



INSTALLATION, OPERATION, & MAINTENANCE MANUAL



HD2P-11000AC
2 Post Lift

⚠ FOLLOW THIS MANUAL CAREFULLY TO ENSURE THE MACHINE WILL FUNCTION CORRECTLY AND PROVIDE MANY YEARS OF DEPENDABLE SERVICE. FAILURE TO FOLLOW THESE INSTRUCTIONS AND SAFETY WARNINGS MAY RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE. KEEP THIS MANUAL IN A SAFE DRY PLACE FOR FUTURE REFERENCE. KEEP THIS MANUAL IN A SAFE DRY PLACE FOR FUTURE REFERENCE.



TITAN MARKETING, LLC

PO Box 7069 Greenwood, IN 46142
1.888.908-4826 FAX (317) 215.2770
www.titanlifts.com

To Our Valued Customers:

Thank you for purchasing a Titan Lifts® product. We hope this high quality equipment provides you with years of dependable service.

It is unfortunate that rare situations may occur with the products you purchase from Titan Lifts®. We value your business as well as the trust you have and need to maintain your relationship with us. Titan Lifts® carries liability coverage that may protect our customers if a situation does occur. However, as in all accidents there must be proof of liability for a claim to be made. Our insurance company requires the following procedures be observed in order to consider a claim:

- A. The claimant must contact the Titan Lifts® distributor immediately with the facts of the situation.
- B. If any equipment is damaged, including vehicles or shop equipment, Titan Lifts® must be given the opportunity to send an impartial representative to the site for proper assessment of the situation.
- C. The Vehicle cannot be moved until either an impartial representative has reviewed the accident or clear and precise pictures are taken that reflect all the pertinent information for an impartial representative to be able to access the information from a distance. Titan Lifts® or its representatives must approve the pictures before anything can be moved.
- D. If any potential liability is determined on behalf of Titan Lifts®, two estimates must be submitted for damages to be reimbursed.

It is imperative that the claimant complies with these procedures, because without proper assessment of the situation a claim will be denied.

ARBITRATION NOTICE

The installation or use of this equipment shall constitute an acknowledgement that the user agrees to resolve any and all disputes or claims of any kind whatsoever, which relate in any way to the equipment, by way of binding arbitration, not litigation. No suit or legal action may be filed in any state or federal court. Any arbitration shall be governed by the Federal Arbitration Act, and administered by the American Mediation Association, Indianapolis Indiana. The maximum amount that an arbitrator may award and all damages shall not exceed the retail value of this equipment.

WARRANTY NOTICE

This equipment must be installed by a "Professional Installer" assembled and used in the manner according to the documentation provided to be covered by warranty.

Damaged or missing components must be reported within 72 hours of receipt to your freight carrier and to the distributor. Claims must be filed to cover cost.

If you have any questions or if we can be of any further assistance, please don't hesitate to contact a Titan Lifts® representative at 1-888-908-4826. Thank you for the opportunity to continue to serve your lift equipment needs.

CONTENT

1. Safety	Page 1
1.1 Introduction	Page 1
1.2 Safety Instructions for Commissioning	Page 1
1.3 Safety Instructions for Operation.....	Page 1
1.4 Safety Instructions for Maintenance.....	Page 3
1.5 Risks	Page 3
1.6 Description	Page 4
2. Unpacking and set-up	Page 5
2.1 Delivery & check of packages	Page 5
2.2 Lifting & handling.....	Page 5
2.3 Preparation.....	Page 5
3. Specifications	Page 6
4. Floor Requirements.....	Page 6
4.1 Select the site area	Page 6
4.2 Floor Requirements.....	Page 6
4.3 Concrete and Anchoring Information.....	Page 7
4.4 Anchoring tips.....	Page 8
5. Installation Instructions	Page 8-10
6. Operation Instructions	Page 11
6.1 Defects / Malfunctions.....	Page 11
6.2 Controls	Page 11
6.2.1 Up Controls	Page 11
6.2.2 Safety Lock Control.....	Page 11
6.2.3 Lowering Control	Page 12
6.3 Operation	Page 12
7. Maintenance.....	Page 14
7.1 Maintenance Schedule.....	Page 14
7.1.1 Daily	Page 14
7.1.2 Weekly.....	Page 14
7.1.3 Monthly.....	Page 15
7.1.4 Bimonthly	Page 15
7.1.5 Yearly	Page 15
7.1.6 Every Other Year	Page 16
7.2 Maintenance by the Operator.....	Page 16
7.2.1 Hydraulic System	Page 16
7.2.2 Greasing Points.....	Page 17
7.2.3 Operation and Wear Checks.....	Page 17
7.2.4 Lift Stability.....	Page 17
7.3 Cleaning	Page 17
8. Troubleshooting	Page 18
9. Owner / Employer Responsibilities	Page 19
10. Diagrams Fig. 1-11	Page 20-24
11. Parts Diagrams	Page 25-27

INSTRUCTIONS

1.SAFETY

1.1 INTRODUCTION



WARNING: READ ENTIRE MANUAL AND COMPLY WITH ALL SAFETY AND SERVICE PRECAUTIONS. DEATH, PERSONAL INJURY AND / OR PROPERTY DAMAGE MAY OCCUR IF INSTRUCTIONS ARE NOT FOLLOWED CAREFULLY.

Personal injury and property damage incurred due to non-compliance with these safety instructions are not covered by the product liability regulations.

SYMBOLS



FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY.



FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PROPERTY DAMAGE.



IMPORTANT INFORMATION.

1.2 SAFETY INSTRUCTIONS FOR COMMISSIONING

- The lift may be installed and commissioned by authorized service personnel only.
- The standard lift version may not be installed and commissioned in the vicinity of explosives or flammable liquids, outdoors or in moist rooms (e.g. car wash).

1.3 SAFETY INSTRUCTIONS FOR OPERATION

- Read this entire manual.
- Load should not exceed rated capacity for this lift – 11,000 lbs. (2,750 lbs per lift arm)
- Only trained authorized personnel over the age of 18 years should operate the lift.
- Indoor use recommended.
- Always lift the vehicle using all four arms.
- Never use the lift to raise one end or one side of vehicle.

- Maintain a safe working environment. The work area should be clean, dry, clutter free, and sufficiently lit.
- Vehicle doors should be closed during the raising and lowering cycles.
- Closely watch the vehicle and lift during the raising and lowering cycles.
- Do not operate the lift in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power equipment can create sparks which may ignite flammables.
- Keep hands, tools, and other extremities from under carriage and moving parts.
- Never operate this lift with someone on it.
- Do not allow anyone on the lift or inside a raised vehicle.
- Keep children and bystanders away from work area. Do not let children operate or play on lift.
- Wear proper safety attire. Do not wear loose fitting clothing while operating lift. Long hair, jewelry and sleeves should be secured.
- Never leave the lift unattended while under a load.
- Do not operate this lift if under the influence of drugs, alcohol, or medication. Operator must be alert at all times when using heavy lift equipment.
- Comply with all applicable accident prevention regulations.
- Only use the vehicle manufacturer's recommended lifting points.
- After positioning the vehicle, apply the parking brake.
- Use caution when removing or installing heavy vehicle components which may result in center-of-gravity displacement.
- Use this lift only for the work it is intended. Do not use this product for an application for which it was not designed. Misuse can lead to personal injury and/or property damage.



WARNING: Prior to completely raising the vehicle, raise the vehicle 6" off the ground and check the adapter pads for solid contact by performing the "BUMPER TEST". Walk around the back of the vehicle and push up and down on the bumper. The vehicle will rock, but should not at any time lose contact with the pads. If the vehicle is bouncing off the pads or feels at all unstable, you should lower it back to the ground and reposition the pads to balance the load. Repeat this process until the vehicle is completely stable.



WARNING: Use this lift only in well ventilated areas. Carbon monoxide exhausted from running vehicle engines is a colorless, odorless fume that, if inhaled, can cause serious personal injury or death.



WARNING: People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.




WARNING: This product contains or produces a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm). (California Health & Safety Code 25249.5 et seq.)

1.4 SAFETY INSTRUCTIONS FOR MAINTENANCE

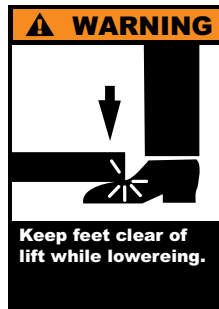
- Maintenance or repair work should be done by authorized service personnel only.
- Work on the electrical equipment by certified licensed electricians only.
- Ensure that ecologically harmful substances are disposed of only in accordance with the appropriate regulations.
- To prevent the risk of damage, do not use high pressure / steam jet cleaners or caustic cleaning agents.
- Do not replace or override the safety devices.

1.5 RISKS

 **WARNING:** Risks the personnel could encounter, due to an improper use of the lift, are described in this section.

CRUSHING RISKS

During lowering of runways and vehicles, personnel must not be within the area covered by the lowering trajectory. The operator must be sure no one is in danger before operating the lift.



BUMPING RISK

When the lift is stopped at relatively low height for working, the risk of bumping against projecting parts occurs.



RISK OF THE VEHICLE FALLING FROM THE LIFT

Vehicle falling from the lift can be caused when the vehicle is improperly placed on platforms, and when its dimensions are incompatible with the lift or by excessive movement of the vehicle. To avoid injury in this situation, immediately exit the work area.



1.6 DESCRIPTION

This lift is a 11,000 lbs. capacity, two-column lift. The safety system in this lift is attached to the back of the carriage to provide a single point release that saves time when operating. This lift is equipped with heavy-duty bearings and driven by two heavy-duty BL646 leaf chains, one per side. The hydraulic cylinders used are greater than 3" in diameter, providing more that 40% additional force than the traditional 2-1/2" diameter cylinders.

An electrical-hydraulic power unit included with the lift will provide up to 3000 Psi of hydraulic pressure to actuate the cylinders.

Please read the Safety Procedures and operation instruction in this manual before operating the lift.

Proper installation is very important. To minimize the chance of making an error in installation, please read this manual thoroughly before beginning installation. Check with building owner and/or architect's building plans when applicable. The lift should be located on a level floor with 4" 3000 psi concrete sufficiently cured for at least 30 days.

This is a vehicle lift installation / operation manual and no attempt is made or implied herein to instruct the user in lifting methods particular to an individual application. Rather, the contents of this manual are intended as a basis for operation and maintenance of the unit as it stands alone or as it is intended and anticipated to be used in conjunction with other equipment .

Proper application of the equipment described herein is limited to the parameter detailed in the specifications and the uses set forth in the descriptive passages. Any other proposed application of this equipment should be documented and submitted in writing to the factory for examination. The user assumes full responsibility for any equipment damage or personal injury that occurs as the result of alteration of the equipment described in this manual or any subsequent damages.

2. UNPACKING, & SET-UP

Only skilled personnel who are familiar with the lift and this manual shall be allowed to carry out, lifting, handling, transport and unpacking operations.

2.1 DELIVERY AND CHECK OF PACKAGES

When the lift is delivered, carefully unpack the lift making sure all the parts have been included. Check for possible damages due to transport and storage; verify that what is specified in the confirmation of order is included. In case of damage in transit, the customer must immediately inform the carrier of the problem.

Remove the lift and all parts from delivery pallet and place on a clean, solid, flat surface. Packages must be opened paying attention not to cause damage to people (keep a safe distance when opening straps) and parts of the lift (be careful the objects do not drop from the package when opening).

2.2 LIFTING AND HANDLING

When loading/unloading or transporting the equipment to the site, be sure to use suitable loading (e.g. cranes, trucks) and hoisting means. Be sure to hoist and transport the components securely so that they cannot drop, taking into consideration the package's size, weight and center of gravity and it's fragile parts.



LIFT AND HANDLE ONLY ONE PACKAGE AT A TIME

2.3 PREPARATION

The installation of this lift is relatively simple and can be accomplished by 2 men in a few hours. The following tools and equipment are needed:

1. ISO-32, AW-32, or AW-46 hydraulic oil or other premium quality ATF DEXRON-III / MERCON
2. Chalk line and 12' Tape Measure
3. Rotary Hammer Drill with 3/4" Drill Bit. Core Drill Rebar Cutter recommended
4. Transit and a 4' Level
5. Sockets and Open Wrench set, 1/2" thru 1-1/2"(1-1/8"for 3/4" Anchors)
6. Vise Grips

3. SPECIFICATIONS

Model	Description	Capacity	Lifting Time	Overall Height	Overall Width	Between Posts
HD2P-11000AC	Clear Floor/ Asymmetric	11,000 lbs	55 sec.	147 3/4"	145 5/16"	118 3/4"

4. FLOOR REQUIREMENT

These notes are for your guidance prior to installation

4.1 SELECTING THE SITE AREA

1. Make sure that adequate space and height is available.
2. Check for ceiling clearance (lifting height plus vehicle height).
3. Check for clearance in front and rear of vehicle on lift.
4. Check for overhead garage door clearance.

4.2 FLOOR REQUIREMENTS

Do not use the lift on any asphalt surface. Make sure the lift is used on a dry, oil/grease free, flat level CONCRETE surface capable of supporting the weight of the lift, the vehicle being lifted, and any additional tools and equipment. The concrete floor surface should have a minimum thickness of 4". The concrete must have a minimum strength of 3,000 PSI, and should be aged at least 30 days prior to use. Do not use the lift on concrete expansion seams or on cracked, defective concrete. There should be no cracks in the slab within a minimum of 36" of the base plate location.



WARNING: SPECIFICATIONS OF CONCRETE MUST BE ADHERED TO. FAILURE TO DO SO COULD CAUSE LIFT FAILURE RESULTING IN PERSONAL INJURY OR DEATH. THE FLOOR SHOULD BE A REINFORCED CONCRETE SLAB NOT LESS THAN 4" (101.6MM) THICK, COMPRESSIVE STRENGTH OF CONCRETE NO LESS THAN 3,000 PSI (20.68MPA).



DANGER: FOR CORRECT INSTALLATION OF THE LIFT, THE FLOOR MUST BE FLAT AND LEVEL. CHECK WITH STRAIGHT EDGE AND LEVEL. IF A FLOOR IS OF QUESTIONABLE SLOPE, CONSIDER A SURVEY OF THE SITE AND/OR THE POSSIBILITY OF POURING A NEW LEVEL CONCRETE SLAB.



IMPORTANT: NEW CONCRETE MUST BE ADEQUATELY CURED AT LEAST 30 DAYS MINIMUM. NO LIABILITY FOR ANY DAMAGES WILL BE ACCEPTED SHOULD YOU INSTALL THE LIFT ON AN UNSUITABLE FLOOR.

4.3 IMPORTANT CONCRETE AND ANCHORING INFORMATION

1. Concrete shall have compression strength of at least 3,000 PSI and a minimum thickness of 4" in order to achieve a minimum anchor embedment of 3-1/4". When using the standard supplied 3/4" x 5 1/2" long anchors, if the top of the anchor exceeds 2 1/4" above the floor grade, you DO NOT have enough embedment.

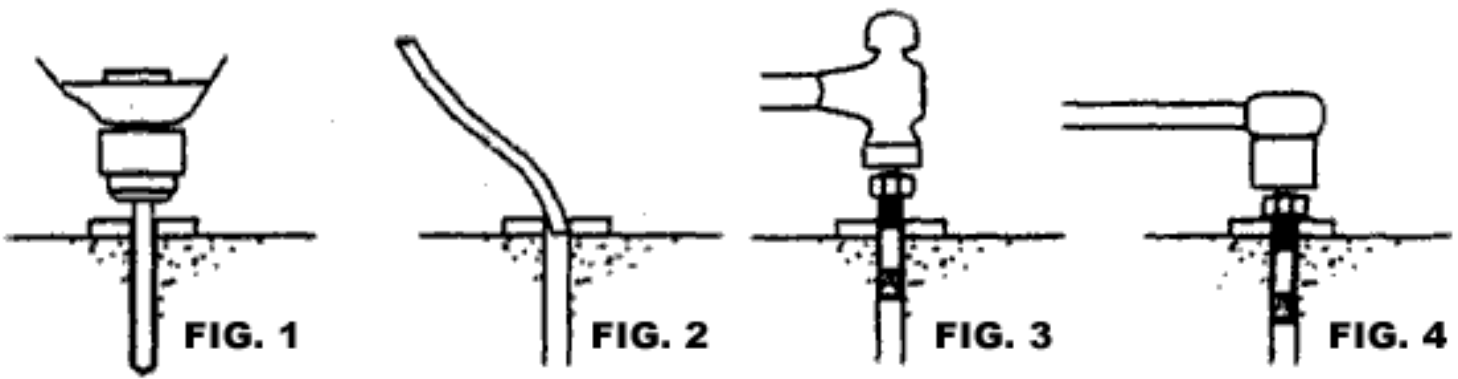
2. Before drilling 3/4" dia. Holes in concrete floor using holes in column base plate as guide. Make sure the hole distance from the edge is not less than 6". Hole to hole spacing should not be less than 6 1/2" in any direction. Concrete thickness or hole depth should be a minimum of 4"



3. **DANGER:** DO NOT Install on asphalt or other similar unstable surface. Columns are supported only by anchoring in floor.

4. Shim each column base until each column is plumb. If one column has to be elevated to match the plane of the other column, full size base shim plates should be used (Reference Shim Kit). Torque anchors to 150 ft-lbs. Shim thickness MUST NOT exceed 1/2" when using the 5 1/2" long anchors provided with the lift. Adjust the column extensions plumb.

5. If anchors do not tighten to 150 ft-lbs. Installation torque, replace concrete under each column base with a 4' x 4' x 6" thick 3,000 PSI minimum concrete pad keyed under and flush with the top of existing floor. Let concrete cure at least 30 days before installing lifts and anchors.



4.4 ANCHORING TIP SHEET

1. Use a concrete hammer drill with a carbide tip, solid drill bit the same diameter as the anchor, 3/4". (.775 to .787 inches diameter). Do not use excessively worn bits or bits which have been incorrectly sharpened.
2. Keep the drill in a perpendicular line while drilling.
3. Let the drill do the work. Do not apply excessive pressure. Lift the drill up and down occasionally to remove residue to reduce binding.
4. Drill the hole to depth equal to the length of anchor.
5. For better holding power blow dust from the hole.
6. Place a flat washer and hex nut over threaded end of anchor, leaving approximately 1/2 inch of thread exposed carefully tap anchor. Do not damage threads. Tap anchor into the concrete until nut and flat washer are against base plate. Do not use an impact wrench to tighten. Tighten the nut. Two or three turns on average concrete (30-day cure). If the concrete is very hard only one or two turns may be required.

5. INSTALLATION INSTRUCTIONS

PLEASE READ THESE INSTRUCTIONS BEFORE STARTING TO OPERATE THE LIFT.

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

STEP 2: Remove the shipping bands and packing materials from the unit.

STEP 3: Open the wrapping from the upper column and carefully remove the parts from inside. Unbolt the column from the shipping brackets.

STEP 4: Once the lift location is decided, insure the proper lift placement is observed from walls and onstacles. Also check the ceiling height for clearance in this location.

STEP 5: Unpack the cylinders and open the oil port on each cylinder by unscrewing the black plastic cap. Move the carriage up about 20" to 25". Next, carefully slide the cylinder inside from the bottom of the carriage. The oil port will face the backside of the column and the notch on the bottom of cylinder will fit into the hole in the center of the base plate.

STEP 6: Position the columns facing each other 145 5/16" inside base plate.

NOTE: THE POWER UNIT COLUMN IS REFERRED TO AS THE MAIN SIDE COLUMN AND THE NONPOWER UNIT COLUMN IS REFFERED TO AS THE OFFSIDE COLUMN.

STEP 7: Using a 3/4" diameter concrete drill, drill the holes in the main side column, installing anchors as you go. Use a block of wood or rubber mallet to drive anchor bolts in. Drill to a minimum depth of 4" to insure maximum holding power. Drilling through concrete (recommended) will allow the anchor to be driven through the bottom if the threads are damaged.

STEP 8: Using a level, check column for side-to-side plumb and front-to-back plumb. If needed, use 3/4" washers or shim stock, placing shims under the base plate and around the anchor bolt. This will prevent bending the column bottom plates (Shim thickness should not exceed 1/2"). Tighten 3/4" anchor bolts to 150 ft-lbs. of torque.

STEP 9: Using a tape measure, measure from back corner of the base on the main side column to the opposite back corner of the offside column to insure columns are square. After confirming dimensions, drill and install the anchors on the other side leg.

STEP 10: Using a level, plumb the second column.

STEP 11: Install the overhead cross beam. The cross beam has two pieces. First bolt them together and then bolt the whole cross beam together with the columns.

STEP 12: Connect the safety release cable between the two latches (Fig. 5). Check the tension of the cable is tight. Pull the single point safety lock release handle several times and check the tension again by making sure both latches releases at the same time when the handle is pulled.

STEP 13: Mount the power unit on the main side column to the power unit bracket using the four 5/16" bolts and nuts. Install the "T" fitting (87) with o-ring on the power unit, and then install the 6" pipe (91) into the backside of the main column cylinder (power unit side). Connect the 90-degree hydraulic fitting (90) on the other end of the 6" pipe (91). Connect one end of the short hydraulic hose to one side of the "T" fitting and the other end to the 90 degree elbow. Place the long hose (98) across over the overhead beam to the opposite column, then down the side and connect to the fitting on the other column cylinder.

STEP 14: Connect the equalizing cables (Fig. 3). Do not tighten at this step of assembly. Note –The cable stud that connects to the front right corner of the carriage should be connected first by pulling the stud through the carriage hole and up where it is easy to be held by locking pliers. Pull the stud back into place after threading at least 1/2" of the stud past locknut. Connect the other ends to the rear right corners of the carriage with at least 1/2" of thread showing past lock nut (cables run on inside of carriage). It may be necessary to manually raise both carriages above the cylinder to provide enough space to use the locking pliers. Make sure the carriage is engaged at the LOCK position.

STEP 15: Adjust the carriage cable tension. This is accomplished by tightening the near nut on top of each carriage. The near carriage adjustment nut adjusts the opposite post carriage height. The left post carriage nut adjusts the right column carriage, and the right column carriage nut adjusts the left column carriage. Adjust each cable to approximately 1/2" side-to-side play. Check the latch releases to insure the carriage is still engaged in the appropriate latch.

STEP 16: Install the half moon gear locks on each swing arm (USA side up). Position the swing arms on the carriages using the included 1 1/2" diameter pins (2 short for front arms and 2 long for rear arms). Check for proper engagement of the arm lock – the rack on the lock should fully engage the gear on the arm.

STEP 17: Remove the fill cap from the power unit and fill the oil tank reservoir. To fill the oil tank reservoir, the lift must be completely lowered. Fill the oil tank with a premium quality ISO-32, or AW-46 Hydraulic Oil, or premium quality ATF-DEXRON-III / MERCON.

STEP 18: Make the Electrical hookup to the power unit. 220V Single Phase. It is recommended that a 220 Volt, 30 Amp twist lock plug be installed in the power line just ahead of the power unit. Size wire for 30-amp circuit.



Warning: the wiring must comply with local code . Have a certified electrician make the electrical hook-up to the power unit . Protect each circuit with time delay fuse or circuit breaker ; 208V-230V single phase . 60 Hz 30 amp.

STEP 19: Do not place any vehicle on the lift at this time. Cycle the lift up and down several times to insure latches click together and all air is removed from the system. Insure all hydraulic fittings are tight and not leaking To lower the lift, latch releases must be manually released. Latches will automatically reset once the lift ascends approximately 17" from base. If latches click out of sync, tighten the cable on the one that clicks first.



WARNING: 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 REENERGIZED UNTIL ALL MAINTENANCE AND/OR INSTALLATION PROCEDURES ARE COMPLETED.



DANGER: DO NOT RUN POWER UNIT WITHOUT FLUID. 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.

6. OPERATION INSTRUCTIONS



WARNING: LIFT OPERATION BY TRAINED AUTHORIZED PERSONNEL OVER 18 YEARS ONLY. APPLY THE PARKING BRAKE AFTER POSITIONING THE VEHICLE ON THE LIFT. DO NOT ALLOW ANYONE TO STAY IN LIFT AREA DURING RAISING AND LOWERING CYCLES. CLOSELY WATCH THE VEHICLE AND THE LIFT DURING RAISING AND LOWERING CYCLES. OBSERVE THE RATED LOAD CAPACITY AND LOAD DISTRIBUTION. DO NOT ALLOW ANYONE TO CLIMB ON LIFT OR STAY INSIDE VEHICLE. AFTER RAISING THE VEHICLE FRAME 6”, STOP AND CHECK ADAPTERS FOR SECURE CONTACT. PERFORM BUMPER TEST (PG.2). MAKE SURE THE VEHICLE DOORS ARE CLOSED DURING RAISING AND LOWERING CYCLES.

6.1 DEFECTS / MALFUNCTIONS



WARNING: IN CASE OF DEFECTS OR MALFUNCTIONS SUCH AS JERKY LIFT MOVEMENT OR DEFORMATION OF THE SUPERSTRUCTURE, SUPPORT OR LOWER THE LIFT IMMEDIATELY. CONTACT QUALIFIED SERVICE PERSONNEL.

6.2 CONTROLS

6.2.1 UP CONTROL



Once the up button is actuated, the lift moves up until the button is released or the limit stop is reached.

6.2.2 SAFETY LOCK CONTROL

The safety latch mechanism will “Trip Over” as the lift raises and drop into each safety latch stop. To lock the lift you must press the lowering handle on the power unit (Fig. 1) to relieve the hydraulic pressure and let the safety locks engage into a level locked position.



WARNING: PAY CLOSE ATTENTION WHEN SETTING THE LOCKS. THE LOCKS MUST BE A LEVEL MATCH SET IN ORDER TO AVOID A VEHICLE TILT.



WARNING: ALWAYS LOCK THE LIFT BEFORE GOING UNDER THE VEHICLE. NEVER ALLOW ANYONE TO GO UNDER THE LIFT WHEN RAISING OR LOWERING.



NOTE: It is normal for an empty lift to lower slowly - it may be necessary to add weight.



Fig. 1

6.2.3 LOWERING CONTROL

Press the up button enough to allow the safety locks to be disengaged. Pull and hold down the safety lock release handle (Fig. 2) to release the safety locks.



Warning: Always make sure both locks disengage when lowering.

While engaging the safety lock release handle by pulling down, press the lowering handle (Fig. 1) until the lift is completely lowered.

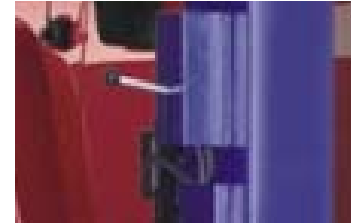


Fig. 2

6.3 OPERATION




WARNING: FAILURE TO OPERATE THE LIFT ACCORDING TO THIS MANUAL MAY CAUSE DAMAGE TO THE LIFT, PROPERTY DAMAGE AND/OR PERSONAL INJURY.

1. Before driving a vehicle onto the lift make sure the lift is fully lowered. Before driving a vehicle onto the lift, position the lift arms outward. Do not hit or run over the lifting arms, as this could damage the vehicle and/or lift. Make sure the lift is fully lowered before moving the vehicle over the lift. **NOTE:** It is recommended to swing both arms outward pointing toward the front of the lift prior to loading a vehicle into the 11000AC.
2. Drive the vehicle over the lift while keeping the vehicle parallel with the lift and aligning the center of gravity of the vehicle with the center of the lift. **NOTE:** The “Center of Gravity” (COG) of the vehicle is the balance point at which there is equal weight in front of and behind the COG, and equal weight on both sides of the COG. The COG is not necessarily the dimensional center of the vehicle, but is often slightly toward the engine from the dimensional center of the vehicle.
3. Turn off the vehicle’s engine and engage the parking brake of the vehicle.
4. Read the vehicles owner’s manual to identify the recommended vehicle lifting points.
5. Prepare the work area according to this manual. Move the lifting arms inward, and position the rubber pads to contact with the vehicle manufacture’s recommended lifting points.



IMPORTANT: PLACE THE FOUR RUBBER PADS UNDER EDGE OF VEHICLE AT THE FOUR JACK POINTS.

6. Once the lifting arms have been positioned under the vehicle lifting points, operate the power switch to make contact and lift the vehicle slightly. Test to make sure the vehicle is well balanced and the contact between the rubber pads and vehicle lifting points are secure by performing the “BUMPER TEST.” (pg. 2) Then, proceed to lift the vehicle to the desired height.

7.  **WARNING:** Do not lift the vehicle if you cannot establish secure and level lifting points. Do not use sub-standard shims or other devices in place of approved and recommended rubber pad adapters. Never use the lift without the rubber pads in place on each plate and in contact with the lifting points of a vehicle.
8. Press up button and raise vehicle to desired height. Do not go under vehicle until load rests on level safety locks.
10. While lifting the vehicle a clicking sound should be noticeable which indicates the safety mechanism is operating. If this sound is not heard, immediately cease using the lift and call an authorized service agent.
9. When lift reaches maximum height, a limit switch will come into operation and stop the lift. When lift has stopped, press and hold the lowering handle (Fig. 1) until load rests on level safety locks.
11. Once the repair work to the vehicle is complete, make sure to remove all tools, safety jack stands, and materials from under the vehicle and lift. Also, make sure the work area is clear and it is safe to lower the vehicle.
12. Lower vehicle by pressing the Up button to disengage the safety locks. Pull and hold down the safety lock release handle (Fig. 2) to release the safety locks then press the lowering handle (Fig. 1) until the lift is completely lowered.
13. Move the lifting arms outward, out of the path of the vehicle. Clear all bystanders, and any objects from work area and direction of vehicle.
14. Disengage the vehicle parking brake. Start the vehicle's engine, and drive the vehicle off the lift slowly and carefully.



WARNING: THE OPERATOR MUST BE TRAINED AND AUTHORIZED TO OPERATE THE LIFT.



WARNING: DO NOT GO UNDER VEHICLE UNDER ANY CIRCUMSTANCES WHILE VEHICLE IS BEING LIFTED OR LOWERED.



WARNING: LOAD MUST BE EVENLY DISTRIBUTED BETWEEN BOTH LIFTING PLATFORMS. IF LOAD IS UNBALANCED, REPOSITION VEHICLE. DO NOT LOWER ON TO LOCKS AT DIFFERENT HEIGHTS.

7. MAINTENANCE



WARNING: DISCONNECT THE POWER BEFORE SERVICING THE LIFT.



IMPORTANT: THE MAINTENANCE INTERVALS INDICATED BELOW APPLY TO AVERAGE WORKSHOP USE. THE LIFT SHOULD BE INSPECTED MORE FREQUENTLY FOR SEVERE USE APPLICATIONS.

7.1 MAINTENANCE SCHEDULE

It is important to keep the lift clean, dry, and well maintained by establishing a periodic preventive maintenance program to ensure trouble-free operation and long service life.

7.1.1 DAILY

1. Check safety locking mechanism is functioning correctly.
2. Check safety lock audibly and visually while in operation.
3. Check safety latches for free movement and full engagement with rack.
4. Inspect the condition of rubber lifting pads and replace as necessary if worn or torn.
5. Check hydraulic connections, and hoses for leakage.
6. Check chain connections - Bends, cracks - and looseness.
7. Check cable connections - Bends, cracks - and looseness.
8. Check for frayed cables in both raised and lowered positions.
9. Check snap rings at all rollers and sheaves.
10. Check bolts, nuts, and screws and tighten.
11. Check wiring & switches for damage.
12. Keep base plate free of dirt, grease or any other corrosive substances.
13. Check floor for stress cracks near anchor bolts.
14. Check swing arm restraints.

7.1.2 WEEKLY

1. Check anchor bolts torque to 150 ft-lbs for the 3/4" anchor bolts.
NOTE: DO NOT USE IMPACT WRENCH.
2. Check floor for stress cracks near anchor bolts.
3. Check hydraulic oil level.
4. Check and tighten bolts and nuts, and screws.
5. Check cylinder pulley assembly for free movement or excessive wear on cylinder yoke or pulley pin.
6. Check cable pulley for free movement and excessive wear.

7.1.3 MONTHLY

1. Check safety mechanism operation.
2. Check condition of shafts, shaft locks and bushings.
3. Check overall cleanliness.

7.1.4 BIMONTHLY

1. Check condition of extensions and lubricate.
2. Check oil leaks from cylinders.
3. Check oil leaks at pipe joints.

7.1.5 YEARLY

Service and safety inspection on the lift must be performed by a competent person. This inspection must be recorded. If the 12 month service and safety inspection is not performed, the warranty is null and void.

1. Lubricate chain
2. Grease rub blocks and column surface contacting rub blocks.
3. Change the hydraulic fluid. A good maintenance program makes it mandatory to keep hydraulic fluid clean. Operating temperature, type of service, contamination levels, filtration, and chemical composition of fluid should be considered. If operating in harsh dusty conditions, shorter interval may be required.

The following items should only be performed by a trained maintenance expert.

- Replace hydraulic hoses.
- Replace chains and rollers.
- Replace cables and sheaves.
- Replace or rebuild air and hydraulic cylinders as required.
- Replace or rebuild pumps / motors as required.
- Check hydraulic and air cylinder rod and rod end (threads) for deformation or damage.
- Check cylinder mount for looseness and damage.

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

7.1.6 EVERY OTHER YEAR

Hydraulic oil should be replaced.



IMPORTANT: AFTER CLEANING WORKSHOP FLOOR OR LIFT, TO MAINTAIN HOIST EFFICIENCY WE ADVISE TO LUBRICATE LIFTING ARM LOCKING MECHANISM, AND SAFETY LOCKING MECHANISM. CHECK SAFETY LOCKING MECHANISM IS FUNCTIONING CORRECTLY.

7.2 MAINTENANCE BY OPERATOR

1. All moving parts have been lubricated at the factory and should be re-lubricated before the first use and at least once every six months to prevent damage.

7.2.1 HYDRAULIC SYSTEM (FIG. 3)

1. Check the fluid level with the lift fully lowered and add fluid as required. Use premium quality ISO-32, AW-32, or AW-46 hydraulic oil, or premium quality ATF DEXRON-III/MERCON.
2. Visually check all hydraulic hoses and connections for tightness before each use to ensure proper working condition.
3. Lightly oil the cylinder rods at least once every six months or when they become dry.



Fig. 3

7.2.2 GREASING POINTS

Slide Tracks:

The carriage assembly slide tracks should be greased every six months (or more frequently in case of noise generation).

Slightly grease the slide tracks over their whole length using a brush.

7.2.3 OPERATION AND WEAR CHECKS.

1. Examine lift for structural cracks, bends, or other signs of damage prior to each use. Do not use this product if worn or damaged.
2. Check that the safety locking mechanism is functioning correctly.
3. Check that the safety lock is audibly and visibly in operation.
4. Check the floor for stress cracks near the anchor bolts.

7.2.4 LIFT STABILITY

1. Every six months check the nuts of all bolts for correct installation torque.
2. Retighten them as required. **NOTE: DO NOT USE AN IMPACT WRENCH.**

7.3 CLEANING



DANGER: DO NOT USE HIGH PRESSURE / STEAM JET CLEANERS OR CAUSTIC CLEANING AGENTS.

RISK OF DAMAGE!

1. **PERIODICALLY WASH OFF AGGRESSIVE SUBSTANCES AND TREAT THE LIFT WITH OIL OR WAX SPRAY.**
2. **REPAIR THE DAMAGE TO THE PAINTWORK IMMEDIATELY TO PREVENT CORROSION. THE RAL NUMBER IS AVAILABLE THROUGH THE MANUFACTURER.**

8. TROUBLE SHOOTING

1. Motor does not run:

- A. Breaker or fuse blown.
- B. Motor thermal overload tripped. Wait for overload to cool.
- C. Faulty wiring connections call electrician.
- D. Defective up button call electrician for service.

2 Motor runs but will not raise:

- A: A piece of trash is under check valve. Push handle down and push the up button at the same time. Hold for 10-15 seconds. This should flush the system.
- B. Check the clearance between the plunger valve of the lowering handle. There should be 1/16”.
- C. Remove the check valve cover and clean ball and seat.
- D. Oil level to low. Oil level should be just under the vent cap port when the lift is in the lowered position.

3 Oil blows out breather of power unit:

- A. Oil reservoir overfilled.
- B. Lift lowered too quickly while under a heavy load.

4 Motor hums and will not run:

- A. Impeller fan cover is dented. Take off and straighten.
- B. Faulty wiring.....call electrician
- C. Bad capacitor.....call electrician
- D. Low voltage.....call electrician
- E. Lift overloaded...

5. Lift jerks going up and down: Air in hydraulic system. Raise lift all the way to top and return to floor; Repeat 4-6 times. Do not let this overheat power unit.

6 Oil leaks:

- A. Power unit: if the power unit leaks hydraulic oil around the tank-mounting flange; check the oil level in the tank. The level should be two inches below the flange of the tank. Check with a screwdriver.
- B. Rod end of the cylinder: the rod seal of the cylinder is out. Rebuild or replace the cylinder.
- C. Breather end of the cylinder: the piston seal of the cylinder is out. Rebuild or replace the cylinder.

7. Lift makes excessive noise:

- A. Leg of the lift is dry and requires grease.
- B. Cylinder pulley assembly or cable pulley assembly is not moving freely.
- C. May have excessive wear on pins or cylinder yoke.

9. OWNER/EMPLOYER RESPONSIBILITIES

The owner/employer:

Shall establish procedures to periodically maintain, inspect and care for the lift in accordance with the manufactures recommended procedures to ensure it's continued safe operations.

Shall provide necessary lockout / tag outs of energy sources per ANSI Z244.1 - 1982 before beginning any lift repairs. Shall not modify the lift in any manner without prior written consent of the manufacturer.

Shall display this manual or copy supplied with the lift in a conspicuous, dry location in the lift area convenient to the operator.

Shall insure that lift operators are instructed in the safe proper use and operation of the lift using the manufacturer's instructions outlined within this manual supplied with the lift.

10. DIAGRAMS

FIG. 1

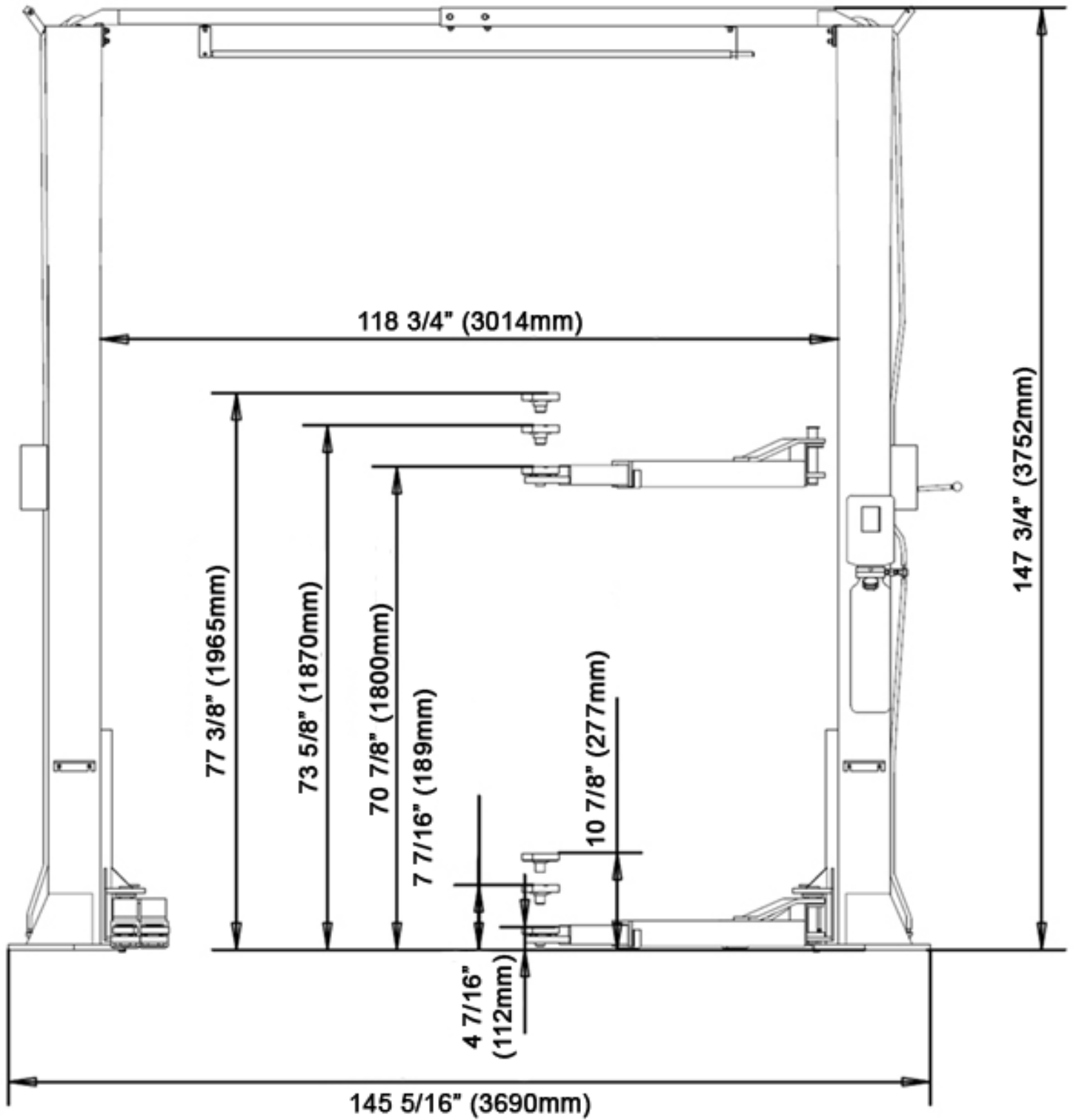


FIG. 2

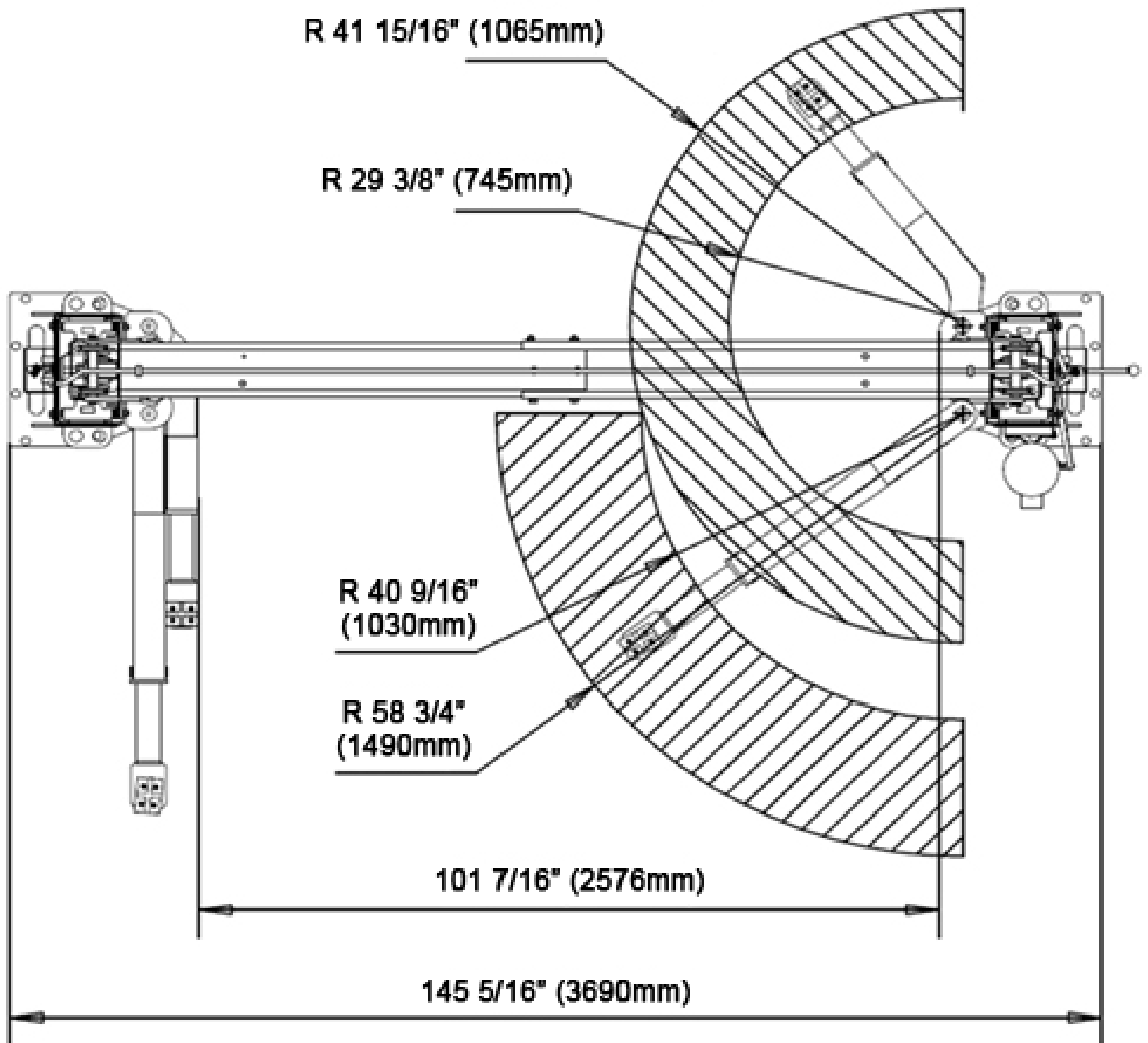


FIG. 3

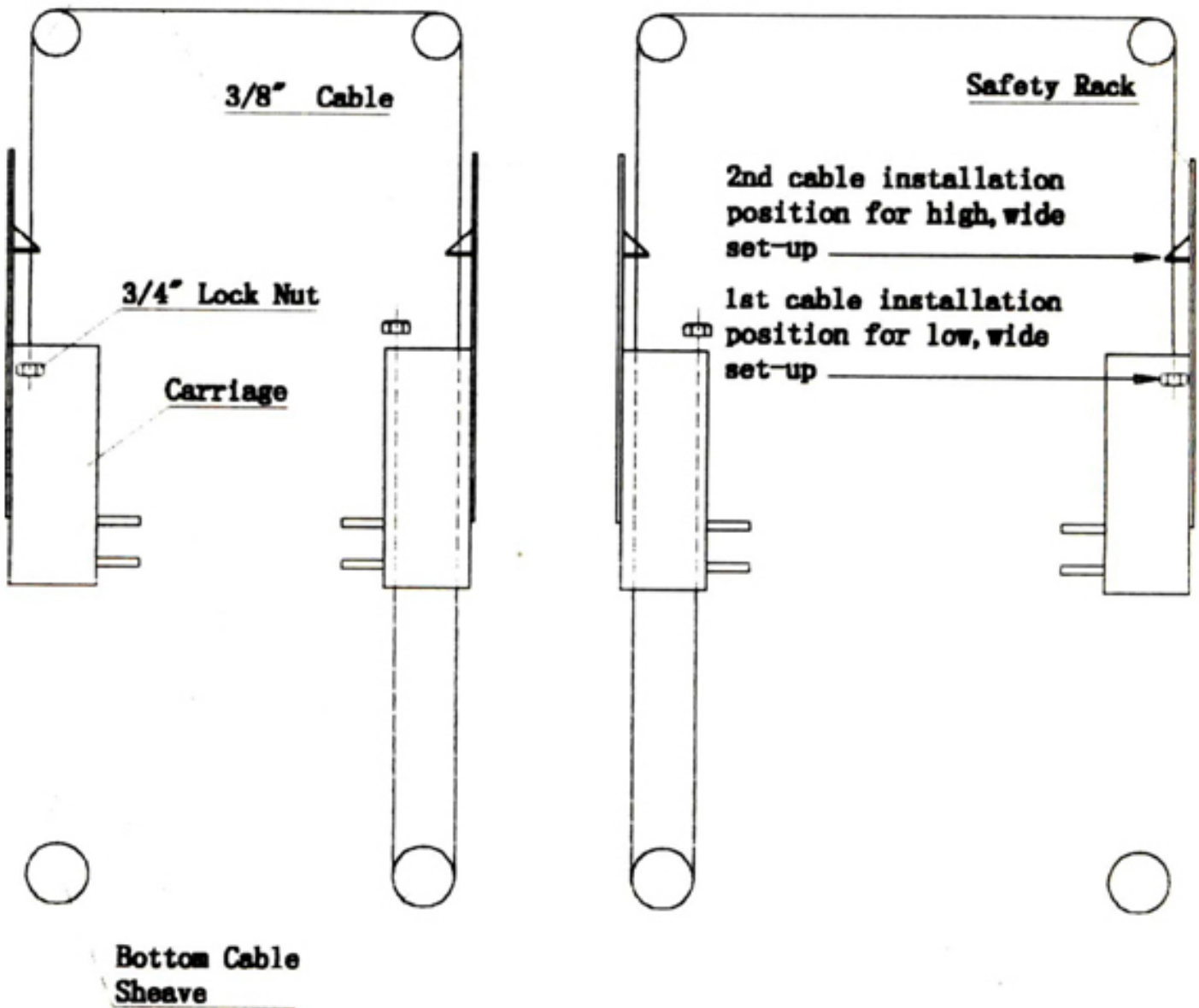


FIG. 4

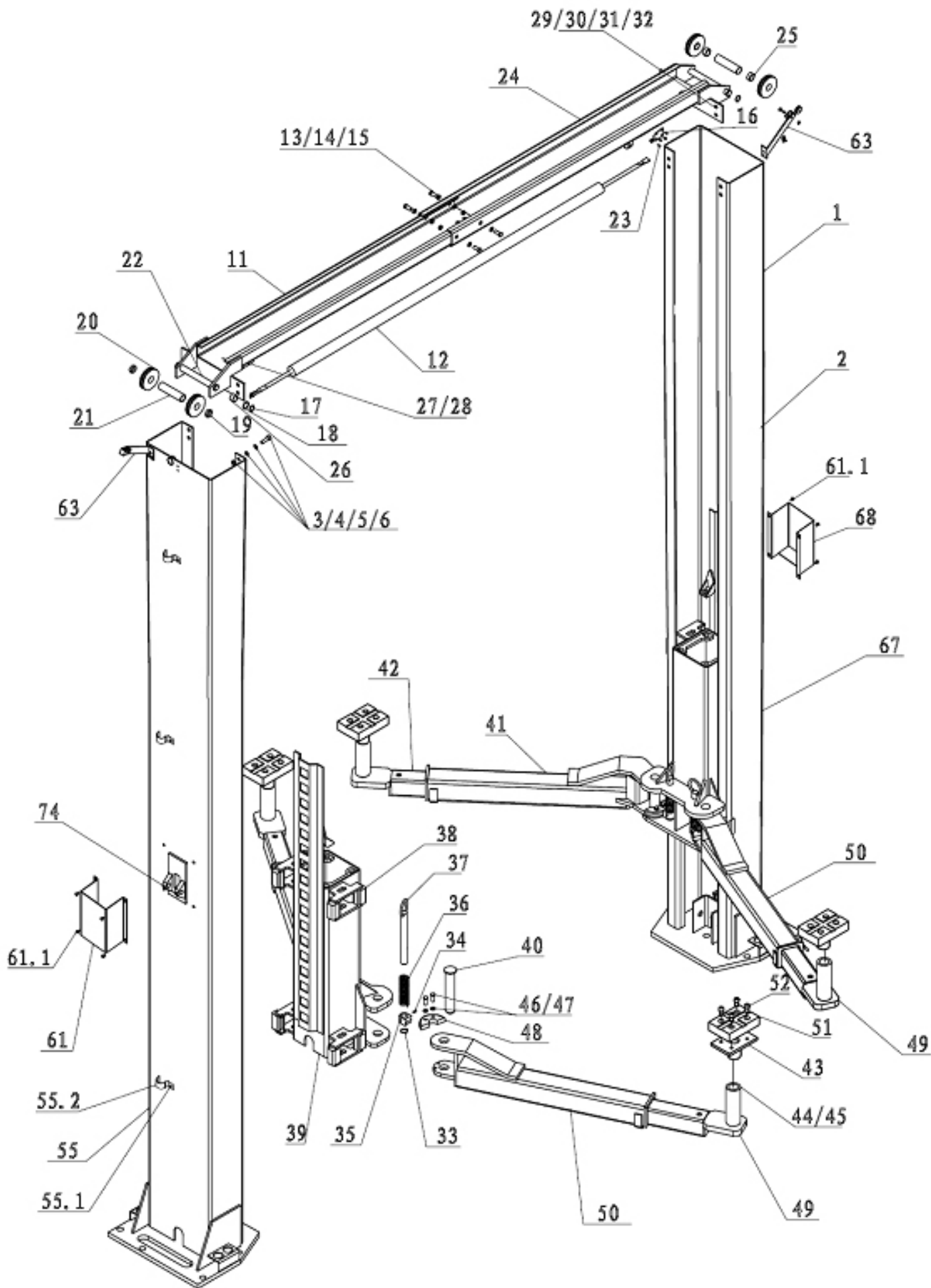


FIG. 5

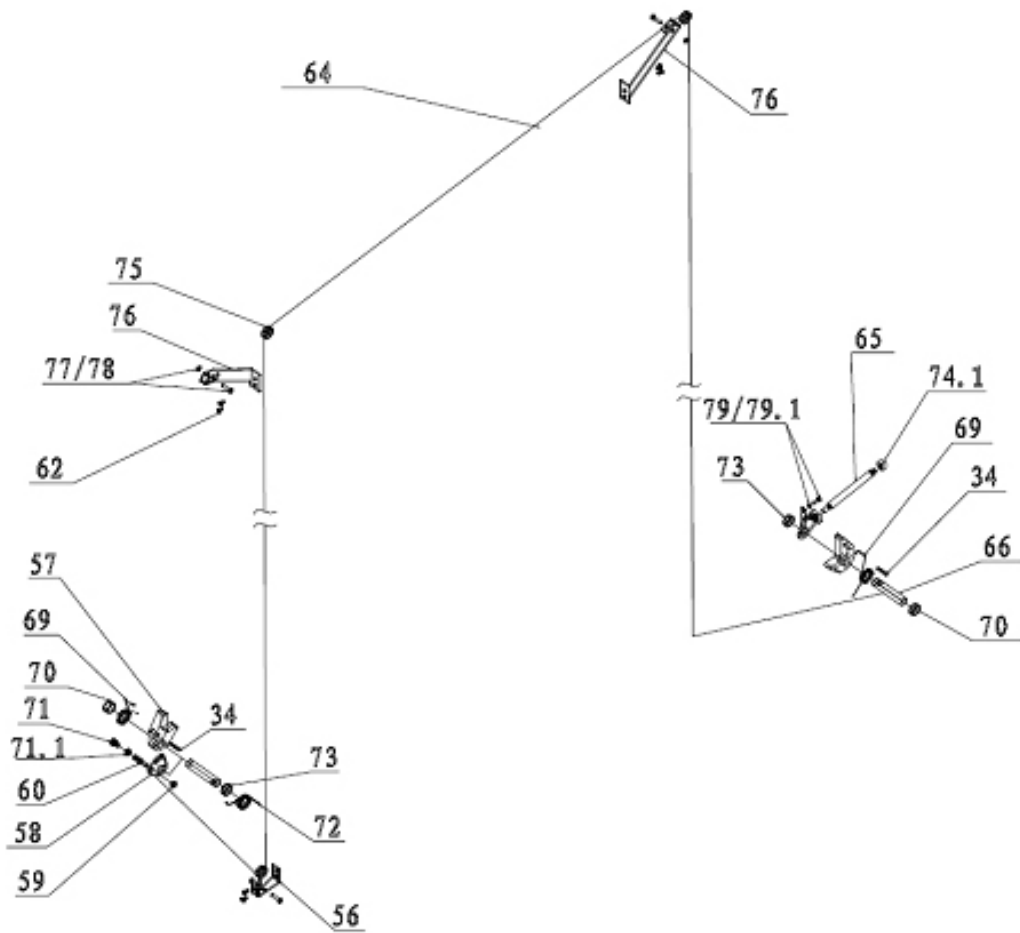
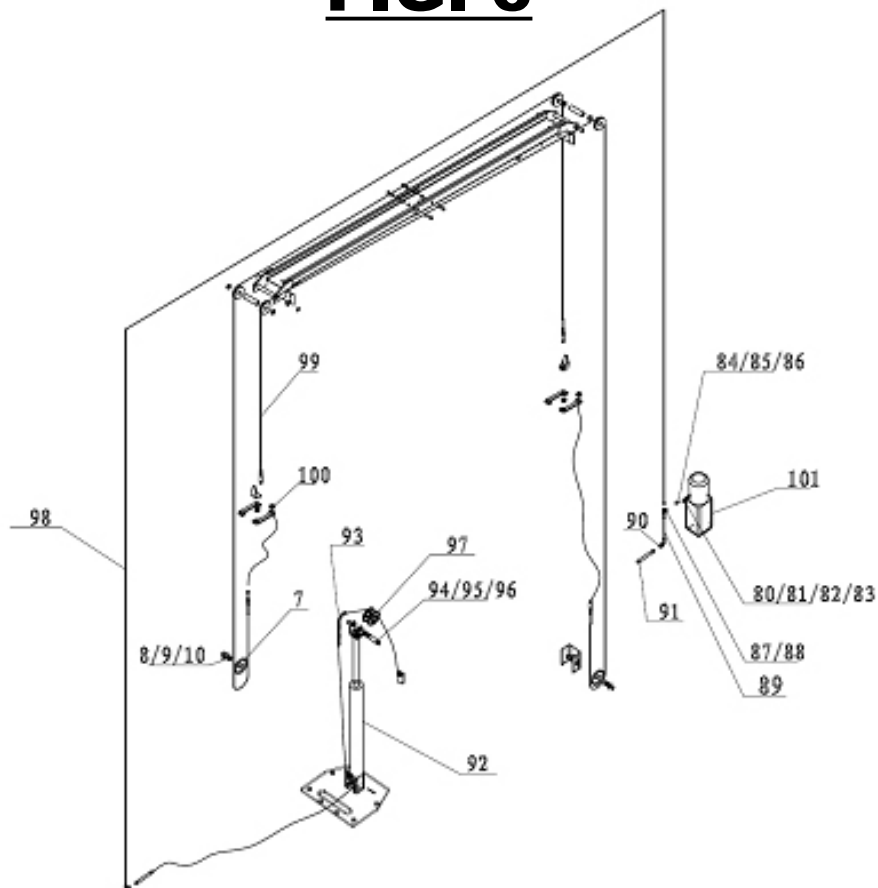


FIG. 6



No.	Chart No.	Description	Qty	Remark
1, 2	XG4.5A01-01-00A/B	Column weldment	2	Left, Right
3	GB5783-86	Bolt	16	M12X35
4	GB95-87	Big flat washer	32	d12
5	GB93-87	Spring washer	16	d12
6	GB6170-86	Nut	16	M12
7	XG4.5A01-03	Pulley	2	
8		Complex busher	2	SF2518
9	GB894.2-86	Spring axle stop ring	2	d25
10	XG4.5A01-04	Spacer	2	
11	XG4.5A02-01B-00	Top beam weldment	1	
12	QYS-700-05B	Height-limit lever	1	
13	GB5783-86	Bolt	6	M12X30
14	GB95-85	Flat washer	12	d12
15	GB6170-86	Nut	6	M12
16	LX19-121	Switch	1	
17	GB894.2-86	Spring axle stop ring	4	d25
18	GB95-85	Flat washer	4	d24
19	XG4.5A02-03B	Spacer	2	
20	XG4.5A02-05	Pulley	4	
21	XG4.5A02-04	Spacer	2	
22	XG4.5A02-02AB	Axle	1	L1=236 L2=228
23	GB818-85	Cross screw	4	M4X10
24	XG4.5A02-01A-00	Top beam weldment	1	
25	XG4.5A02-03A	Spacer	2	
26		Complex sheath	4	SF2518
27	GB97-86	Cotter pin	1	Φ2.5x25
28	GB95-85	Flat washer	1	d10
29	GB5783-86	Bolt	8	M12X35
30	GB6170-86	Nut	8	M12
31	GB95-85	Flat washer	16	d12
32	GB93-87	Spring washer	8	d12
33	GB894.2-86	Spring axle stop ring	4	d25
34	GB879-86	Spring column pin	6	Φ6x40
35	XG4.5A03-04	Inner tooth	4	Sintered-carbon steel
36	XG4.5A03-03(special)	Compression spring	4	
37	XG4.5A03-02-00(special)	Axle pin	4	Weldment
38	XG4.5A03-05	Sliding block	16	Nylon 1010
39	XG4.5A03-01-00(special)	Carriage weldment	2	Weldment
40	XG4.5A04-06-00(special)	Axle pin	4	Weldment
41	XG4.5A04-01K-100(special)	Curved arm	2	Weldment
42	XG4.5A04-01K-200(special)	Telescoping arm	2	

No.	Chart No.	Description	Qty	Remark
43	XG4.5A04-03-01-00	Salver weldment	4	Weldment
44	XG4.5A04-04	Height adapter	4	L=102
45	XG4.5A04-05	Height adapter	4	L=190
46	GB5783-86	Bolt	8	M10X30
47	GB93-87	Spring washer	8	d10
48	XG4.5A04-02	Half moon gear	4	
49	XG4.5A04-01-200(special)	Telescoping arm	2	Weldment
50	XG4.5A04-01-100(special))	Straight arm	2	Weldment
51	QYS-300-10-03-00	Rubber Pads	4	Hard Rubber
52	GB70-85 M8X16	Inner hex socket screw	16	
55	XG4.5A01-00B	Sub column weldment	1	Weldment
55.1	GB/T 15856.4-1995	Inner hex self-drilling tapping screw	6	ST4.8 L=13
55.2		Retaining clip	6	
56	XG4.5A05-02-02	Bracket B	1	
57	XG4.5A05-05B	Hanging hook	2	
58	XG4.5A05-03	Sector plate	1	
59	GB6170-86	Nut	1	M8
60	XG4.5A05-04	Screw	1	
61	XG4.5A05-13	Sub cover	1	
61.1	GB67-85	Cross screw	8	M6X15
62	GB5781-86	Bolt	6	M6X16
63	XG4.5A05-01-00	Bracket A	2	Assembly
64		Safety steel wire	1	Φ2.5x7620
65	XG4.5A05-14	Handle	1	
66	XG4.5A05-11	Axel	2	
67	XG4.5A01-00A	Main column weldment	1	Weldment
68	XG4.5A05-12	Main cover	1	
69	XG4.5A05-07	Main torque spring	2	
70	XG4.5A05-09	Sheath	2	L=14
71	GB77-85	Inner hex socket screw	3	M6X20
71.1	GB6170-86	Hex Nut	1	M6
72	XG4.5A05-08	Sub torque spring	1	
73	XG4.5A05-10	Sheath	2	L=10
74	GB78-85	Inner hex tight screw	2	M10X10
74.1	JB/T7271.1-94	Knob	1	
75	XG4.5A05-01-01	Roller	3	
76	XG4.5A05-01-02	Bracket A	2	
77	GB5781-86	Hex bolt	2	M6X35

No.	Chart No.	Description	Qty	Remark
78	GB/T889-1968	Self-tight Nut	2	M6
79	GB5781-86	Hex bolt	1	M6X25
79.1	GB6170-86	Hex nut	1	M6
80	GB5781-86	Hex bolt	4	M8X15
81	GB97.2-85	Flat washer	4	d8
82	GB93-87	Spring washer	4	d8
83	GB6170-86	Nut	4	M8
84	TPF4-500-00	Washer	2	
85	GB6170-86	Nut	1	M14X1.5
86	TPF4-500-07	Fitting	1	
87	TPF4-500-04	Tee fitting	1	
88	TPF4-500-09	Nut	1	9/16"
89	TPF4-500-12	Hydraulic hose	1	1650mm
90	TPF4-500-06	90° elbow fitting	2	
91	XG4.5A06-02	Straight fitting	2	Yellow zinc plated
92	XG4.5A06-01	Hydraulic cylinder	2	Assembly
93	GB/T 6074-1995	Chain P=19.5	2	125 stages
94	GB894.2-86	Spring axle stop ring	4	d26
95	XG4.5A06-07	Axle	2	
96	JDB	Bearing	4	Φ26xΦ34x28
97	XG4.5A06-05	Roller	2	
98	XG4.5A06-03	Hydraulic hose	1	L=9450
99	XG4.5A03-06	Steel cable	2	L=10150
100		Nut	8	3/4"-16
101		Power unit	1	Assembly



WARNING



The warnings, precautions and instructions in this manual cannot cover all possible conditions and situations that may occur. The operator must understand that the operator must supply common sense and examine caution factors when using this product to determine safety in all circumstances being used.



TITAN MARKETING, LLC

PO Box 7069 Greenwood, IN 46142
1.888.908-4826 FAX (317) 215.2770
www.titanlifts.com