



ATLAS OH-10X

10,000 lb. Capacity
Two-Post Overhead Lift

INSTALLATION & OPERATION MANUAL



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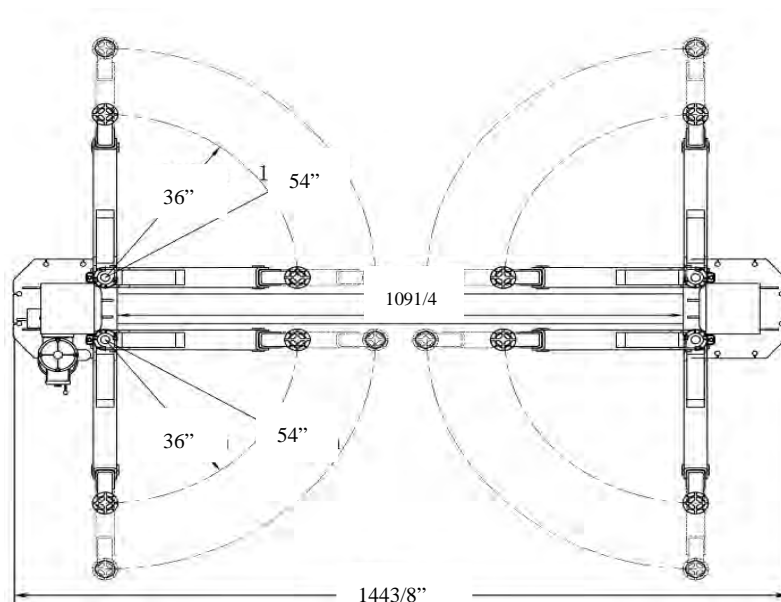
DIRECT-DRIVEN MODEL FEATURES

MODEL OH1000X (See Fig.2)

- Direct-drive design minimizes the lift wear on parts and breakdown ratio.
- Dual hydraulic direct-drive cylinders are designed and made on ANSI standards, utilizing oil seal in cylinder.
- Self-lubricating UHMW Polyethylene sliders and bronze bush.
- Single-point safety release and dual safety design.
- Clear floor design, provides unobstructed floor space.
- Overhead safety shut-off device.
- Stackable adapters 1.5", 3", 6" are standard equipment.

Model	Style	Lifting Capacity	Lifting Time	Lifting Height	Overall Height	Overall Width	Width Between Columns	Minimum Pad Height	Motor
OH1000X	Clear Floor Direct-drive	4.5T	60S	1930-2200mm	3852mm	3666mm	3000mm	80mm	3.0 HP
		10,000lbs		76" – 86 5/8"	151 5/8"	144 3/8"	118 1/8"		

MODEL 201CX SPECIFICATIONS



II. INSTALLATION REQUIREMENT

A. TOOLS REQUIRED

- ✓ Rotary Hammer Drill (19mm, 3/4")



- ✓ Hammer



- ✓ 4 Foot Level Bar



- ✓ Crescent Wrench (12")



- ✓ Ratchet Spanner With Socket (28mm)



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



- ✓ Carpenter's Chalk



- ✓ Screw Driver Set



- ✓ Tape Measure (7.5m, 25ft)



- ✓ Pliers



- ✓ Socket Head Wrench (3mm, 6mm)



- ✓ Vise Grips



Fig. 1

B. SPECIFICATIONS OF CONCRETE (See Fig. 2)

Concrete specifications must be followed accordingly.

Failure to do so may result in lift and/or vehicle falling.

1. Concrete must be thickness 4 inches minimum and without reinforcing steel bars, and must be completely cured before the installation.
2. Concrete must be in good condition and must be of test strength 3,500psi (250kg/cm²) minimum.
3. Floors must be level and no cracks.

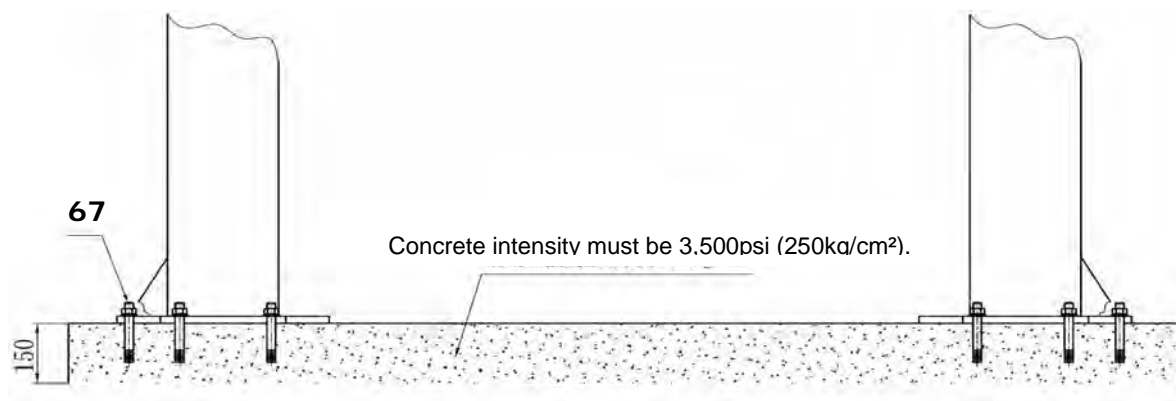


Fig. 2

C. POWER SUPPLY

The electrical source must be 3HP minimum. The electrical wire size must be 10 gauge, in good condition, and have a ground wire.

III. STEPS OF INSTALLATION

A. Installation Site

Double check the installation site (concrete, layout, space size etc.) for the lift installation.

- B. Use a carpenter's chalk line to establish installation layout on the base plates (See Fig. 3).

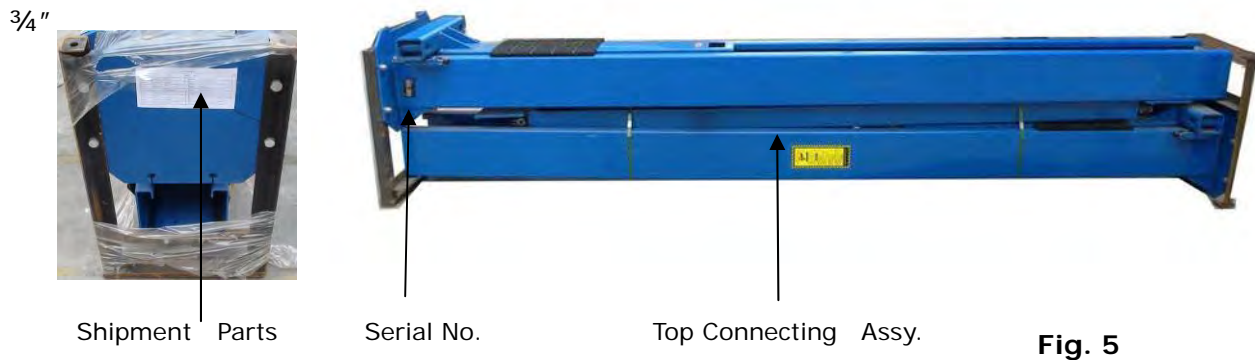
C. Check the parts before assembly

1. Packaged lift and hydraulic power unit (see Fig. 4)



Fig. 4

2. Move the lift aside with a fork lift or hoist, and open the outer packing carefully (See Fig. 5).



3. Take off the parts from upper and inside of the column, and move the parts aside.

4. Loosen the bolts of the upper package stand and take off the upper column with a fork lift or hoist, and remove the package stand.

5. Move aside the parts and check the parts according to the shipment parts list (See Fig. 6).

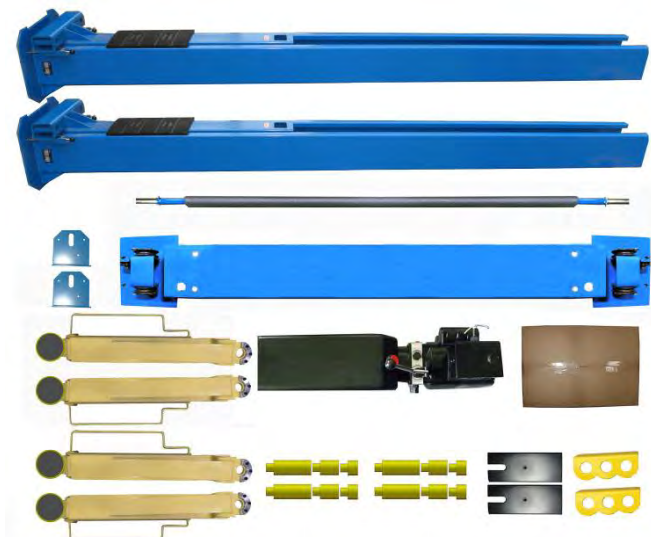


Fig. 6

6. Open the carton of parts and check the parts according to parts box list (See Fig. 15).



Fig. 7

7. Check the parts of the parts bag according to parts bag list (See Fig. 8).

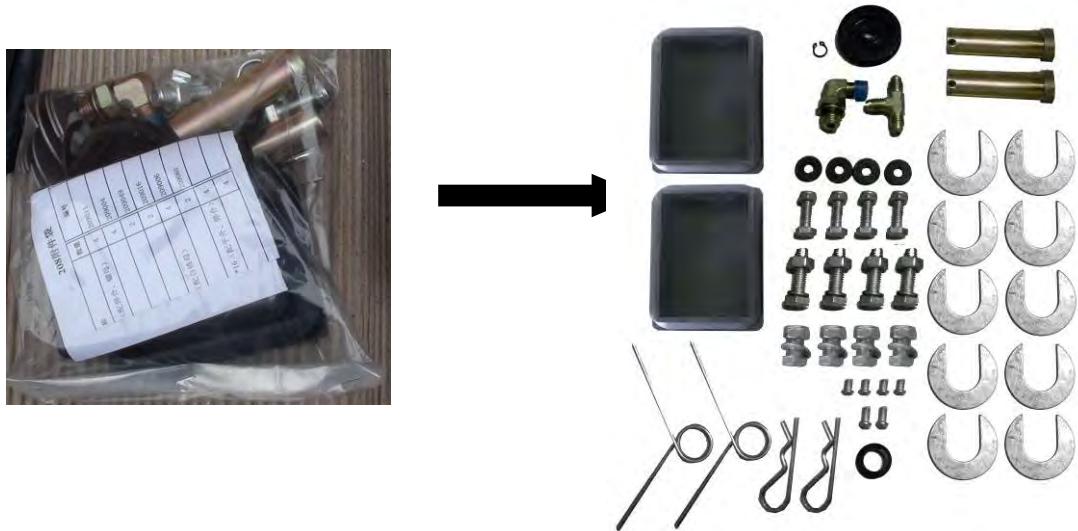


Fig. 8

D. Position the power side column

Lay down two columns on the installation site parallel of each other. Position the power side column according to the actual installation site. Usually, it is suggested to install power side column on the front-right side from which vehicles are driven to the lift (**See Fig. 9**).

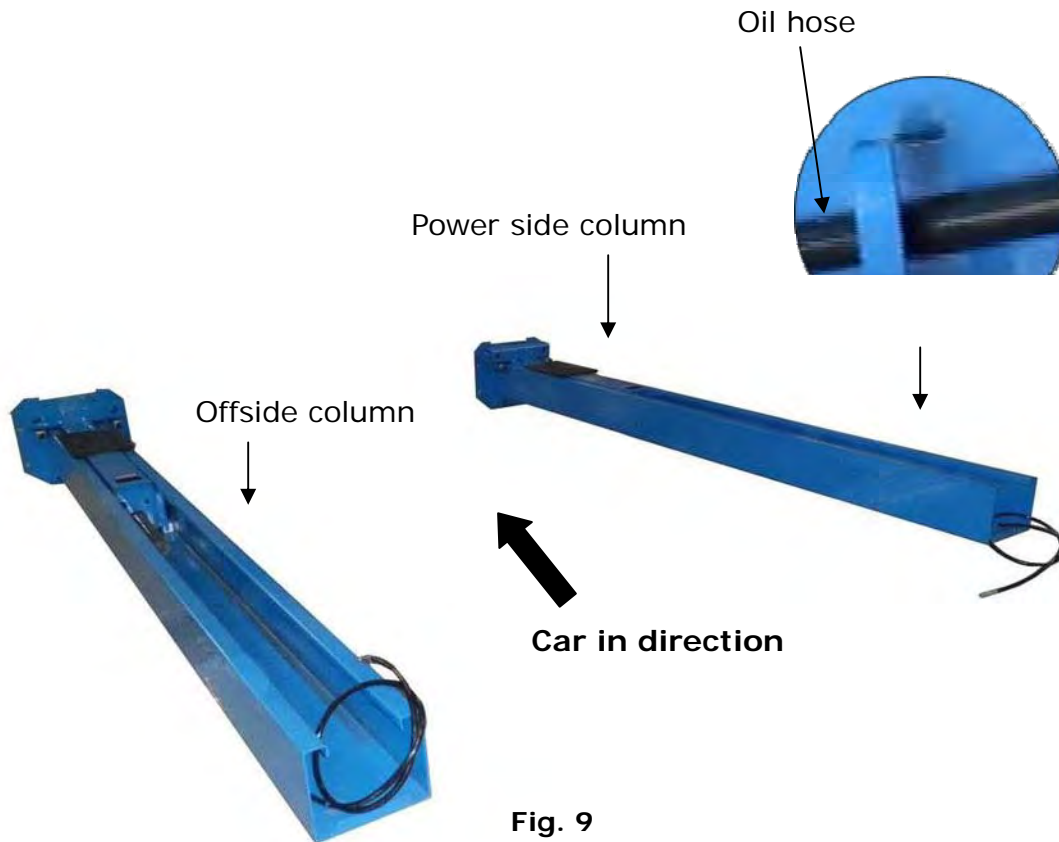


Fig. 9

E. Connecting oil hose

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



Fig. 10

F. Connecting cables

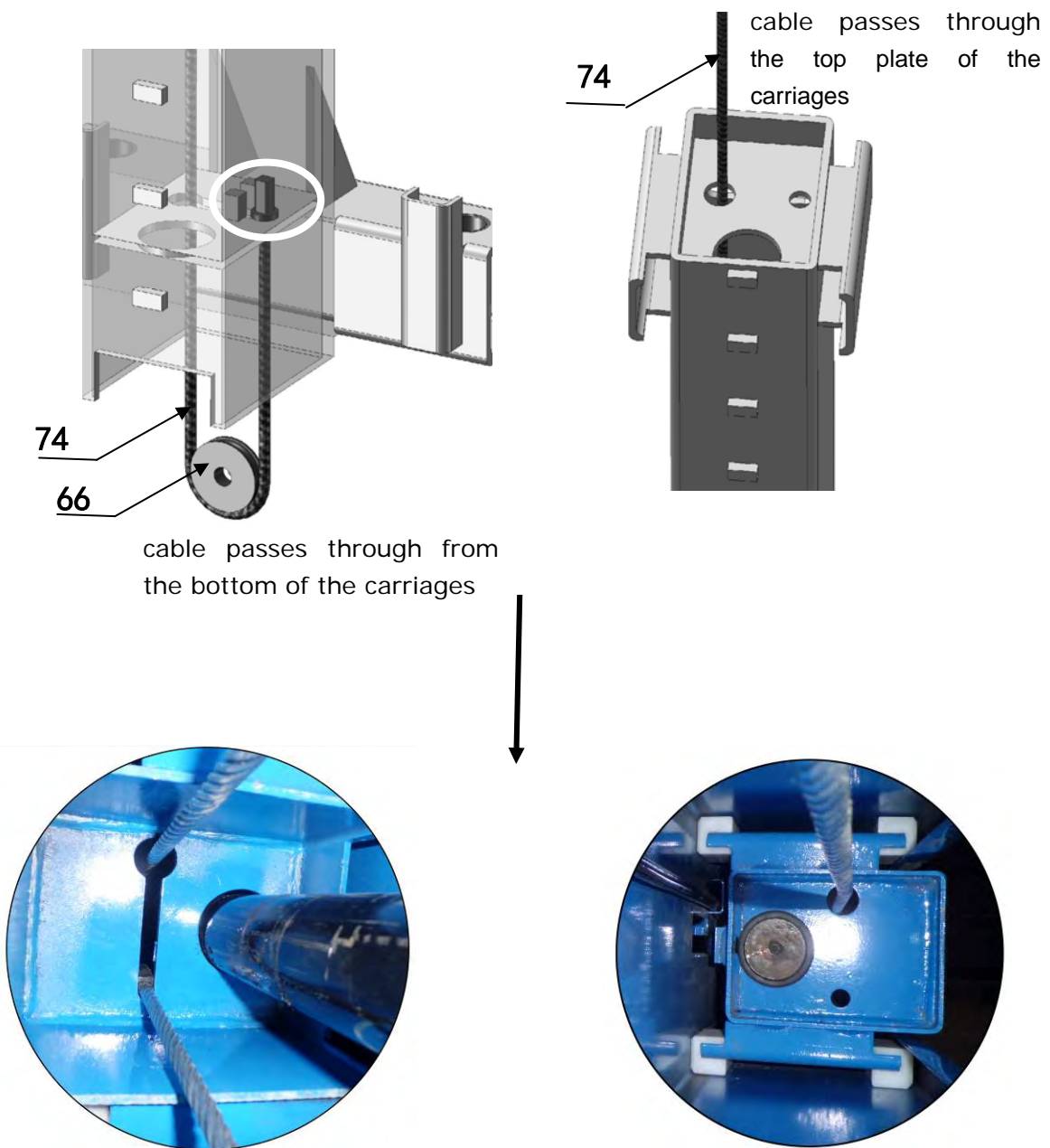
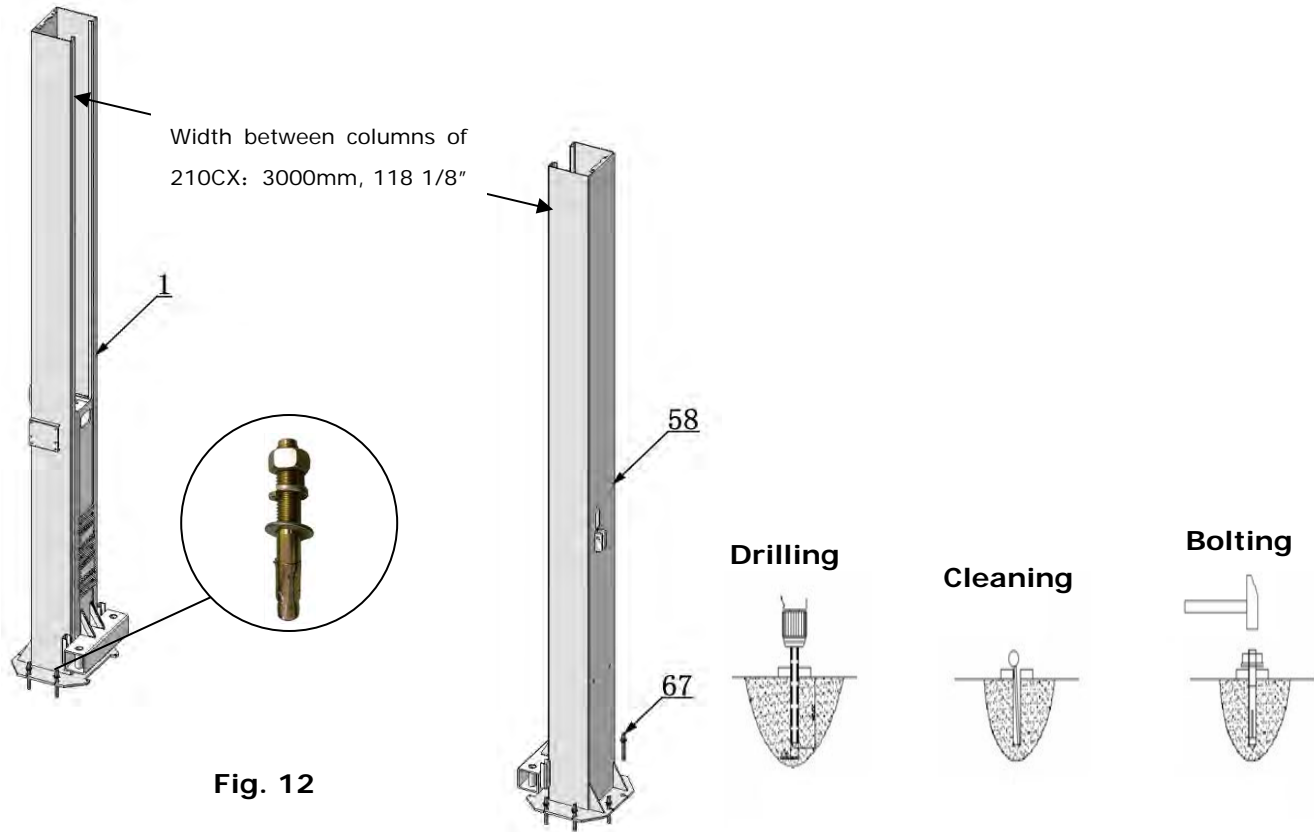


Fig. 11

H. Position columns

Position the columns upright on the installation layout. Drill holes for the power side column only. Install the anchor bolts. Do not tighten the anchor bolts. Position the offside column parallel to the power side column at the approximate width. **Do not drill holes until overhead beam is installed** (See Fig.12).



I. Assemble overhead top beams (See Fig.13).



Fig. 13

J. Check the columns for plumb with a 4ft. level bar, and adjust with the shims. Tighten the anchor bolts (See Fig.14).

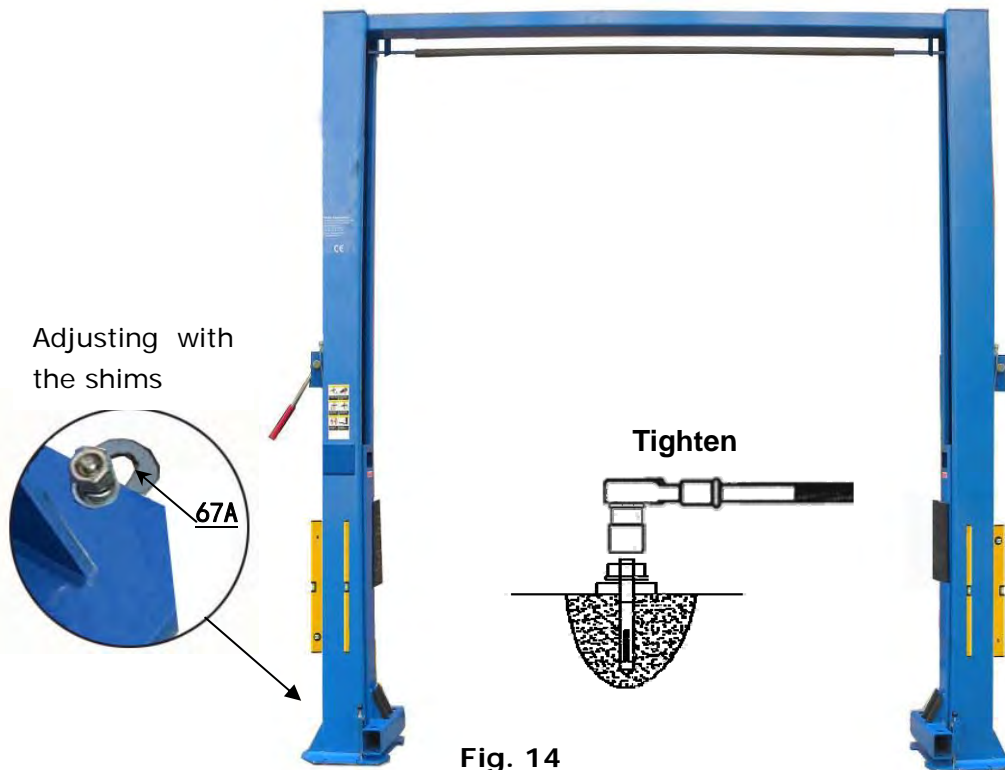


Fig. 14

K. Install the limit switch control bar and limit switch (See Fig. 15).

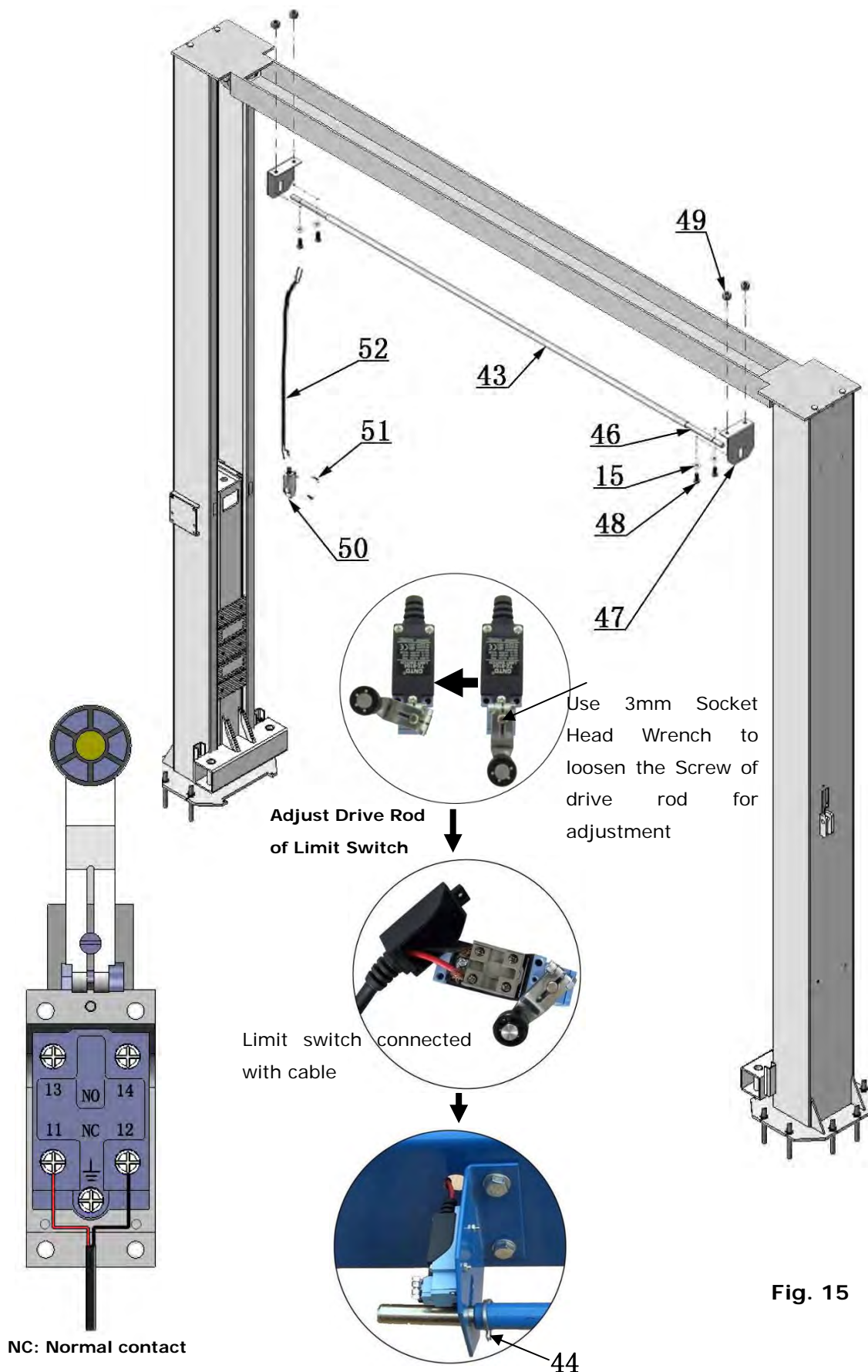


Fig. 15

L. Install the safety cable (See Fig. 16).

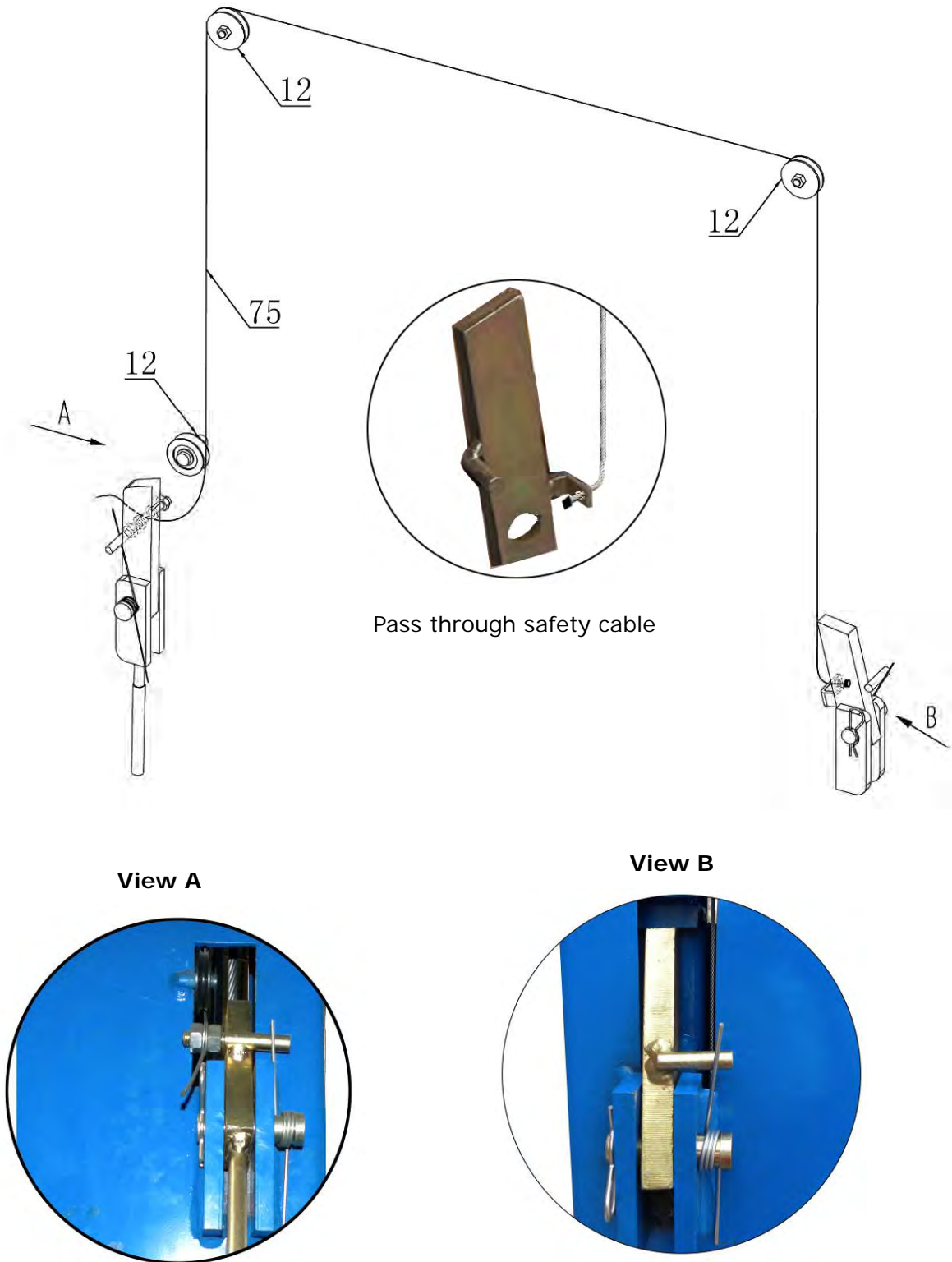


Fig. 16

M. Install cables (See Fig. 17).

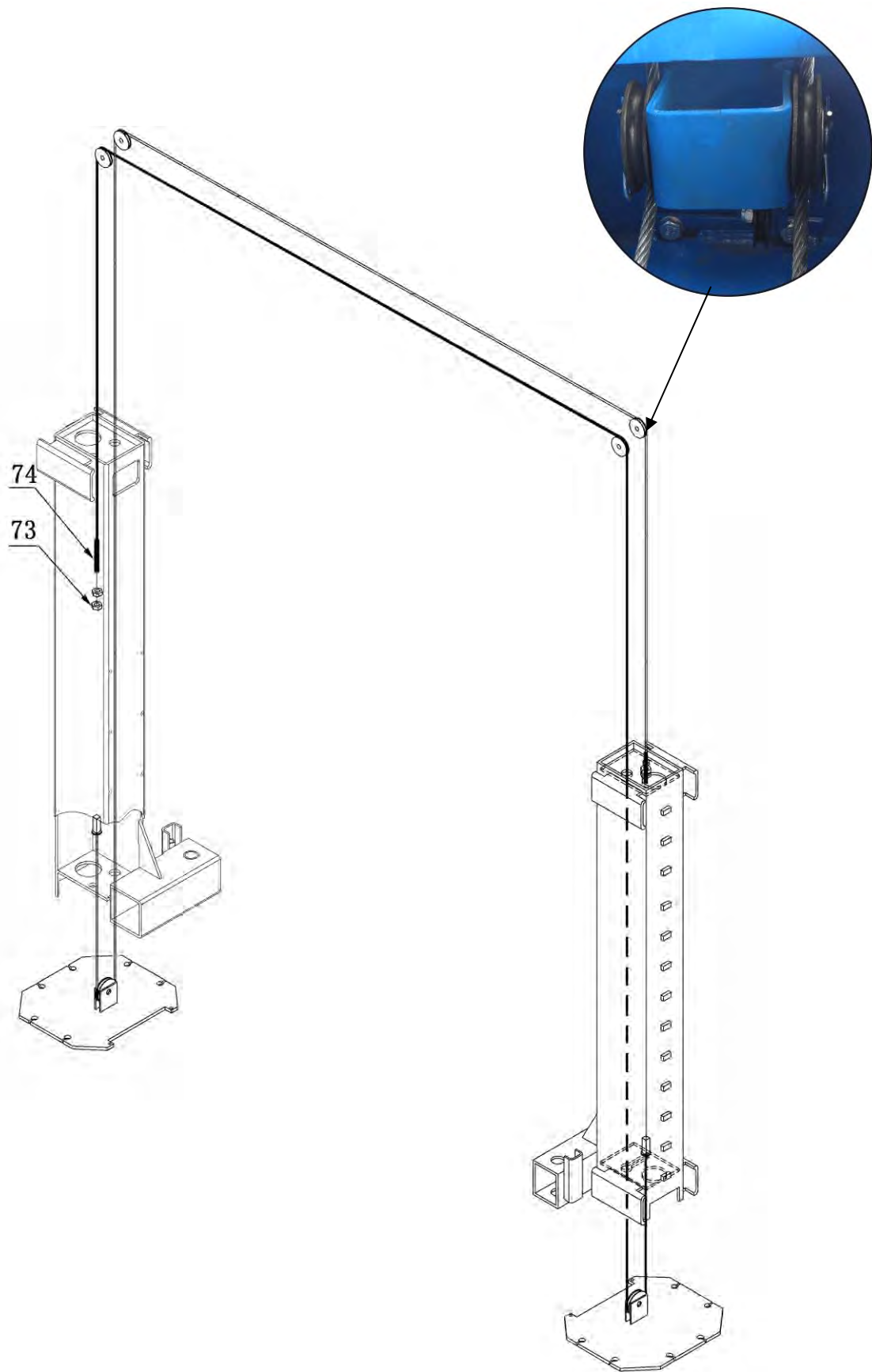


Fig. 17

2. For model OH10000X (See Fig.18).

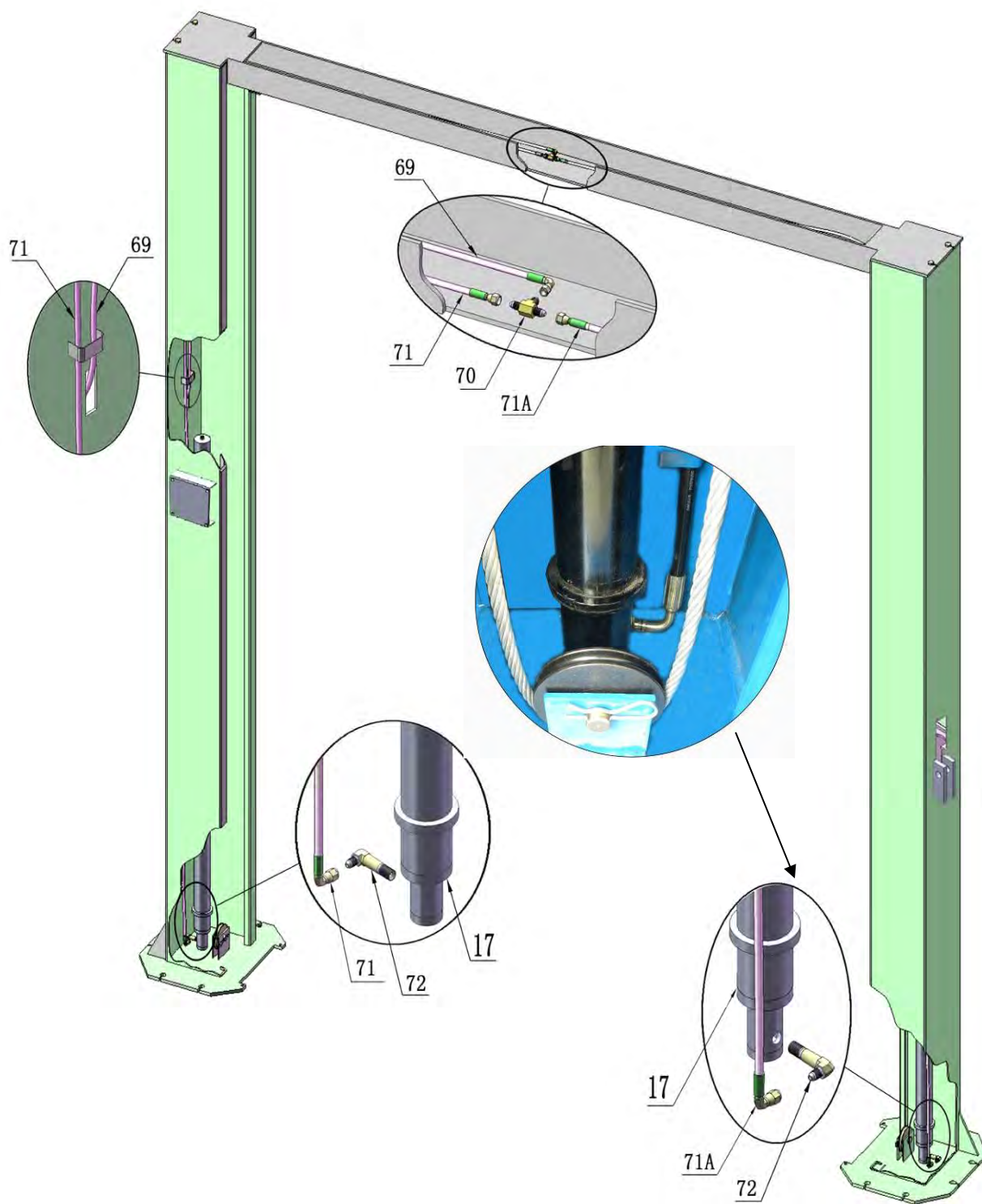
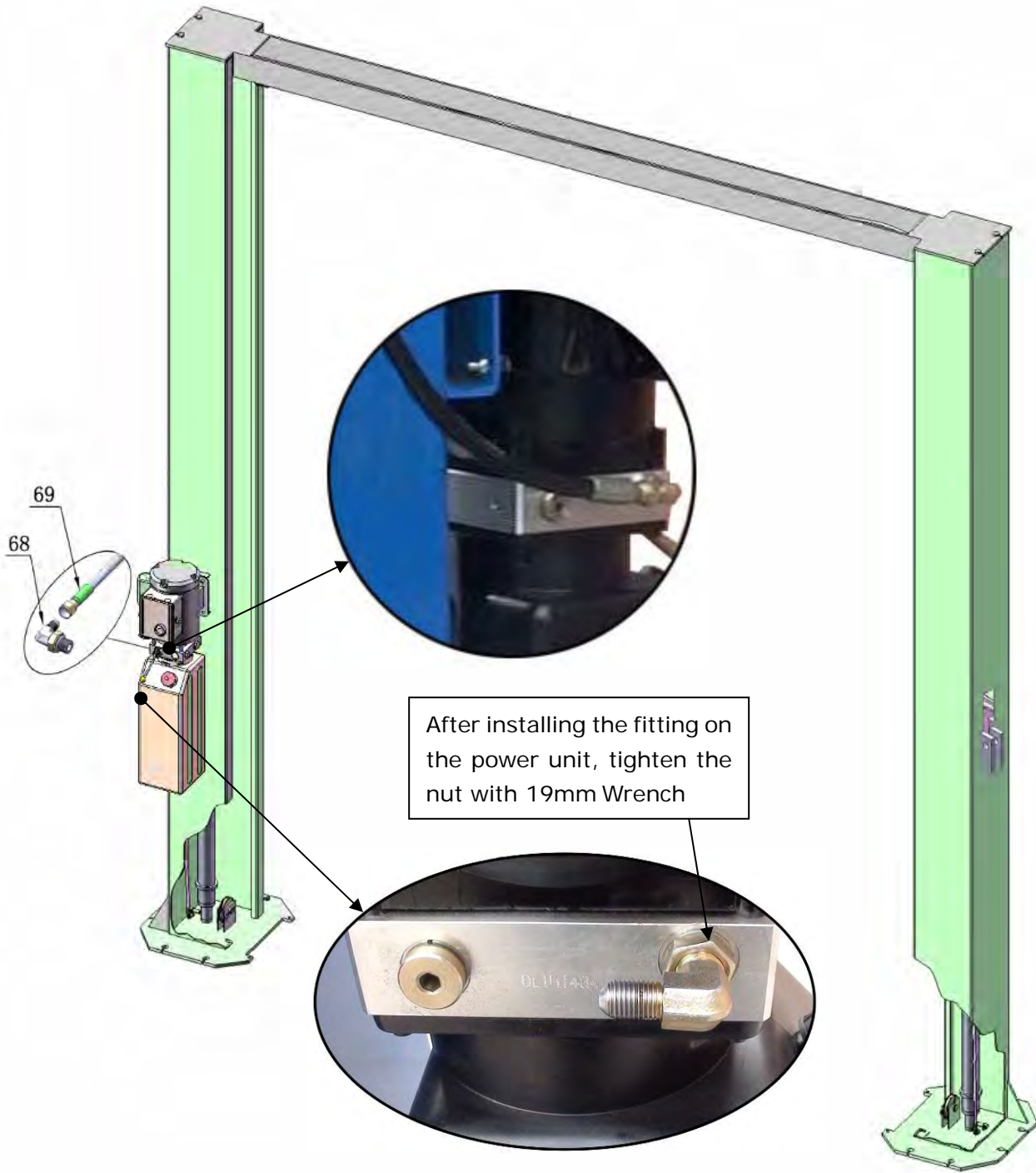


Fig. 18

O. Install power unit and oil hoses (See Fig. 19)



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

Note: Use hydraulic fluid series 46.

Fig. 19

P. Install lifting arms and adjust the arm locks

1. Install the lifting arms (See Fig. 20).
2. Lower the carriages down to the lowest position. Then use a 17mm wrench to loosen the nut on arm lock (See Fig. 21).

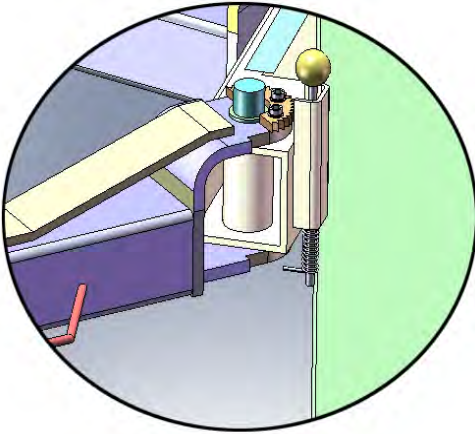


Fig. 20

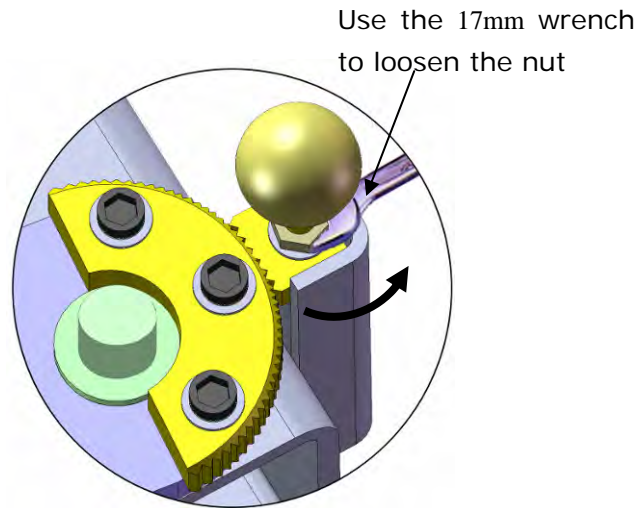
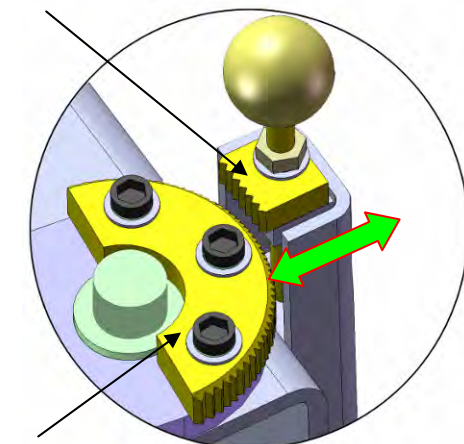


Fig. 21

3. Adjust the arm lock as direction of arrow (See Fig. 22)
4. Adjust the moon gear and arm lock so that it meshes, then tighten the nut of arm lock (See Fig. 23).

Adjust the Arm lock



Moon Gear

Fig. 22

Locking the nuts after the moon gear and arm lock engaged well

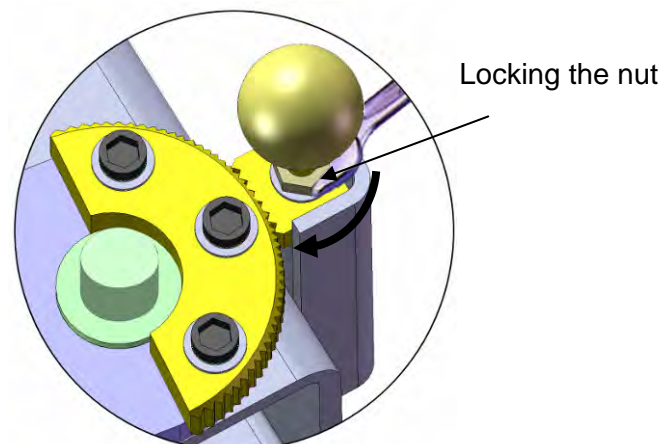


Fig. 23

Q. Install the electrical system

Connect the power source on the data plate of power unit.

Note: 1. The power source used must contain a ground wire.

ATLAS single phase motor (See Fig. 24).

1. Connect the two power supply lines (fire wire **L** and zero wire **N**) to the terminals on the AC contactor marked **L1, L2**.
2. Connect the two motor wires to the terminals on the AC contactor marked **T1, T2**.
3. Connect **A2** to **L2** on the AC contactor.
4. Connect the Limit Switch: Remove the line of connecting terminal **4#** on the control button and **A1** on the AC contactor first (See Fig. 25), then connect wire **12#** on the limit switch with terminal **4#** on the control button and connect wire **11#** with terminals **A1** on the AC contactor (See Fig. 26).

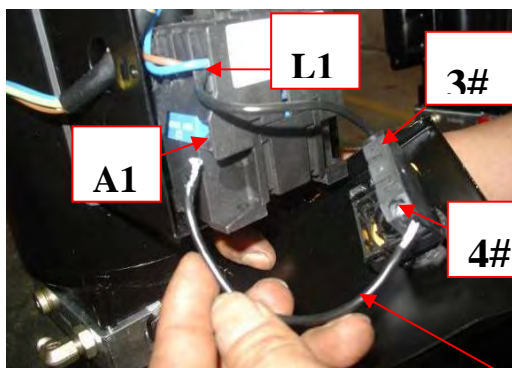
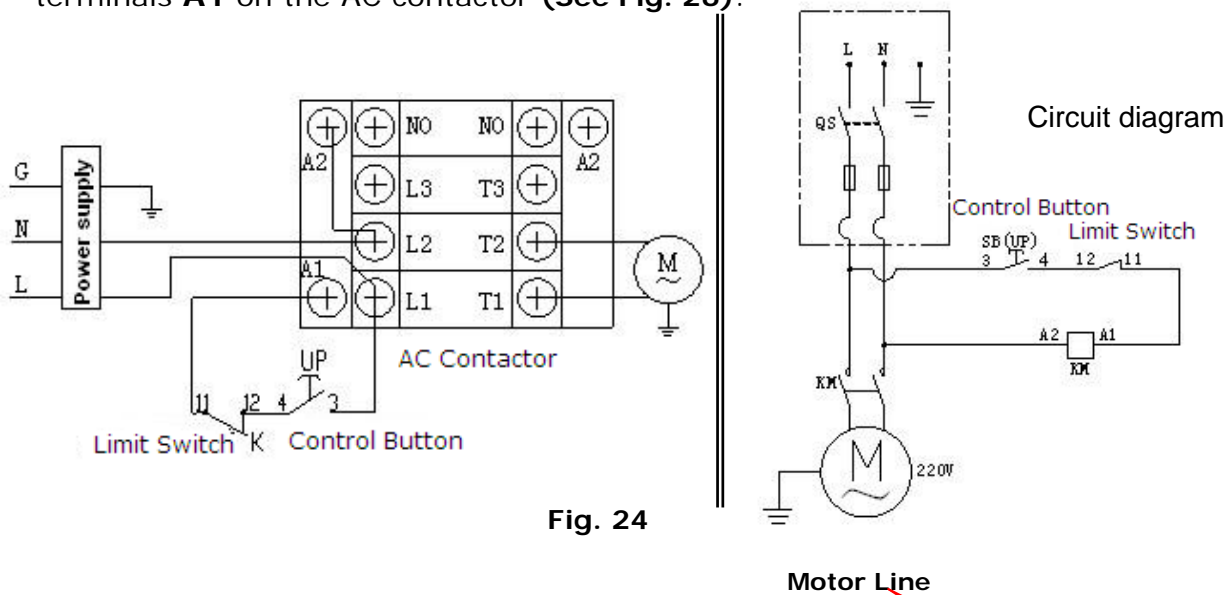


Fig. 25

Remove this line before connecting the Limit Switch

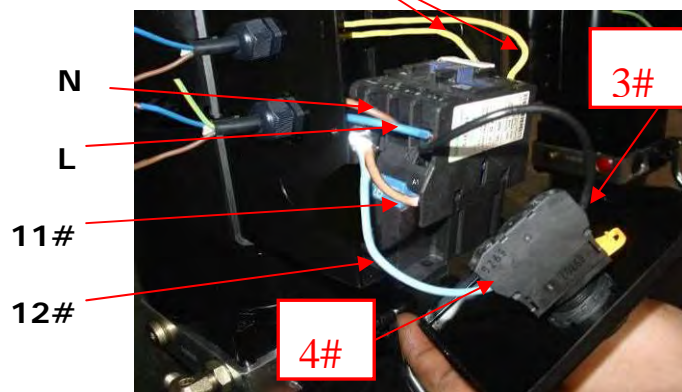


Fig. 26

SPX single phase motor (See Fig. 27)

1. Power supply line (zero wire **N**) connected with wire **5#** on the motor.
2. Wire **11#** on the limit switch connected with wire **6#** on the motor.
3. Wire **12#** on limit switch connected with wire **4#** on the control button.
4. Power supply line (fire wire **L**) connected with wire **3#** on the control button.

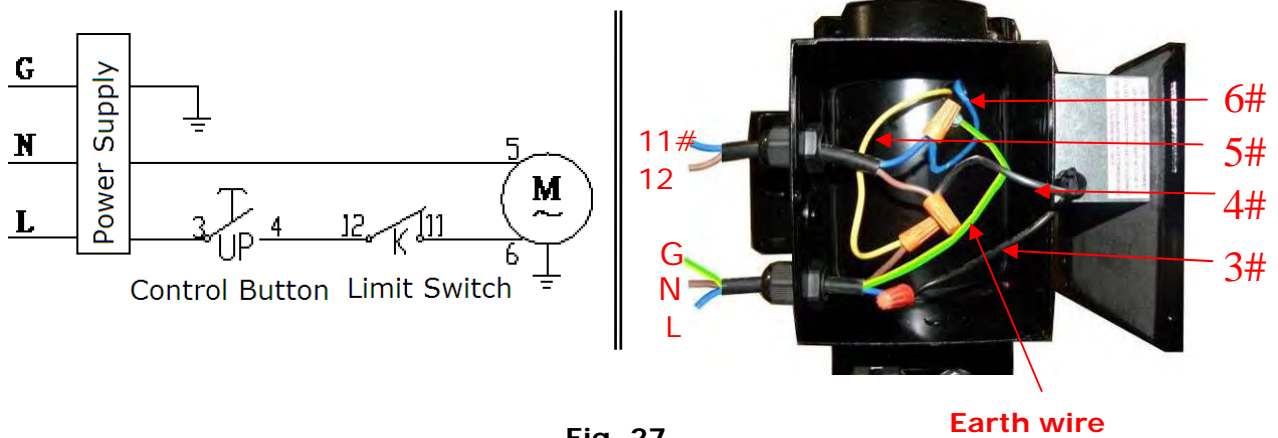
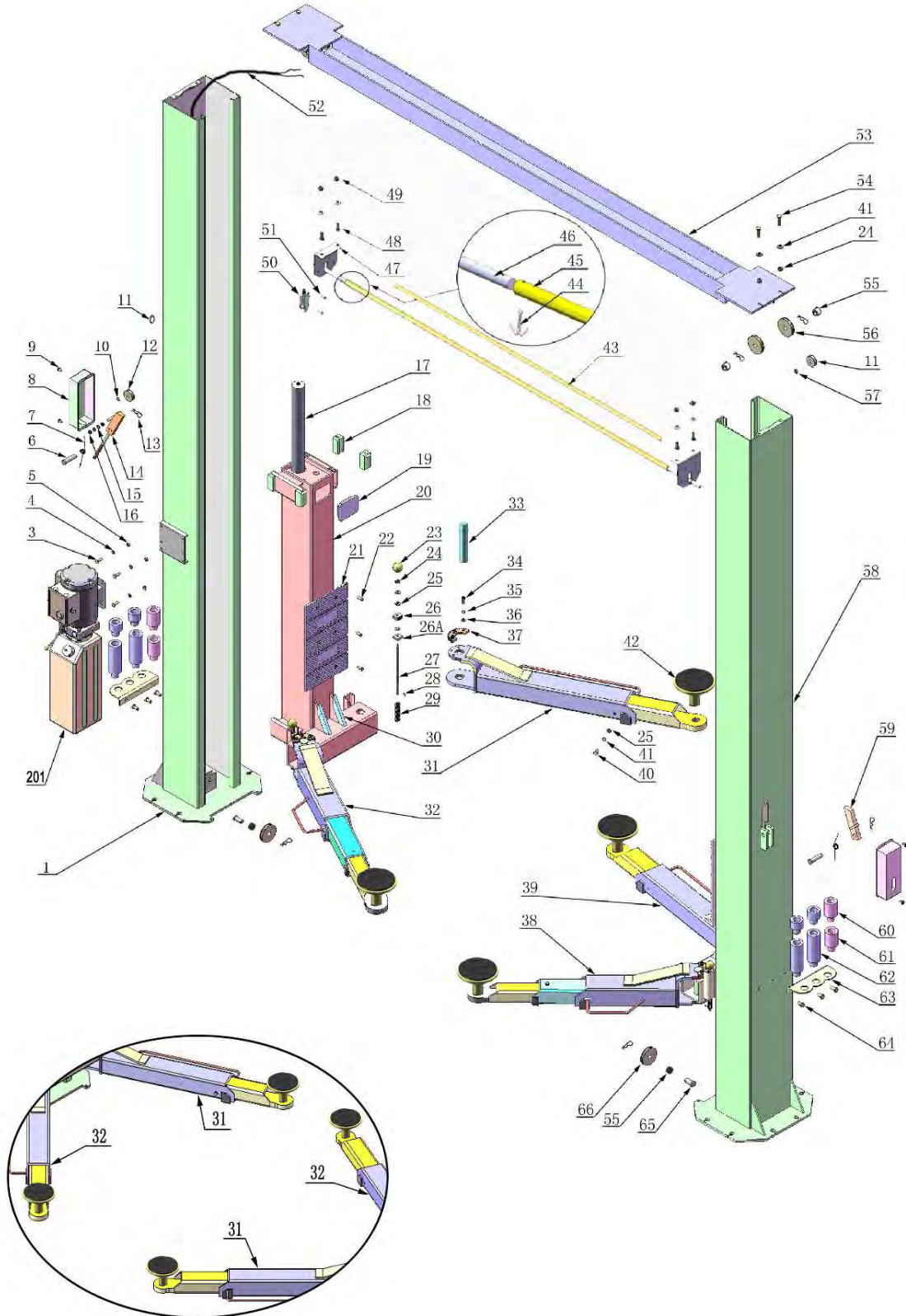


Fig. 27

Fig. 28

IV. EXPLODED VIEW

Model OH1000X



Model OH1000X Lifting arms

Fig. 29
Cylinders

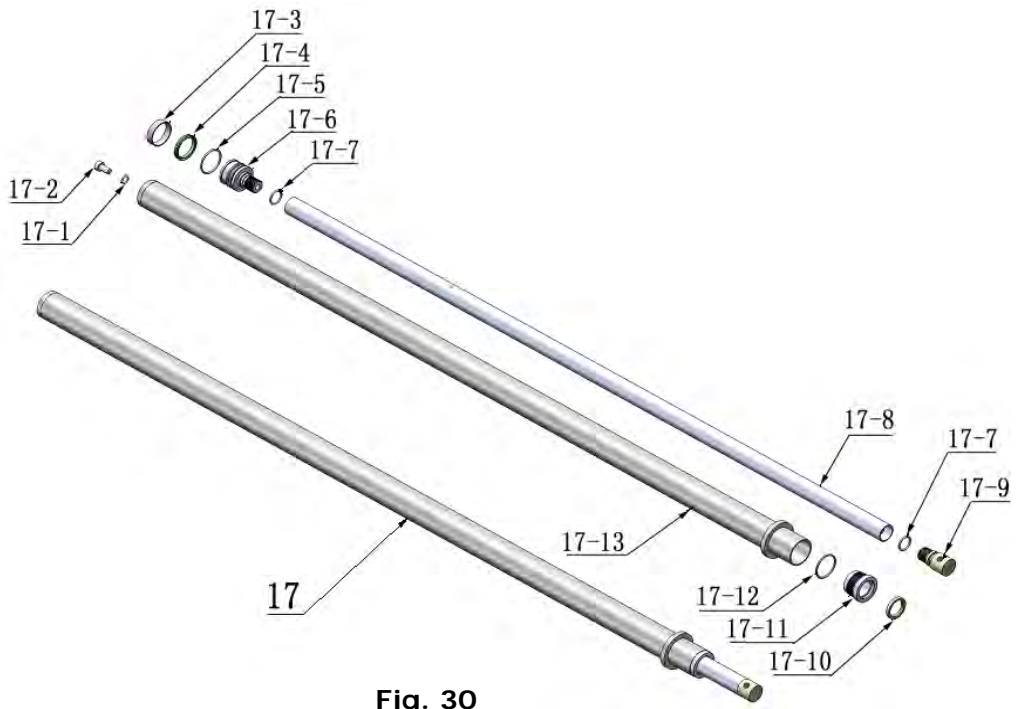


Fig. 30

SPX POWER UNIT, 220V/50Hz, Single phase

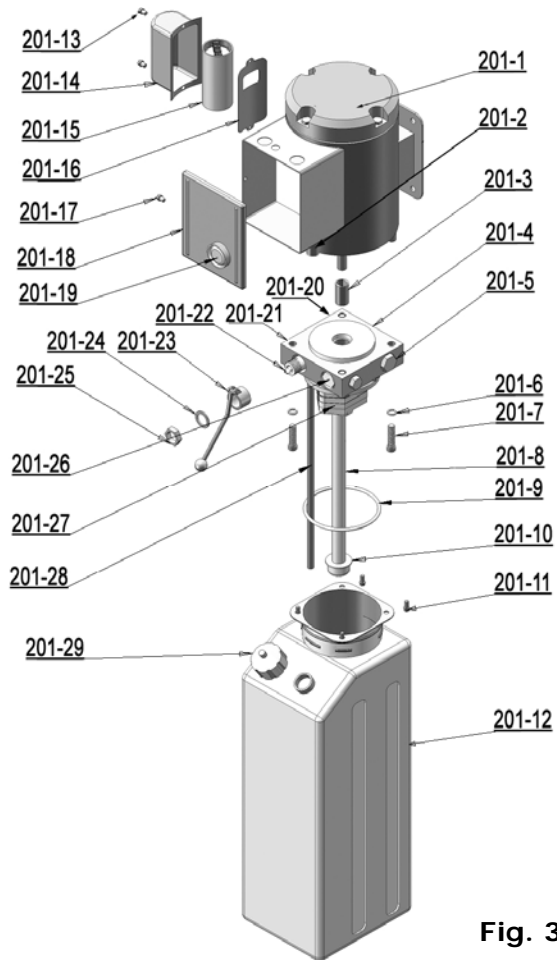


Fig. 31

**ATLAS POWER UNIT
220V/50HZ/1 phase**

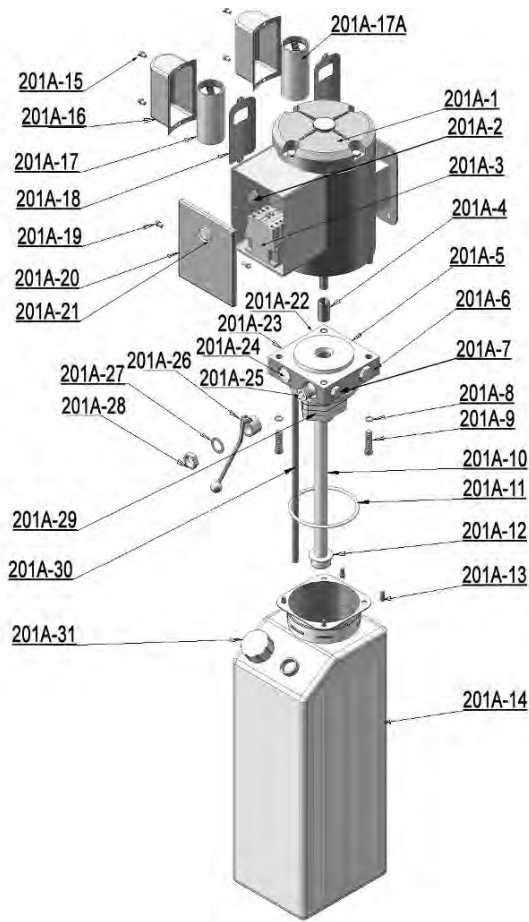


Fig. 32

Illustration of hydraulic valve for SPX & ATLAS power unit

a. SPX manual power unit, 220V/50HZ, Single phase (See Fig. 44)



Fig. 33

b. ATLAS manual power unit, 220V/50HZ, Single phase (See Fig. 34)

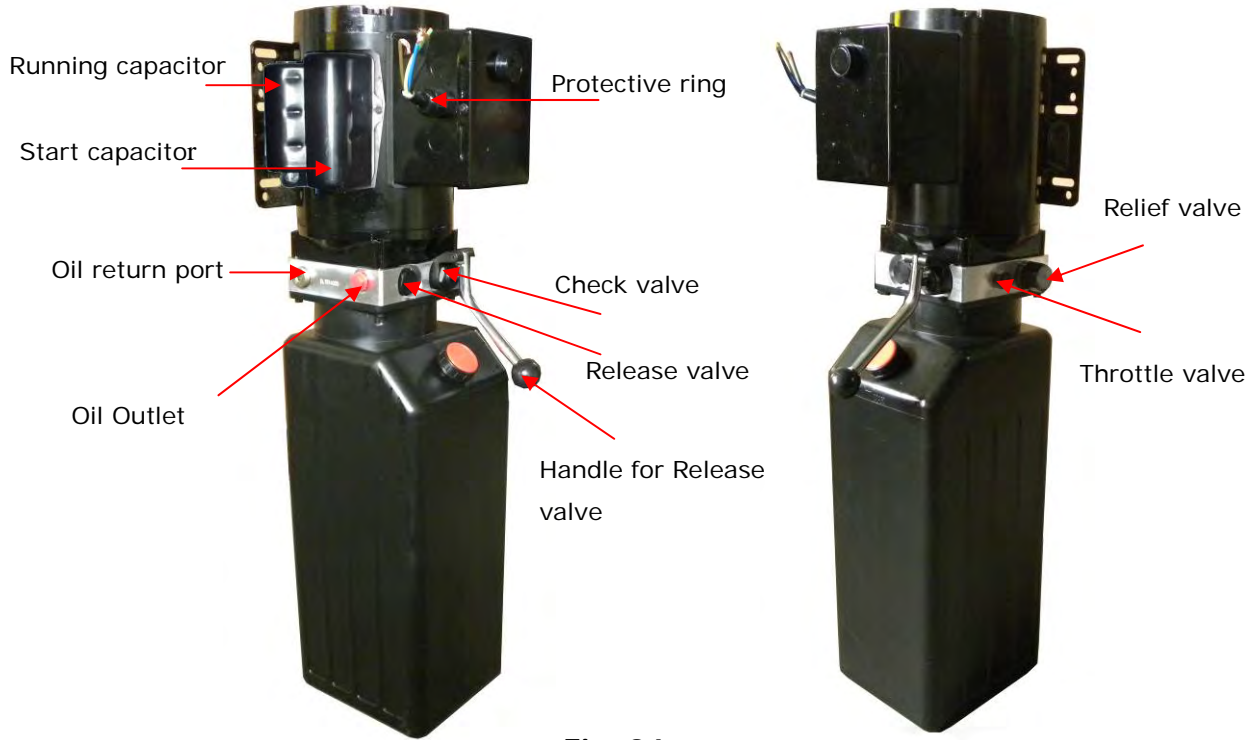


Fig. 34

V. TEST RUN

1. Adjust the synchronizing cables (See Fig. 35)

Use a wrench to hold the cable fitting, use a Ratchet to tighten the cable nut.

Make sure the two cables have the same tension so the two carriages lift at the same time.

Press the plastic hole covers on the lifting carriages.

If the carriages do not lift at the same time, tighten the cable nut on the lower of the 2 sides.

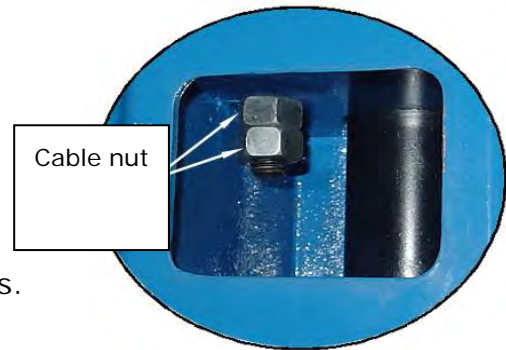


Fig. 35

2. Adjust safety cable

Lift 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 locks always worked properly.

3. Bleeding air

This hydraulic system is designed to bleed air by loosening the bleeding plug. Lifting the carriages to about 3 feet high, and loosen the bleeding plugs, the air will bleed automatically when lowering the lift. Tighten the plugs after bleeding (See Fig. 48).

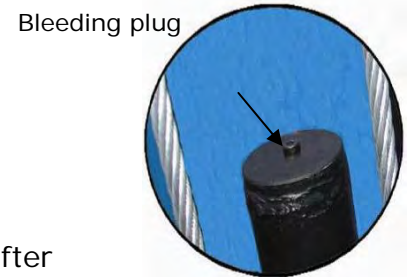


Fig. 36

4. Adjust the lowering speed (Only for ATLAS power unit)

You can adjust the lowering speed of the lift if needed. Loosen the fixing nut on 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 made.

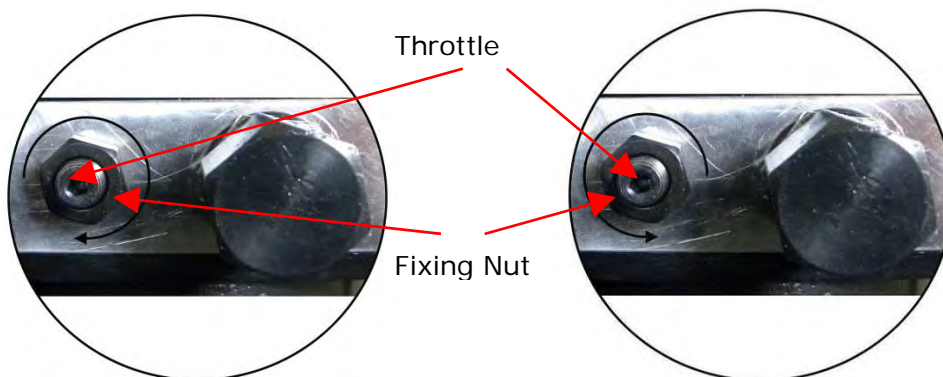


Fig. 37

Clockwise to decrease the down speed

Counterclockwise to increase the down speed

5. Test with load

Test run the lift with a load. Run the lift in low position several times, make sure the lift can raise and lower at the same time, and the safety device can lock and release at the same time. Test run the lift to the top.

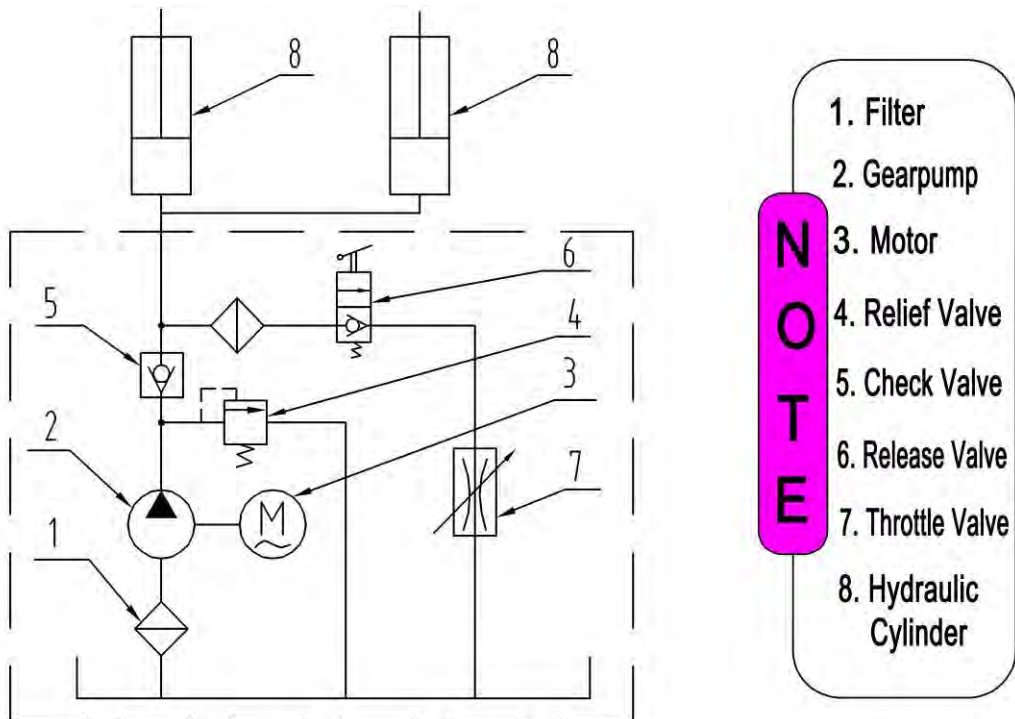


Fig. 38 Hydraulic System

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.
9. Push lowering handle to lower lift on the nearest safety. The vehicle is ready to repair.

To lower vehicle

1. Be sure clear the area around and under the lift, only leaving operator in lift area.
2. Press the button of **UP** to raise the vehicle slightly and 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.

VII. MAINTENANCE SCHEDULE

Monthly:

1. Re-torque the anchor bolts to 80-100 ft lbs.
2. Check all connectors, bolts and pins for proper mounting.
3. Lubricate cables with lubricant.
4. Make a visual inspection of all hydraulic hoses/lines for possible wear or leakage.
5. Check safety device and make sure they are set and adjusted.
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, equalizer tension on the cables to insure level lifting.
3. Check columns for plumb.
4. Check rubber pads and replace as necessary.
5. Check safety device (locks) and make sure proper they are in good operating condition.

VIII.TROUBLE SHOOTING

TROUBLE	CAUSE	REMEDY
Motor does not run	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Release Valve out of work 2. Relief Valve or Check Valve leakage 3. Cylinder or Fittings leaks 	Repair or replace
Lift raises slowly	<ol style="list-style-type: none"> 1. Oil line is jammed 2. Motor running on low voltage 3. Oil mixed with Air 4. Gear Pump leaks 5. Overload lifting 	<ol style="list-style-type: none"> 1. Clean the oil line 2. Check electrical system 3. Fill tank 4. Replace Pump 5. Check load
Lift can not lower	<ol style="list-style-type: none"> 1. Safety device are in activated 2. Release Valve in damage 3. Safety cable broken 4. Oil system is jammed 	<ol style="list-style-type: none"> 1. Release the safeties 2. Repair or replace 3. Replace 4. Clean the oil system

IX.PARTS LIST FOR MODEL OH1000X

Item	Part#	Description	Qty.			Note
1	211001	Power side Column			1	
201	209002	Manual Power Unit			1	
3	209003	Hex Bolt			4	
4	209004	Rubber Ring			4	
5	209005	Nylok Nut			4	
6	209006	Safety Pin			2	
7	209007	Safety Spring			2	
8	209008	Safety Cover			2	
9	209009	Cup Head Bolt			4	
10	209010	Snap Ring			1	
11	209114	Protective ring			1	
12	209049	Plastic small pulley			3	
13	209012	Hair Pin			8	
14	209013	Power side Safety Lock			1	
15	206006	Washer			6	
16	206023A	Hex Nut			2	
17	209014	Cylinder			2	
18	209015	Slider Block			16	
19	209016	Carriage Plastic Cover			2	
20	211002	Carriage			2	
21	209018	Protective Rubber			2	
22	209019	Bolt			12	
23	209020	Plastic Ball			4	
24	209021	Hex Nut			12	
25	209022	Washer			8	
26	209023A	Arm Lock			4	
26A	201041	Limit ring			4	
27	209024	Arm Lock Bar			4	
28	209025	Hair Pin			4	
29	209026	Spring			4	
30	209027	Protective Rubber Set			4	
31	209028	Lifting Arm-Rear Right			2	
	213001				0	
32	209029	Lifting Arm-Front Right			2	
	213002				0	
33	209030	Arm Pin			4	
34	209032	Socket Bolt			12	
35	209034	Lock Washer			18	
36	209033	Washer			12	

Item	Part#	Description	Qty.			Note
37	209035	Moon Gear			4	
38	209036	Lifting Arm- Front Left			0	
	213003				0	
39	209037	Lifting Arm- Rear Left			0	
	213004				0	
40	209038	Hex Bolt			6	
41	209039	Lock Washer			12	
42	680030	Rubber Pad Frame Support			4	
43	206025A	Foam Cushion			1	
44	201005	Split pin			2	
45	206025C	Connecting Pin for Control Bar			2	
46	202011	Control Bar			0	
	202011A				1	
47	206042	Control Bar Bracket			2	
48	206041	Hex Bolt			4	
49	206023	Nylok Nut			4	
50	206013	Limit Switch			1	
51	206011	Cup Head Bolt			2	
52	211010	Wire Cable			1	
53	211011	Top Beam			0	
	211011A				1	
54	209046	Hex Bolt			4	
55	209057A	Bronze Bush			6	
56	209057	Small Pulley			4	
57	209056	Nylok Nut			2	
58	211012	Offside Column			1	
59	211013	Offside Safety Lock			1	
60	209051	Stackable Adapter(1.5")			4	
61	209052	Stackable Adapter (3")			4	
62	209053	Stackable Adapter (6")			4	
63	209054	Stackable Adapter Bracket			2	
64	209055	Hex Bolt			6	
65	209044	Pin For Pulley			2	
66	209045	Big Pulley			2	
67	209059	Anchor Bolt			12	
67A	620065	Shim			10	

Item	Part#	Description	Qty.			Note
Parts List for Oil Hose, Fitting & Cable (See Fig.25-29)						
68	209060	90° Fitting for power unit			1	
69	211014	Oil hose			1	
70	211016	T- fitting			1	
71	211015A	Oil hose			1	
71A	211020	Oil hose			1	
72	211017	Extend 90° fitting for Cylinder			2	
73	209066	Cable Nut			4	
74	211018	Cable			0	
	211018A				2	
75	211019	Safety Cable			0	
	211019A				1	
Parts for Cylinder (See Fig.41)						
17-1	209069	O-Ring			2	
17-2	209070	Bleeding Plug			2	
17-3	209071	Support Ring			2	
17-4	209072	Y-Ring			2	
17-5	209073	O-Ring			2	
17-6	209074	Piston Rod			2	
17-7	209075	O-Ring			4	
17-8	209076	Piston Rod			2	
17-9	209077	Piston Rod Fitting			2	
17-10	209078	Dust Ring			2	
17-11	209079	Head Cup			2	
17-12	209080	O-Ying			2	
17-13	209081	Bore Weldment			2	

Parts for SPX manual power unit, 220V/50Hz/1 phase (See Fig.42)

201-1	209082	Motor			1	
201-2	209109	Protective ring			1	
201-3	209083	Motor connecting shaft			1	
201-4	209084	Valve body			1	
201-5	209085	Relief valve			1	
201-6	209086	Lock washer			4	
201-7	209087	Allen bolt			4	
201-8	209088	Inlet pipe			1	
201-9	209089	O-Ring			1	
201-10	209090	Filter			1	
201-11	209091	Bolt			4	
201-12	209092	Reservoir			1	
201-13	209093	Bolt			2	
Item	Part#	Description	Qty.			Note
201-14	209094	Cover of capacitor			1	
201-15	209095	Capacitor			1	
201-16	209096	Rubber gasket			1	
201-17	209097	Bolt			1	
201-18	209098	Cover of motor terminal box			1	
201-19	209099	Push button			1	
201-20	209110	Oil return port			1	
201-21	209100	Oil outlet			1	
201-22	209101	Release valve			1	
201-23	209102	Handle for release valve			1	
201-24	209103	Washer			1	
201-25	209104	Nut			1	
201-26	209105	Check valve			1	
201-27	209106	Gear pump			1	
201-28	209107	Oil return pipe			1	
201-29	209108	Filler cap			1	

Parts for PEAK manual power unit, 220V/50Hz/1 phase (See Fig.43)						
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	Allen bolt			4	
201A-10	209088A	Inlet pipe			1	
201A-11	209089A	O-Ring			1	
201A-12	209090A	Filter			1	
201A-13	209091A	Allen 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-17A	209095B	Run 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	

Item	Part#	Description	Qty.			Note
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	Nut			1	
201A-29	209106A	Gear pump			1	
201A-30	209107A	Oil return pipe			1	
201A-31	209108A	Filler cap			1	
Parts for PEAK manual power unit 380V/50Hz/3 phase (See Fig.43)						
201B-1	209118A	Motor			1	
201B-2	209109	Protective ring			1	
201B-3	209112	AC contactor			1	
201B-4	209083A	Motor connecting shaft			1	
201B-5	209084A	Valve body			1	
201B-6	209085A	Relief valve			1	
201B-7	209113	Throttle valve			1	
201B-8	209086A	Lock washer			4	
201B-9	209087A	Allen bolt			4	
201B-10	209088A	Inlet pipe			1	
201B-11	209089A	O-Ring			1	
201B-12	209090A	Filter			1	
201B-13	209091A	Allen bolt			4	
201B-14	209092A	Reservoir			1	
201B-15	209097A	Cup head bolt with washer			2	
201B-16	209098A	Cover of motor terminal box			1	
201B-17	209099A	Push button			1	
201B-18	209110A	Oil return port			1	
201B-19	209100A	Oil outlet			1	
201B-20	209105A	Check valve			1	
201B-21	209101A	Release Valve			1	
201B-22	209102A	Handle for release valve			1	
201B-23	209103A	Washer			1	
201B-24	209104A	Nut			1	
201B-25	209106A	Gear pump			1	
201B-26	209107A	Oil return pipe			1	
201B-27	209108A	Filler cap			1	

