



WEAVER

E Q U I P M E N T

W-10C Automotive Lift

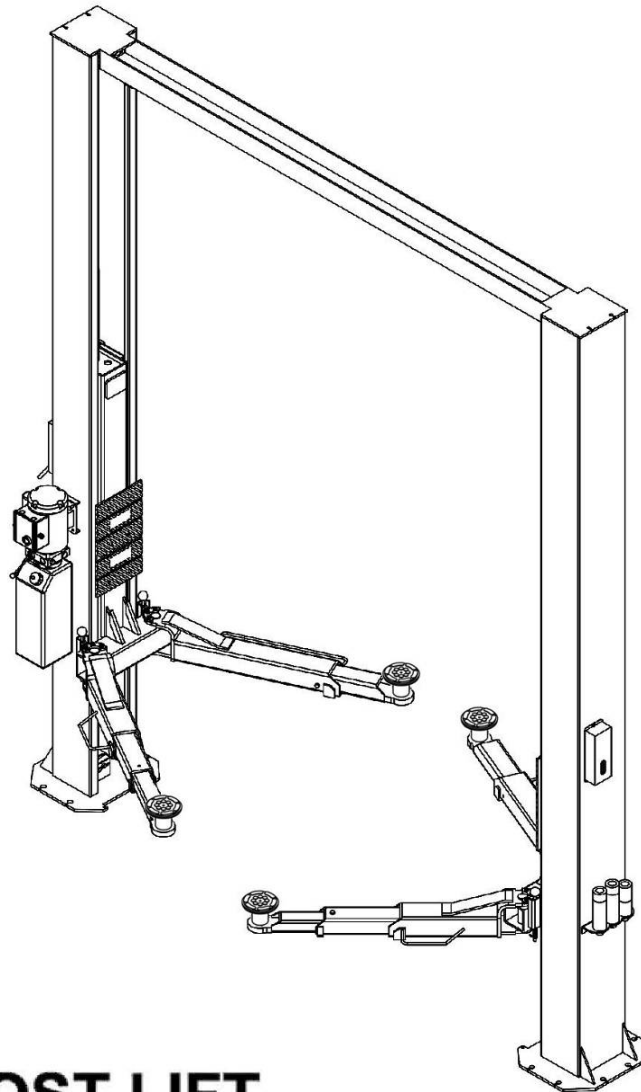
Please read this manual before operation

WEAVER

LIFT



Installation And Service Manual



TWO-POST LIFT

MODEL: W-10C 10,000-Lb. Capacity

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I. PRODUCT FEATURES AND SPECIFICATIONS

CLEARFLOOR DIRECT-DRIVEN MODEL FEATURES

MODEL W-10C (See Fig.1)

- Direct-driving design, minimize the lift wear parts and breakdown ratio.
- Dual hydraulic direct-drive cylinders, designed and made on ANSI standard, utilizing oil seal in cylinder.
- Self-lubricating UHMW Polyethylene sliders and bronze bush.
- Single-point safety release, and dual safety design.
- Clearfloor design, provide unobstructed floor space.
- Overhead safety shut-off device.
- Supersymmetric arms design, make lifts easily find the lift point of the car.
- Stackable adapters 1.5", 2.5", 5" as standard.

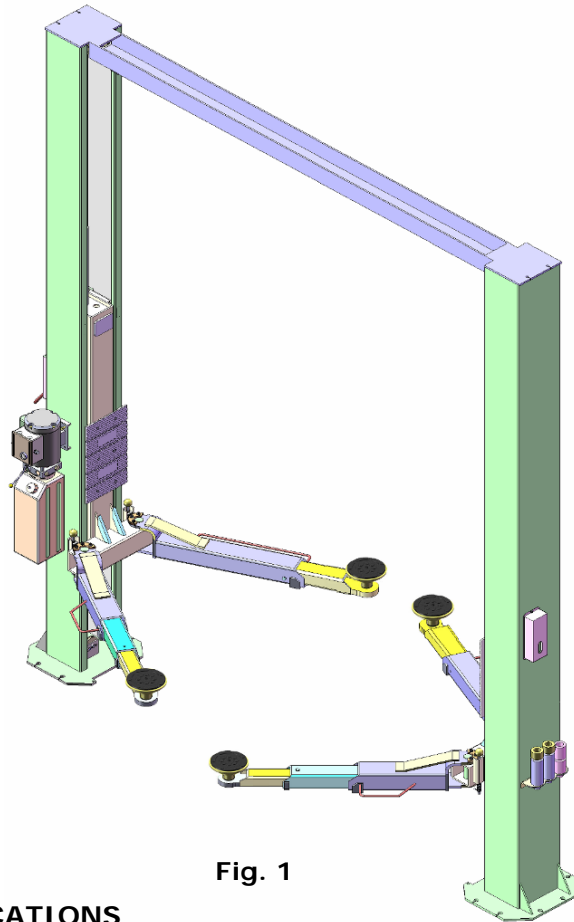


Fig. 1

MODEL W-10C SPECIFICATIONS

Model	Style	Lifting Capacity	Lifting Time	Lifting Height	Overall Height	Overall Width	Width Between Columns	Minimum Pad Height	Gross Weight	Motor
W-10C	Clearfloor Direct-drive	4.5T 10,000lbs	60S	1940-2169mm 76 3/8"-85 3/8"	3854mm 151 3/4"	3516mm 138 3/8"	2850mm 112 1/4"	115mm 4 1/2"	780Kg 1,719lbs	2.0/3.0 HP

CLEARFLOOR DIRECT-DRIVEN MODEL FEATURES

MODEL W-10CX (See Fig.2)

- Direct-driving design, minimize the lift wear parts and breakdown ratio.
- Dual hydraulic direct-drive cylinders, designed and made on ANSI standard, utilizing oil seal in cylinder.
- Self-lubricating UHMW Polyethylene sliders and bronze bush.
- Single-point safety release, and dual safety design.
- Clearfloor design, provide unobstructed floor space.
- Overhead safety shut-off device.
- Symmetric arms.
- Stackable adapters 1.5", 2.5", 5" as standard.

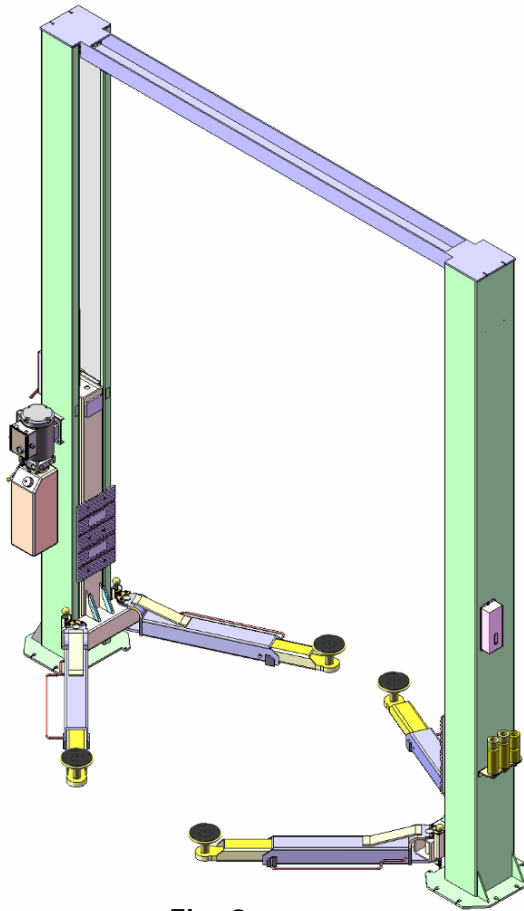


Fig. 2

MODEL W-10CX SPECIFICATIONS

Model	Style	Lifting Capacity	Lifting Time	Lifting Height	Overall Height	Overall Width	Width Between Columns	Minimum Pad Height	Gross Weight	Motor
10CX	Clearfloor	4.5T 10,000lbs	60S	1940-2169mm 76 3/8"-85 3/8"	3854mm 151 3/4"	3666mm 144 3/8"	3000mm 118 1/8"	115mm 4 1/2"	785Kg 1,730lbs	2.0/3.0 HP

Arm Swings

View For Model
W-10C

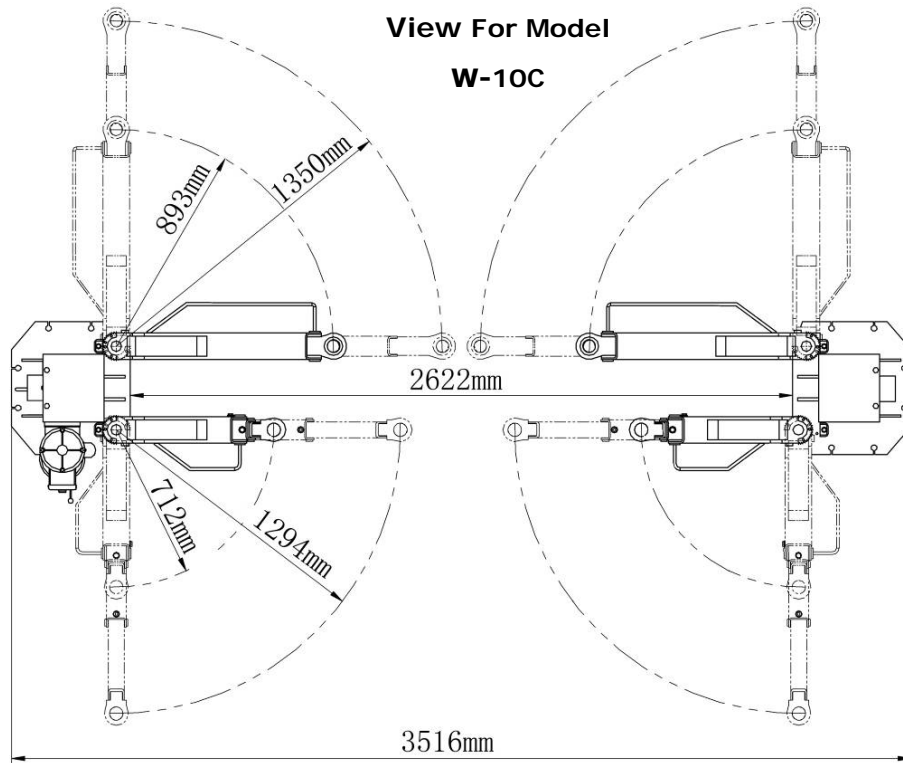


Fig. 3

For Model W-10CX

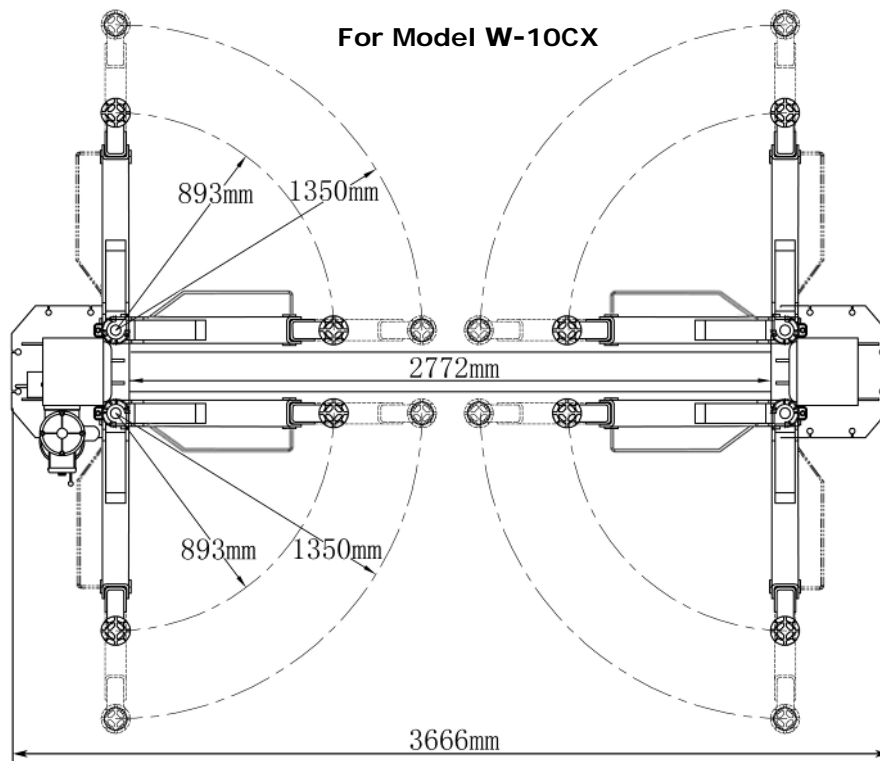


Fig. 4

II. INSTALLATION REQUIREMENT

A. TOOLS REQUIRED

- ✓ Rotary Hammer Drill (19)



- ✓ Hammer



- ✓ Level Bar



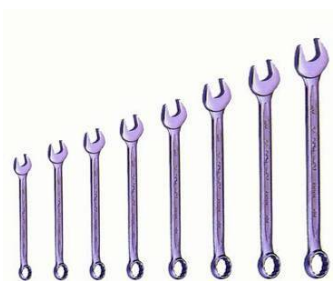
- ✓ English Spanner (12")



- ✓ Ratchet Spanner With Socket (28#)



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



- ✓ Carpenter's Chalk



- ✓ Screw Sets



- ✓ Tape Measure (7.5m)



- ✓ Pliers



- ✓ Socket Head Wrench (3#, 6#)



- ✓ Lock Wrench



Fig. 5

Concrete Specifications

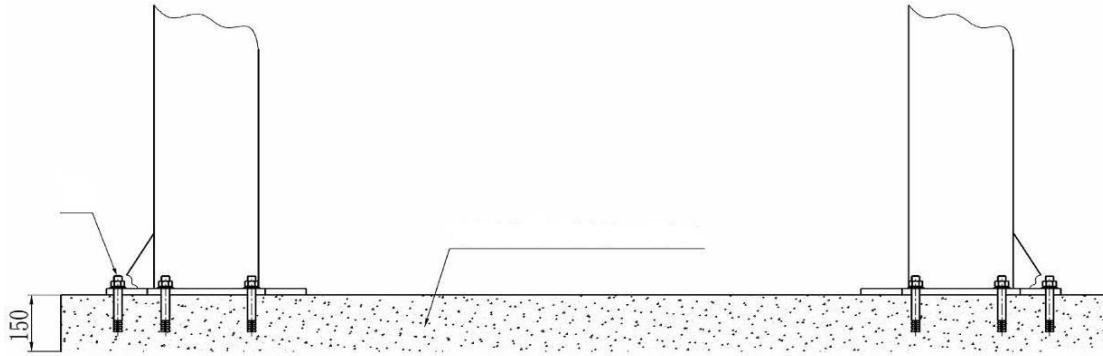
Failure to adhere to the specifications of concrete may result in Lift Failure.

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 week).

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



Concrete must be 3,500psi (250kg/cm²).

67

Fig. 6

III. STEPS OF 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 baseplate (See Fig. 7).

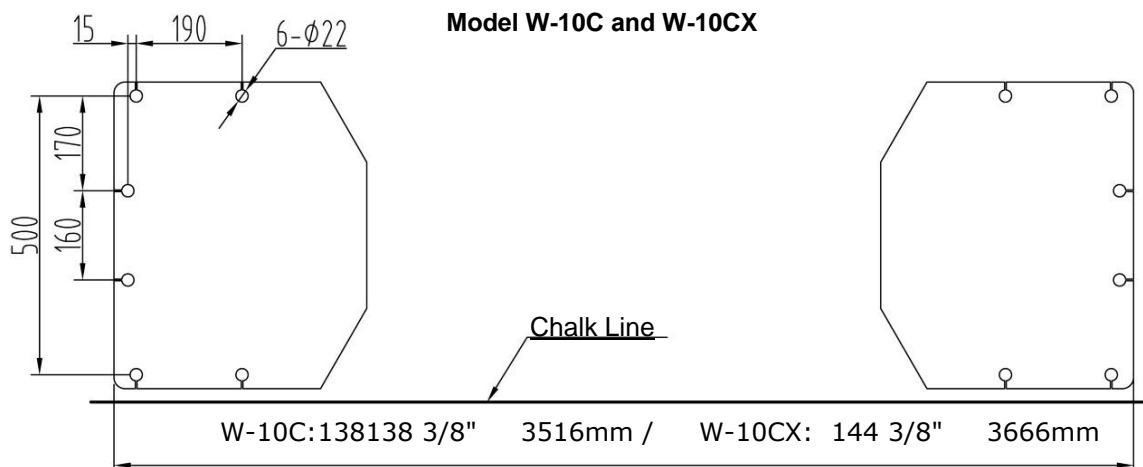


Fig. 7

C. Check the parts before assembly

1. Packaged lift and hydraulic power unit (see Fig. 8)



Fig. 8

2. Move the lift aside with a fork lift or hoist, and open the outer packing carefully , take off the parts from upper and inside the column, take out the parts box, check the parts according to the shipment parts list (See Fig. 9).

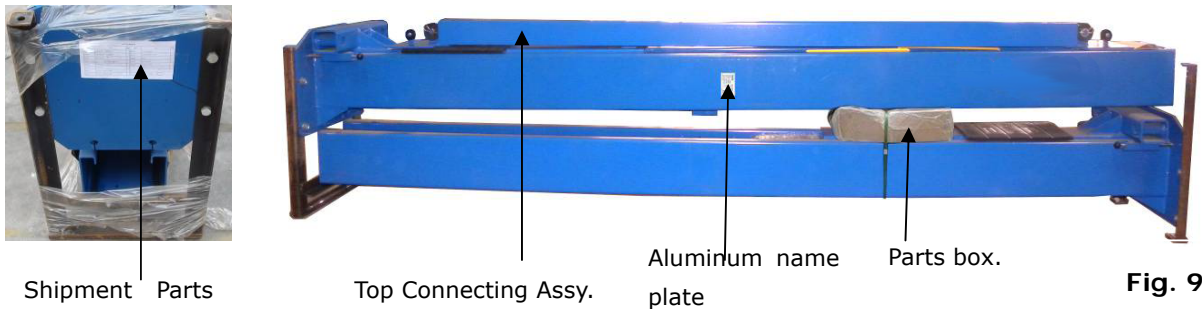


Fig. 9

3. Loose the screws of the upper package stand, take off the upper column and remove the package stand.
4. Move aside the parts and check the parts according to the shipment parts list
- 4.1 For Model W-10C (See Fig. 10,11).

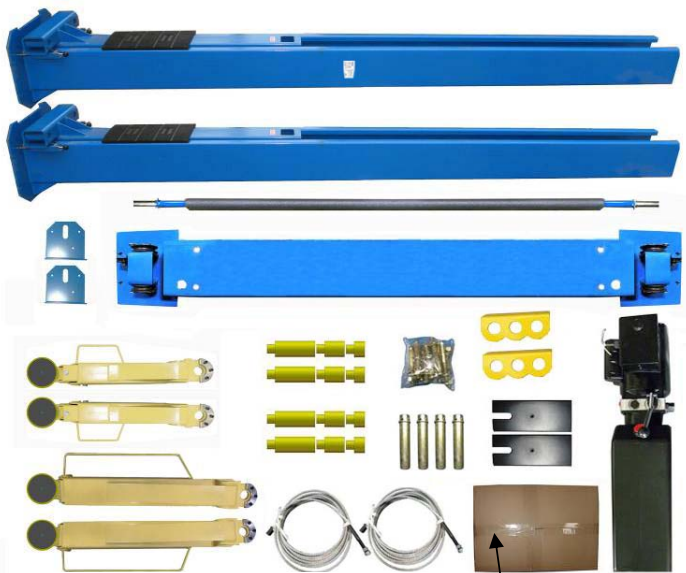


Fig. 10

Parts in the shipment parts list

76



Fig. 11

Parts in the parts box (76)

4.2 For Model 10CX (See Fig. 12,13).

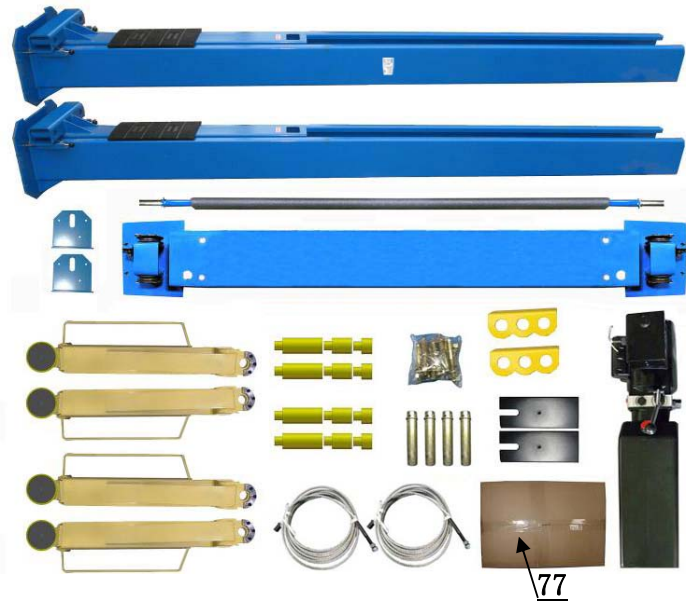


Fig. 12

Parts in the shipment parts list



Fig. 13

Parts in the parts box (77)

5. Open the bag of parts and check the parts of the parts bag according to parts bag list (**See Fig. 14**).



D. Position powerside column

Lay down two columns on the installation site parallelly, position the powerside column according to the actual installation site. Usually, it is suggested to install powerside column on the front-right side from which vehicles are driven to the lift (See Fig. 15).

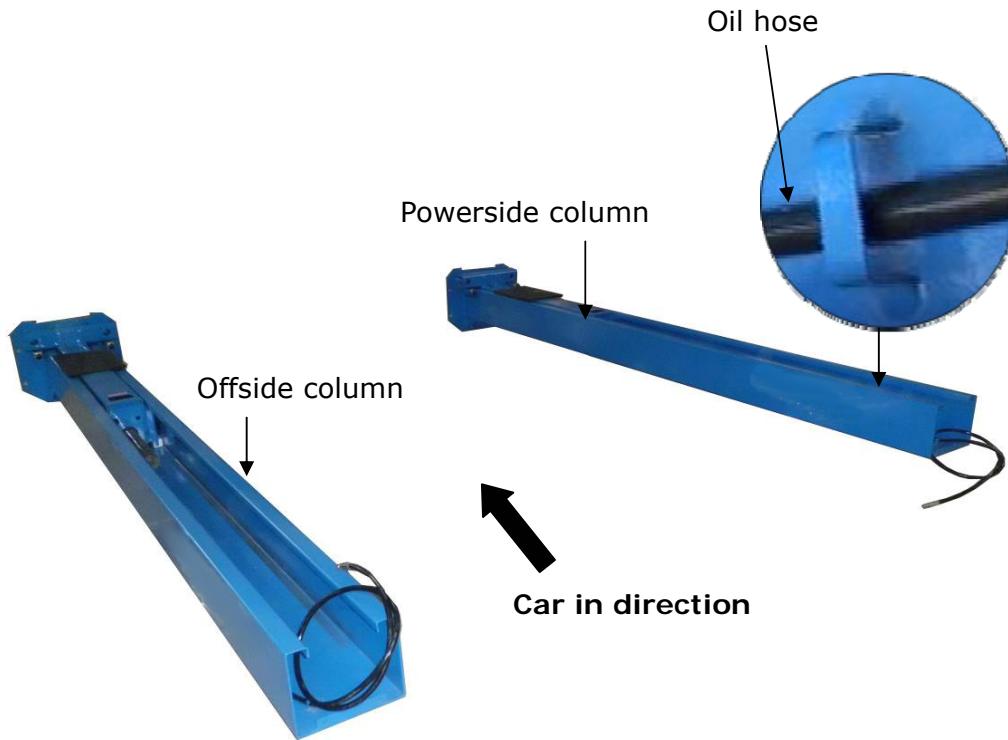


Fig. 15

E. Connecting oil hose

Push the carriages, connecting the cylinder fittings and then connect the oil hose to the cylinder.

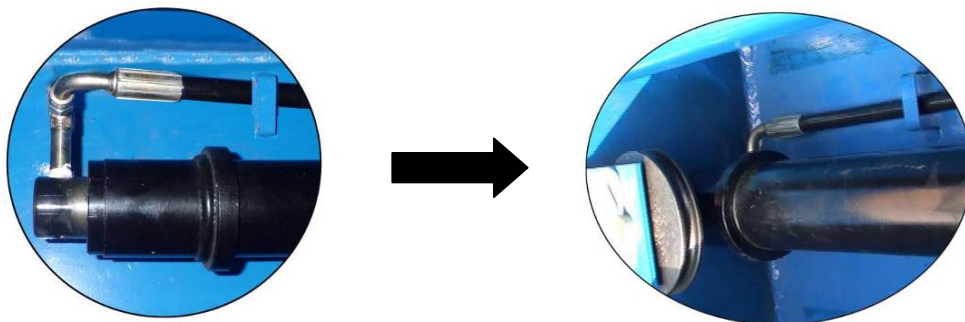
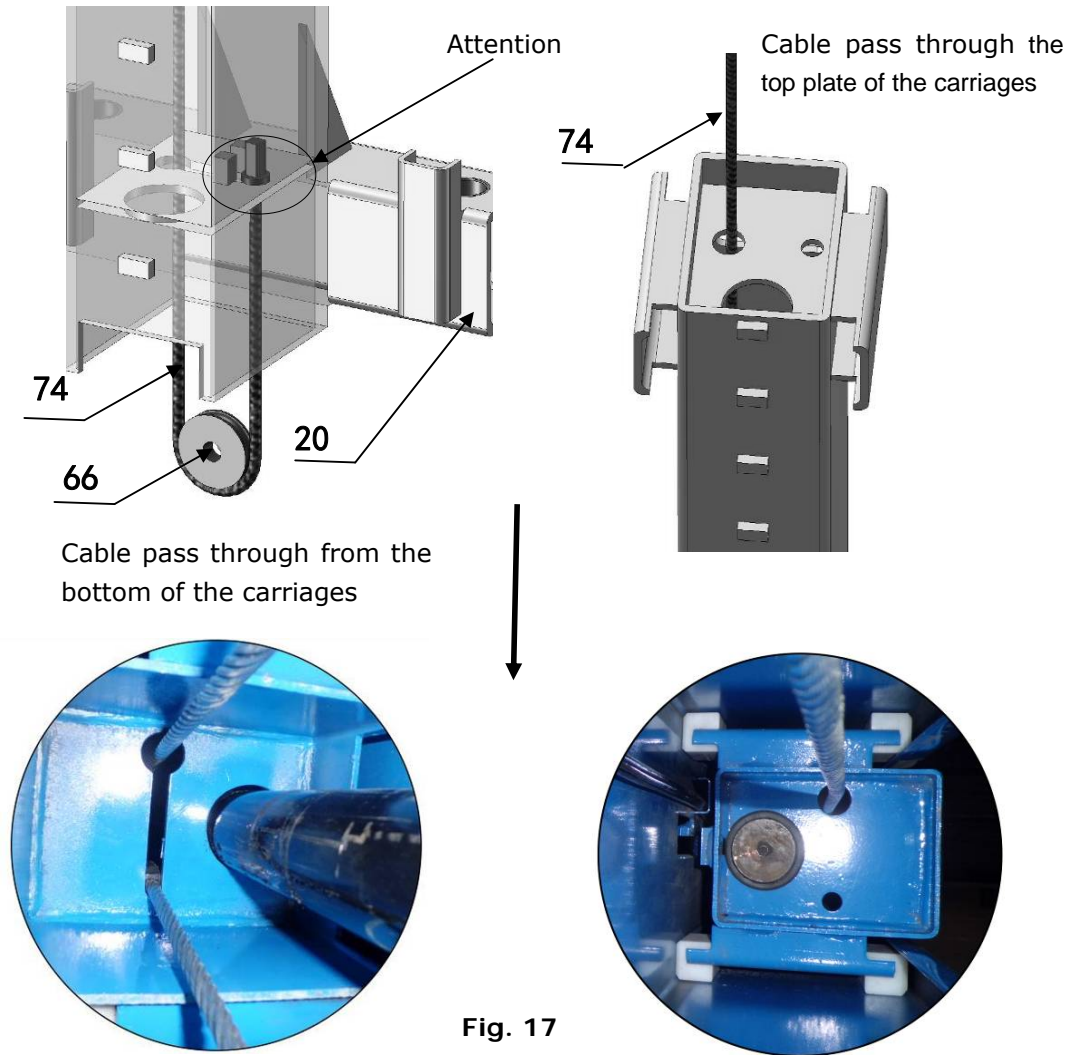
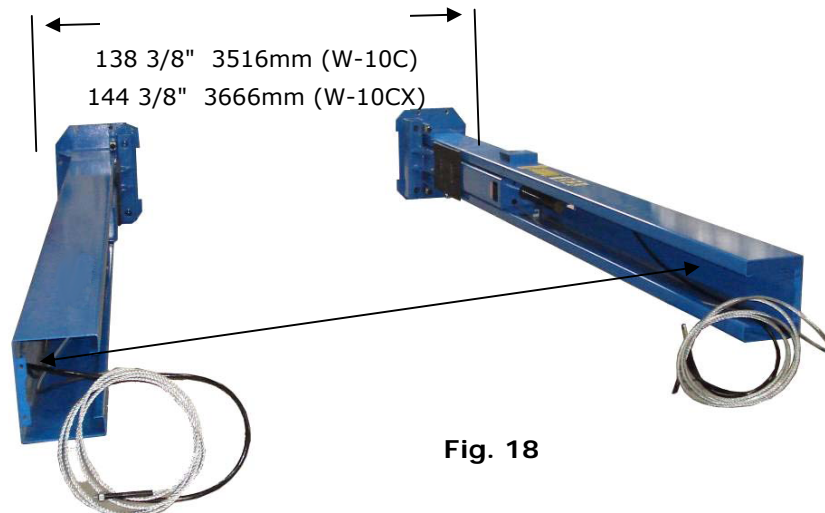


Fig. 16

F. Connecting cables



G. Lay down aside the columns with cables and oil hoses installed, face the open way of each columns.



H. Position columns

Position the columns on the installation layout of baseplate. Install the anchor bolts. Do not tighten the anchor bolts (**See Fig.19**).

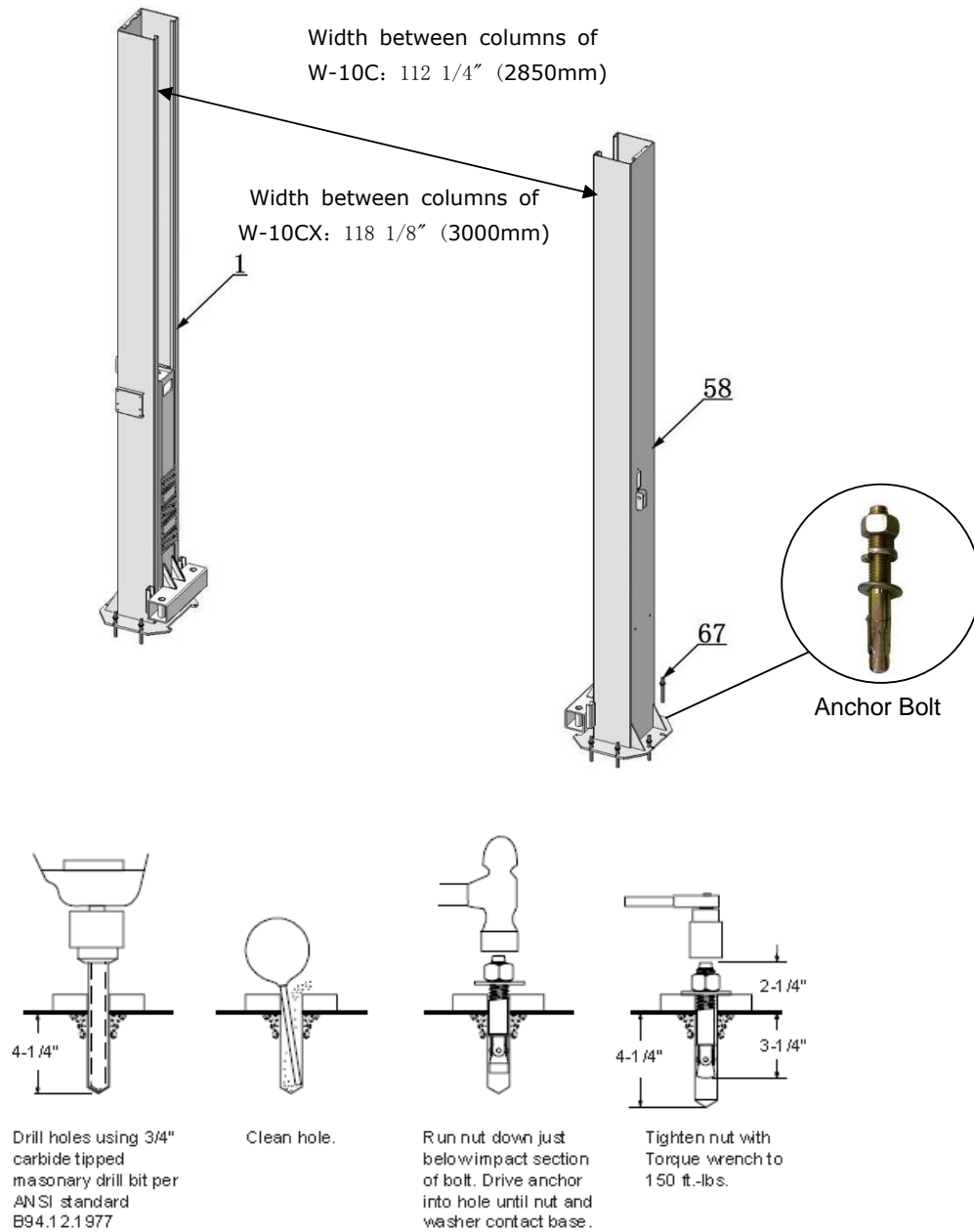


Fig. 19

I. Assemble overhead top beams (See Fig.20).



Fig. 20

J. Check the columns plumbness with level bar, and adjusting with the shims if the columns are not vertical. Tighten the anchor bolts (See Fig.21).

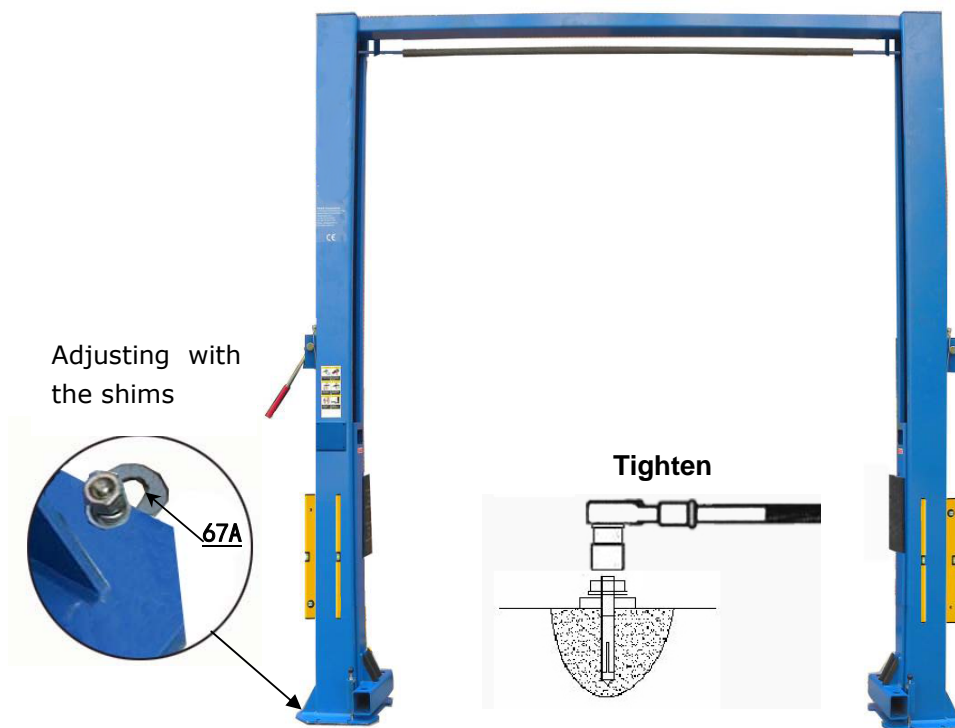


Fig. 21

K. Install the limit switch control bar and limit switch (See Fig. 22).

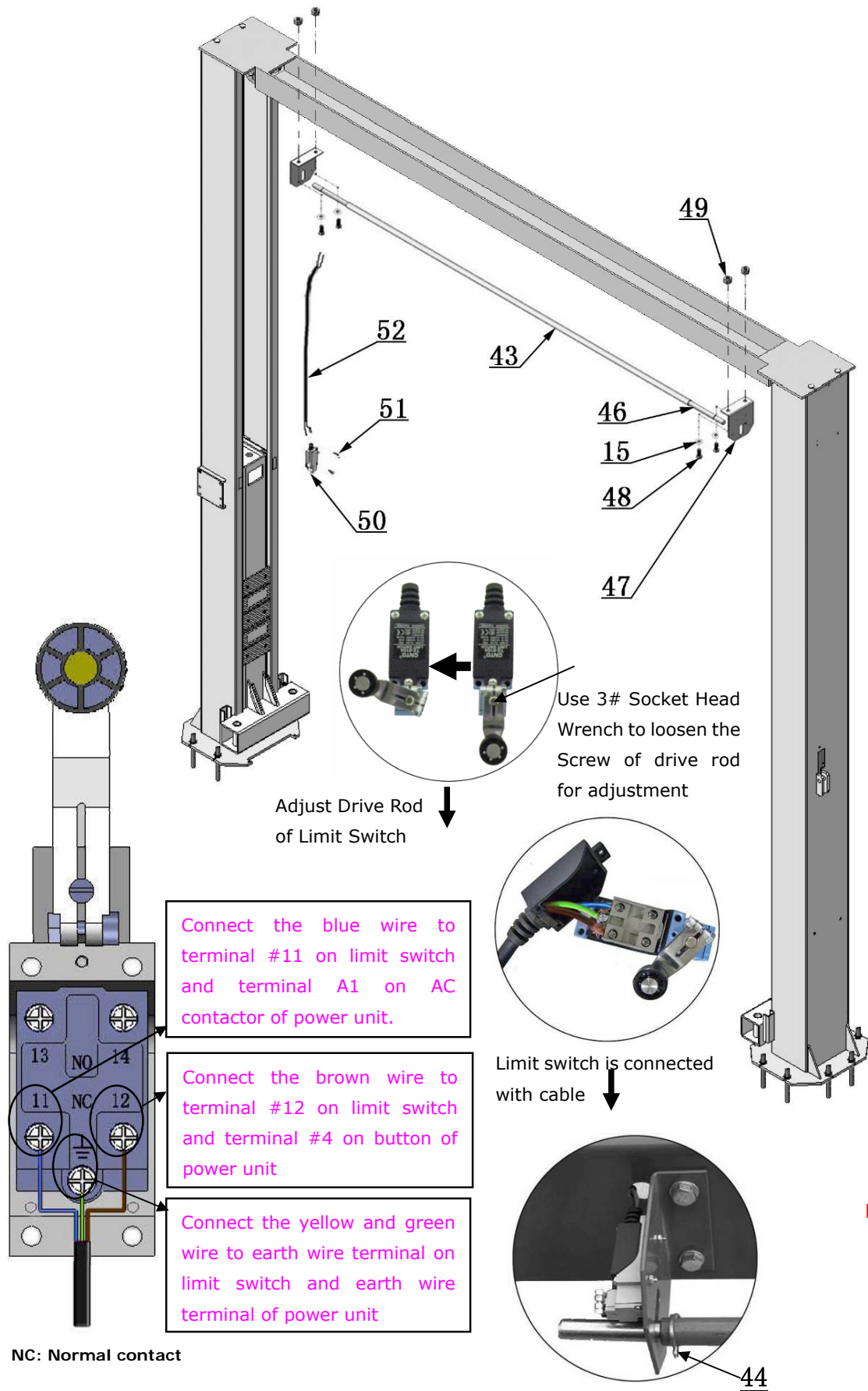


Fig. 22

L. Install safety cable (See Fig. 23).

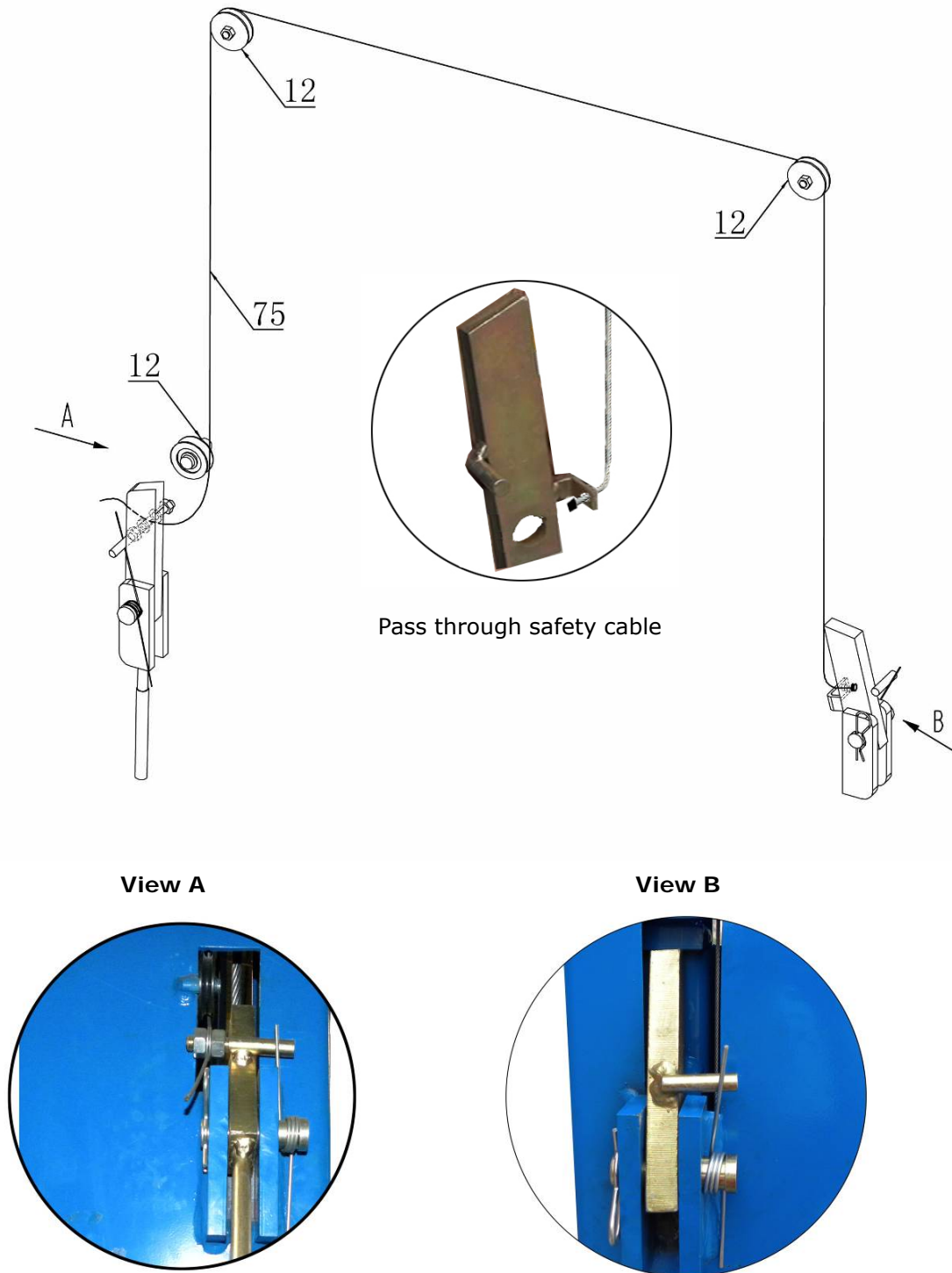


Fig. 23

M. Install cables (See Fig. 24).

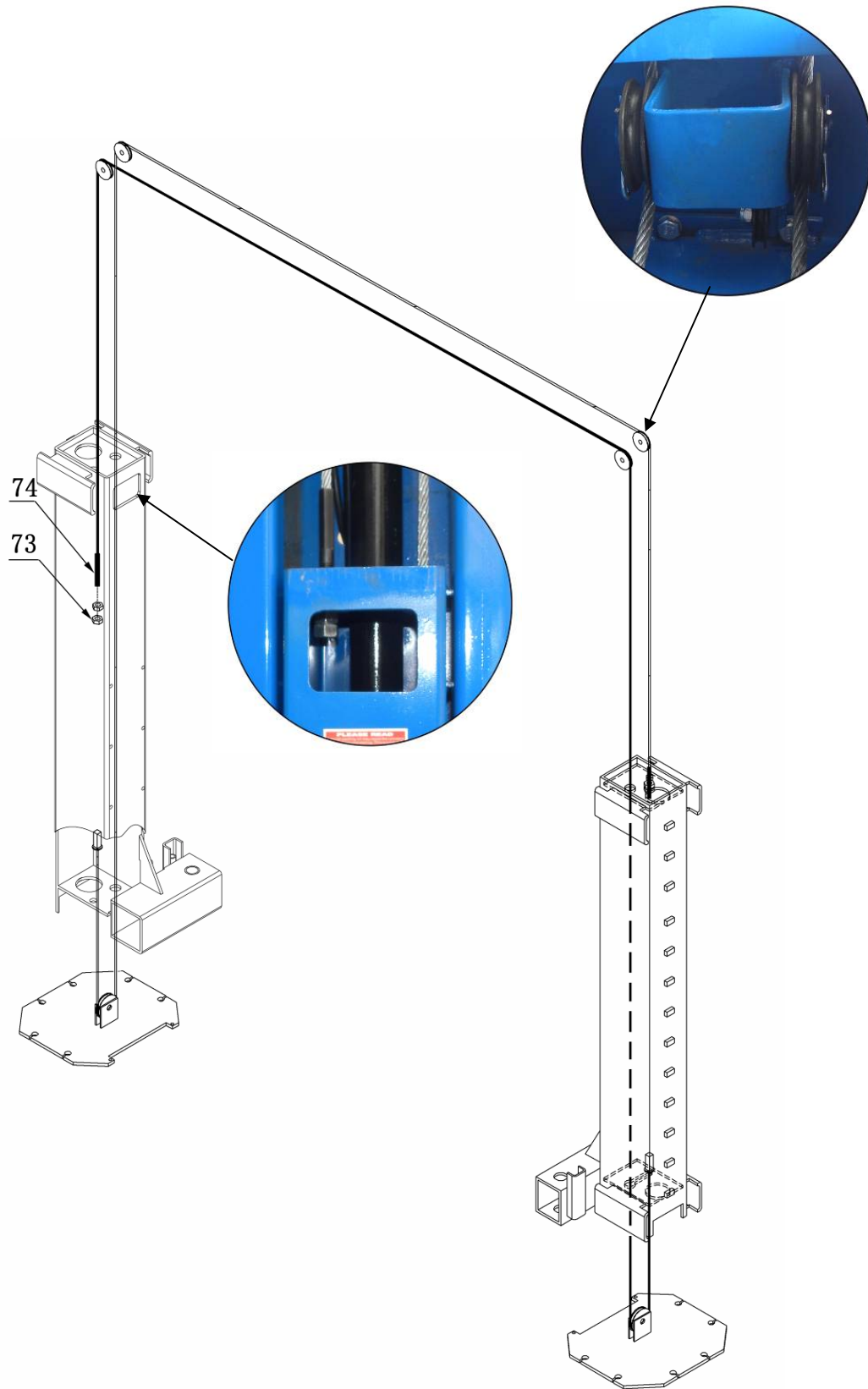


Fig. 24

N. Assembly oil hose assy.

1. For model W-10C (See Fig. 25).

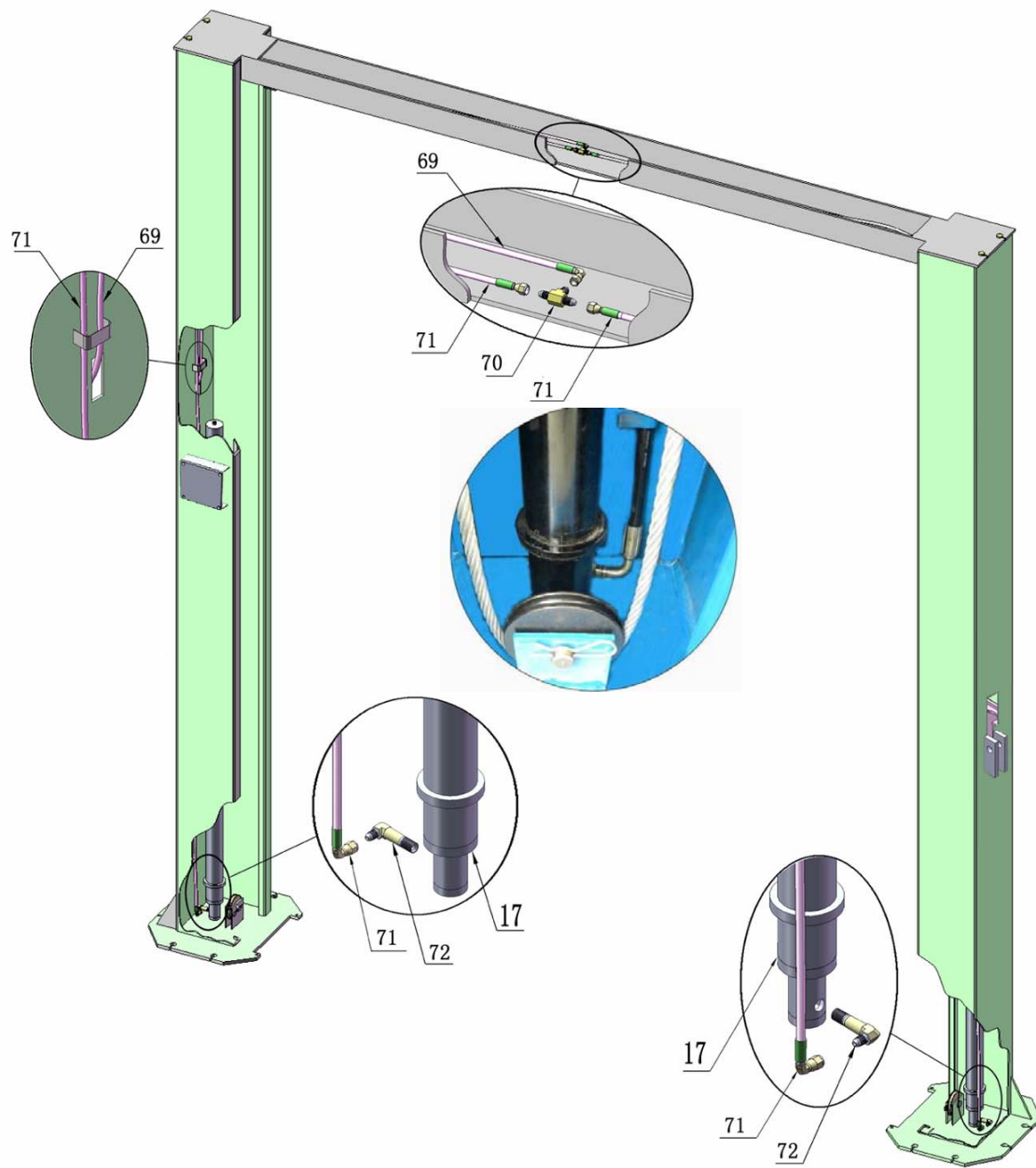


Fig. 25

2. For model W-10CX (See Fig. 26).

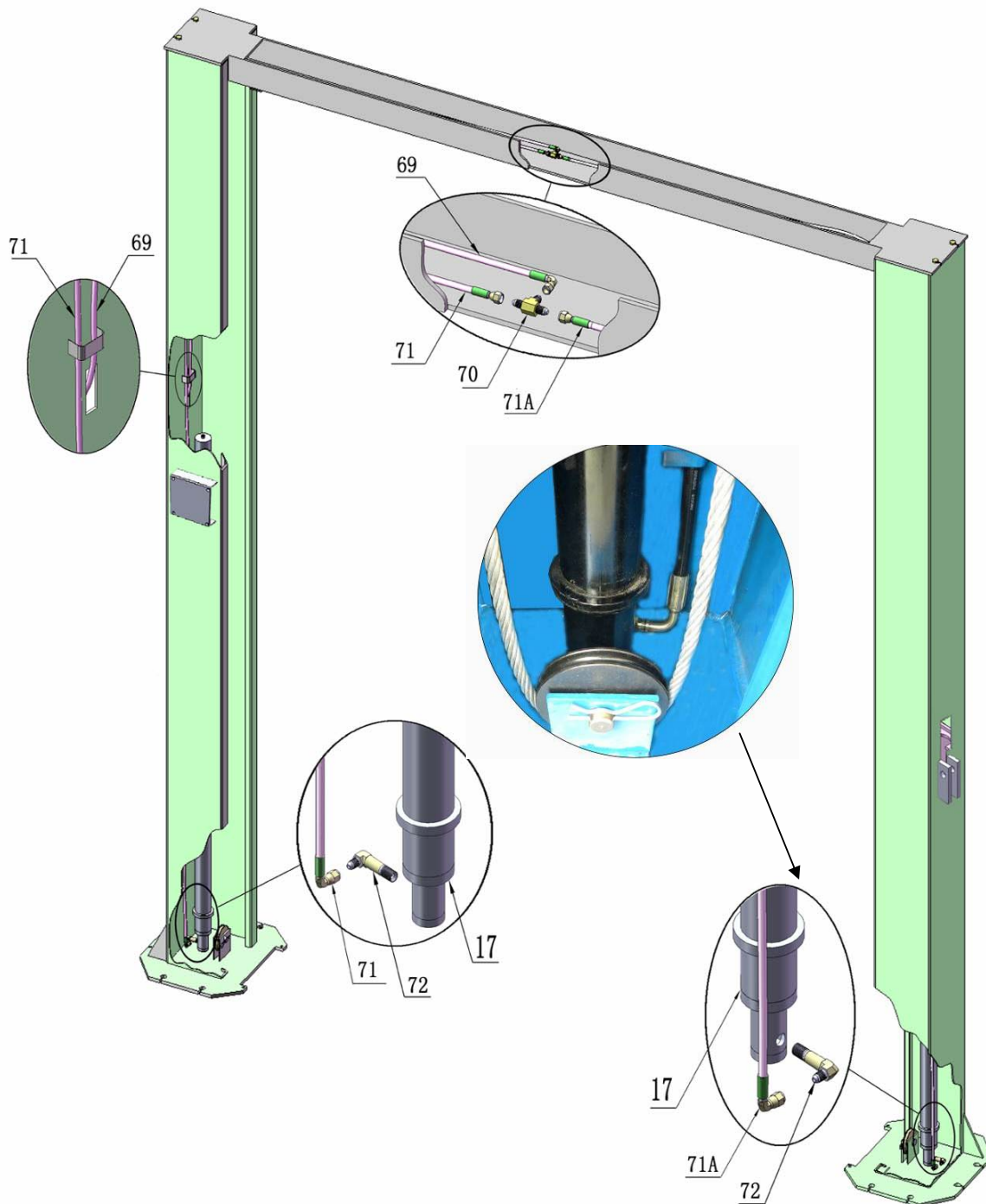
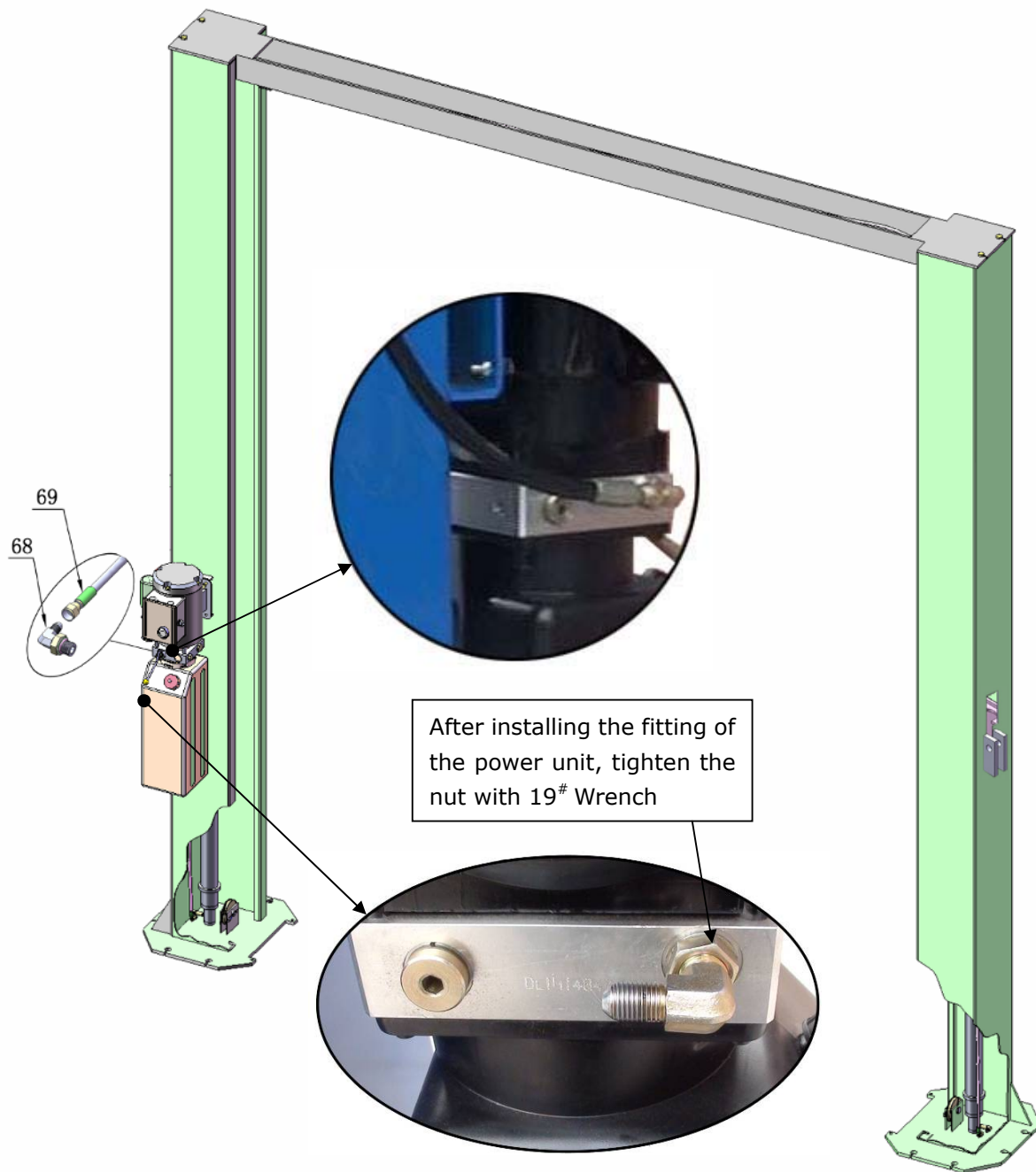


Fig. 26

O. Install power unit and oil hoses (See Fig. 27)



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

Note: In consideration of Hydraulic Power Unit's durability and keep the equipment running in the perfect condition, please use Hydraulic Oil AW32 or AW46.

Fig. 27

P. Install lifting arms and adjust the arm locks

1. Install the lifting arms (See Fig. 28).
2. Lowering the carriages down to the lowest position, then use the 17[#] wrench to loosen the nut of arm lock (See Fig. 29).

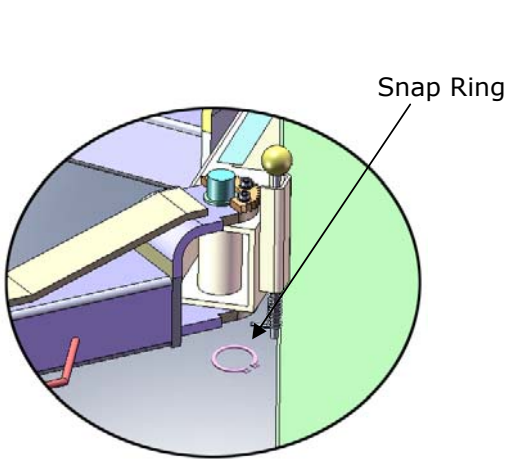


Fig. 28

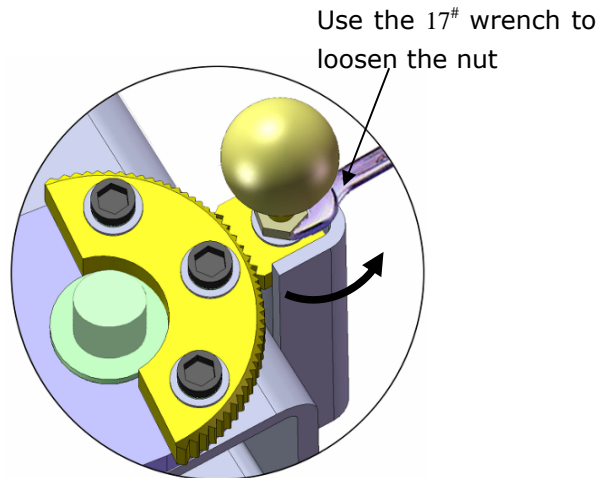


Fig. 29

3. Adjust the arm lock as direction of arrow (See Fig. 30)
4. Adjust the moon gear and arm lock to make it to be meshed, then tighten the nut of arm lock (See Fig. 31).

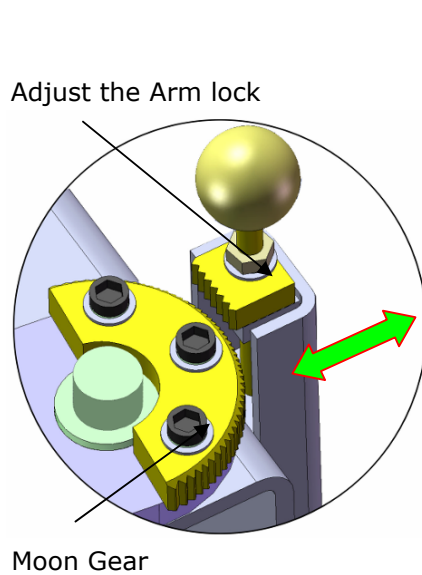


Fig. 30

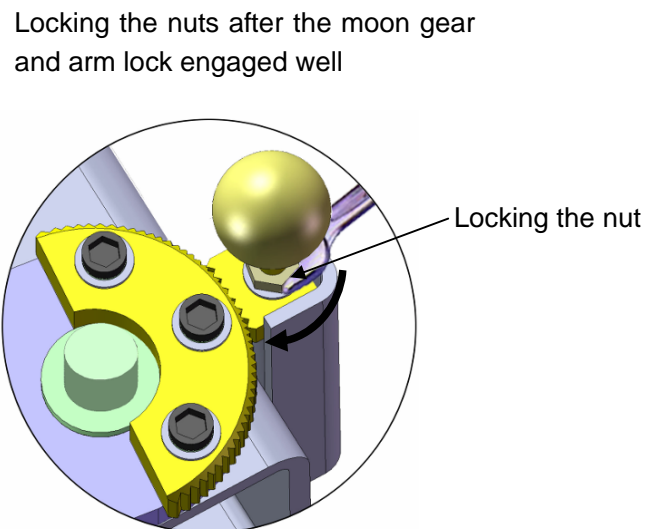


Fig. 31

Q. 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 three phase motors.

PEAK single phase motor (See Fig. 32).

1. Connecting the two power supply lines (Active **L** and Neutral 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. Connecting the Limit Switch: Removing the wire of connecting terminal **4#** on control button and terminal **A1** on AC contactor firstly (See Fig. 33), then connecting wire **12#** (brown color) of the limit switch with terminal **4#** of the control button and connecting wire **11#** (blue color) with terminal **A1** on AC contactor respectively. Connecting the earth wire (green and yellow color) of the limit switch with earth wire terminal on power unit. (See Fig. 34).
5. Connecting terminal **3#** on control button with terminal **L1** of AC contactor.

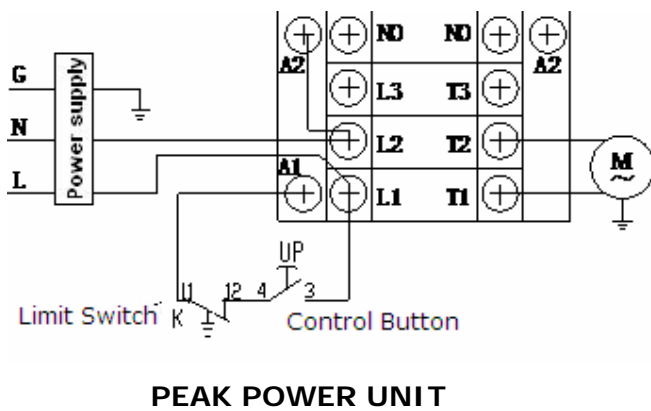
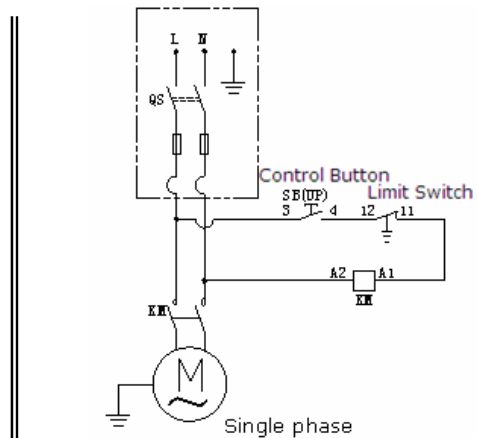


Fig. 32



Motor Line

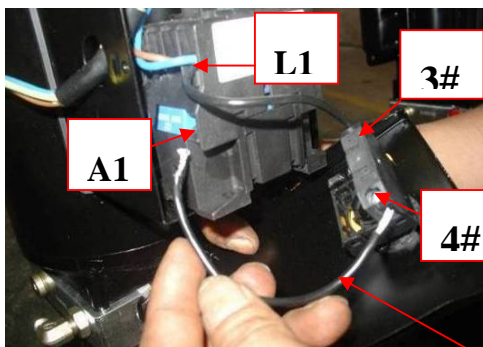


Fig. 33

Remove this line before connecting the Limit Switch

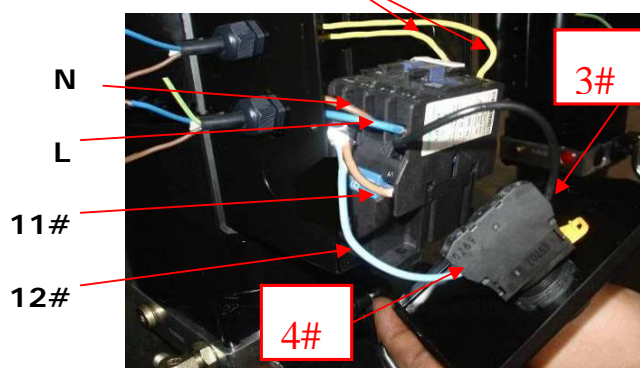
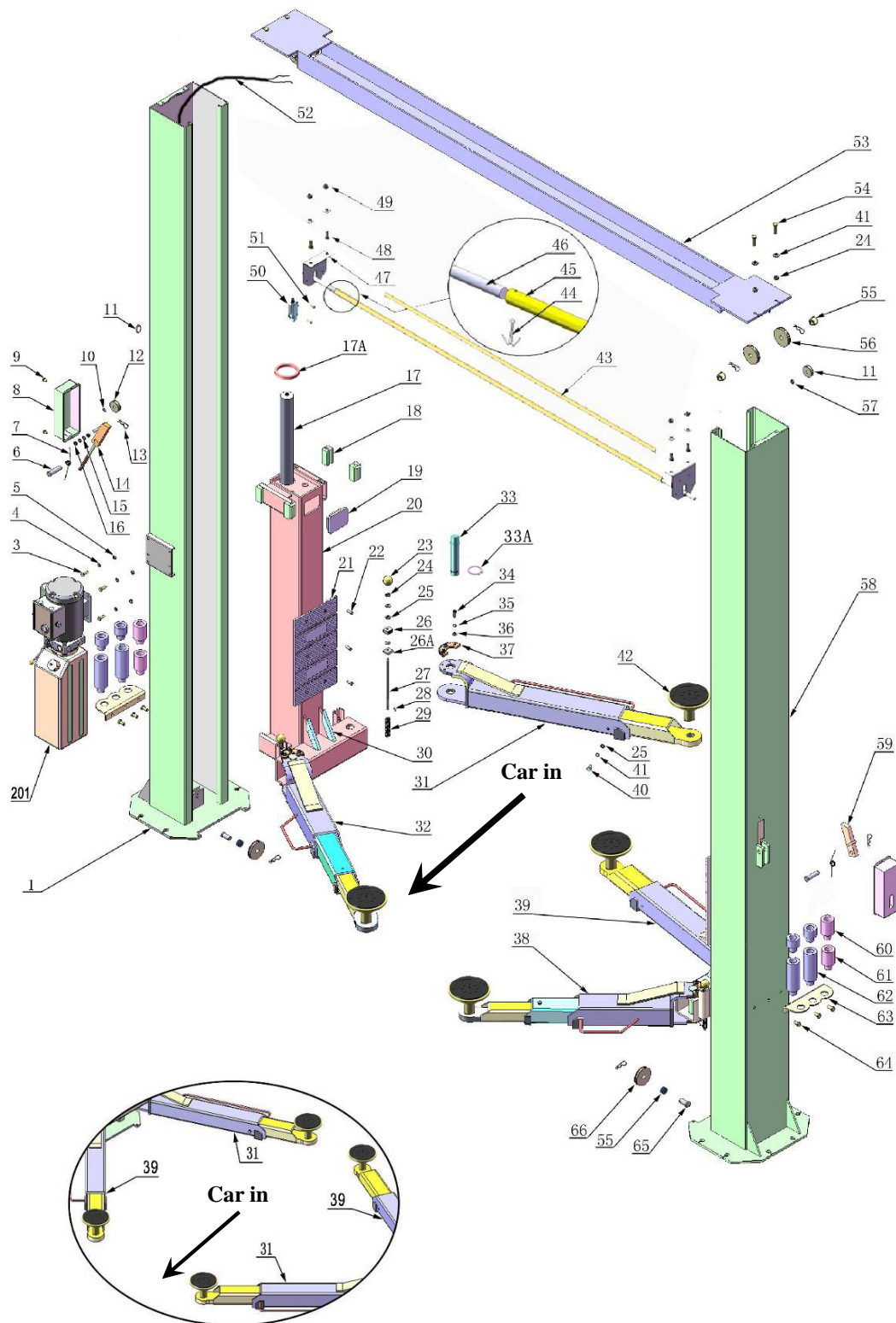


Fig. 34

IV. EXPLODED VIEW

Model W-10C, W-10CX



Model W-10CX Lifting arms

Fig. 38

Cylinders

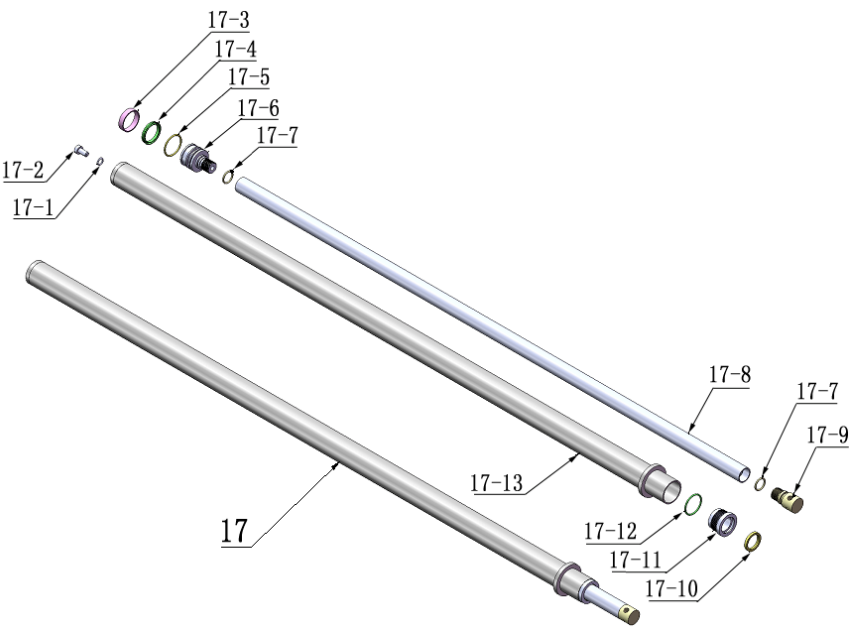


Fig. 39

Fig. 40

PEAK MANUAL POWER UNIT

220V/60HZ/1 phase

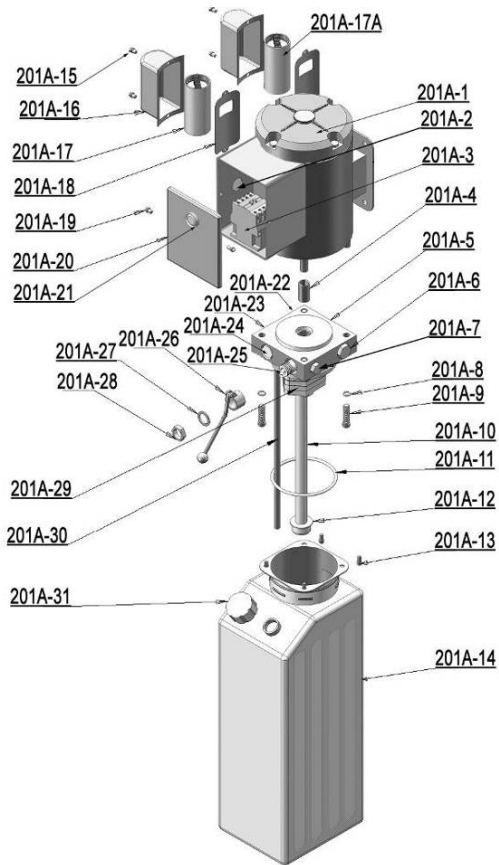


Fig. 41

Illustration of hydraulic valve for PEAK power unit

b. PEAK manual power unit, 220V/60HZ, Single phase (See Fig. 43)

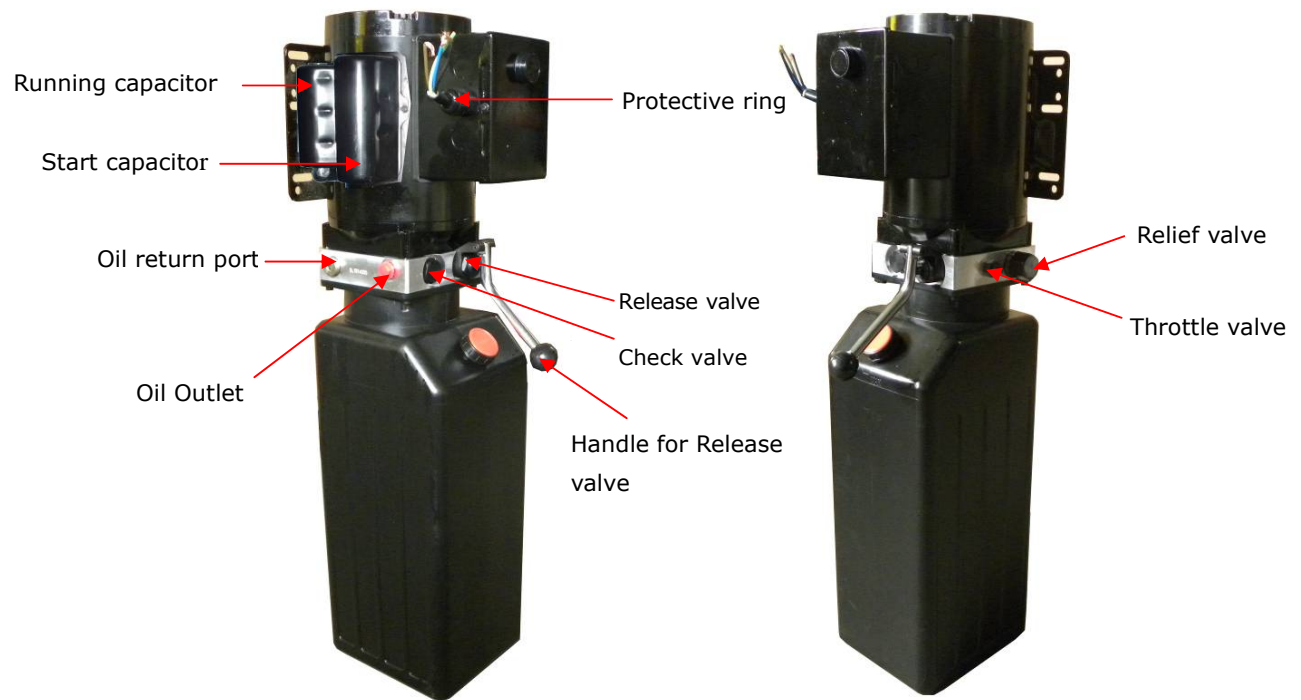


Fig. 43

V. TEST RUN

1. Adjust synchronous cable (See Fig. 45)

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 carriages can work synchronously.

Fit the plastic hole cover on the lifting carriages.

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

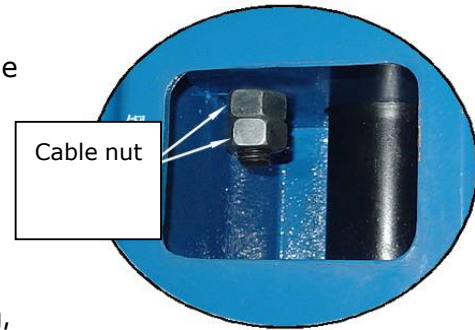


Fig. 45

2. Adjust safety cable

Lifting the carriages 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. Bleeding air

This hydraulic system is designed to bleeding air by loosening the bleeding plug. Lifting the carriages to about 1 meter height, and loose the bleeding plug, the air would be bled automatically, then tighten the plug after bleeding, the lift would work stably and smoothly, otherwise repeat bleeding (See Fig. 46).

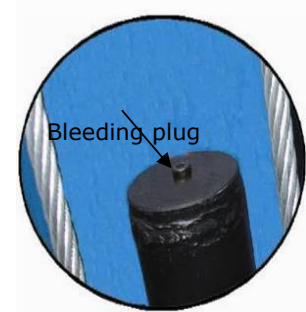
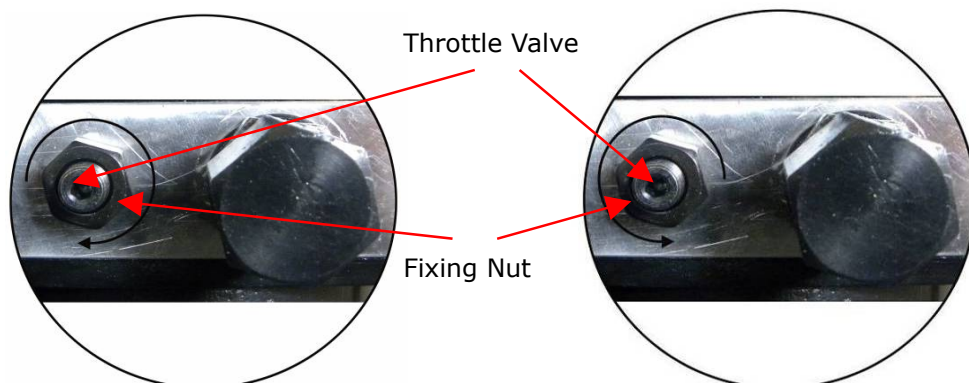


Fig. 46

4. 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.



Clockwise to decrease
the down speed

Fig. 47

Counterclockwise to increase
the down speed

5. 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: It may be vibrated when lifting at start, lifting it with load for several times, the air would be bled and the vibration would be disappeared automatically.

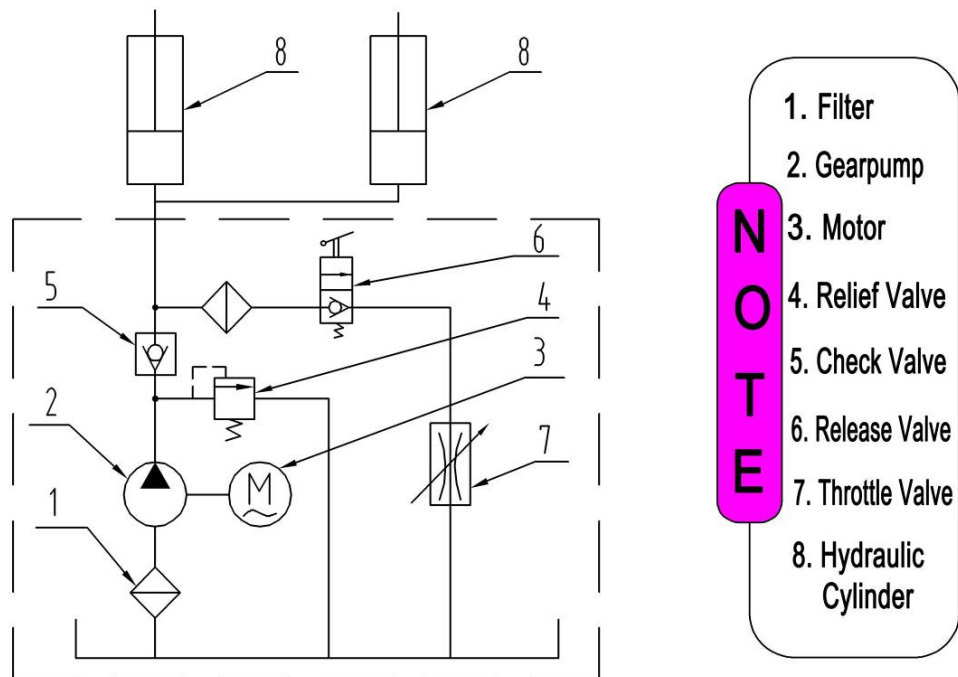


Fig. 48 Hydraulic System

VI. OPERATION 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 80-117 Nm;
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	1. Button does not work 2. Wiring connections are not in good condition 3. Motor burned out 4. Height Limit Switch is damaged 5. AC Contactor burned out	1. Replace button 2.Repair all wiring connections 3. Repair or replace motor 4.Replace the Limit Switch 5. Replace AC Contactor
Motor runs but the lift is not raised	1. Motor runs in reverse rotation 2. Gear Pump out of operation 3. Release Valve in damage 4. Relief Valve or Check Valve in damage 5. Low oil level	1.Reverse two power wire 2.Repair or replace 3. Repair or replace 4.Repair or replace 5.Fill tank
Lift does not stay up	1. Release Valve out of work 2. Relief Valve or Check Valve leakage 3. Cylinder or Fittings leaks	Repair or replace
Lift raises slowly	1. Oil line is jammed 2. Motor running on low voltage 3. Oil mixed with Air 4. Gear Pump leaks 5. Overload lifting	1. Clean the oil line 2. Check electrical system 3. Fill tank 4. Replace Pump 5. Check load
Lift can not lower	1. Safety device are locking 2. Release Valve in damage 3. Safety cable broken 4. Oil system is jammed	1. Release the safeties 2. Repair or replace 3. Replace 4. Clean the oil system

IX. PARTS LIST FOR MODEL W-10C W-10CX

Item	Part#	Description	Qty.		Note
			W-10C	W-10CX	
(See Fig.38, Fig.10, Fig. 12, Fig. 17, Fig. 19)					
1	211001	Powerside Column	1	1	
201	209002	Manual Power Unit	1	1	
3	209003	Hex Bolt	4	4	
4	209004	Rubber Ring	4	4	
5	209005	Nylok Nut	4	4	
6	206002	Safety Pin	2	2	
7	209007	Safety Spring	2	2	
8	209008	Safety Cover	2	2	
9	209009	Cup Head Bolt	4	4	
10	209010	Snap Ring	1	1	
11	209114	Protective ring	1	1	
12	209049	Plastic small pulley	3	3	
13	209012	Hair Pin	8	8	
14	209013	Powerside Safety Lock	1	1	
15	206006	Washer	6	6	
16	206023A	Hex Nut	2	2	
17	209014	Cylinder	2	2	
17A	209111	Protective ring for cylinder	2	2	
18	209015	Slider Block	16	16	
19	209016	Carriage Plastic Cover	2	2	
20	211002	Carriage	2	2	
21	209018	Protective Rubber	2	2	
22	209019	Bolt	12	12	
23	209020	Plastic Ball	4	4	
24	209021	Hex Nut	12	12	
25	209022	Washer	10	8	
26	209023A	Arm Lock	4	4	
26A	201041	Limit ring	4	4	
27	209024	Arm Lock Bar	4	4	
28	209025	Hair Pin	4	4	
29	209026	Spring	4	4	
30	209027	Protective Rubber Set	4	4	
31	209028A	Lifting Arm - Rear Right	1	2	
31A	209179	Outer Arm - Rear Right	1	2	
31B	209136B	Inner Arm - Rear Right	1	2	
32	209029A	Lifting Arm - Front Right	1	0	
32A	209137	Outer Arm - Front Right	1	0	
32B	206088	Middle Arm - Front Right	1	0	
32C	206089A	Inner Arm - Front Right	1	0	

Item	Part#	Description	Qty.		Note
			W-10C	W-10CX	
33	203105	Arm Pin	4	4	
33A	520023	Snap Ring	4	4	
34	209032	Socket Bolt	12	12	
35	209034	Lock Washer	18	18	
36	209033	Washer	12	12	
37	209035	Moon Gear	4	4	
38	209036A	Lifting Arm - Front Left	1	0	
38A	209177	Outer Arm - Front Left	1	0	
38B	206093	Middle Arm - Front Left	1	0	
38C	206089A	Inner Arm - Front Left	1	0	
39	209037A	Lifting Arm - Rear Left	1	2	
39A	209139	Outer Arm - Rear Left	1	2	
39B	209140A	Inner Arm - Rear Left	1	2	
40	209038	Hex Bolt	6	6	
41	209039	Lock Washer	10	8	
42	217114A	Rubber Pad Assy.	4	4	
42A	420138	Socket bolt	4	4	
42B	209134	Rubber Pad	4	4	
42C	680030B	Rubber Pad Frame	4	4	
43	206025A	Foam Cushion	1	1	
44	201005	Split pin	2	2	
45	206025C	Connecting Pin for Control Bar	2	2	
46	202011	Control Bar	1	0	
	202011A		0	1	
47	206042	Control Bar Bracket	2	2	
48	206041	Hex Bolt	4	4	
49	206023	Nylok Nut	4	4	
50	206013	Limit Switch	1	1	
51	206011	Cup Head Bolt	2	2	
52	209184	Wire Cable	1	1	
53	211011	Top Beam	1	0	
	211011A		0	1	
54	209046	Hex Bolt	4	4	
55	209057A	Bronze Bush	6	6	
56	209057	Small Pulley	4	4	
57	209056	Nylok Nut	2	2	
58	211012	Offside Column	1	1	
59	211013	Offside Safety Lock	1	1	
60	209051B	Stackable Adapter(1.5)	4	4	
61	209052B	Stackable Adapter (2.5)	4	4	

Item	Part#	Description	Qty.		Note
			W-10C	W-10CX	
62	209053B	Stackable Adapter (5)	4	4	
63	209054A	Stackable Adapter Bracket	2	2	
64	209055	Hex Bolt	6	6	
65	209044	Pin For Pulley	2	2	
66	209045	Big Pulley	2	2	
67	209059	Anchor Bolt	12	12	
67A	620065	Shim	10	10	
Parts List for Oil Hose, Fitting & Cable (See Fig.22-27)					
68	209060	90° Fitting for power unit	1	1	
69	211014	Oil hose	1	1	
70	211016	T- fitting	1	1	
71	211015A	Oil hose	2	1	
71A	211020	Oil hose	0	1	
72	211017	Extend 90° fitting for Cylinder	2	2	
73	209066	Cable Nut	4	4	
74	211018	Cable	2	0	
	211018A		0	2	
75	211019	Safety Cable	1	0	
	211019A		0	1	
76	209501B	Parts Box	1	0	
77	209502B		0	1	
Parts for Cylinder (See Fig.39)					
17-1	209069	O-Ring	2	2	
17-2	209070	Bleeding Plug	2	2	
17-3	209071	Support Ring	2	2	
17-4	209072	Y-Ring	2	2	
17-5	209073	O-Ring	2	2	
17-6	209074	Piston Rod	2	2	
17-7	209075	O-Ring	4	4	
17-8	209076	Piston Rod	2	2	
17-9	209077	Piston Rod Fitting	2	2	
17-10	209078	Dust Ring	2	2	
17-11	209079	Head Cup	2	2	
17-12	209080	O-Ying	2	2	
17-13	209081	Bore Weldment	2	2	

Item	Part#	Description	Qty.		Note
			W-10C	W-10CX	
Parts for PEAK manual power unit, 220V/60Hz/1 phase (See Fig.41)					
201A-1	209082A	Motor	1	1	
201A-2	209109	Protective ring	1	1	
201A-3	209112	AC contactor	1	1	
201A-4	209083A	Motor connecting shaft	1	1	
201A-5	209084A	Valve body	1	1	
201A-6	209085A	Relief valve	1	1	
201A-7	209113	Throttle valve	1	1	
201A-8	209086A	Lock washer	4	4	
201A-9	209087A	Allen bolt	4	4	
201A-10	209088A	Inlet pipe	1	1	
201A-11	209089A	O-Ring	1	1	
201A-12	209090A	Filter	1	1	
201A-13	209091A	Allen bolt	4	4	
201A-14	209092A	Reservoir	1	1	
201A-15	209093A	Cup head bolt with washer	4	4	
201A-16	209094A	Cover of capacitor	2	2	
201A-17	209095A	Start capacitor	1	1	
201A-17A	209095B	Run capacitor	1	1	
201A-18	209096A	Rubber gasket	2	2	
201A-19	209097A	Cup head bolt with washer	2	2	
201A-20	209098A	Cover of motor terminal box	1	1	
201A-21	209099A	Push button	1	1	
201A-22	209110A	Oil return port	1	1	
201A-23	209100A	Oil outlet	1	1	
201A-24	209105A	Check valve	1	1	
201A-25	209101A	Release valve	1	1	
201A-26	209102A	Handle for release valve	1	1	
201A-27	209103A	Washer	1	1	
201A-28	209104A	Nut	1	1	
201A-29	209106A	Gear pump	1	1	
201A-30	209107A	Oil return pipe	1	1	
201A-31	209108A	Filler cap	1	1	