# ATLAS BP9000X
## 9,000 lb. Capacity
## Two-Post Baseplate Lift

# INSTALLATION & OPERATION MANUAL


**INDIANA**
5800 MASSACHUSETTS AVE.
INDIANAPOLIS, IN 46218
PHONE: (800) 262-1950
FAX: (317) 542-1448

**DELAWARE**
250 EXECUTIVE DRIVE, SUITE 1
NEWARK, DE 19702
PHONE: (800) 715-1950
FAX: (302) 894-9136

**GEORGIA**
5405 BUFORD HWY.
NORCROSS, GA 30071
PHONE: (800) 768-4104
FAX: (678) 781-0149

**ARIZONA**
8399 W VAN BUREN ST., SUITE 210
TOLLESON, AZ 85353
PHONE: (800) 602-9928
FAX: (602) 490-3495

**NEW HAMPSHIRE**
8 INDUSTRIAL DRIVE
HUDSON, NH 03051
PHONE: (800) 360-0053

**FLORIDA**
12250 NW 25TH ST., SUITE 112
MIAMI, FL 33182
PHONE: (800) 305-5609

# CONTENTS

## I. FLOORPLATE CHAIN-DRIVE TWO POST LIFT

**Model BP9000X**

· Compact design

· Dual hydraulic cylinders, designed and made on ANSI standards, utilizing NOK oil seal for cylinder

· Self- lubricating UHMW Polyethylene sliders and bronze bushings

· Single-point safety release and dual safety design

· Super-symmetric (2 in 1) arms design, Stackable adapters 1.5”, 3”, 6”

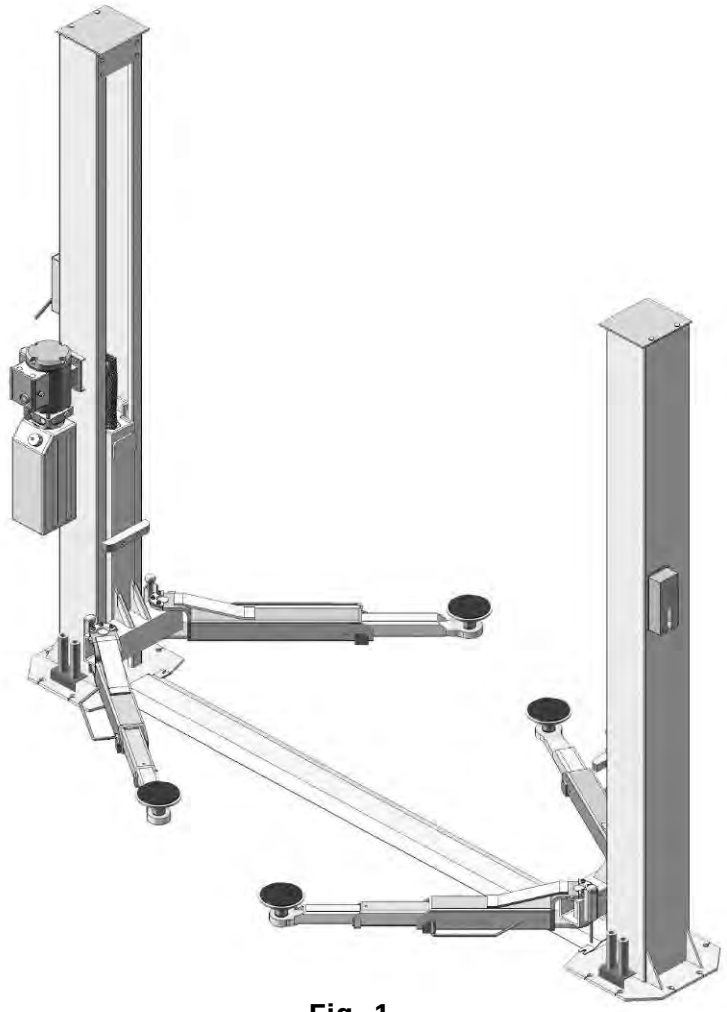
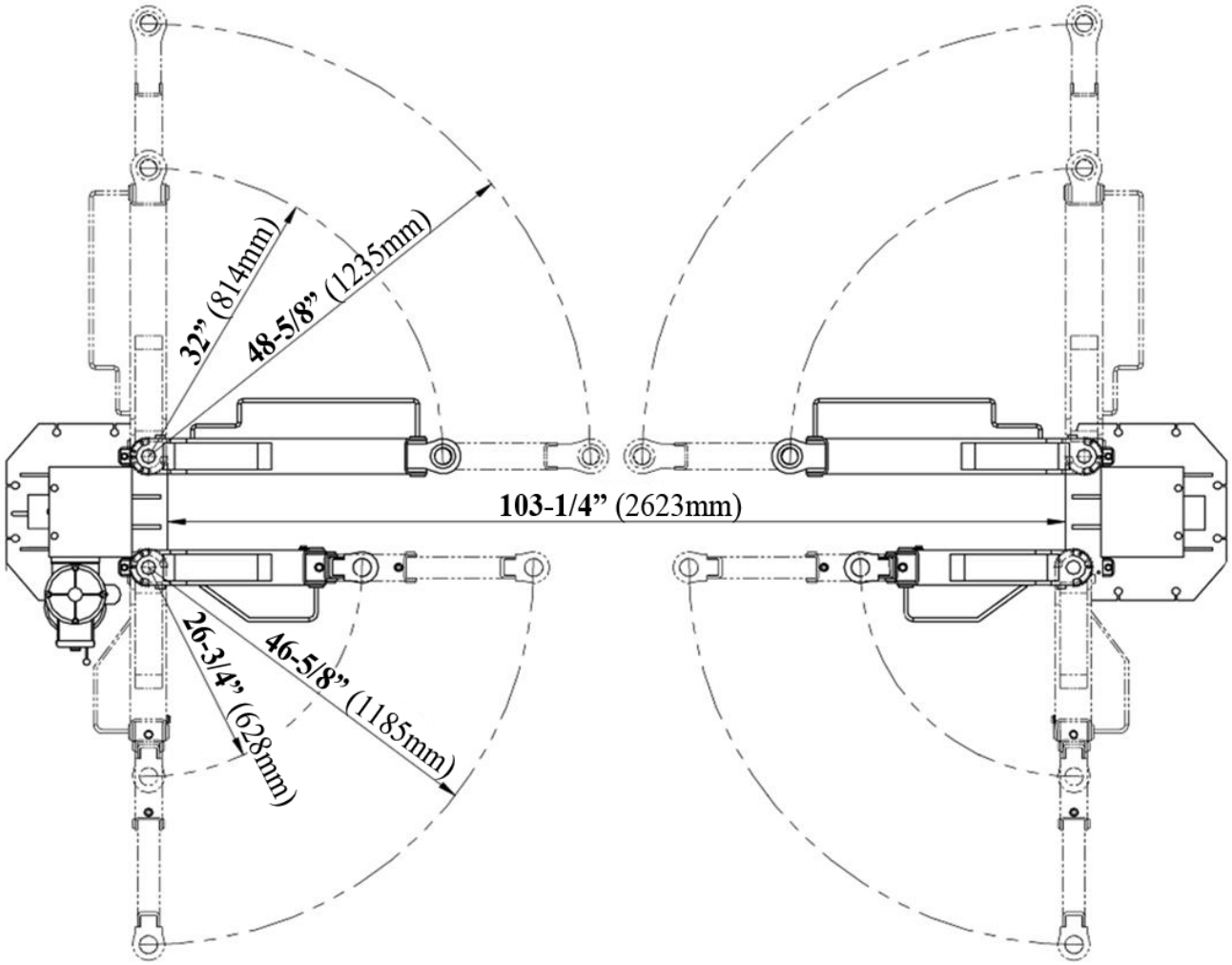


**Fig. 1**

**MODEL BP9000X SPECIFICATIONS**

| Model | Style | Lifting Capacity | Lifting Time | Lifting Height | Overall Height | Overall Width | Width Between Posts | Minimum Pad Height for stackable adapter | Motor |
|---|---|---|---|---|---|---|---|---|---|
| BP9000 | Floor Plate Chain-Drive | 4.0 T 9,000 lbs | 49 Sec. | 1930-2200 mm 76” – 86 5/8” | 2837 mm 111 3/4” | 3458 mm 136 1/8” | 2850 mm 112 1/4” | 105 mm 3 1/8 | 3.0 HP |

## Model BP9000X



## II. INSTALLATION REQUIREMENT

### A. TOOLS REQUIRED

- ✓ Rotary Hammer Drill (3/4” Drill Bit)

- ✓ Hammer

- ✓ Level Bar

- ✓ Crescent Wrench (12")

- ✓ Ratchet Spanner With Socket

- ✓ Socket Set (mm)

- ✓ Carpenter’s Chalk

- ✓ Screw Sets

- ✓ Tape Measure

- ✓ Pliers

- ✓ Allen Head Wrench (6mm)

- ✓ Vise Grips

- ✓ ($10^{\#}$, $13^{\#}$, $14^{\#}$, $15^{\#}$, $17^{\#}$, $19^{\#}$, $24^{\#}$, $27^{\#}$)

**Fig. 2**

## B. CONCRETE SECIFICATIONS (See Fig. 3).

**Concrete Specifications Must Be Followed.**

**Failure To Do So May Result In Lift and /or Vehicle Falling.**

1. Concrete must be a minimum of 4” and without reinforcing steel bars, and must be dried totally before the installation.
2. Concrete must be in good condition and must have a strength of 3,500 psi (250kg/cm²) minimum.
3. Floor must be level and no cracks.

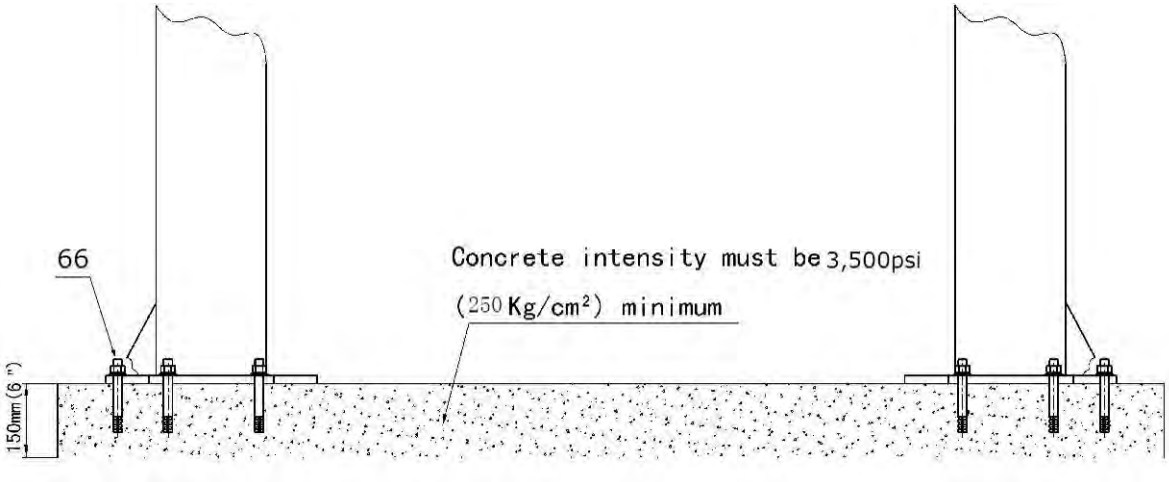



**Fig. 3**

## C. POWER SUPPLY

The capacity of power must be 3 HP minimum. The line must be 2.5 mm² (12 guage) minimum.

## III. STEPS FOR INSTALLATION

### A. Location of Installation

Check the installation location (concrete, layout, space, size etc.) for the lift installation.

**B.** Use a carpenter's chalk line to establish installation layout of the base plate **(See Fig. 4)**.


**Fig. 4 Model BP9000X**

### C. Check the Parts Before Assembly.

1. Packaged lift and Hydraulic Power Unit **(See Fig. 5).**

**Fig. 5**

2. Unload the lift with a fork lift or hoist, and open the outer packing carefully **(See Fig. 6).**

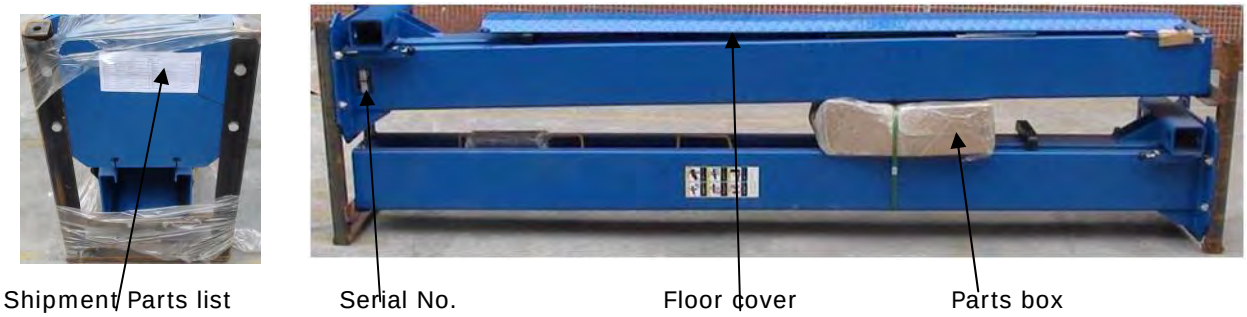



**Fig. 6**

3. Remove the parts from upper and inside the column, then take out the parts box, and check the parts according to the shipment parts list **(See Fig. 7).**

**Fig. 7 Model BP9000X**

4. Loosen the screws from the upper package stand, take off the upper column and remove the package stand **(See Fig. 8).**

**Fig. 8**

5. Open the box of parts and check the parts according to parts box list **(See Fig. 9).**

**Fig. 9**

6. Check the parts bag according to parts bag list (**See Fig. 10).**

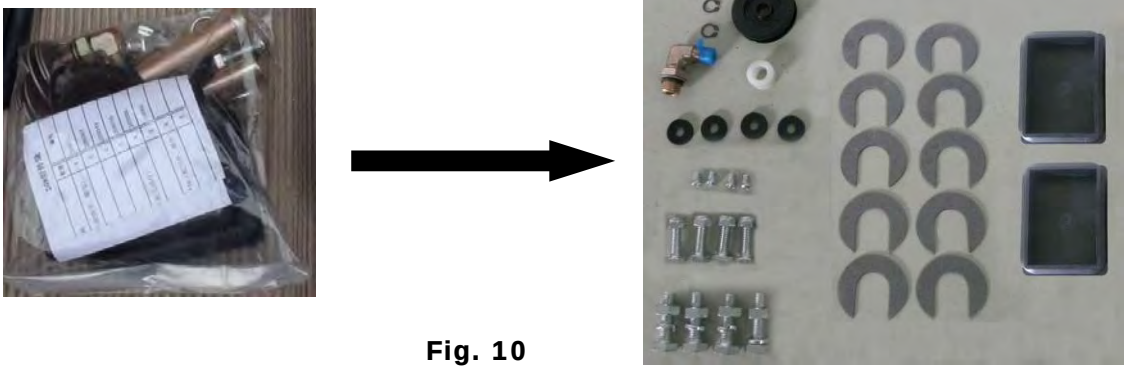


**Fig. 10**

## D. Position Power Side Post

Lay down the two posts on the installation site parallel, position the Power side post according to the location of the actual installation. Usually, it is suggested to install Power side Post on the front-right side from which vehicles are driven to the lift **(See Fig. 11).**

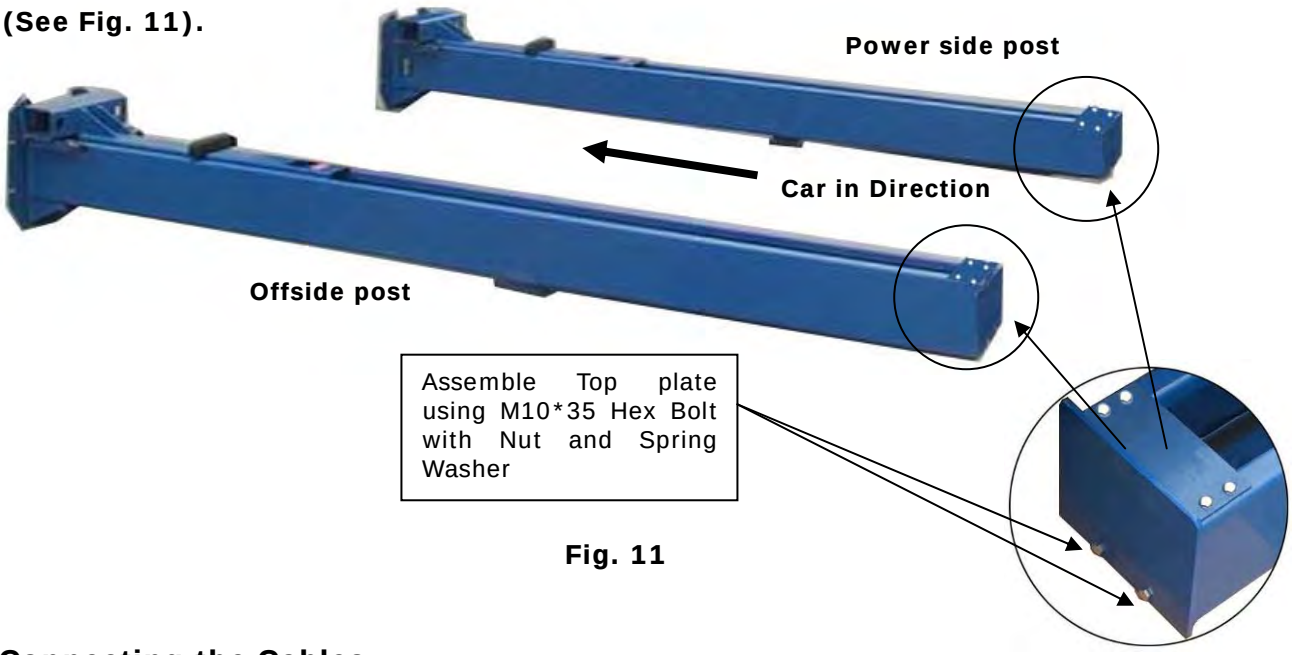



**Fig. 11**

## E. Connecting the Cables

1. With the posts down, push the carriages higher than the chain pulley **(See Fig. 12).**

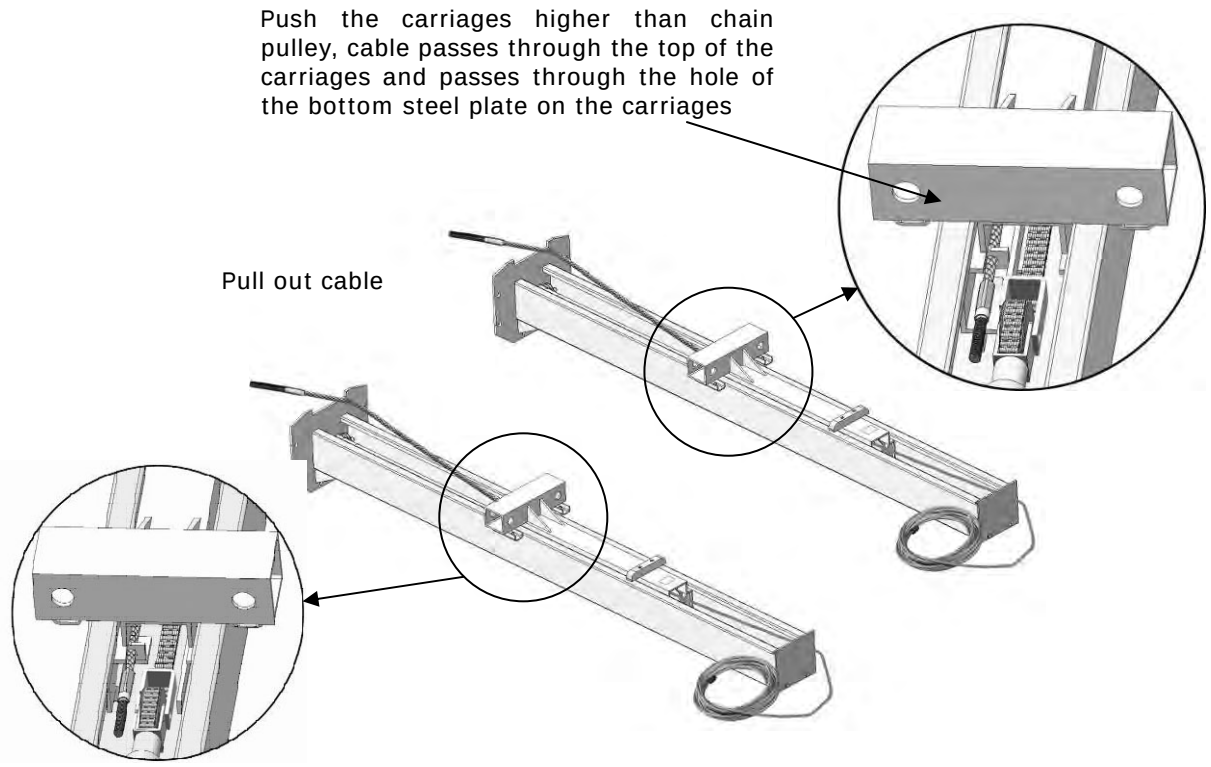



**Fig. 12**

2. Push the carriages to the bottom of the columns **(See Fig. 13).**

**Fig. 13**

## F. Position posts (See Fig. 14)

Check the posts plumb with level a, and adjust with shims if the posts are not level.

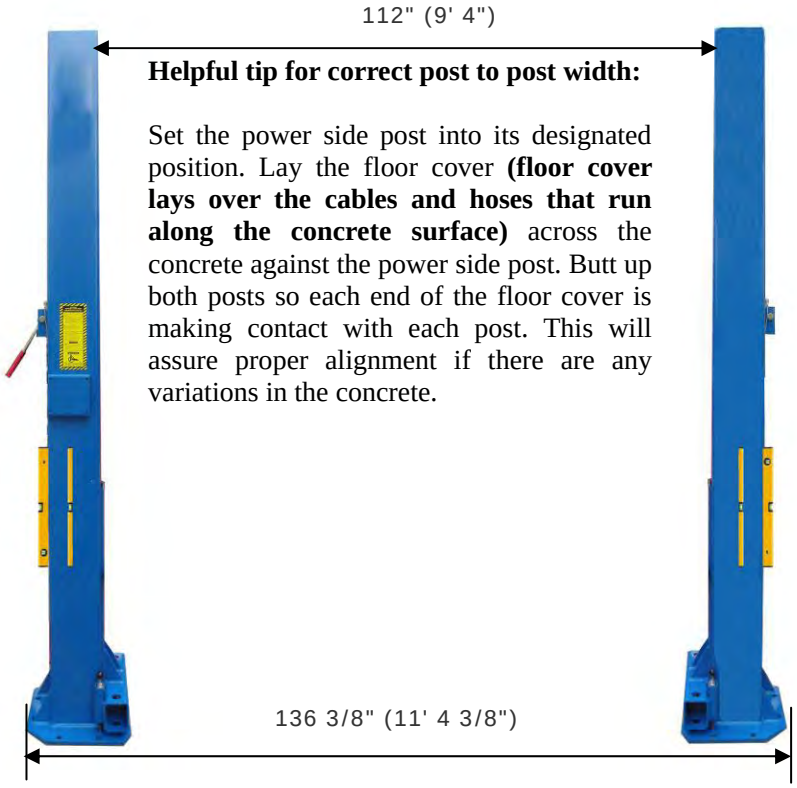



**Fig. 13**

## G. Install the Anchor Bolts

1. Prepare anchor bolts. **(See Fig. 14)**

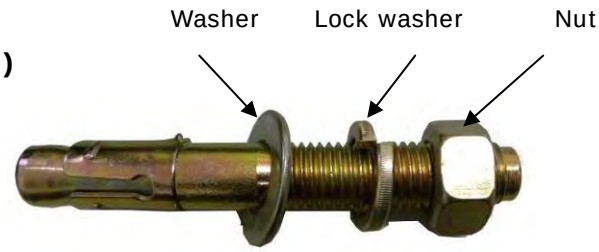



**Fig. 14**

2. Use a rotary hammer drill with a ¾" masonry drill bit, and drill all the anchor holes and install the anchor bolts. Tighten the anchor bolts to 100 foot pounds **(See Fig. 15).**

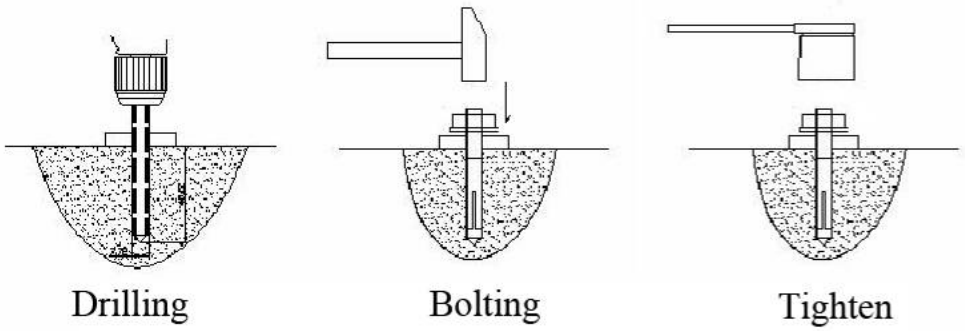



**Fig. 15**

**H.** Lift the carriages up by hand and let them rest on the first set of locks. **(See Fig. 16).**

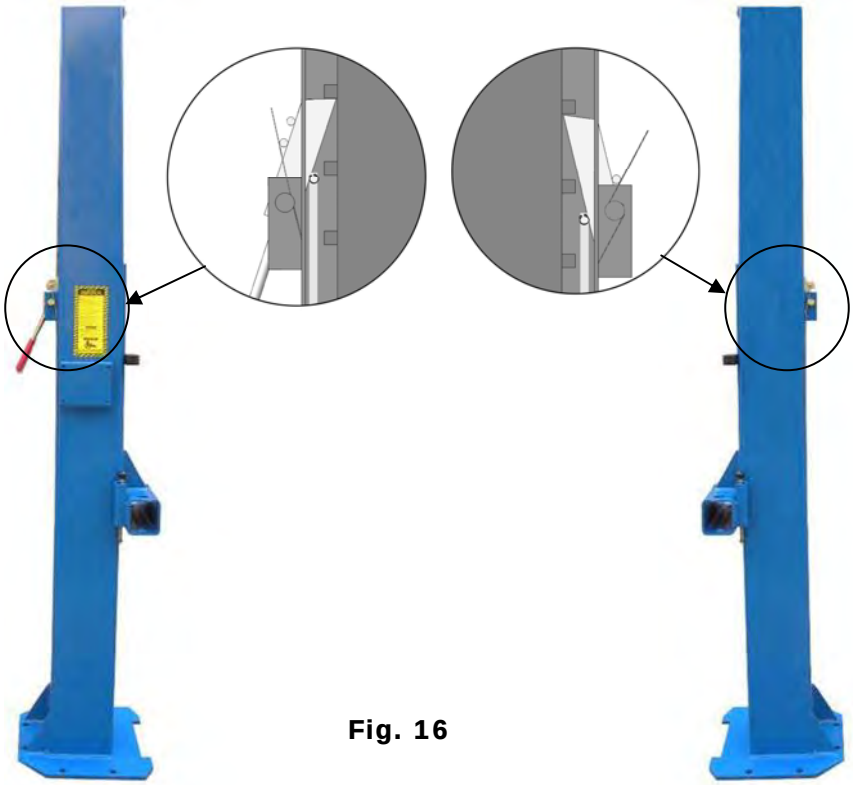


**Fig. 16**

## I. Install Cables (See Fig. 17)

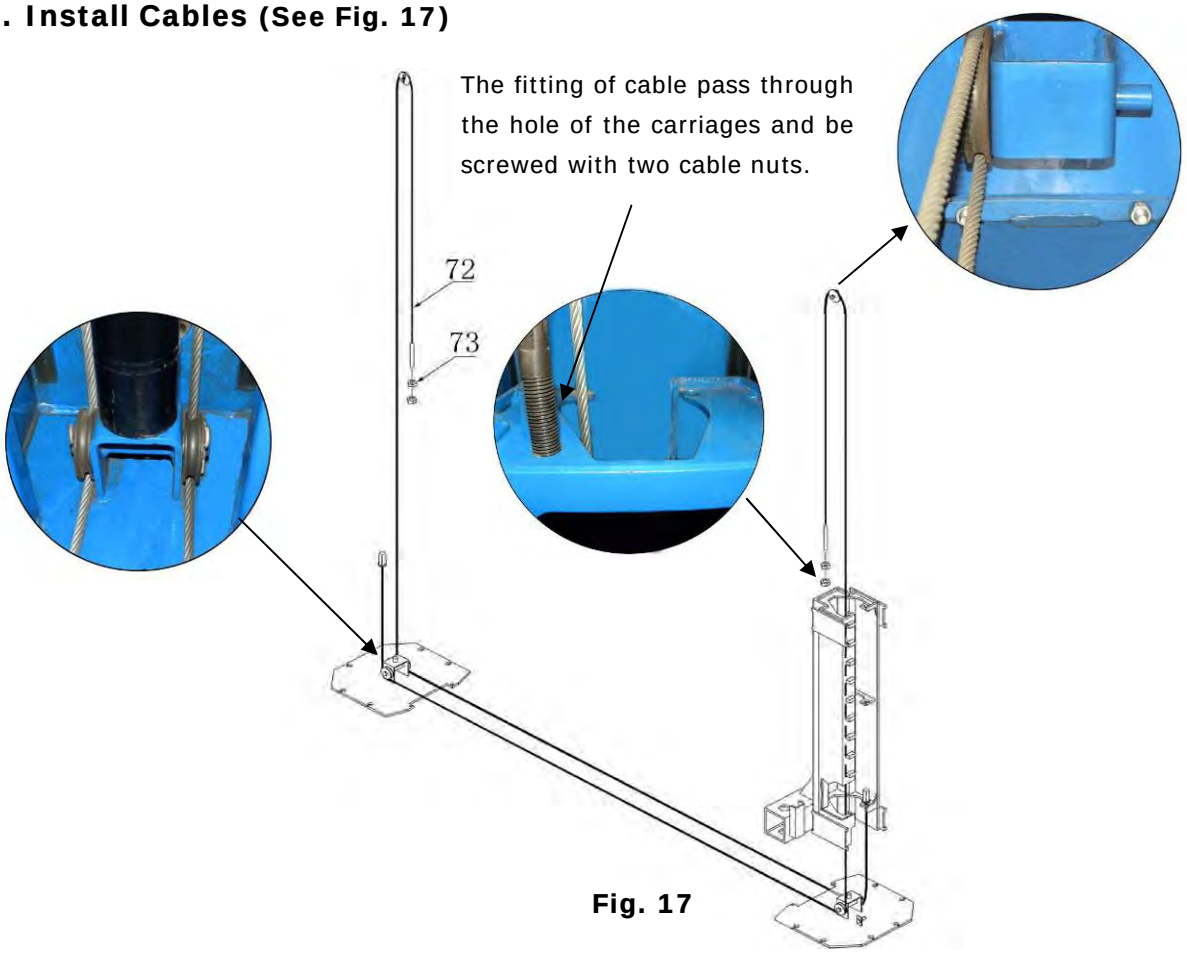



**Fig. 17**

## J. Hydraulic Hose Assembly (See Fig. 18).

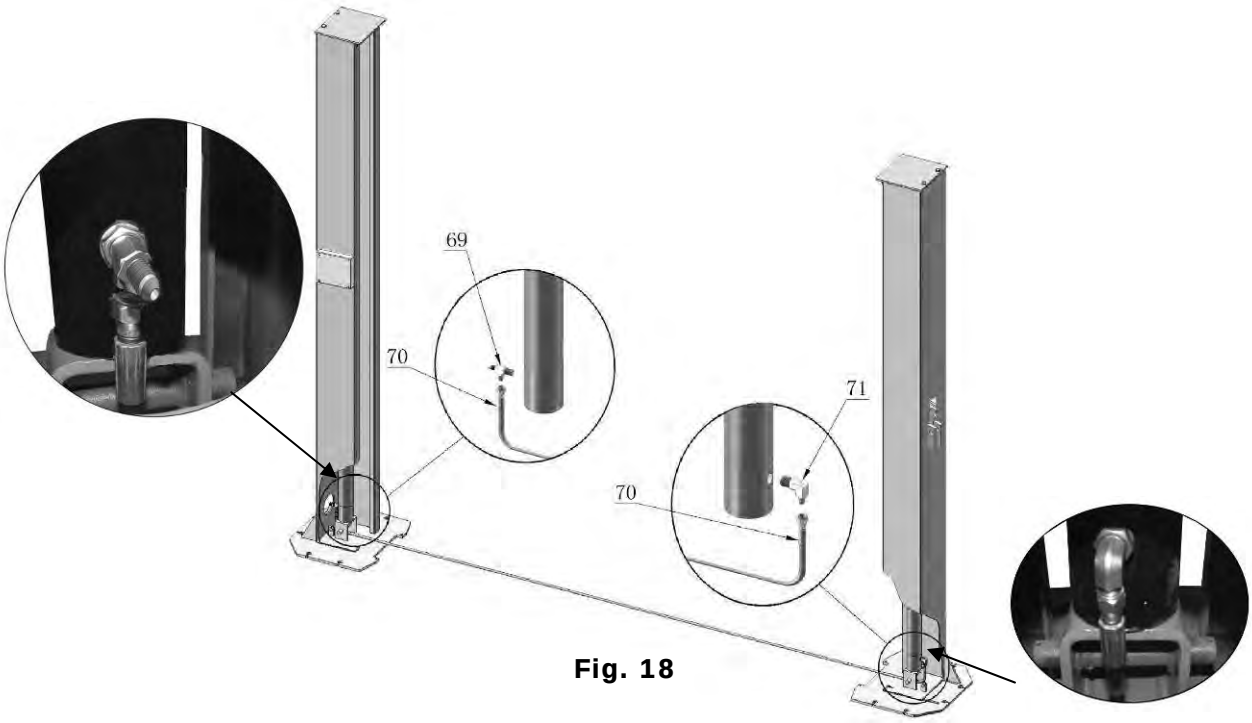



**Fig. 18**

**K. Install Hydraulic Power Unit and the Hydraulic Hose (See Fig. 19).**

Tighten all the hydraulic fittings, and fill the reservoir with hydraulic oil.

**Note: Before filling the power unit reservoir, make electrical connections to the 220volt power unit and test run it for a few seconds to see if it operates properly. Fill the power unit reservoir with #32 series hydraulic oil; approximately 3 gallons.**

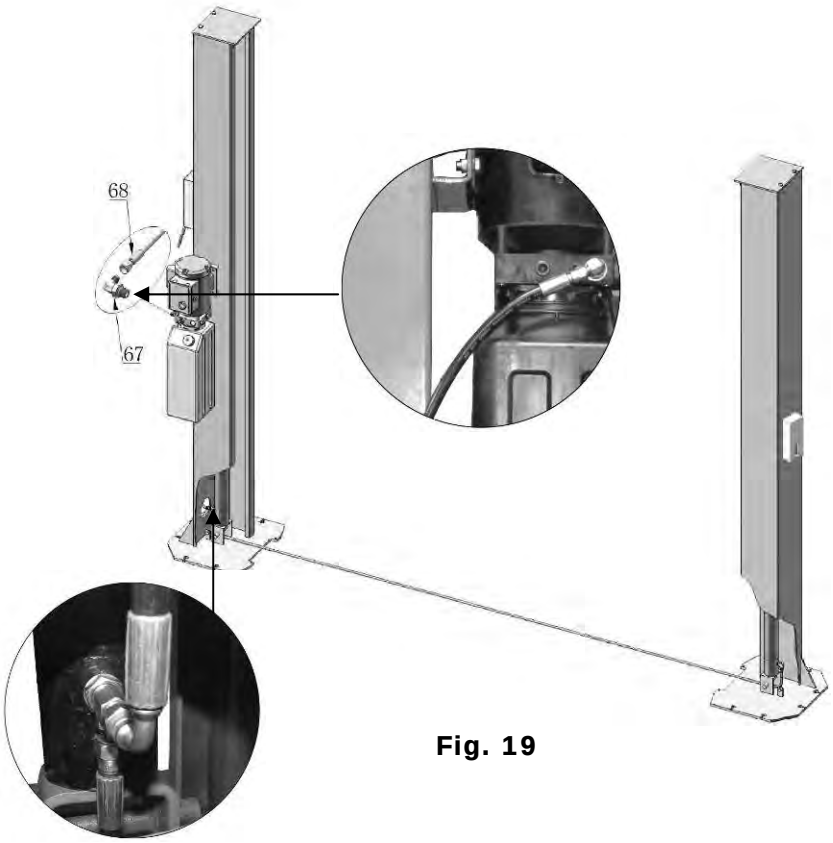



**Fig. 19**

**L. Install Safety Device and Safety Cable (See Fig. 20).**

**NOTE:** 1. Install the safety cable from the offside lock assembly.

2. Pay attention to the connecting direction of the safety cable.

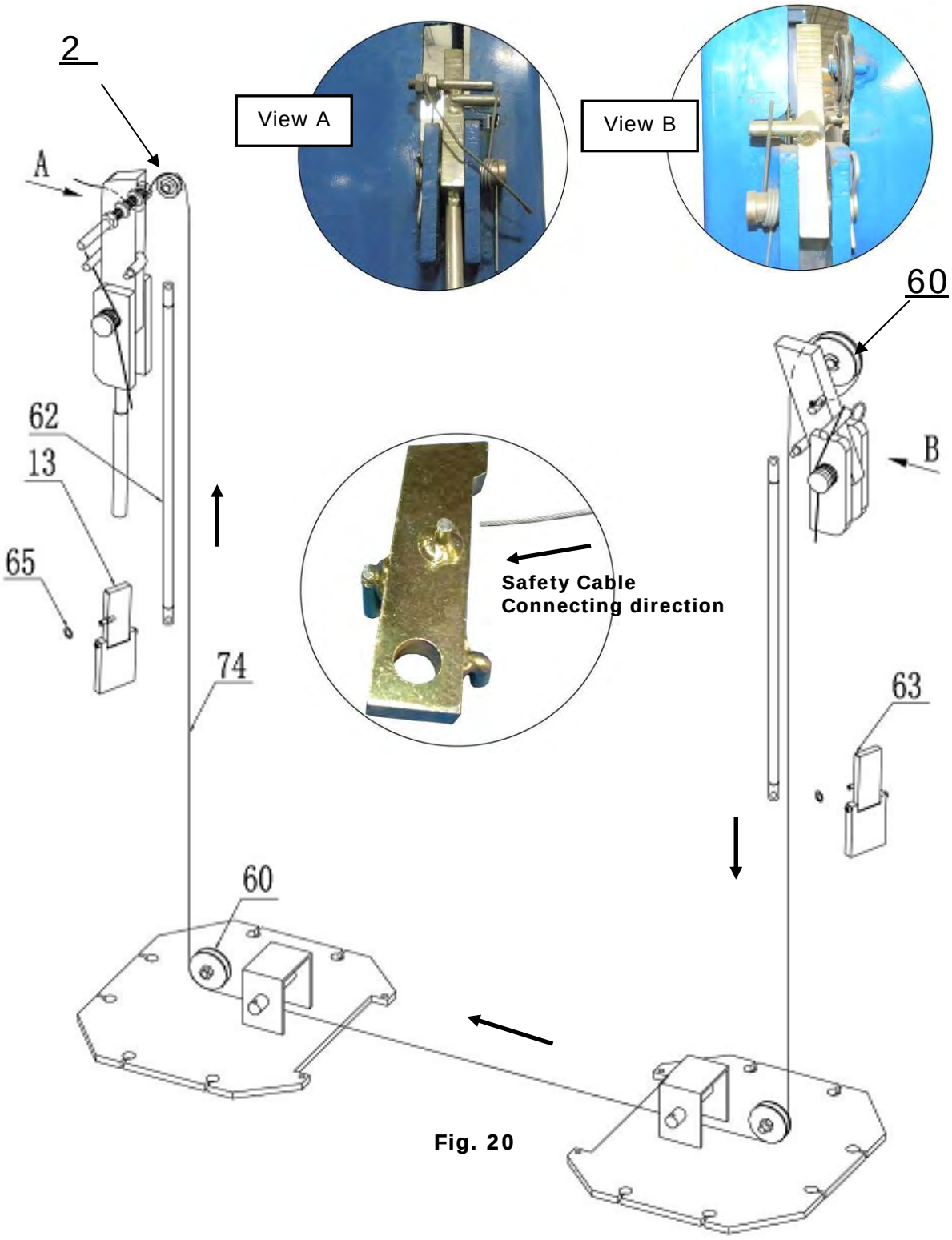



**Fig. 20**

## M. Assemble Floor Cover and Protective Rubber Guards (See Fig. 21).


**Fig. 21**

## N. Install the Lifting Arms and Adjust the Arm Locks

1. Install the Lifting Arms **(See Fig. 22).**

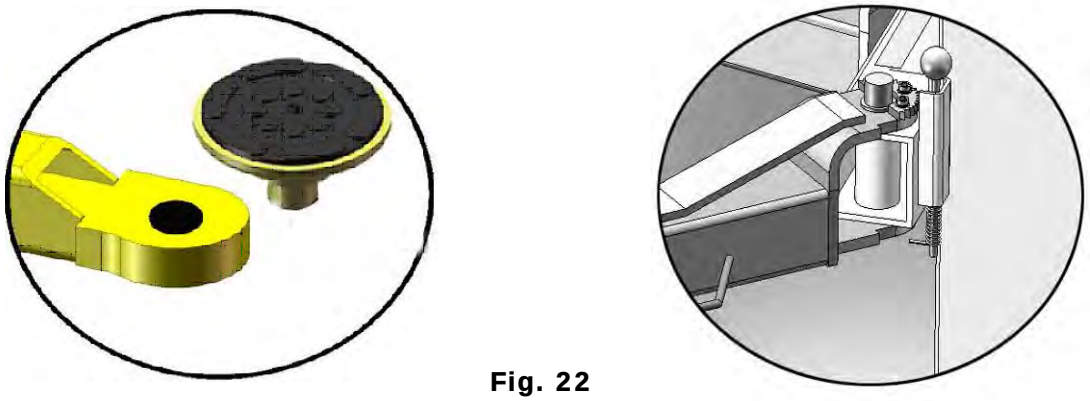


**Fig. 22**

2. Lowing the carriages down to the lowest position, then use the 17# wrench to loosen the nut **(See Fig. 23)**

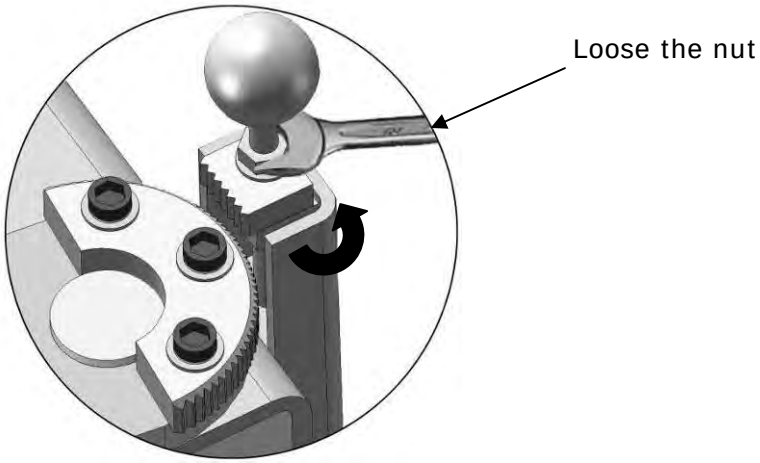



**Fig. 23**

3. Adjust the arm lock either back or forth to mesh the gear lock teeth **(See Fig. 24).**

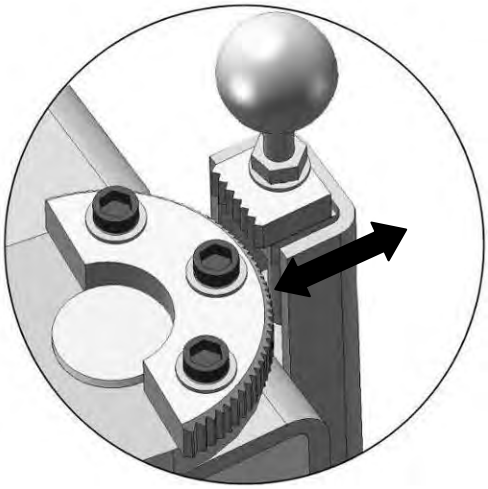


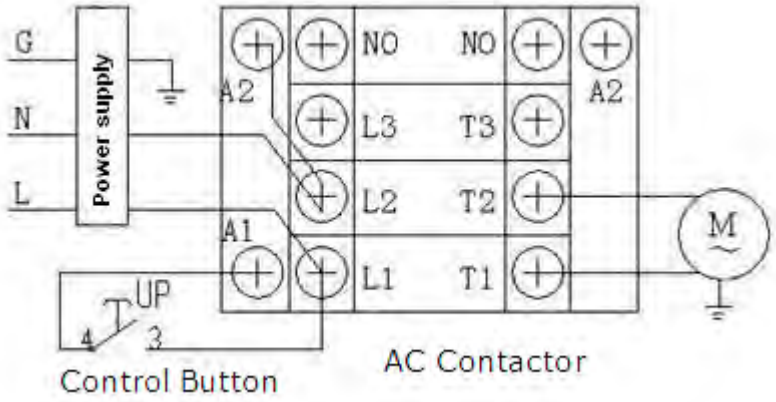
**Fig. 24**

## O. Install Electrical System

**Note:**

**Single phase motor wiring (See Fig. 25)**

1. Connect the two power supply lines (fire wire **L** and zero wire **N**) to terminals on the AC contactor marked **L1, L2**.
2. Connect the two motor wires to terminals on the AC contactor marked **T1, T2**.
3. Connect the jumper wire (about 3" long) **A2** to **L2** on the AC contactor.
4. Connect the control **(push)** button wires to **A1, L1** on the AC contactor.



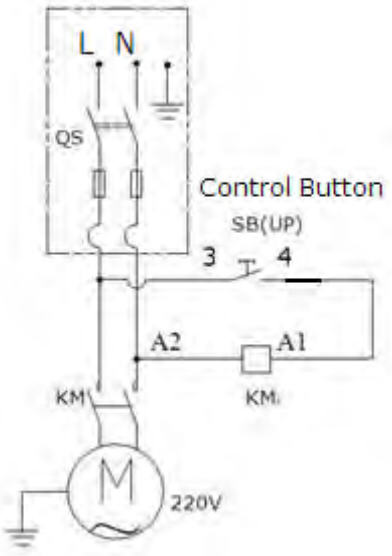
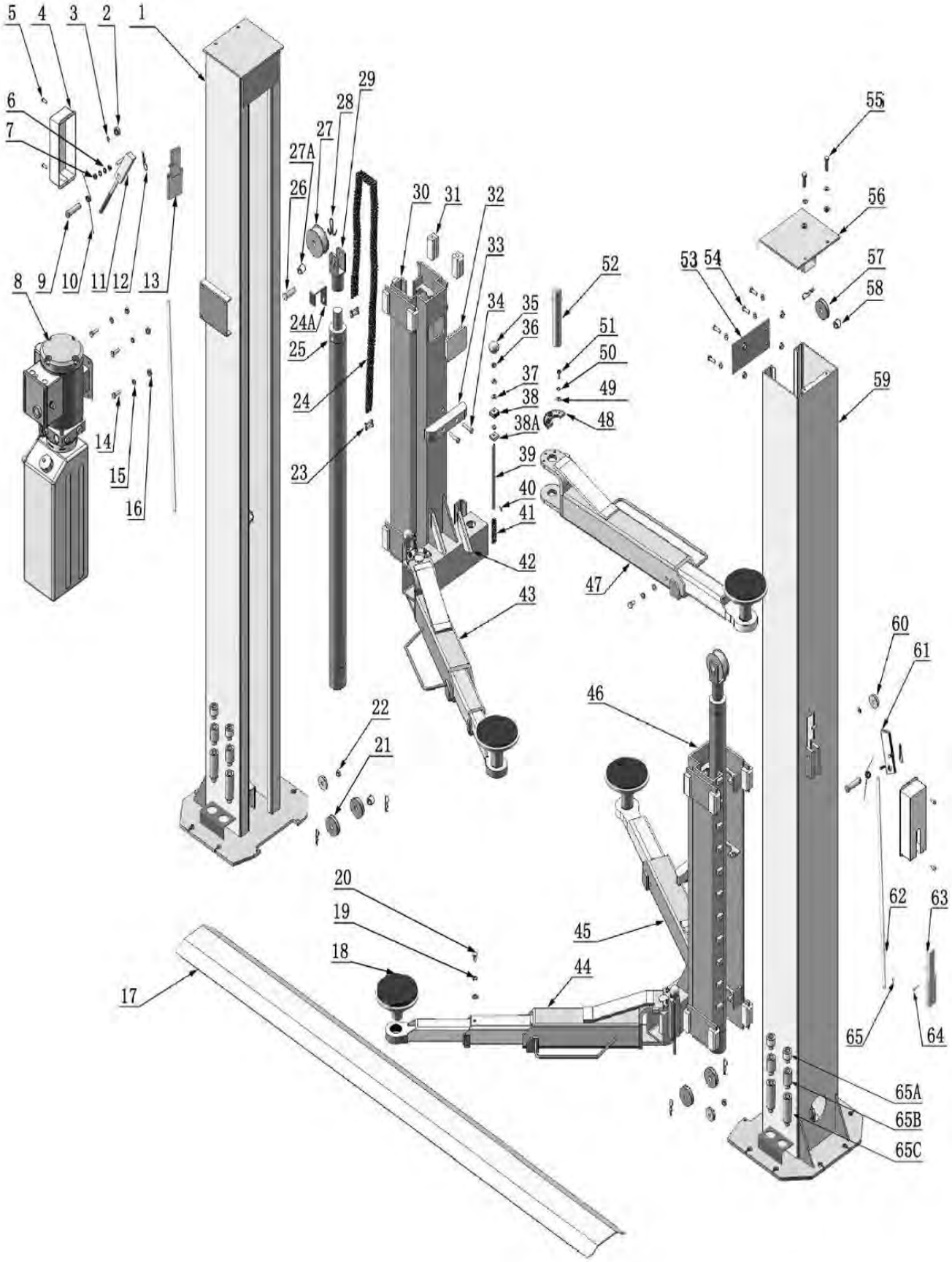
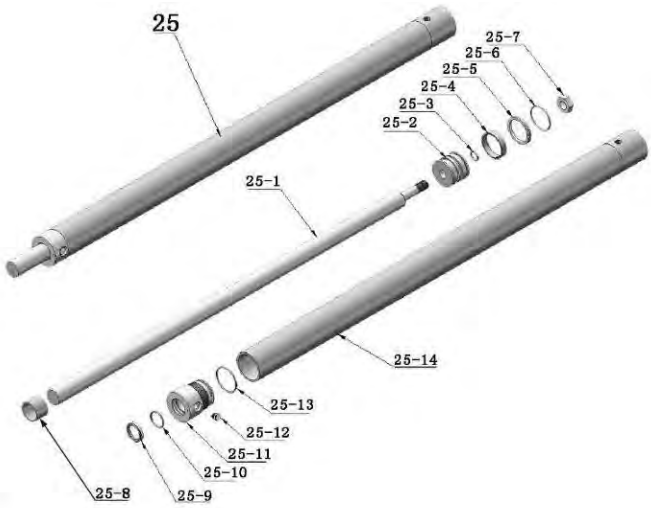




**Fig. 25**

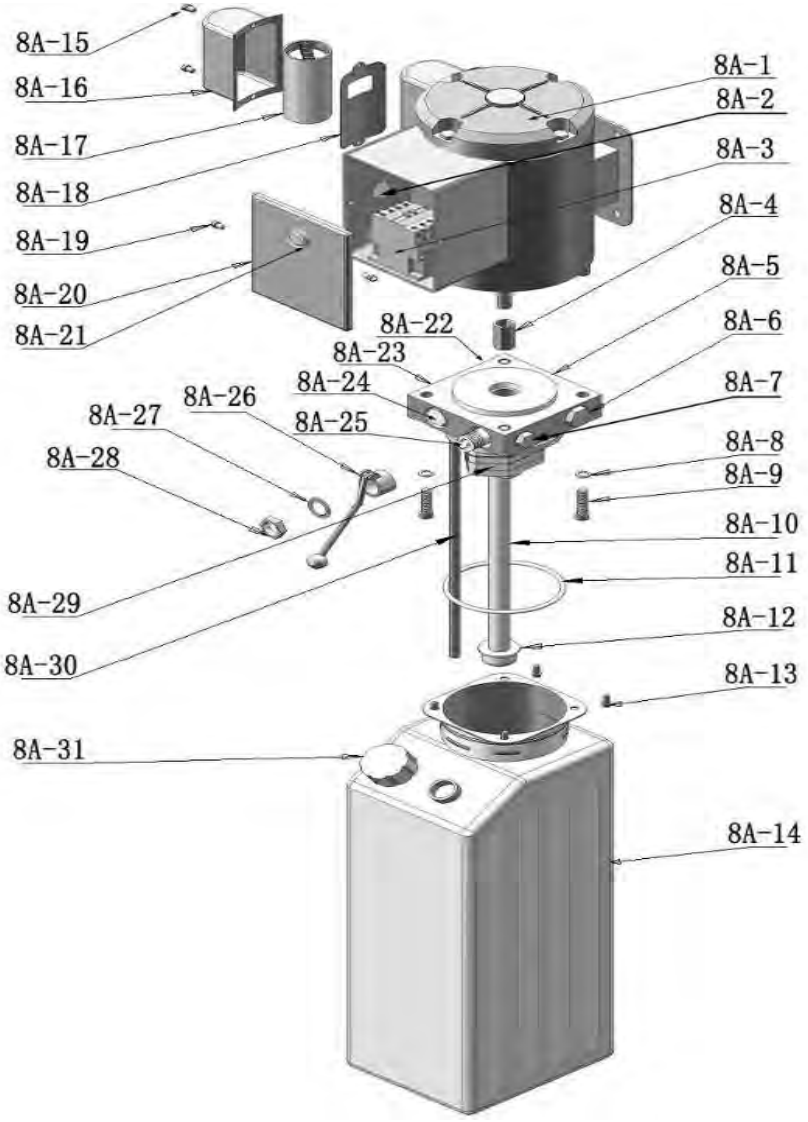
## Exploded View



## Cylinder Exploded View




## Hydraulic Power Unit Exploded View



**PEAK hydraulic power unit**

## V. TEST RUN

### 1. Adjust Synchronizing Cables (See Fig. 26)

Use a crescent wrench to hold the cable end and
Use a ratchet or wrench to tighten the cable nut.
Make sure the two cables have the same tension.
The two carriages should go up and down at the same time.
Install the plastic grommet covers on the carriages.

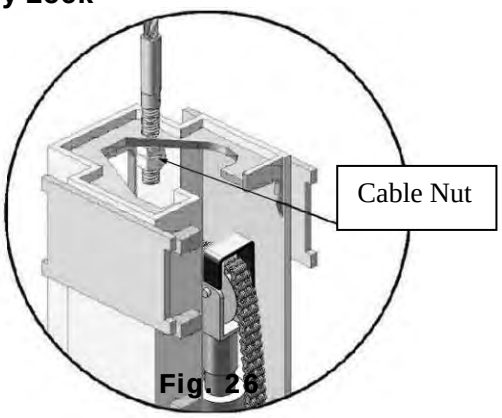
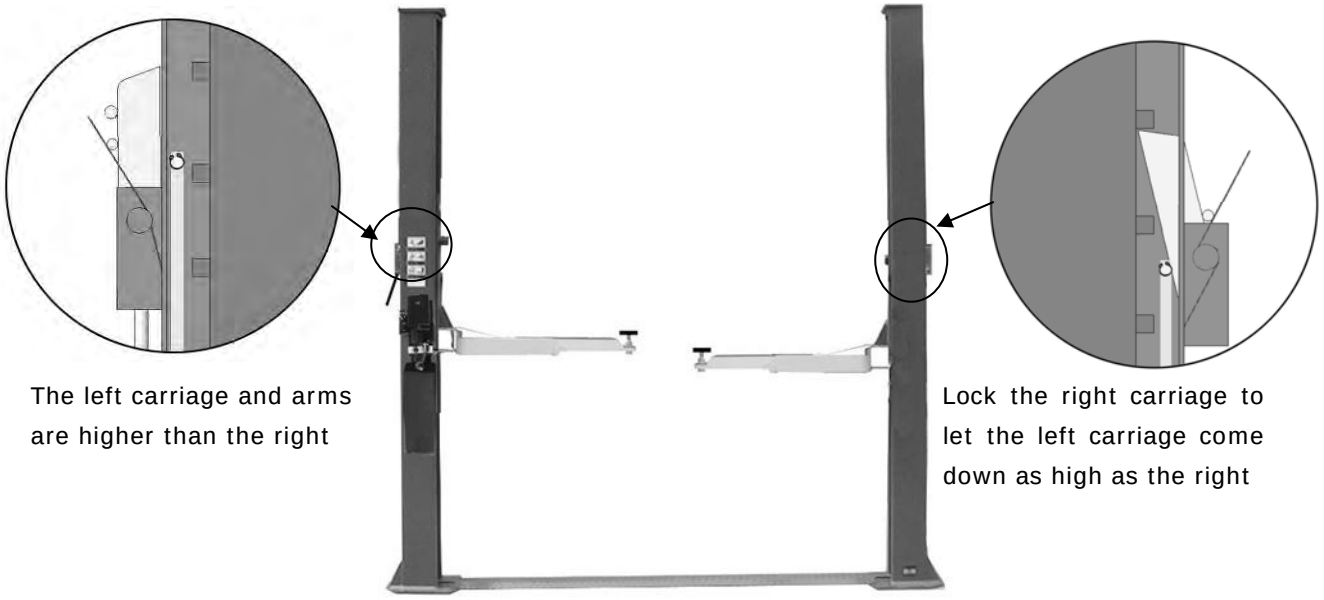



Fig. 26

**a.** Press **UP** button to lift the carriages past the first safety lock. Then lower the carriages on the first set of safety locks.

**b.** Loosen the safety cable lock nuts. Release the safety lock on the side that is in a higher position. The other side safety lock is in engaged. Then lower the lift down. The side with the carriage in the lower position will be locked and the other side is unlocked. Continue to lower down the lift until both carriages are at the same level.

**c.** Tighten the cable nut on the synchronizing cables, and tighten the safety cable with the lock nuts, raise the lift again, adjust the cables if needed.



The left carriage and arms are higher than the right

Lock the right carriage to let the left carriage come down as high as the right

Fig. 27

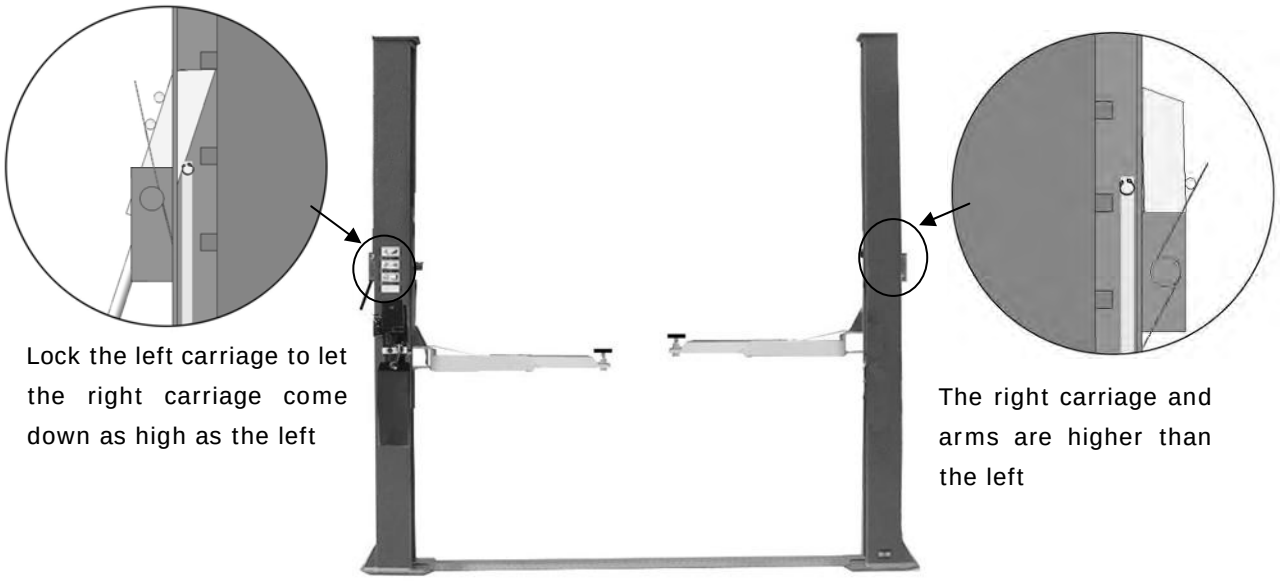



**Fig. 28**

## 2. Adjusting the Safety Cable

Raise the carriages to same height and lower on the safety locks, tighten the safety cable and then release the tension a little, and then tighten the cable nuts.

## 3. Adjust the Lowering Speed

You can adjust the lower speed of the lift if needed: Loosen the locking nut on the Throttle Valve, and then turn the Throttle Valve clockwise to decrease the lowering speed, or counterclockwise to increase the lowering speed. Do not forget to tighten the locking nut after the lowering speed adjustment has been done.

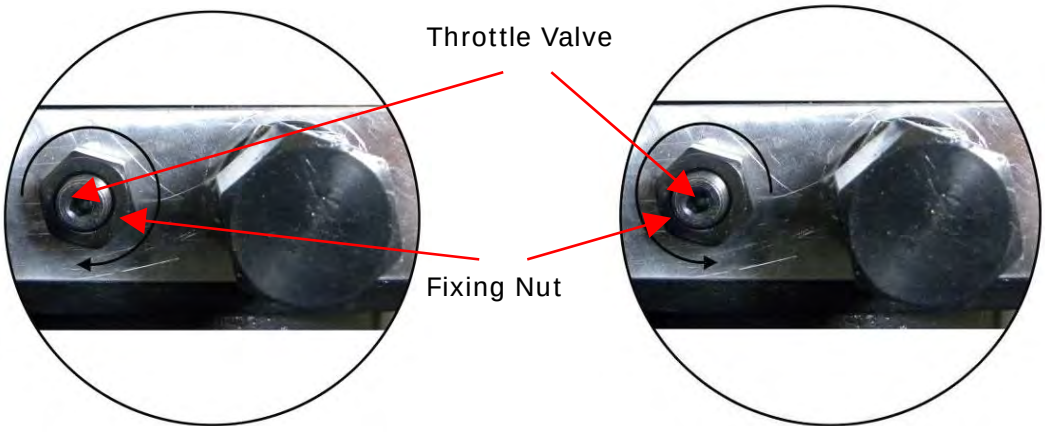



**Fig. 29**

## 4. Test with load

Test run the lift with a load. Run the lift in low position several times, make sure the lift carriages can raise and lower at the same time. The safety locks should engage and release at the same time. Test run the lift to the top and bottom. The above steps may need to be repeated if the lift arms raise or lower at different intervals.

**NOTE: The lift arms may vibrate on the way down. This means that air is trapped in the cylinder(s). By raising and lowering the lift several more times, the air will bleed out automatically.**

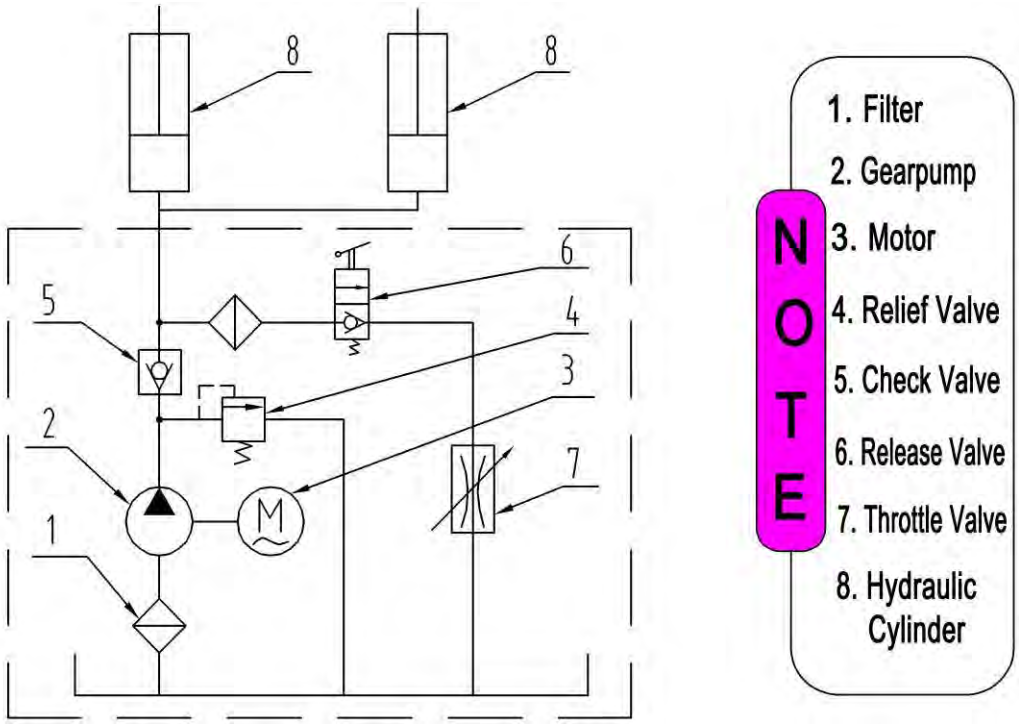



**Fig. 30 Hydraulic System**

## VI. OPERATION INSTRUCTIONS

**Please read the safety tips carefully before operating the lift**

**To lift vehicle**

1. Keep of environment near the lift clean;
2. Position lift arms to the lowest position;
3. Position vehicle between columns evenly;
4. Move arms to the vehicle's lifting points;
   **Note: The four lift arms must contact the vehicle's lifting point at the same time.**
5. Press the **UP** button until the lift pads contact underside of vehicle. Check to make sure the vehicle is secure;
6. Continue to raise the lift slowly to the desired working height, ensuring the balance of the vehicle;
7. Push lowering handle to lower lift onto the nearest safety locks. The vehicle is ready to repair.

**To lower vehicle**

1. Be sure that the area around and under the lift is clear, only leaving operator in lift area;
2. Press the button of **UP** to raise the vehicle slightly, and then release and hold the safety lock handle, lower vehicle by pushing lowering handle on the power unit.
3. Open the arms and position them to the shortest length;
4. Drive away the vehicle.
5. Turn off the power.

## VII.MAINTENANCE SCHEDULE

**Monthly:**

1. Re-torque the anchor bolts to 100 foot pounds;
2. Check all connectors, bolts and pins to insure proper mounting;
3. Lubricate cable with lubricant;
4. Make a visual inspection of all hydraulic hoses/lines for possible wear or leakage;
5. Check Safety locks and make sure they operate properly. Adjust if needed;
6. Lubricate all Rollers and Pins with 90wt. Gear oil or equivalent;

**Note: All anchor bolts should take full torque. If any of the bolts do not function for any reason, DO NOT use the lift until the bolt has been replaced.**

**Every six months:**

1. Make a visual inspection of all moving parts for possible wear, interference or damage.
2. Check and adjust as necessary the tension of the cables to insure level lifting.
3. Check columns for plumb.
4. Check Rubber Pads and replace as necessary.
5. Check Safety locks and make sure they operate properly. Adjust if needed.

## VII. TROUBLE SHOOTING

| TROUBLE | CAUSE | REMEDY |
|---|---|---|
| Motor does not run | 1. Button does not work<br>2. Wiring connections are not in good condition<br>3. Motor burned out<br>4. Height Limit Switch is damaged<br>5. AC contactor burned out | 1. Replace button<br>2.Repair all wiring connections<br>3. Repair or replace motor<br>4.Replace the Limit Switch<br>5. Replace AC Contactor |
| Motor runs but the lift will not raise | 1. Hydraulic pick up tube cracked<br>2. Gear Pump out of operation<br>3. Release Valve in damage<br>4. Relief Valve or Check Valve is damage<br>5. Low oil level | 1.Remove tank and replace<br>2.Repair or replace<br>3. Repair or replace<br>4.Repair or replace<br>5.Fill tank |
| Lift does not stay up | 1. Release Valve stuck open<br>2. Relief Valve or Check Valve leakage<br>3. Cylinder or Fitting leaks | Repair or replace |
| Lift raises slowly | 1. Oil line is jammed<br>2. Motor running on low voltage<br>3. Oil mixed with air<br>4. Gear Pump leaks<br>5. Overload lifting | 1. Clean the oil line<br>2. Check Electrical System<br>3. Fill tank<br>4. Replace Pump<br>5. Check load |
| Lift will not lower | 1. Safety locks out of adjustment<br>2. Release Valve stuck in closed position<br>3. Safety cable broken<br>4. Oil system is jammed | 1. Release and readjust<br>2. Repair or replace<br>3. Replace<br>4. Clean the oil system |

## IX. Parts List For Model BP9000x

### B. Parts for Model BP9000X

| Item. | Part No. | Description | Qty. | Note |
|---|---|---|---|---|
| 1 | 203001 | Power Side Post | 1 | |
| 2 | 209011 | Plastic Pulley | 1 | |
| 3 | 209010 | Snap Ring | 2 | |
| 4 | 209008 | Safety Cover | 2 | |
| 5 | 209009 | Cup Head Bolt | 4 | |
| 6 | 206006 | Washer | 2 | |
| 7 | 206023A | Hex Nut | 2 | |
| 8 | 209002 | Hydraulic Power Unit | 1 | |
| 9 | 209006 | Safety Pin | 2 | |
| 10 | 209007 | Safety Spring | 2 | |
| 11 | 203002 | Power Side Safety Assembly | 1 | |
| 12 | 209012 | Hair Pin | 8 | |
| 13 | 203015 | Safety Block (Main Side) | 1 | |
| 14 | 209003 | Hex Bolt | 4 | |
| 15 | 209004 | Rubber Ring | 4 | |
| 16 | 209005 | Nylock Nut | 8 | |
| 17 | 203003 | Floor Cover | 1 | |
| 18 | 680030 | Rubber Pad Frame Support | 4 | |
| 19 | 209039 | Spring Washer | 14 | |
| 20 | 209038 | Hex Bolt | 6 | |
| 21 | 209057 | Small Pulley | 4 | |
| 22 | 209056 | Nylock Nut | 2 | |
| 23 | 201010 | Chain Connector | 4 | |
| 24 | 203005 | Chain | 2 | |
| 24A | 201042 | Chain Protective Cover | 2 | |
| 25 | 201008 | Hydraulic Cylinder | 2 | |
| 26 | 201007 | Pin For Chain Pulley | 2 | |
| 27 | 203004 | Chain Pulley | 2 | |
| 27A | 203004A | Bronze bush for Chain Pulley | 4 | |
| 28 | 201005 | Split Pin | 2 | |
| 29 | 201004 | Chain Pulley Assy. | 2 | |
| 30 | 203007 | Power Side Lifting Head | 1 | |
| 31 | 206044 | Slider (Wear Blocks) | 16 | |
| 32 | 209016 | Carriage Plastic Cover | 2 | |
| 33 | 206045 | Protective Rubber | 2 | |
| 34 | 206046 | Self-tapping Screw | 4 | |
| 35 | 209020 | Plastic Ball | 4 | |
| 36 | 209021 | Hex Nut | 12 | |
| 37 | 209022 | Washer | 12 | |

| | | | | |
|---|---|---|---|---|
| 38 | 209023A | Teeth | 4 | |
| 39 | 209024 | Arm Lock Bar | 4 | |
| 40 | 209025 | Hair Pin | 4 | |
| 41 | 209026 | Spring | 4 | |
| 42 | 209027 | Protective Rubber Set | 4 | |
| 43 | 201012C | Lifting Arm - Front Right (Drop-in) | 1 | |
| 44 | 201013C | Lifting Arm - Front Left (Drop-in) | 1 | |
| 45 | 201014B | Lifting Arm - Rear Left (Drop-in) | 1 | |
| 46 | 203008 | Offside Lifting Head | 1 | |
| 47 | 201016B | Lifting Arm - Rear Right (Drop-in) | 1 | |
| 48 | 209035 | Gear | 4 | |
| 49 | 209033 | Washer | 20 | |
| 50 | 209034 | Spring Washer | 12 | |
| 51 | 209032 | Socket Bolt | 12 | |
| 52 | 209030 | Lifting Arm Pin | 4 | |
| 53 | 203009 | Connecting Bar | 2 | |
| 54 | 209043 | Hex Bolt | 8 | |
| 55 | 209046 | Hex Bolt | 4 | |
| 56 | 203010 | Top plate | 2 | |
| 57 | 209045 | Big Pulley | 2 | |
| 58 | 209057A | Bronze Bush For Pulley | 6 | |
| 59 | 203011 | Offside Post | 1 | |
| 60 | 209049 | Plastic Pulley | 3 | |
| 61 | 203012 | Offside Safety Assembly | 1 | |
| 62 | 203013 | Coupling | 2 | |
| 63 | 203014 | Safety Block (Second Side) | 1 | |
| 64 | 203018 | Socket Bolt | 4 | |
| 65 | 203016 | Snap Ring | 4 | |
| 65A | 209051 | Stackable Adapter (1.5”) | 4 | |
| 65B | 209052 | Stackable Adapter (3”) | 4 | |
| 65C | 209053 | Stackable Adapter (6”) | 4 | |
| 66 | 209059 | Anchor bolt | 12 | |
| **Oil Hose, Fittings & Cables** | | | | |
| 67 | 209060 | $90^0$ Fitting for Hydraulic Power Unit | 1 | |
| 68 | 201021 | Oil Hose | 1 | |
| 69 | 201022 | T-Fitting | 1 | |
| 70 | 203019 | Oil Hose | 1 | |
| 71 | 201020 | $90^0$ Fitting | 1 | |
| 72 | 203020 | Cable | 2 | |
| 73 | 209066 | Cable Nut | 4 | |
| 74 | 203021 | Safety Lock Cable | 1 | |

| Parts For Hydraulic Cylinder | | | | |
|---|---|---|---|---|
| 25-1 | 201027 | Piston Rod | 2 | |
| 25-2 | 201028 | Piston | 2 | |
| 25-3 | 206069 | O-Ring | 2 | |
| 25-4 | 201029 | Support Ring | 2 | |
| 25-5 | 201030 | Y-Ring | 2 | |
| 25-6 | 201031 | O-Ring | 2 | |
| 25-7 | 206071 | Hex Nut | 2 | |
| 25-8 | 201037 | Adjustment Tube | 2 | |
| 25-9 | 209078 | Dust Seal | 2 | |
| 25-10 | 201032 | O-Ring | 2 | |
| 25-11 | 201033 | Head Cap | 2 | |
| 25-12 | 201034 | Bleeding Plug | 2 | |
| 25-13 | 201035 | O-Ring | 2 | |
| 25-14 | 201036 | Bore Weldment | 2 | |

## Parts List for Power Unit for Model BP9000X

| Item. | Part No. | Description | Qty. | Note |
|---|---|---|---|---|
| 8A-1 | 209082A | Motor | 1 | |
| 8A-2 | 209109 | Protective Ring | 1 | |
| 8A-3 | 209112 | AC contactor | 1 | |
| 8A-4 | 209083A | Motor Connecting Shaft | 1 | |
| 8A-5 | 209084A | Valve Body | 1 | |
| 8A-6 | 209085A | Relief Valve | 1 | |
| 8A-7 | 209113 | Throttle valve | 1 | |
| 8A-8 | 209086A | Spring Washer | 4 | |
| 8A-9 | 209087A | Socket Bolt | 4 | |
| 8A-10 | 209088A | Inlet Pipe | 1 | |
| 8A-11 | 209089A | O-Ring | 1 | |
| 8A-12 | 209090A | Filter | 1 | |
| 8A-13 | 209091A | Socket bolt | 4 | |
| 8A-14 | 209092A | Reservior | 1 | |
| 8A-15 | 209093A | Cup Head Bolt | 4 | |
| 8A-16 | 209094A | Cover of Capacitor | 2 | |
| 8A-17 | 209095A | Capacitor | 2 | |
| 8A-18 | 209096A | Rubber Gasket | 2 | |
| 8A-19 | 209097A | Cup Head Bolt | 2 | |
| 8A-20 | 209098A | Cover of Motor Terminal Box | 1 | |
| 8A-21 | 209099A | Push Button | 1 | |
| 8A-22 | 209110A | Oil Return Port | 1 | |
| 8A-23 | 209100A | Oil Outlet | 1 | |
| 8A-24 | 209105A | Check Valve | 1 | |
| 8A-25 | 209101A | Release Valve | 1 | |
| 8A-26 | 209102A | Handle For Release Valve | 1 | |
| 8A-27 | 209103A | Washer | 1 | |
| 8A-28 | 209104A | Hex Nut | 1 | |
| 8A-29 | 209106A | Gear Pump | 1 | |
| 8A-30 | 209107A | Oil Return Pipe | 1 | |
| 8A-31 | 209108A | Filler Cap | 1 | |