers 6312SD 3/4" Smart Drop In Anchor Installation Below

If additional information is of interest visit: <http://www.powers.com/pdfs/mechanical/6312SD.pdf>

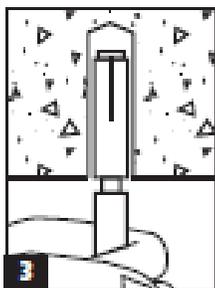
Manual Installation



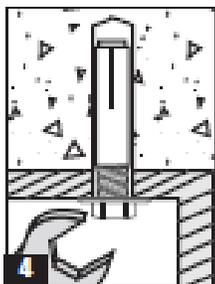
1. Drill a hole into the base material to the depth of embedment required. The tolerances of the drill bit used must meet the requirements of ANSI Standard B212.15. Use any ANSI Standard carbide drill bit.



2. Blow the hole clean of dust and other materials. Insert the anchor into the hole and, if necessary tap flush with surface.

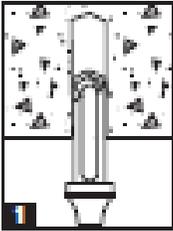


3. Using a Powers manual setting tool specifically, set the anchor by driving the tool with a sufficient number of hammer blows until the shoulder of the tool is seated against the anchor. Anchor will not hold allowable loads required if shoulder of Powers manual setting tool does not seat against anchor. Proper manual installation may not remove blue indicator paint.

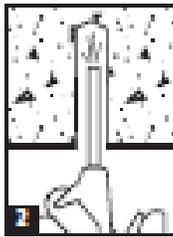


4. If using a fixture, position it, insert bolt and tighten so as not to exceed the maximum tightening torque. Most overhead applications utilize threaded rod. Minimum thread engagement should be at least one anchor diameter.

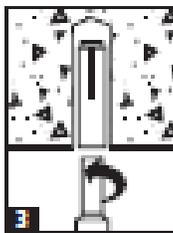
Smart DI+™ System Installation



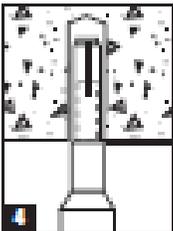
1. Drill a hole into the base material to the depth of embedment required using the appropriate Powers DI+™ Drill. The tolerances of the drill bit used must meet the requirements of ANSI Standard B212.15. Standard installation with a DI+™ Drill may result in the anchor being slightly subset from the surface. Minimum published embedment depths must be achieved by using the shoulder of the DI+™ Drill as a guide.



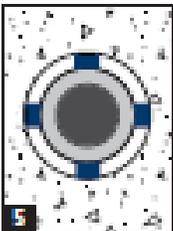
2. Blow the hole clean of dust and other materials. Insert the anchor into the hole and, if necessary, tap flush with the surface.



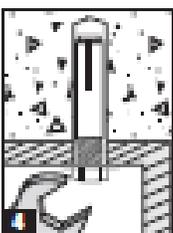
3. Slide the appropriate Powers DI+™ Tool over the DI+™ Drill used to drill the hole and twist counterclockwise to lock the setting tool onto the bit. If tool does not fit snug onto bit it may be necessary to replace the internal rubber spring plug in the tool (see ordering information). Replacement kit sold separately.



4. Once attached, insert the tip of the setting tool into the Smart DI+™ anchor and drive the internal plug fully using the rotation with hammer mode of the SDS+ drill (see table below for suggested tools).



5. For proper installation, the shoulder of the setting tool must come briefly in full contact with the Smart DI+™ resulting in the blue indicator paint being removed from the raised top of the anchor. The paint will remain in the recessed portion of the top indicating full expansion.



6. If using a fixture, position it, insert the bolt and tighten so as not to exceed the maximum tightening torque. Most overhead applications utilize threaded rod. Minimum thread engagement should be at least one anchor diameter.

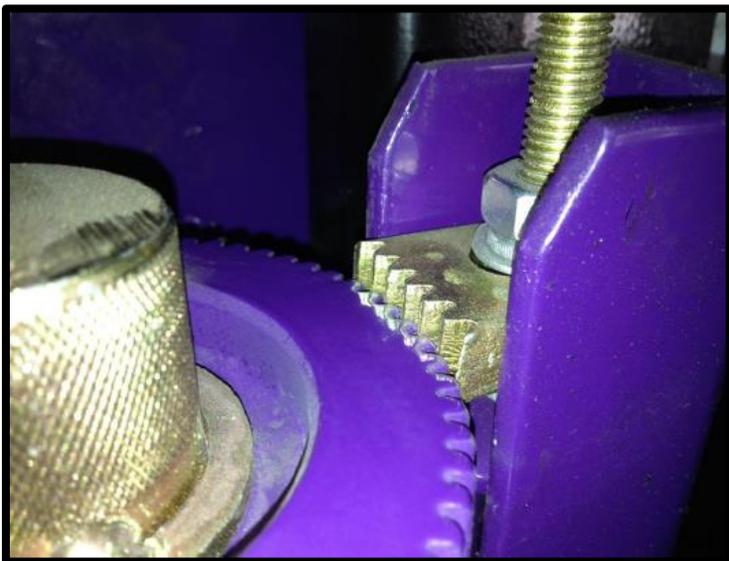
Install Arm and Pins



Install Arm Extension Slide Lock Bolts



Install Arm Lock Latches W/Spring,
Washer, and Retaining Pin On Bottom of Arm
Adjust Arm Locks So The Teeth Interlock
When The Lift Is Raised



Connecting Hydraulic Lines

1. Thread the male quick disconnect fittings onto the rear cylinder fittings using teflon tape on the pipe threads.
2. Thread one end of the male npt hose fitting into one of the top ports of the flow divider. Turn until 80ft-lbs of torque. Do this with both hoses.
3. Install the female quick-disconnect fittings at each of the other male npt hose ends.
4. Recheck all fitting connections to make sure they are properly tightened before proceeding.
5. Position the power unit stand at the front or rear of the vehicle.
6. Connect the free end of each cylinder hose assembly to the quick disconnect fitting at the base of each cylinder.



Hydraulic Power Unit Set Up

1. Fill the power unit reservoir with 7 quarts of 10 weight hydraulic oil or dexron III automatic transmission fluid. Make sure the funnel used to fill the power unit is clean. An additional 1.5 Quarts should be added after initial bleeding, at 1/3 or 1/2 full lift height. Do not add additional quarts when lift is lifted to full height.
2. The standard power unit for your lift is 110/220 volt, 50/60hz, single phase. The lift should be plugged into a dedicated circuit with a 30 amp circuit breaker.

All wiring must be performed by a certified electrician only.

SEE WIRING INSTRUCTIONS AFFIXED TO MOTOR FOR PROPER WIRING INSTRUCTIONS.

RISK OF EXPLOSION!

This equipment has internal arcing or parts that may spark and should not be exposed to flammable vapors. The motor should not be located in a recessed area or below floor level.

IMPORTANT

- **DO NOT** run power unit with no oil. Damage to pump can occur.
- The power unit must be kept dry. Damage to power unit caused by water or other liquids such as detergents, acid etc. , is not covered under warranty.
- Improper electrical hookup can damage the motor and will not be covered under warranty.
- Motor cannot run on 50HZ without a physical change in the motor.
- Use a separate breaker for each power unit.
- Protect each circuit with a time delay fuse or circuit breaker.
- For 110-120 volt, single phase, use a 30 amp breaker.

- For 208 -230 volt, single phase, use a 25 amp breaker.
- For 208-230 volt, three phase, use a 20 amp breaker.
- For 380-440 volt, three phase, use a 15 amp breaker.

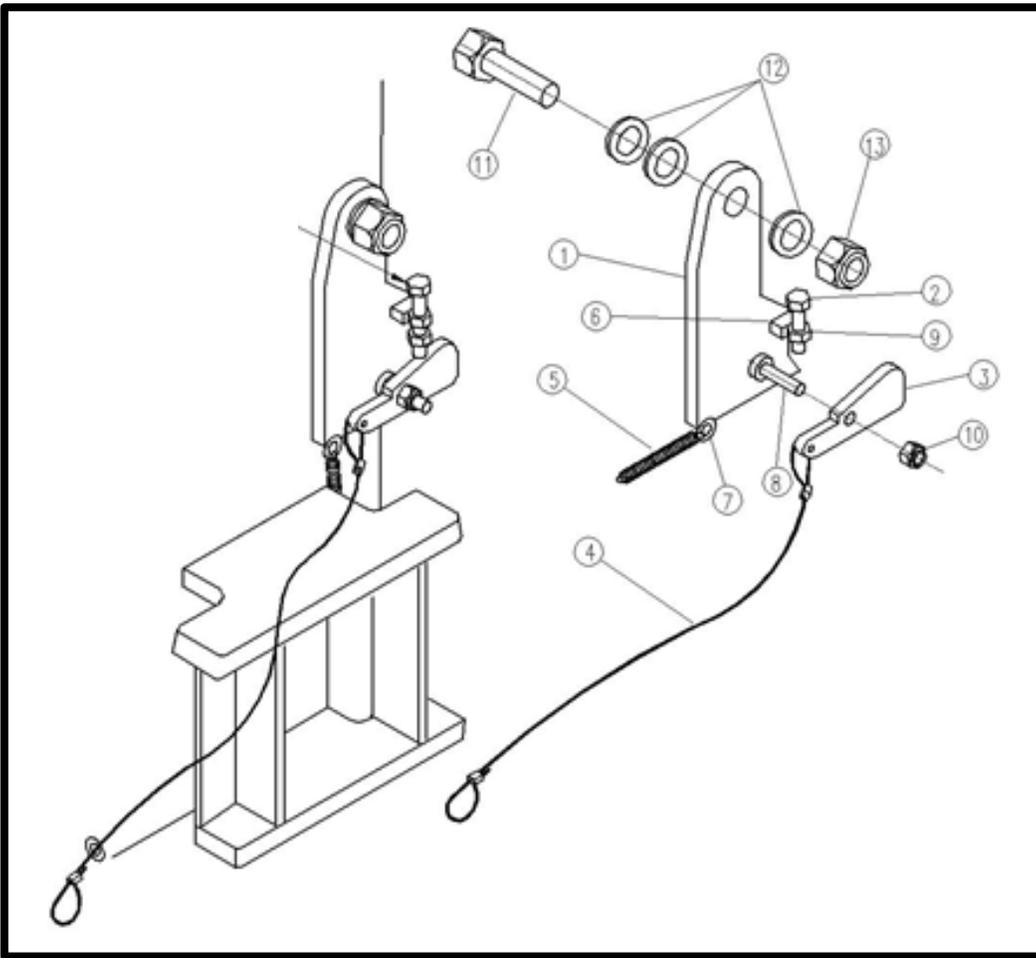
Lift Start Up / Final Adjustments

During the START-UP procedure, observe all operating components and check for proper installation and adjustment. DO NOT attempt to raise vehicle until a thorough operational check has been completed.

1. Spray the inside of the columns where the slide blocks glide with a white lithium grease or equivalent
3. Test the power unit by pressing the push-button switch. If the motor sounds like it is operating properly, raise the lift a few inches and check all hose connections for leaks. If the motor gets hot or sounds peculiar, stop and check all electrical connections.
4. Continue pressing the raise button until the lift starts to move.

Check safety latch Safety Latch Adjustment

- Do not make any adjustments with anything on the lift.
- If the safety latch in either leg does not operate, use the following procedure to adjust it:
- Raise the lift until you can see the latch through the access hole in side of the column.
- Do not set lift on latch. Allow the hydraulic system to hold the lift up.
- Pull the latch forward with a screwdriver.
- If the latch is not working during ascent, tighten the adjustment bolt one full turn and test latch – follow this procedure until latch operates.
- If the latch is not working during descent, loosen the adjustment bolt one full turn and test latch – follow this procedure until latch operates.
- Latch and or cable adjustments are normal maintenance and not a warranty item.
- See part diagram next page.



ITEM #	NAME	DESCRIPTION
13		NYLON LOCKNUT 3/4"-16
12		WASHER 3/4 SAE
11		3/4"-16 X 2 1/2 HEX BOLT GR 5
10		3/8"-16 NC NYLON LOCK NUT
9		3/8"-16 NC HEX NUT
8		3/8"-16 NC x 1-3/8 HEX BOLT
7		WASHER 3/8" FLAT
6		HR 3/8 X 1/2 FLT X 1"
5	SAFETY LATCH SPRING	
4	PULL CABLE	
3	RESET CAM	3/8"x1 3/4"x4 1/4" PL
1	LATCH PLATE	1/2"x4"x8 1/2 PL w/ hole

WARNING

- KEEP HANDS AND FEET CLEAR of lift when operating.
 - Avoid pinch points.
5. Raise the lift half way until the lift arms are approximately 24” off the floor.
 6. Loosen the bolts on the Arm Restraints. Adjust the Arm Re- straints so the gears mesh firmly and smoothly. Tighten the Arm Restraint Bolts. Apply a small amount of grease to the gears. (See figure 22)

Bleeding

1. *****ALWAYS*****

When Bleeding the Air From The Lift You Must Follow These Steps

- Fill Hydraulic Reservoir $\frac{3}{4}$ Full
- Raise Lift $\frac{1}{4}$ Way Up, Then Lower
- Raise Lift $\frac{1}{2}$ Way Up, Then Lower
- Raise Lift $\frac{3}{4}$ Way Up, Then Lower
- Raise Lift Fully, Then Lower
- Let Sit For Air To Dissipate From Fluid
- Repeat Until Bubbles No Longer Form In Hydraulic Fluid Reservoir.

DANGER

The lift will move down when bleeding - make sure all equipment, personnel, hands and feet are clear before bleeding.

Press the power unit raise button until both cylinders reach their full stroke. Do not continue pressing the raise button after lift reaches full height damage to the motor and / or flow divider can occur if continued.

WARNING

DO NOT use lift if an unlevel lifting condition occurs at the arm pad locations that is greater than 3-de- grees or 1.5”. If an unbalanced condition occurs, Follow the bleeding instructions shown on this page or consult factory. The lift must be re-leveled, shimmed and bled each time the lift is reinstalled. Failure to follow these instructions can result in serious injury or death.

Post Installation Check Off

- Columns are properly shimmed and stable
- Anchor bolts are tightened
- Pivot pins are properly attached
- Electric power supply confirmed
- Top Plate installed and bolts tight
- Safety locks function properly
- Check for hydraulic leaks
- Oil level
- Lubcation of critical components
- Check for overhead obstructions
- Lift arms are level
- Arm restraints properly adjusted
- All screws, bolts, and pins are secured
- Surrounding area is clean
- Operation, maintenance and safety manuals on site.

Operation

To raise lift;

1. Load the vehicle onto the lift using vehicle lifting guide to determine proper lifting points.
2. Never use lift pad assemblies without rubber slip over pads in place.
3. Set the parking brake or use a wheel chock to hold the vehicle in position.
4. Before raising vehicle, be sure all personnel are clear of the lift and surrounding area. Pay careful attention to overhead clearances.
5. Raise the lift to the desired height by pressing the push button on the power unit.
6. After the vehicle is raised to the desired height, - double check the latches before working under the carriage. Make sure carriage the chain is not kinked. Be sure each carriage is at the same height by measuring from the top of the base to the bottom of the c should be within 1/4". Check to insure the cylinders are properly seated onto base plate.

TO LOWER LIFT;

1. Before lowering vehicle, be sure all personnel are clear of the lift and surrounding area. Pay careful attention to overhead clearances. Insure all tools and equipment have been cleared from under the lift.
2. Raise the lift off of the safety lock bars by pressing the push button on the power unit. Make sure you raise the lift by at least one inch to allow adequate clearance for the safety bars to be removed. Remove lock bars.
3. Push the lowering handle on the power unit until the lift has descended completely.

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 both lock bars are removed.

WEEKLY MAINTENANCE

1. Lubricate all moving parts with white lithium grease.
2. Check all connections, bolts and pins to insure proper mounting.

MONTHLY MAINTENANCE

1. Make a visual inspection of all moving parts and check for excessive signs of wear.
2. Check condition of lift pads and adapters.
3. Check condition of arm restraints. Adjust as necessary.
4. Replace all faulty parts before lift is put back into operation

TO RAISE LIFT

- Always follow the bleeding instructions outlined in the manual prior to using your lift.
- Read operating and safety manuals before using lift.
- Always lift vehicle according to manufacturer's recommended lifting points.
- Position vehicle between columns. Adjust swing arms so that vehicle is positioned with the center of gravity midway between pads.
- Position lift contact pads at manufacturers recommended lifting points.
- Use truck adapters as needed. Never exceed 6" of pad / adapter height.
- Raise lift by pressing raise button on power unit until contact pads make contact with the underside of vehicle.
- Recheck to make sure vehicle is secure.
- Raise vehicle to desired working height then press power unit
- Lowering handle until lift carriages rest onto nearest safety lock position.
- Maintain visual contact with vehicle and surrounding area at all times while raising lift.
- Stop immediately if load shifts or becomes unlevel.
- Always ensure safety lock bar(s) are installed before any attempt is made to work on or near vehicle.
- Always ensure contact pads are making full contact with vehicle before attempting to work on or near vehicle.

TO LOWER LIFT

- Raise lift by pressing raise button on power unit. Elevate lift at least one inch to allow lock release
- Release both safety locks .
- Be sure tool trays, stands or personnel are removed from under vehicle.
- Lower vehicle by pressing power unit lowering handle until lift has descended completely
- Maintain visual contact with vehicle and surrounding area at all times while lowering lift.
- Stop immediately if load shifts or becomes unlevel.
- Before removing vehicle from lift area, position lift arms to provide unobstructed exit.
- Never, drive over lift arms.

REQUIRED MONTHLY MAINTENANCE

- Always consult operation manual for factory recommended maintenance.
- Check arm restraints for proper operation.
- Check all bolts and pins to ensure proper mounting.
- Visually inspect safety lock bar(s).
- Visually inspect concrete floor. Do not use lift if concrete foundation shows signs of deterioration.
- Inspect all anchor bolts.
- Inspect all lift pads, replace if necessary.

WARNING

- Do not use lift if an unlevel lifting condition occurs at the arm pad locations that is greater than 3-degrees or 1.5".
- Warning: if anchor bolts are loose, or any component of the lift is found to be defective, do not use lift!
- Install and inspect all quick connect/disconnect hose ends before any attempt is made to raise vehicle.
- Securely tighten all anchor bolts prior to operation.
- Never operate the lift with any person or equipment below.
- Never exceed rated capacity.
- Always ensure safety latches are engaged before any attempt is made to work on or near vehicle.
- Never leave lift in an elevated position unless the safety latches are engaged.
- Do not permit electric motor to get wet! Motor damage caused by dampness is not covered under warranty

SAFE LIFT OPERATION

Safe use is critical in preventing injuries and damage. Safe operation of automotive lifts requires that only trained operator should be allowed to use the lift.

TRAINING SHOULD INCLUDE, BUT NOT LIMITED TO:

- Proper positioning of the vehicle on the lift arms. (See manufacturers minimize wheel base loading requirements.)
- Use of the operating controls and 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 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.

DANGER

- **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 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, and 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 this 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 Removal

1. Depress the lowering valve on the power unit.
2. Ensure that the lift is lowered all the way to the ground.
3. Disconnect the power unit from the power source and / or ensure that the power to the circuit is shut off to prevent accidental powering on of the lift while disassembling.
4. Disconnect the cylinder hoses from the cylinder. Hoses can be coiled and stored in the power unit cart.

WARNING

Before removing cylinder hoses, always ensure that the hydraulic pressure has been relieved from the system by depressing the lowering valve until the lift is fully lowered or the raised load is fully settled onto the safety lock bars. Never connect or disconnect the hoses with the lift in an elevated non-locked position.

DANGER

Do not perform any maintenance or installation of any components without first ensuring that electrical power has been disconnected at the source or panel and cannot be re-energized until all maintenance and / or installation procedures are completed.

5. Be careful to clean up any spilled hydraulic fluid that may drip from the hose assemblies.
6. Remove the lift arm assemblies.
7. Loosen the anchor bolts. Be careful not to disturb the lift column until ready to move the column.
8. Move the column to your storage area. Secure with straps or other device to prevent any accidental tipping or movement of the columns during storage.

Lift - Re-Installation

1. Clear installation area of debris, tools and equipment.
2. Blow out the mounting holes with compressed air.
3. Inspect the drop in anchors for proper setting and the concrete for defects and / or damage.
4. Line up the holes of the Base Plates. Re-shim the lift as required to ensure the lift is installed level.
5. With the Shims and Anchor Bolts in place, tighten all Anchor Bolts tight to the base plate. Do not use an impact wrench for this procedure.
6. Follow all procedures as outlined in steps 8 - 12

WARNING

Inspect all anchors for proper setting and or damage each time the lift is re-installed. Inspect the concrete for cracks defects and / or damage. Do not reinstall the lift if any of the anchors are defective or the concrete is cracked or defective.

DANGER

The lift must be re-leveled, shimmed and bleed each time the lift is reinstalled. Failure to do so may result in Injury or death.

CAUTIONS

*Never Start a Hydraulic Pump Under Pressure, Always start From Ground Or Leg Locks. Starting a Motor Under Load Can
Damage Motor.

NOTE

*Mobile Lifts Use Hydraulic Proportioning to lift and Lower Vehicles, Always Slowly Release Vehicle From the Lifted Position to Reduce Side to Side Rocking as the Valve Initiates Fluid Transfer!

TWO-POST LIFTS/FOUR-POST LIFTS WARRANTY

- ✓ Five Years (60-Months) Warranty on the lift structure
- ✓ One Year (12-Months) Warranty on the hydraulic cylinder(s) and power unit
- ✓ One Year (12-Months) Warranty on operating components
- ✓ 90 day (3-Months) Free-Shipping* on ground-freight charges related to warranty performance

Limited Warranty

1. Who gives this warranty (Warrantor): NAT Inc., 5217 Azle Ave. Fort Worth, TX 76114
2. Who receives this warranty (Purchaser): The original Purchaser (other than for purpose of resale)
3. What products are covered by this warranty: Any Triumph Two-Post or Four-Post Vehicle Service Lift**
4. What is covered under this warranty: manufacturer defects due to material and/or workmanship with the exceptions noted below.
5. What is not covered under this warranty:
 - a. Any failure that results from Purchaser's abuse, neglect or failure to operate, maintain or service product in accordance with instructions provided in the owner's manual(s) supplied
 - b. Any damage caused by overloading lift beyond rated capacity
 - c. Items or service normally required to maintain the product, i.e. lubricants, oil, etc.
 - d. Items considered general wear parts such as rubber pads, lifting cables, etc. unless wear or failure is a direct result of manufacturer defect due to material and/or workmanship
 - e. Any component damaged in shipment or any failure caused by installing or operating lift under conditions not in accordance with installation and operation guidelines or damaged by contact with tools or surroundings
 - f. Motor or pump failure caused by rain, excessive humidity, corrosive environments or other contaminants
 - g. Rusted components due to improper maintenance or corrosive environments
 - h. Cosmetic defects that do not interfere with product functionality
 - i. Damage due to incorrect voltage or improper wiring
 - j. Any incidental, indirect, or consequential loss, damage, or expense that may result from any defect, failure, or malfunction of NAT Inc. product
 - k. All electrical components (excluding power unit) are guaranteed for one year against defects in workmanship and/or materials when the lift is installed and used according to specifications.
6. Responsibilities of Warrantor under this warranty: Repair or replace, at Warrantor's option, component which is defective, has malfunctioned and/or failed to conform within duration of the warranty period.
7. Responsibilities of Purchaser under this warranty:
 - a. Provide dated proof of purchase and maintenance records
 - b. In some cases, components may be required to be shipped to the nearest Triumph Authorized Service Center. Freight costs, after 3-months, must be borne by the Purchaser.
 - c. Use reasonable care in the operation and maintenance of the products as described in the owner's manual(s).

8.*Free-shipping applies to direct shipping points within the 48 continental United States. Rural area shipping surcharge may apply for remote addresses. **For all Triumph brand Two-Post or Four-Post Vehicle Service Lifts (excluding specialty lifts, high rise, commercial parking, material handling, or models for particular purpose) manufactured on or following 1/1/2013.

Limitation of Liability Triumph/(NAT) shall have no obligation pursuant to this Warranty with respect to products which in our sole judgment have been altered, damaged, misused, abused, badly worn, lost or improperly maintained. In no event will either party be liable for any damage caused by the other party's failure to fulfill its responsibilities under these terms and conditions. In no event will either party be liable for any lost profits, lost savings, incidental damage, or other economic consequential damages. Triumph/(NAT) products are provided and sold as is without any express or implied warranties including warranties of merchantability or fitness for particular purpose. No warranties, expressed or implied, will apply after this period. Triumph may modify these terms and conditions at any time by either providing the customer with written notice or posting such revised terms on www.nationalautotools.com. Such revised terms shall be effective thirty days from the date of such written notice or posting.

In addition to all claims listed on each of the following individual WARRANTY pages, the following GENERAL DISCLAIMERS apply.

GENERAL DISCLAIMER

1. The purchaser of any Triumph or (NAT) product (Buyer) assumes the risk of verifying all materials or resources used or relied on. In no event will TRIUMPH/(NAT) be liable to the Buyer or to anyone else for any decision made or action taken in reliance on information obtained from any Triumph or (NAT) website or from any Triumph or (NAT) dealer, or third-party website, or any online or published catalog.
2. TRIUMPH/(NAT) has exclusive title and ownership rights including all intellectual property right throughout the world for all material and content contained on any Triumph or (NAT) website or from any Triumph or (NAT) online or published catalog.
3. TRIUMPH/(NAT) warrants that all products shown on any Triumph or (NAT) website or in any online or published catalog conform to TRIUMPH/(NAT) published specifications only and are free from defects in material or workmanship.
4. NAT websites may contain hypertext or other links to websites not owned or controlled by TRIUMPH/(NAT). Links to other computer systems or websites are not supervised nor regularly reviewed by TRIUMPH/(NAT). TRIUMPH/(NAT) specifically disavows legal responsibility for any information, personal opinions, guidance, advice or instruction that a Buyer receives from others or other websites.
5. Materials, design, specifications, images and other content from any Triumph or (NAT) website, or any other Triumph or (NAT) affiliate or dealer website, or any Triumph or (NAT) online or published catalog are subject to change. TRIUMPH/(NAT) takes no responsibility for improper use or any results thereof. TRIUMPH/(NAT) reserves the right to make changes to all published warranties, website content, or published content without incurring any obligation to notify the Buyer or public that changes were made.
6. TRIUMPH/(NAT) products are provided and sold as is without any express or implied warranties including warranties of merchantability or fitness for particular purpose.
7. NAT makes no promises, guarantees or assurances that our products meet any state, county, federal or international mandated permit, license, code, standard, certification, or any other mandate other than what is listed or shown on Triumph or (NAT) website(s), or any Triumph or (NAT) online or published catalog. Not all Triumph lift models meet the standards as prescribed by ANSI/ALI ALCTV- (current edition) or ANSI/UL 201. Buyer assumes full responsibility for any state, county, federal or international mandated permit, license, code, standard, certification, or any other mandate required related to the installation and/or operation of any Triumph or (NAT) product. TRIUMPH/(NAT) will not be responsible for any charges, fines, liens, or other levies imposed on the Buyer related to any special or regional structural, seismic or any other building code and/or codes such as the Uniform Building Code (UBC), International Building Code (IBC), or any other state, county, federal or international mandated permit, license, code, standard, certification, or other mandate, law, rule, regulation or directive by any other agency, government, administrations, or corporations whether state, county, federal, or international mandated.
8. In no event will TRIUMPH/(NAT) be liable for any special, incidental, or consequential damages based on breach of warranty, breach of contract, negligence, strict tort, or any other legal theory. Damages that TRIUMPH/(NAT) will not be responsible for include, but are not limited to: loss of profits; loss of savings or revenue; loss of use of the product or any associated equipment; cost of capital; cost of any substitute equipment, facilities, or services; downtime; the claims of third parties, including customers; and injury to property. This limitation does not apply to damages caused by breach of the warranty of title and against infringements or to claims for personal injury.
9. Unless modified in a writing signed by both parties, it is understood that TRIUMPH/(NAT) published [Warranties](#) and TRIUMPH/(NAT) [Terms and Conditions of Sale](#) are to be the complete and exclusive agreement (Agreement) between the parties superseding all oral or written prior agreements and all other communications between the parties relating to the subject matter of said Agreement, including statements made by salespersons. No employee of TRIUMPH/(NAT) or any other party is authorized to make any warranty in addition to those made in the Agreement. The buyer is warned, therefore, to check all [Warranties](#) and review in full detail the [Terms and Conditions of Sale](#) carefully to see that it correctly reflects those terms that are important to the Buyer.
10. The Agreement allocates the risks of product failure between TRIUMPH/(NAT) and the buyer. This allocation is recognized by both parties and is reflected in the price of the goods. Buyer acknowledges that they have read and fully understand the Agreement, and are bound by its terms. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to some Buyers. This warranty gives the Buyer specific legal rights. The Buyer may have other rights also which vary from State to State.
11. ANY ACTION FOR BREACH OF WARRANTY MUST BE COMMENCED WITHIN 60-DAYS FOLLOWING EXPIRATION DATE OF ANY WARRANTY PROVISION OR TERM.

