



WEAVER
E Q U I P M E N T

W-9F Automotive Lift

Please read this manual before operation

WEAVER

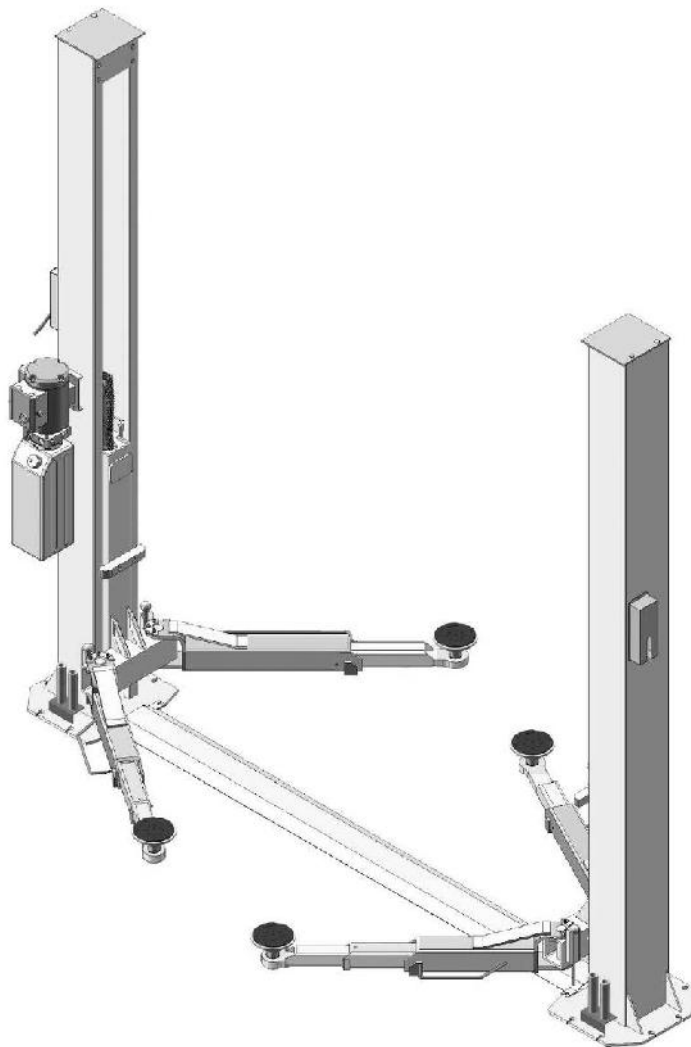
L I F T



W-9F Installation & Operation Manual

9000 lb. Capacity Baseplate

Super-Symmetric Two Post Lift



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I. PRODUCT FEATURES AND SPECIFICATIONS

FLOORPLATE CHAIN-DRIVE TWO POST LIFT

Model W-9F (See Fig. 1)

- Compact design
- Dual hydraulic cylinders, designed and made on ANSI standards, utilizing NOK oil seal in cylinder
- Self-lubricating UHMW Polyethylene sliders and bronze bush
- Single-point safety release, and dual safety design
- Supersymmetric (2 in 1) arms design
- Stackable adapters 4 – Pieces each 1.5", 2.5", 5"
- Saddle Adapters – 4 Pieces

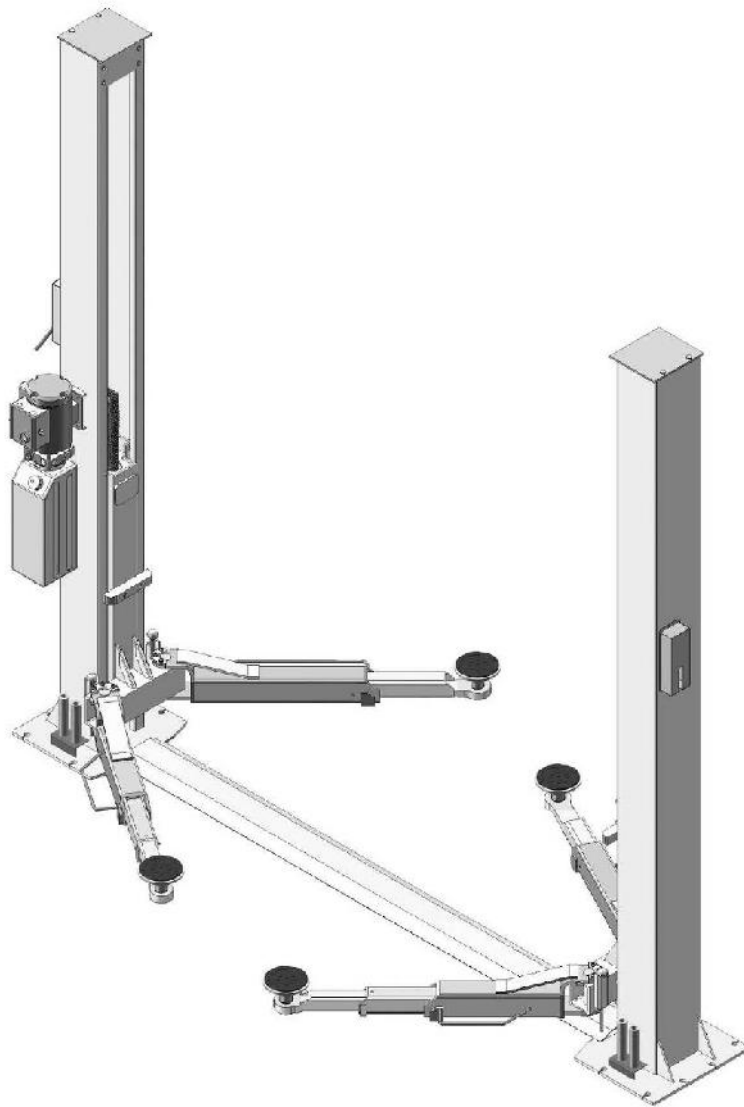


Fig.1

Swing Arm View

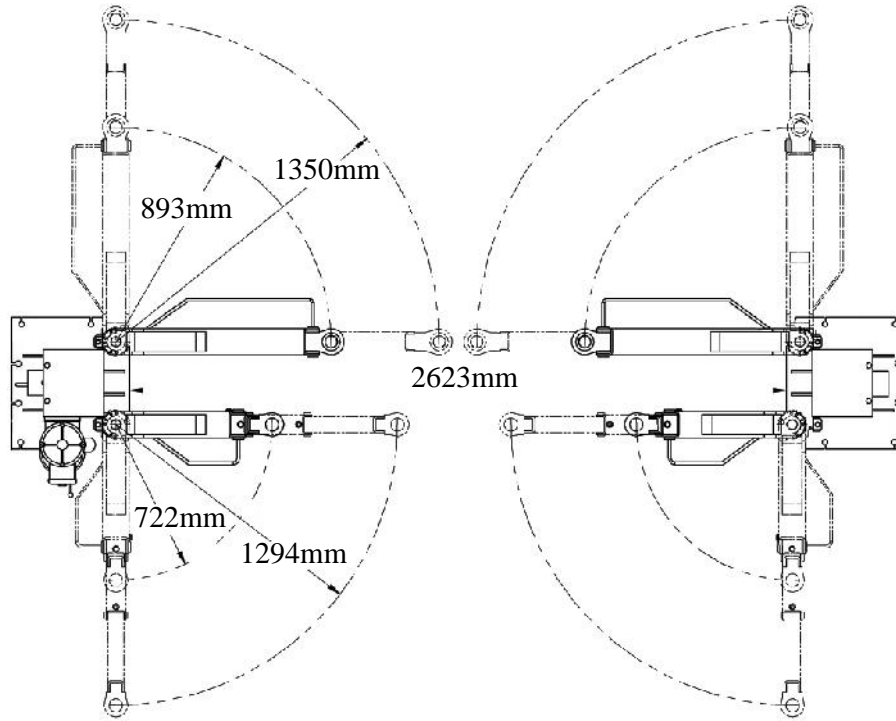


Fig.2

Model	Style	Lifting Capacity	Lifting Time	Lifting Height	Overall Height	Overall Width	Width Between Columns	Minimum Pad Height	Gross Weight	Motor
W-9F	Floorplate Chain-driven	4.0T 9,000lbs	49S	1940-2169mm 76 3/8"-85 3/8"	2841mm 111 3/4"	3460mm 136 1/4"	2850mm 112 1/4"	90mm 3 1/2"	675Kg 1,488 lbs	2.0/3.0 HP

II. INSTALLATION REQUIREMENT

A. TOOLS REQUIRED

- ✓ Rotary Hammer Drill (19)



- ✓ Hammer



- ✓ Level



- ✓ Adjustable Wrench (12")



- ✓ Ratchet With Socket (30#)



- ✓ Wrench Set
(10#, 13#, 14#, 15#, 17#, 19#, 24#, 27#)



- ✓ Carpenter's Chalk



- ✓ Screwdriver Set



- ✓ Tape Measure (7.5m)



- ✓ Pliers



- ✓ Socket Head Wrench (6#)



- ✓ Vise Grip



Fig. 3

Concrete Specifications

Failure to adhere to the specifications of concrete may result in Lift Failure.

FOUNDATION and ANCHORING REQUIREMENTS

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". NOTE: 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. Maintain a 6" minimum distance from any slab edge or seam. Hole to hole spacing should be a minimum 6 1/2" in any direction. Hole depth should be a minimum of 4". Drilling through the slab is recommended in case an anchor needs to be replaced it can be driven down through the slab.
3. DO NOT install on asphalt or other similar unstable surface. Columns are supported only by anchoring to floor.
4. Using the shims provided, shim each column base as required 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. Torque anchors to 100 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 100 ft-lbs. installation torque, replace the 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 the existing floor. Allow concrete to cure before installing lifts and anchors (typically 2 to 3 weeks).

POWER SUPPLY

The power requirement is 220 Volt 1 phase power with a 30 amp circuit. Follow local guidelines for running power to the lift.

III. INSTALLATION

A. Location of Installation

Check and insure the installation location (concrete, layout, space size etc.) is suitable for lift installation.

B. Use a carpenter's chalk line to establish installation layout of lift (See Fig.4).

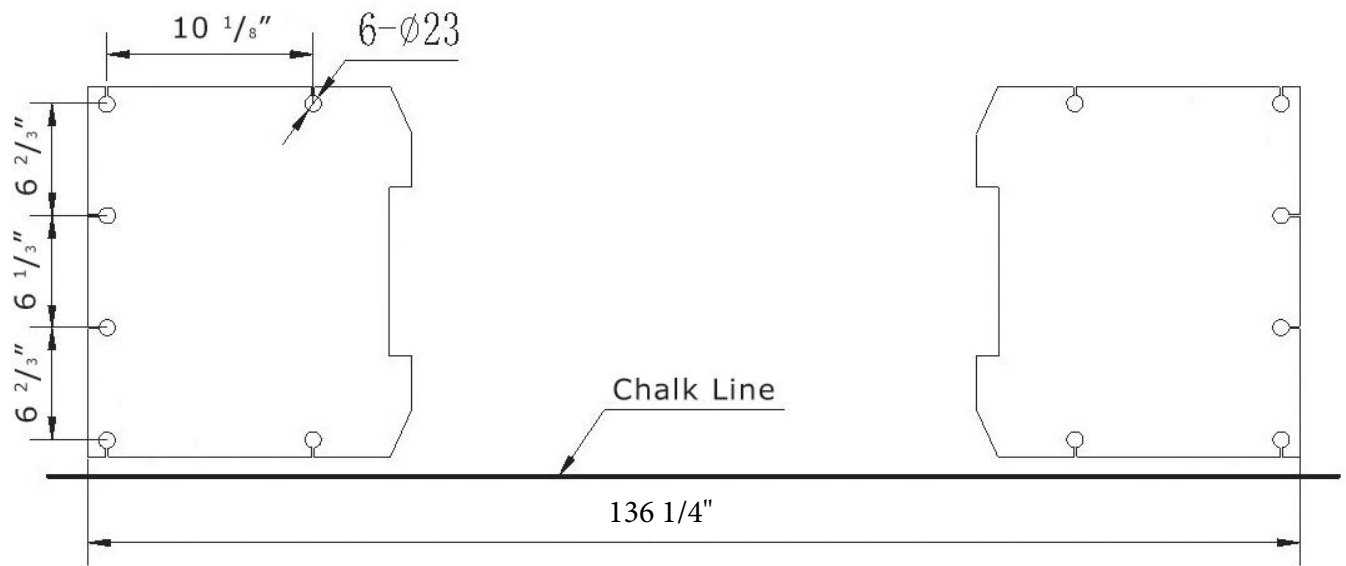


Fig. 4 Model W-9F

C. Check the parts before assembly.

1. Packaged lift and hydraulic power unit (See Fig. 5).



Fig.5

2. Move the lift aside with fork lift or hoist, and open the outer packing carefully. (See Fig. 6).

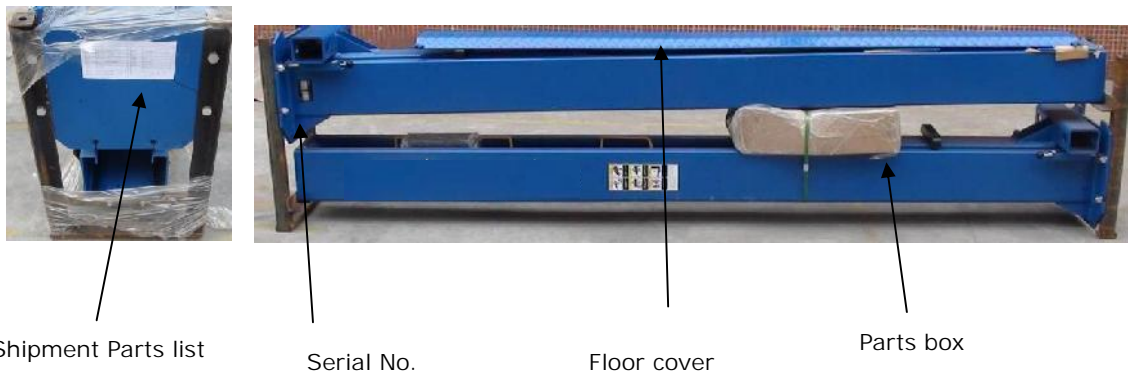


Fig.6

3. Take off the JKparts 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

4. Loosen the top packing bracket bolts. Remove the upper column. Remove the packing bracket.
5. Remove the parts and parts box from the bottom column. Check the parts according to the shipment parts list. **(See Fig. 8)**.



Fig.8

77A

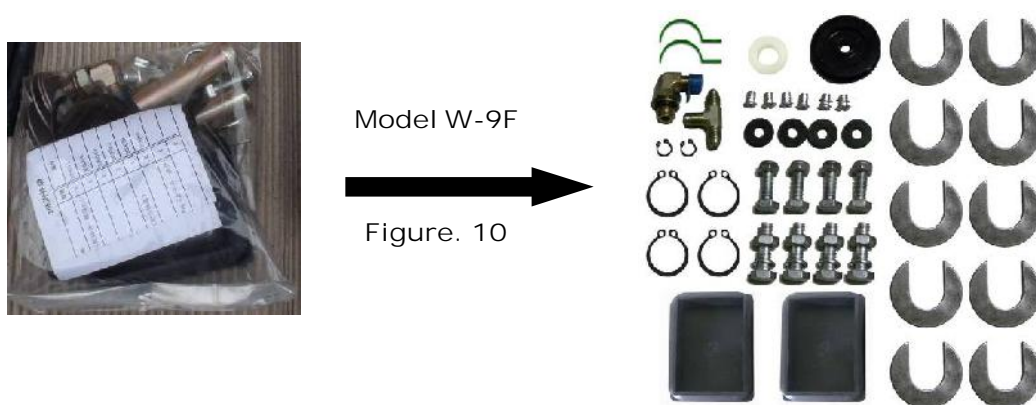
6. Open the carton of parts and check the parts according to parts box list **(See Fig. 9)**.

Model W-9F



Fig.9

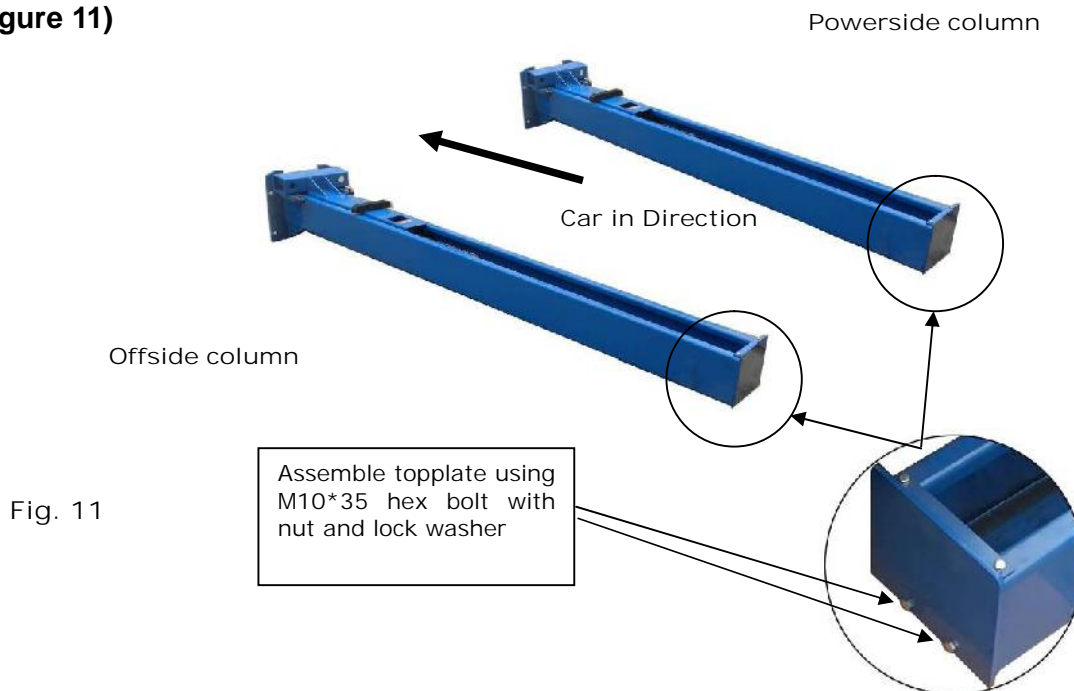
7. Check the parts of the parts bag according to parts bag list (See Fig. 10).



D. Position powerside column

Lay down two columns on the installation site parallel, position the powerside column according to the actual installation site. It is suggested to install the powerside column on the front-right side (passenger side) of vehicle.

(See Figure 11)

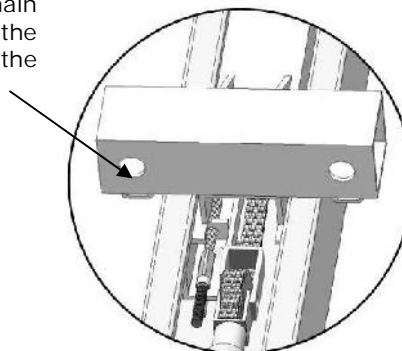


E. Connecting the cables

1. Put down columns and then push the carriages higher than chain pulley (Figure 12 & 13).

Push the carriages higher than chain pulley, cable pass through the top of the carriages and pass through the hole of the bottom steel plate of the carriages

Fig. 12



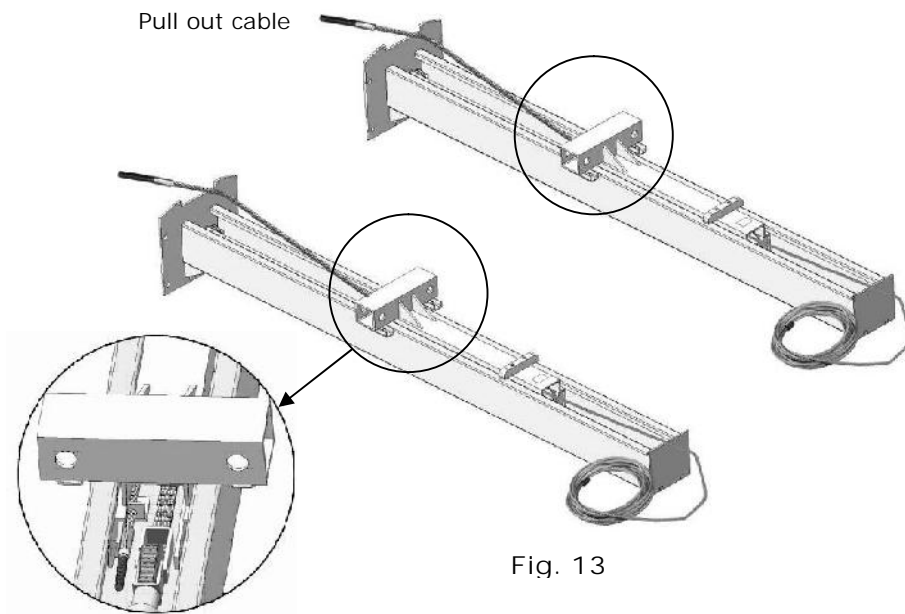


Fig. 13

2. Push the carriages to the bottom of the columns (**See Fig. 14 below**).

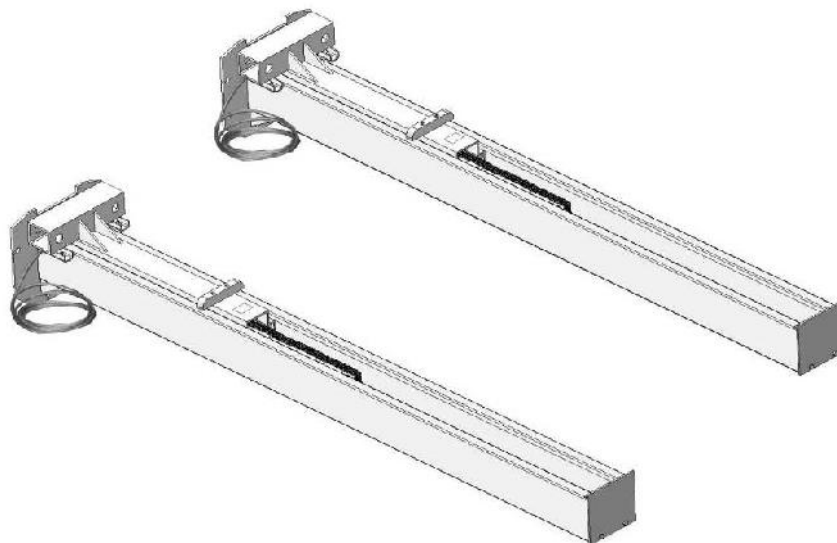


Fig. 14

F. **Position columns (See Fig. 15)**

Check the columns plumbness with level bar, and adjusting with the shims if the columns are not vertical.

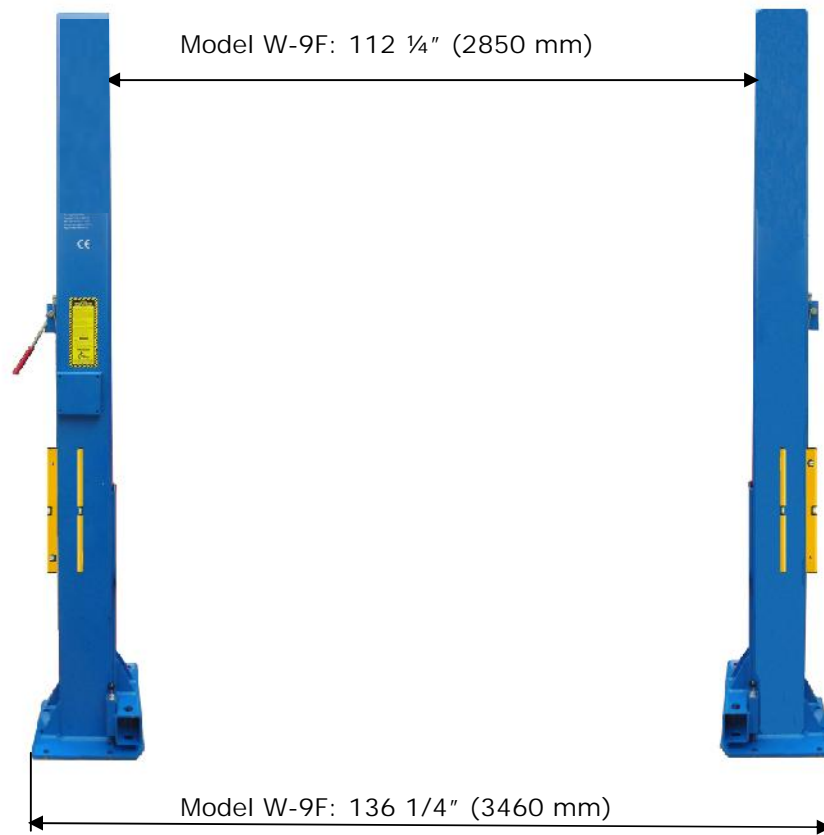
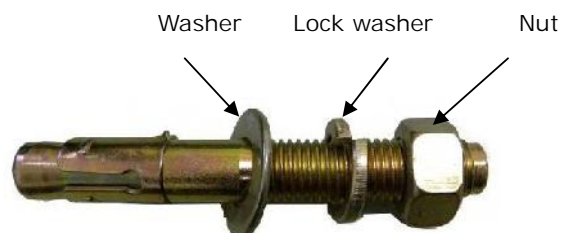


Fig. 15

G. Fix anchor bolts

1. Prepare anchor bolts (See Fig. 16)

Fig.16



2. Using a rotary hammer drill drill all the anchor holes and install the anchor bolts. Then tighten the anchor bolts (See Figure 17 below).

Note: Torque of Anchors is 117N.m .Minimum embedment of Anchors is 90mm.

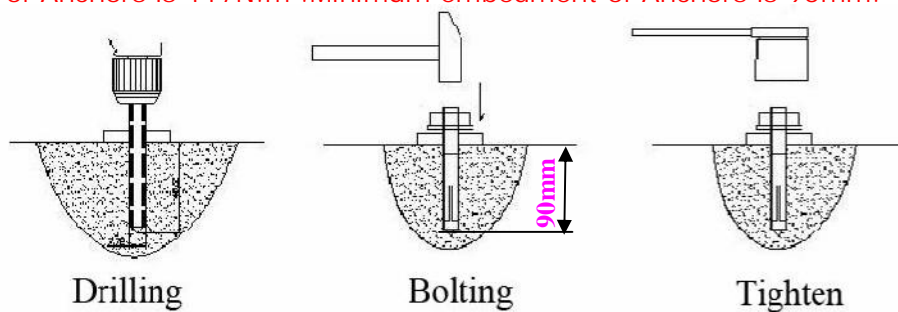


Fig. 17

H. Lift the carriages up by hand and make them be locked at the same level
(See Fig. 18).

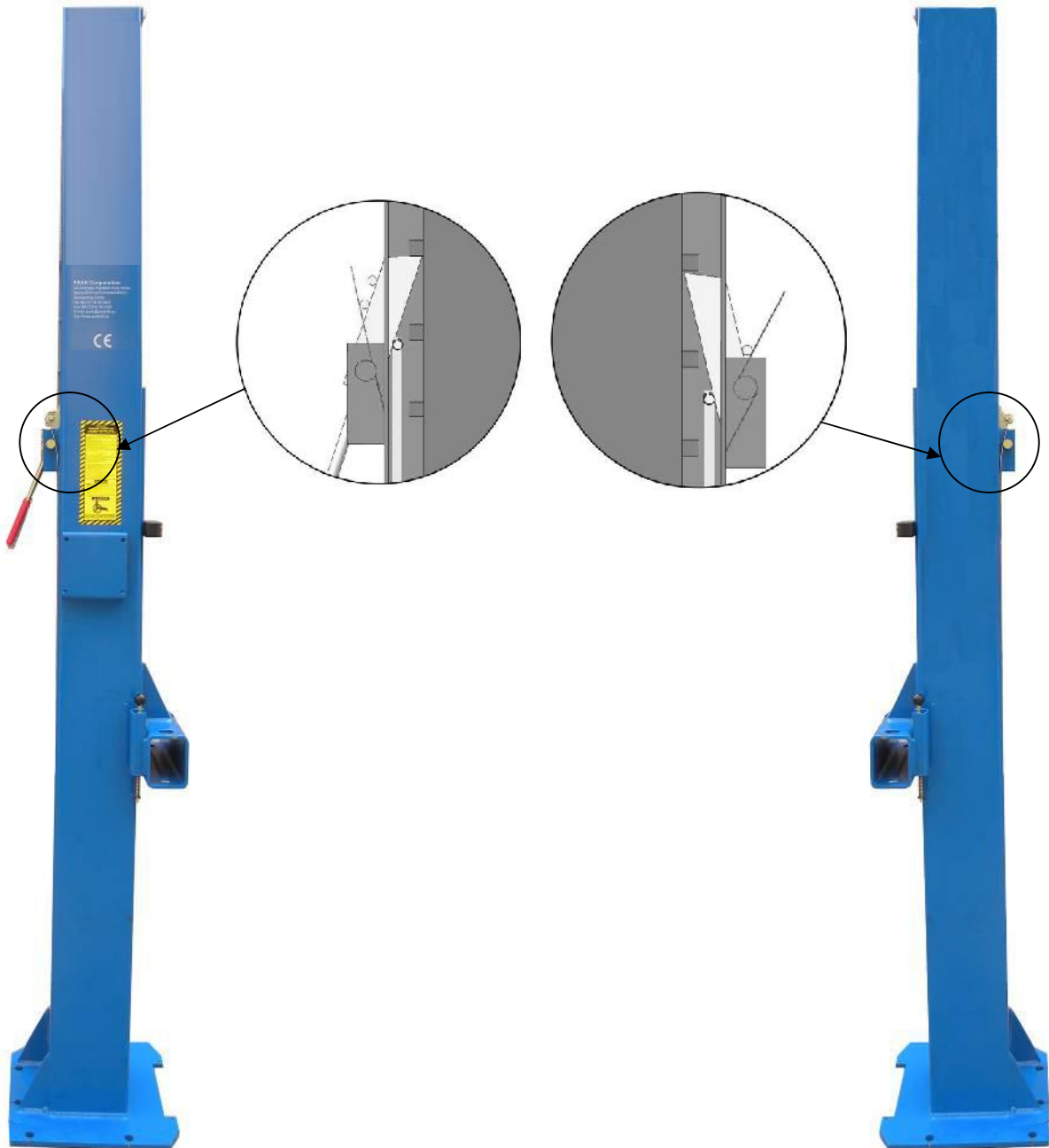
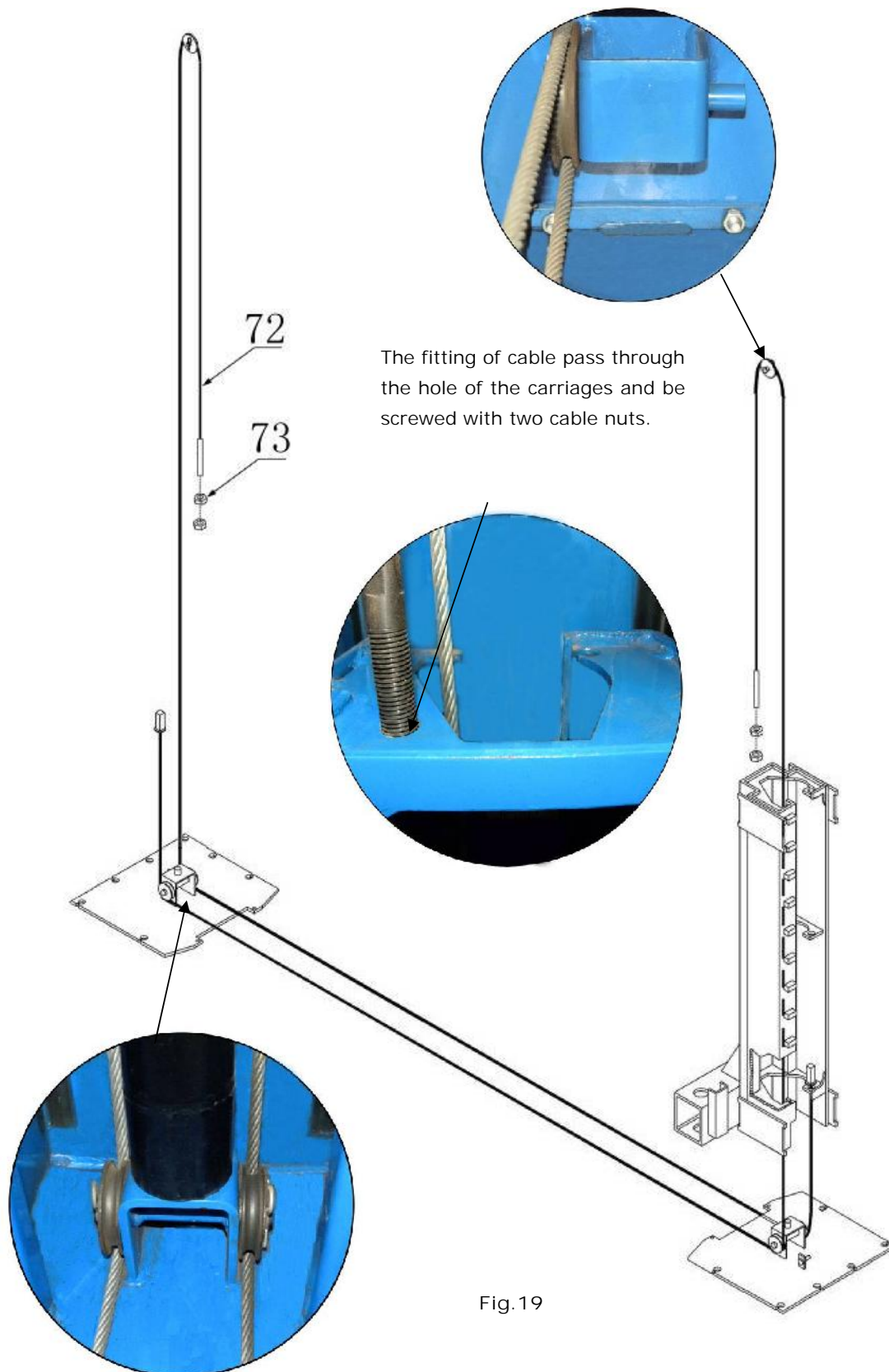


Fig.18

I. Install cable (See Fig. 19 Below)



J. Assembly oil hose assy. (See Fig. 20).

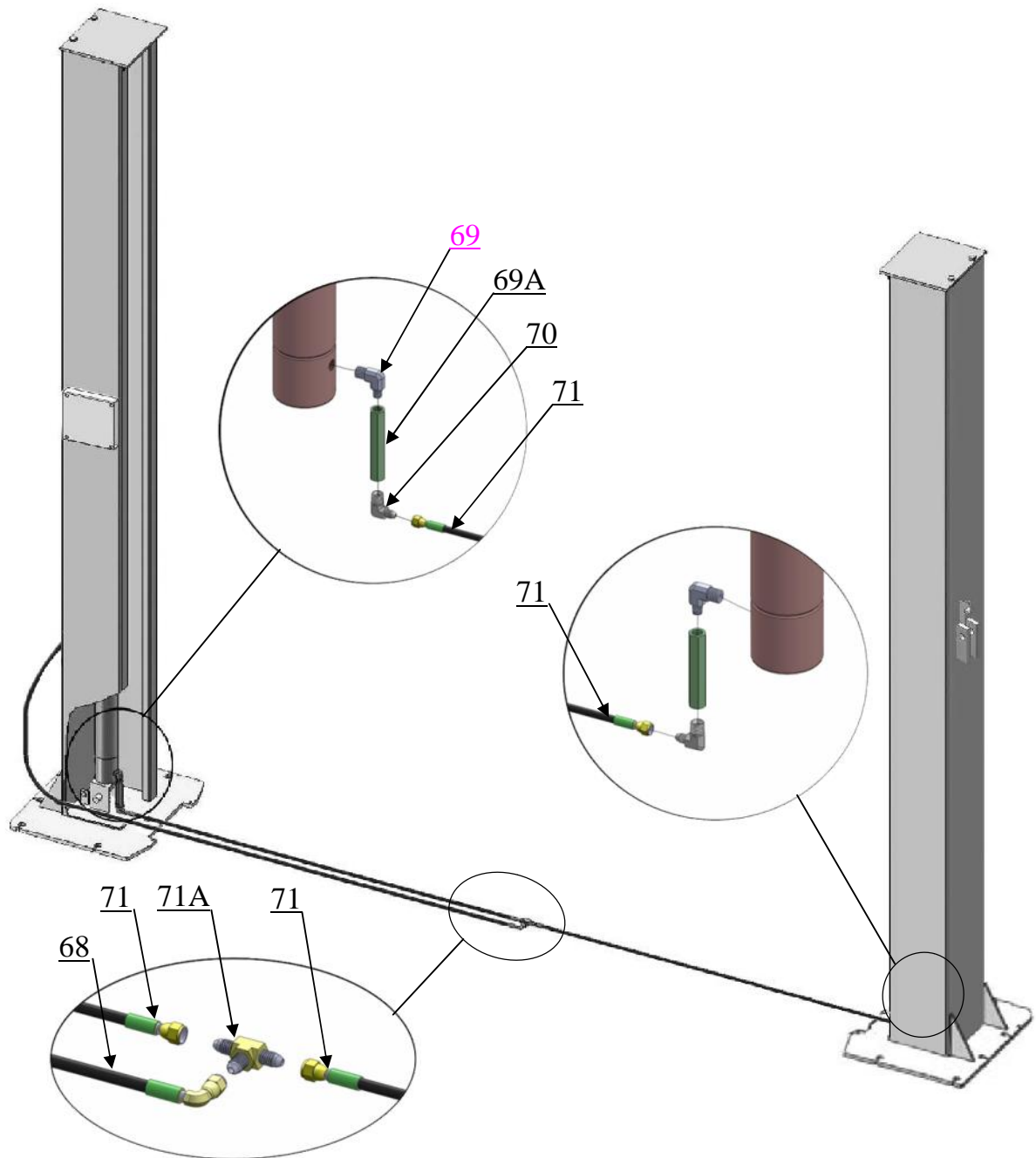


Fig. 20

K. Install hydraulic power unit and oil hose assy. (See Fig. 21).

Tighten all the hydraulic fittings, and fill the reservoir with hydraulic oil, fix the oil hose by retainer..

Note: In consideration of Power Unit's durability and keep the equipment running in the perfect condition, please use Hydraulic Oil 46#

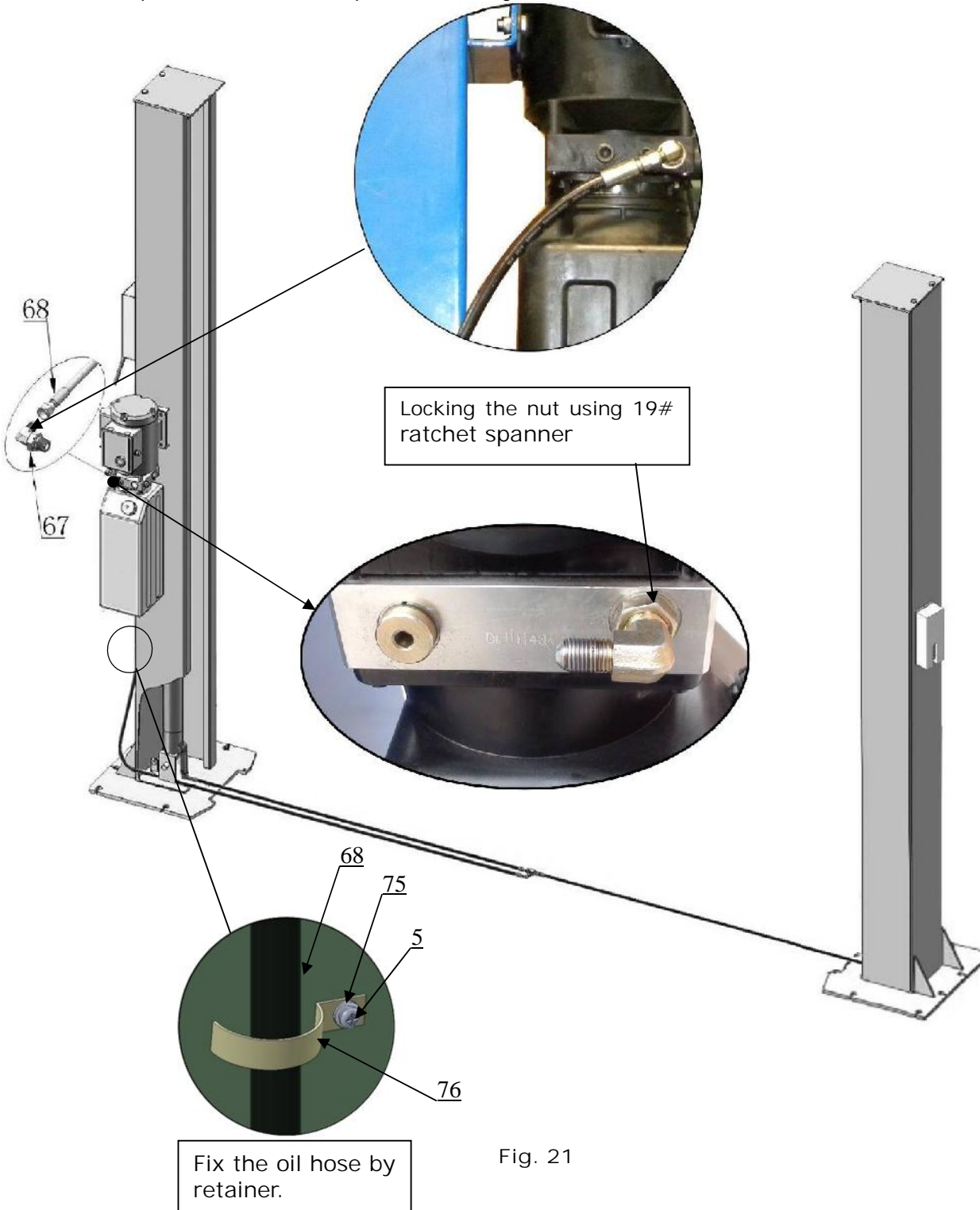
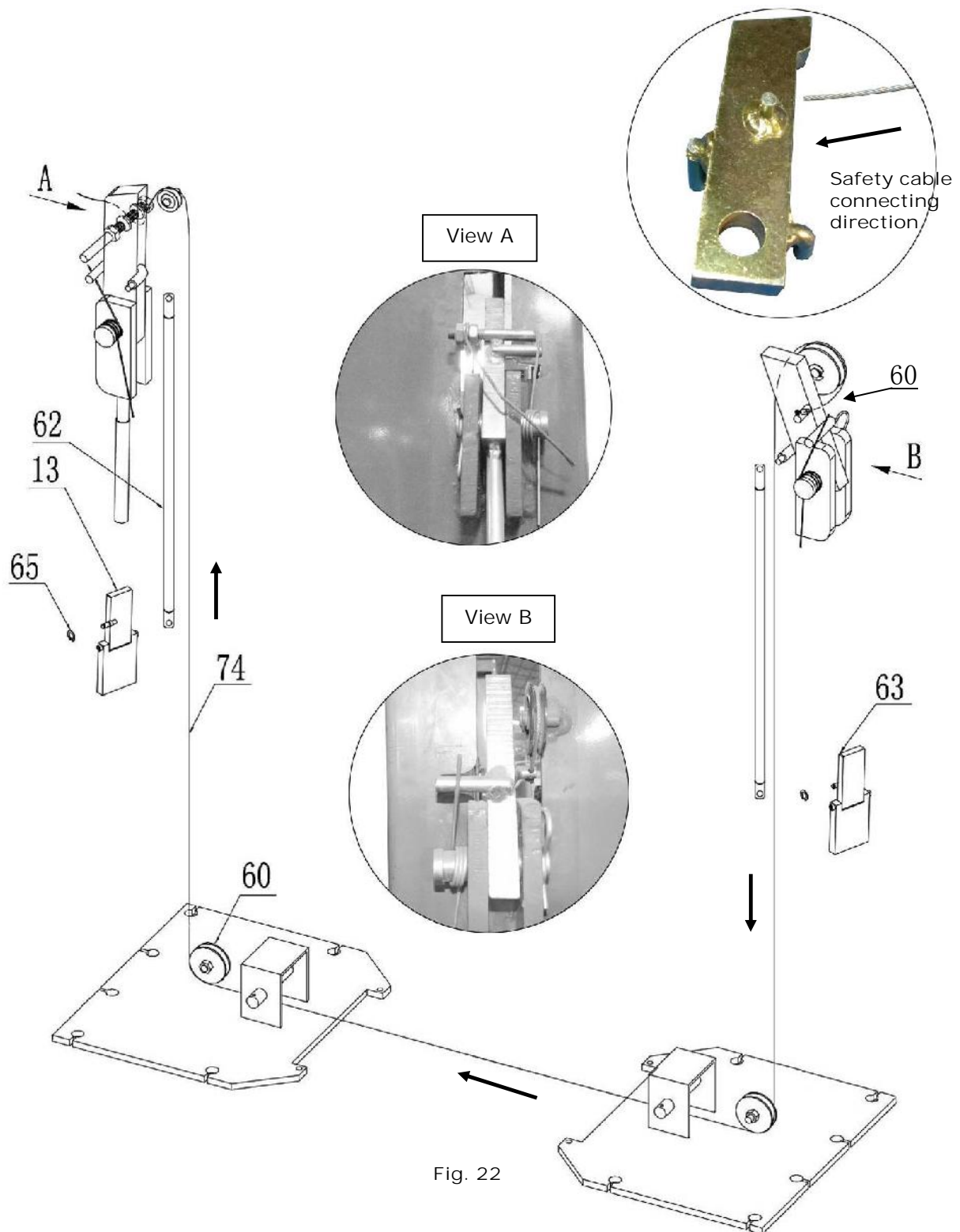


Fig. 21

L. Install safety device and safety cable (See Fig. 22).

NOTE: 1. Assemble safety cable from offside safety assy.

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



M. **Assemble floor cover and protective rubber sets (See Fig. 23).**



Fig. 23

N. Install lifting arms and adjust the arm locks

1. Install the lifting arms (**See Figure 24**)

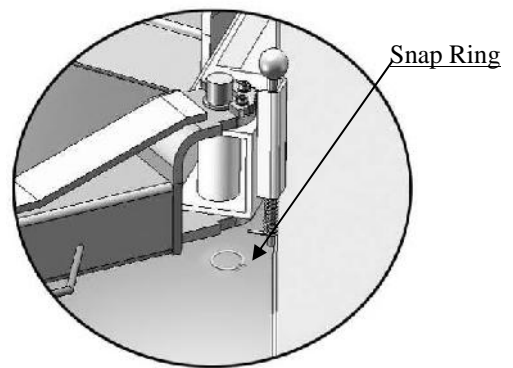
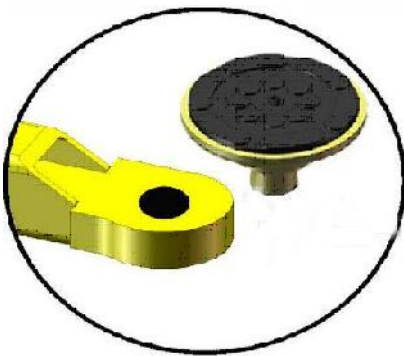


Fig. 24

2. Lowering the carriages down to the lowest position, then use the 17MM# wrench to loosen the nut **(See Figure 25)**

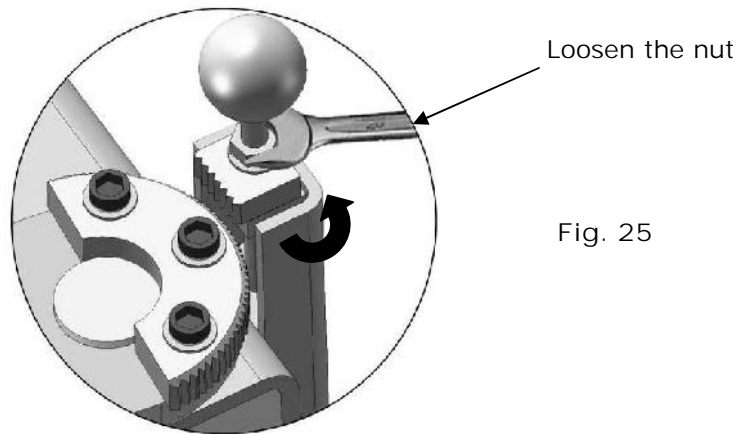


Fig. 25

3. Adjust the arm lock as arrow direction **(See Figure 26 Below)**.

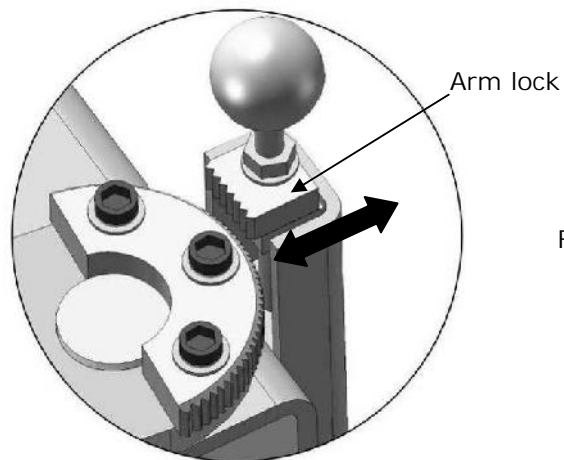


Fig. 26

4. Adjust the moon gear and arm lock to make it to be meshed, then tighten bolts of arm lock **(See Figure 27 Below)**.

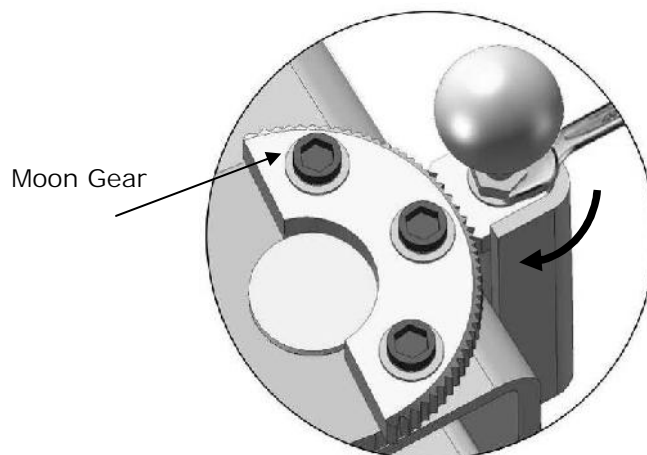


Fig. 27

O. Install Electrical System

Connect the power source on the data plate of Power Unit.

Note: 1. For the safety of operators, the power wiring must contact the floor well.

2. Pay attention to the direction of rotations when using 380V, three phase motors.

PEAK single phase motor (See Figure 28).

1. Connecting the two power supply lines (fire wire **L** and zero wire **N**) to terminals of AC contactor marked **L1**, **L2** respectively.
2. Connecting the two motor wires to terminals of AC contactor marked **T1**, **T2**.
3. Connecting **A2** to **L2** of AC contactor.
4. Terminal **4#** of control button connected with terminals **A1** of AC contactor; Terminal **3#** of control button connected with terminals **L1** of AC contactor.

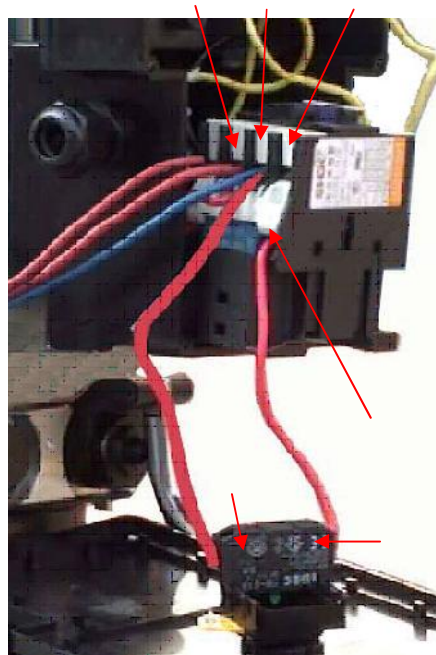
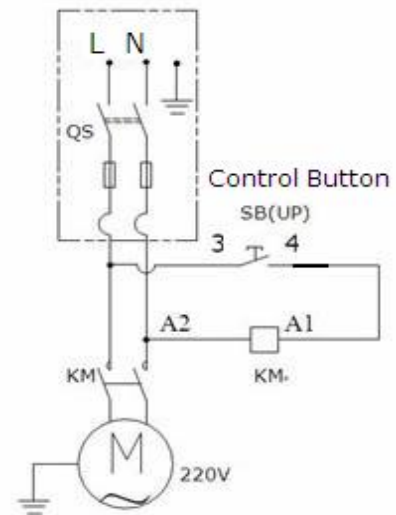
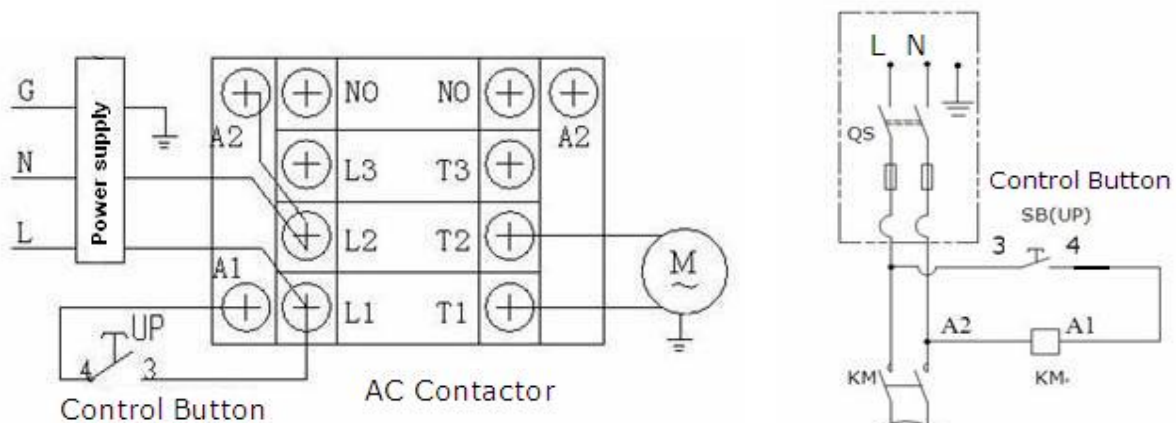


Fig.28

IV. EXPLODED VIEW

Model W-9F

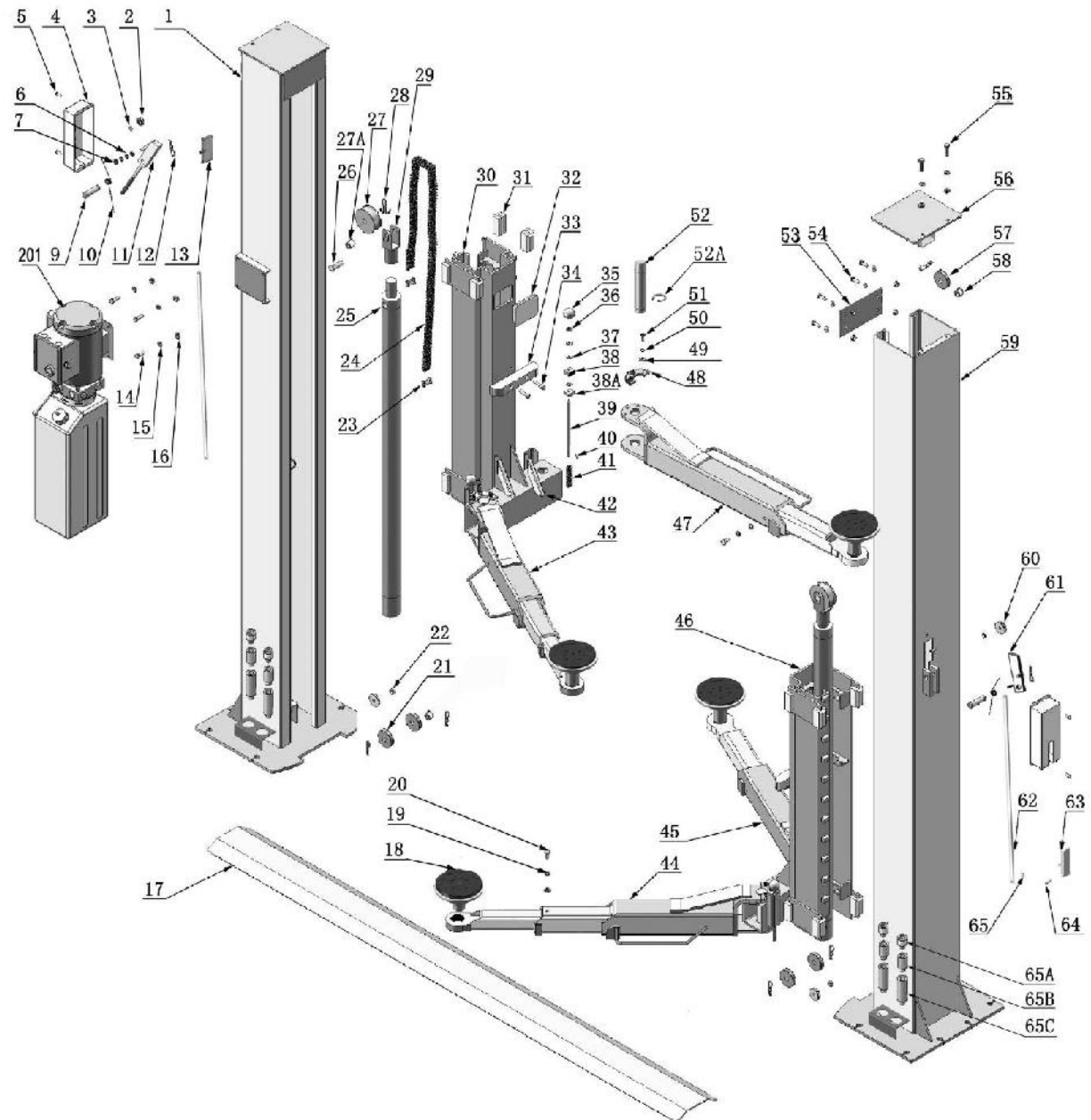


Fig.29

Cylinders

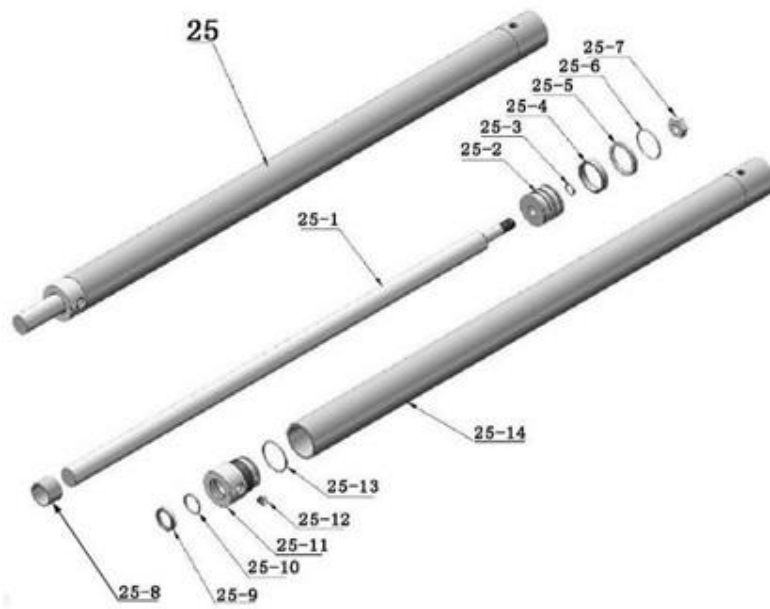


Fig.30

PEAK MANUAL POWER UNIT

220V/60HZ/1Phase

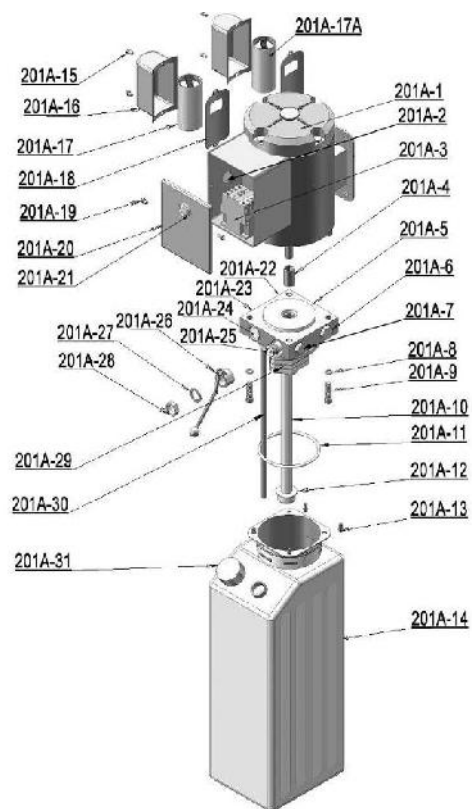


Fig. 31

Illustration of hydraulic valve for PEAK hydraulic power unit

PEAK manual power unit, 220V/60HZ, Single phase (See Figure 32)

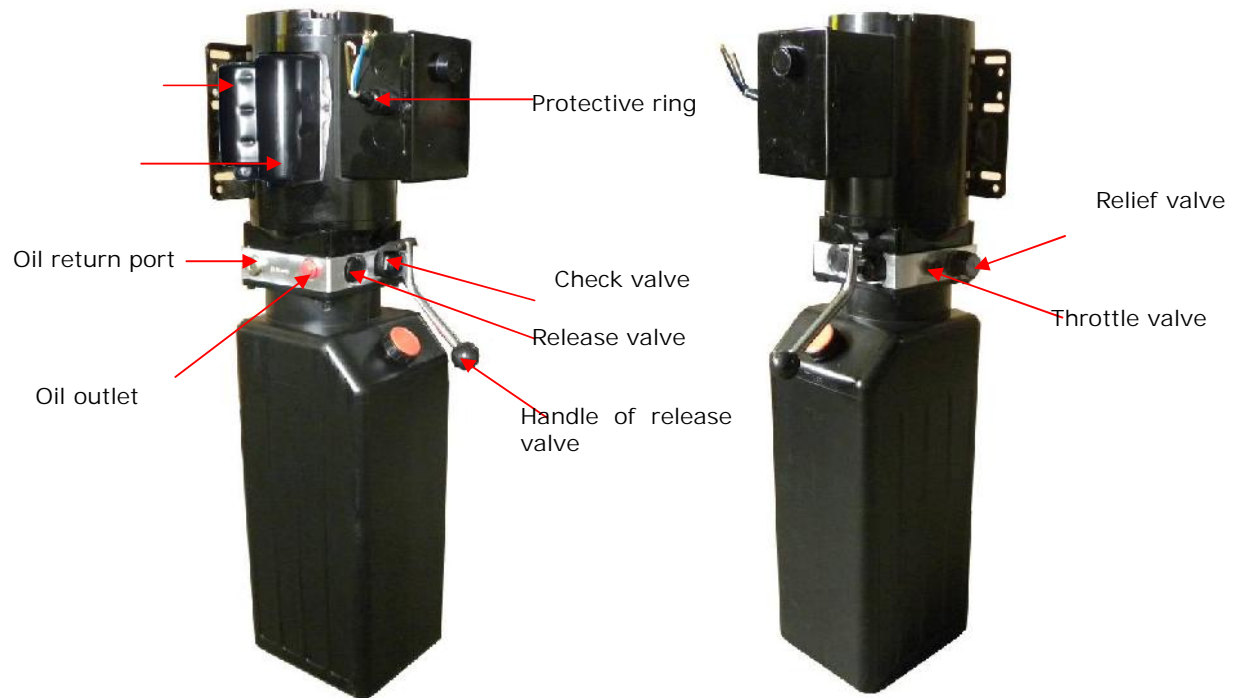


Fig. 32

V. TEST RUN

1. Adjust synchronous cable (See Figure 33)

Use wrench to hold the cable fitting, meanwhile use ratchet spanner to tighten the cable nut. Make sure two cables are with the same tension so that two carriage can work synchronously. Fit the plastic hole cover on the lifting head.

If the carriage does not Synchronize when lifting, please tighten the cable nut of lower side carriage.

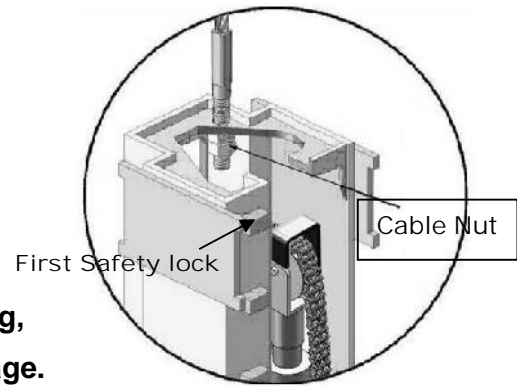


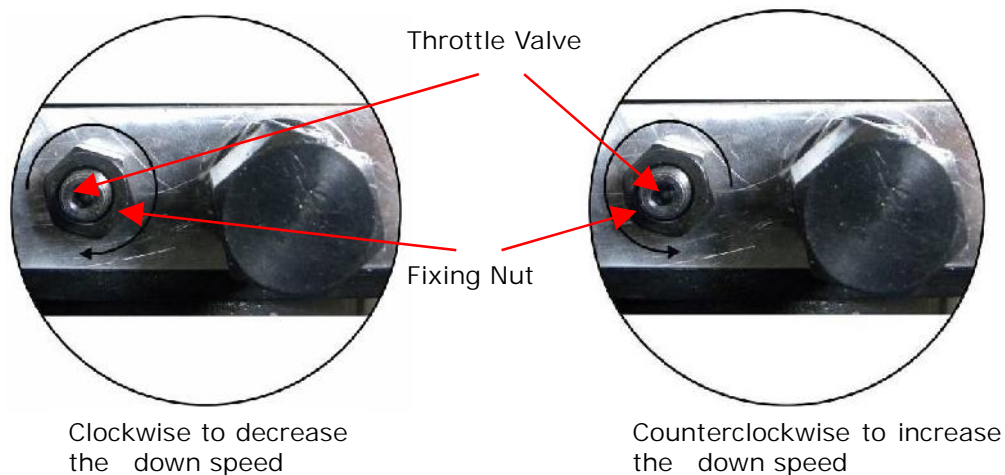
Fig. 33

2. Adjust safety cable

Lifting the carriage and lock at the same height, strain the safety cable and then release a little, and then tighten the cable nuts. Make sure the safety device can always be worked properly.

3. Adjust the lower speed (Only for PEAK power unit)

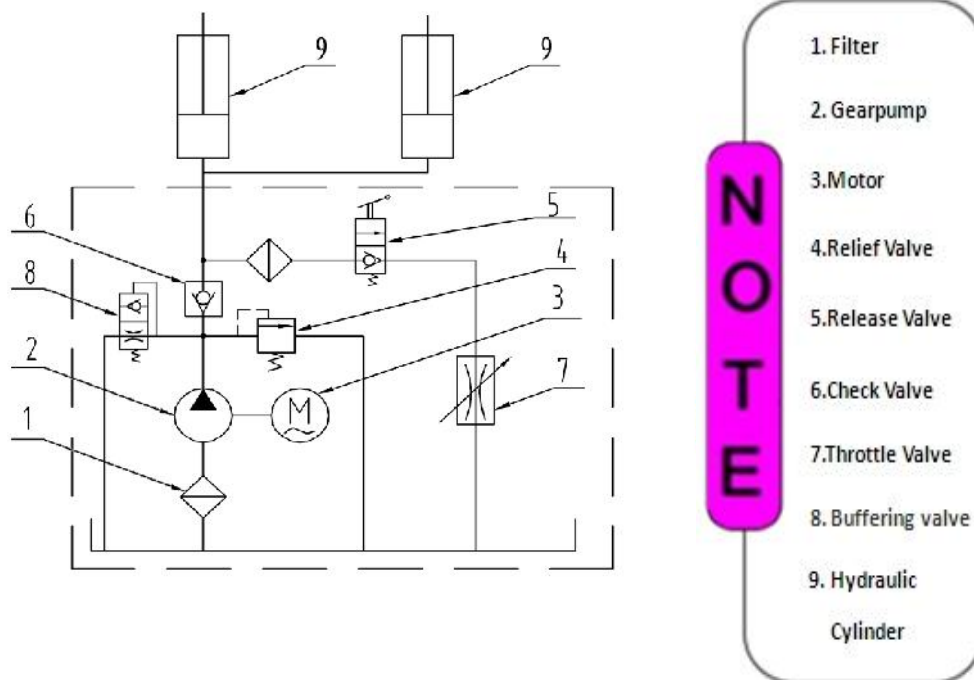
You can adjust the lower speed of the lift if needing: Loosen the Fixing Nut of the throttle valve, and then turn the throttle valve clockwise to decrease the lower speed, or counterclockwise to increase the lower speed. Do not forget to tighten the fixing nut after the lower speed adjustment has been done.



4. Test with load

After finishing the above adjustment, test running the lift with load. Run the lift in low position for several times first, make sure the lift can rise and lower synchronously, the Safety Device can lock and release synchronously. And then test run the lift to the top completely. If there are anything improper, repeat the above adjustment.

NOTE: The lift may vibrate the first several lift cycles. Lift with a load several times and the cylinders will self bleed. The vibration is eliminated after air is bled from the cylinders.



Hydraulic System

VI. OPERATING INSTRUCTIONS

Please read the safety tips carefully before operating the lift

To lift vehicle

1. Keep clean of site near the lift;
2. Position lift arms to the lowest position;
3. To shortest lift arms;
4. Open lift arms;
5. Position vehicle between columns;

6. Move arms to the vehicle's lifting point;

Note: The four lift arms must at the same time contact the vehicle's lifting point where manufacturers recommended

7. Press the **UP** button until the lift pads contact underside of vehicle totally. Recheck to make sure vehicle is secure;
8. Continue to raise the lift slowly to the desired working height, ensuring the balance of vehicle;
9. Push lowering handle to lower lift onto the nearest safety. The vehicle is ready to repair.

To lower vehicle

1. Be sure clear of around and under the lift, only leaving operator in lift area;
2. Press the button of **UP** to raise the vehicle slightly, and then release the safety device, lower vehicle by pushing lowering handle.
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 ft. lbs.
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 device and make sure proper condition.
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 does 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, equalizer tension of the cables to insure level lifting.
3. Check columns for plumbness.
4. Check Rubber Pads and replace as necessary.
5. Check Safety device and make sure proper condition.

VIII.TROUBLE SHOOTING

TROUBLE	CAUSE	REMEDY
Motor does not run	<ol style="list-style-type: none">1. Button does not work2. Wiring connections are not in good condition3. Motor burned out4. Height Limit Switch is damaged5. AC contactor burned out	<ol style="list-style-type: none">1. Replace button2.Repair all wiring connections3. Repair or replace motor4.Replace the Limit Switch5. Replace AC Contactor
Motor runs but the lift is not raised	<ol style="list-style-type: none">1. Motor runs in reverse rotation2. Gear Pump out of operation3. Release Valve in damage4. Relief Valve or Check Valve in damage5. Low oil level	<ol style="list-style-type: none">1.Reverse two power wire2.Repair or replace3. Repair or replace4.Repair or replace5.Fill tank
Lift does not stay up	<ol style="list-style-type: none">1. Release Valve out of work2. Relief Valve or Check Valve leakage3. Cylinder or Fittings leaks	Repair or replace
Lift raises slowly	<ol style="list-style-type: none">1. Oil line is jammed2. Motor running on low voltage3. Oil mixed with air4. Gear Pump leaks5. Overload lifting	<ol style="list-style-type: none">1. Clean the oil line2. Check Electrical System3. Fill tank4. Replace Pump5. Check load
Lift can not lower	<ol style="list-style-type: none">1. Safety device are in activated2. Release Valve in damage3. Safety cable broken4. Oil system is jammed	<ol style="list-style-type: none">1. Release the safeties2. Repair or replace3. Replace4. Clean the oil system

IX. PARTS LIST FOR MODEL W-9F

Item.	Part No.	Description	Qty.	Note
1	203001B	Powerside column	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	
201	209002	Manual Power Unit	1	
9	209006	Safety Pin	2	
10	209007	Safety Spring	2	
11	203002	Powerside Safety Lock	1	
12	209012	Hair Pin	8	
13	203015	Safety Block (Main)	1	
14	209003	Hex Bolt	4	
15	209004	Rubber Ring	4	
16	209005	Self locking nut	8	
17	203003	Floor Cover	1	
18	201046	Rubber Pad Assy.	4	
18A	420138	Socket bolt	4	
18B	209134	Rubber Pad	4	
18C	680030C	Rubber Pad Frame	4	
19	209039	Lock Washer	14	
20	209038	Hex Bolt	6	
21	209057	Small Pulley	4	
22	209056	Self locking nut	2	
23	201010	Chain Connector	4	
24	203005	Chain	2	
25	201008	Hydraulic Cylinder	2	
26	203040	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	Powerside Carriage	1	
31	206044	Slider block	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	8	
37	209022	Washer	10	

Item.	Part No.	Description	Qty.	Note
38	209023A	Arm lock	4	
38A	201041	Limit Ring	4	
39	209024	Arm Lock Bar	4	
40	209025	Hair Pin	4	
41	209026	Spring	4	
42	209027	Protective Rubber Set	4	
43	209029	Lifting Arm - Front Right	1	
43A	209137	Outer Arm - Front Right	1	
43B	206088	Middle Arm - Front Right	1	
43C	206089A	Inner Arm - Front Right	1	
44	209036A	Lifting Arm - Front Left	1	
44A	209177	Outer Arm - Front Left	1	
44B	206093	Middle Arm - Front Left	1	
44C	206089A	Inner Arm - Front Left	1	
45	203044A	Lifting Arm - Rear Left	1	
45A	203046	Outer Arm - Rear Left	1	
45B	203047A	Inner Arm - Rear Left	1	
46	203008	Offside Carriage	1	
47	203045A	Lifting Arm - Rear Right	1	
47A	203048	Outer Arm - Rear Right	1	
47B	203049A	Inner Arm - Rear Right	1	
48	209035	Moon Gear	4	
49	209033	Washer	20	
50	209034	Lock Washer	12	
51	209032	Socket Bolt	12	
52	203105	Arm Pin	4	
52A	520023	Snap ring	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	203011B	Offside column	1	
60	209049	Plastic Pulley	3	
61	203012	Offside Safety Lock	1	
62	203013	Coupling	2	
63	203014	Safety Block (Second)	1	
64	203018	Socket Bolt	4	
65	203016	Snap Ring	4	
65A	209051B	Stackable Adapter (1.5")	4	
65B	209052B	Stackable Adapter (2.5")	4	
65C	209053B	Stackable Adapter (5")	4	

Item	Part#	Description	Qty.	Note
66	209059	Anchor bolt	12	
67	209060	90°Fitting	1	
Oil Hose, Fitting & Cable				
68	201081	Oil Hose	1	
69	207024	90°Fitting	2	
69A	201082	Extended Straight Fitting	2	
70	420097	90°Fitting	2	
71	203109	Oil Hose	2	
71A	211016	T Futtubg	1	
72	203020	Cabke	2	
73	209066	Cabke But	4	
74	203021	Safety Cable	1	
75	420045	Washer	2	
76	217048	Retainer	2	
77A	203501B	Parts Box	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 MANUAL POWER UNIT

Parts For Manual Power Unit 220V/60HZ/1Phase				
Item.	Part No.	Description	Qty.	Note
201A-1	209082A	Motor	1	
201A-2	209109	Protective Ring	1	
201A-3	209112	AC contactor	1	
201A-4	209083A	Motor Connecting Shaft	1	
201A-5	209084A	Valve Body	1	
201A-6	209085A	Relief Valve	1	
201A-7	209113	Throttle valve	1	
201A-8	209086A	Lock Washer	4	
201A-9	209087A	Socket Bolt	4	
201A-10	209088A	Inlet Pipe	1	
201A-11	209089A	O-Ring	1	
201A-12	209090A	Filter	1	
201A-13	209091A	Socket bolt	4	
201A-14	209092A	Reservoir	1	
201A-15	209093A	Cup Head Bolt with washer	4	
201A-16	209094A	Cover of Capacitor	2	
201A-17	209095A	Start Capacitor	1	
201A-17	209095B	Running Capacitor	1	
201A-18	209096A	Rubber Gasket	2	
201A-19	209097A	Cup Head Bolt with washer	2	
201A-20	209098A	Cover of Motor Terminal Box	1	
201A-21	209099A	Push Button	1	
201A-22	209110A	Oil Return Port	1	
201A-23	209100A	Oil Outlet	1	
201A-24	209105A	Check Valve	1	
201A-25	209101A	Release Valve	1	
201A-26	209102A	Handle For Release Valve	1	
201A-27	209103A	Washer	1	
201A-28	209104A	Hex Nut	1	
201A-29	209106A	Gear Pump	1	
201A-30	209107A	Oil Return Pipe	1	
201A-31	209108A	Filler Cap	1	