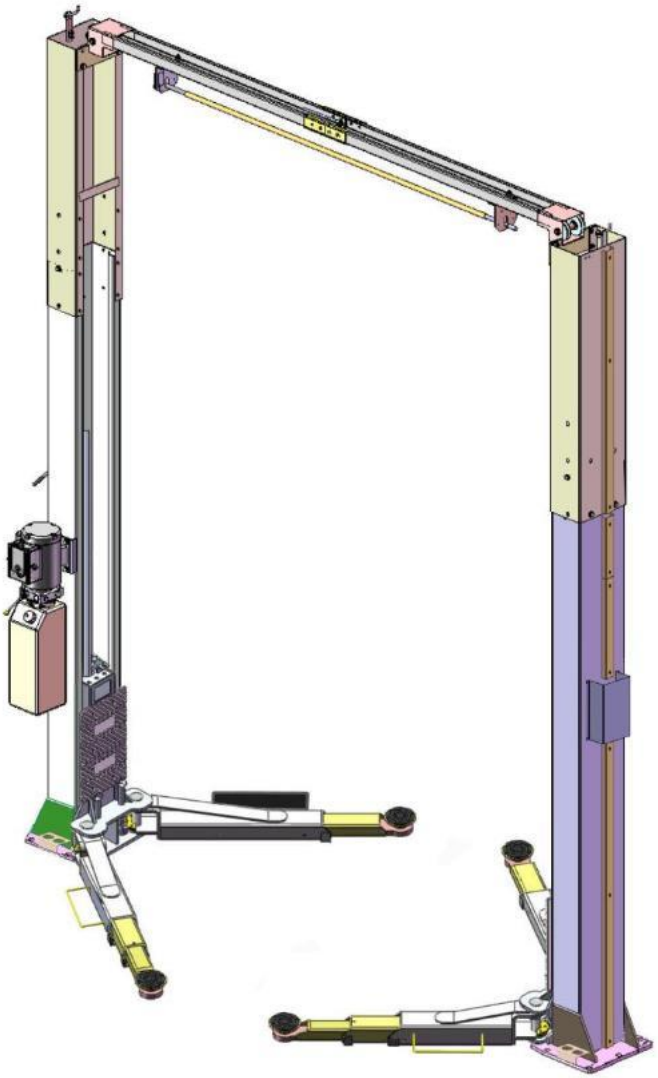
INDYPRO

LIFTS & EQUIPMENT



TP10AS

2-POST LIFT

CONTENTS

I. PRODUCT FEATURES AND SPECIFICATIONS

CLEAR-FLOOR DIRECT-DRIVED MODEL FEATURES

Model TP10AS (See Fig. 1)

· Direct-drive design, minimize the lift wear parts and breakdown ratio

· 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

. Clear-floor design, provide unobstructed floor use

. Overhead safety shut-off device prevents vehicle damage

· Supersymmetric arms design, stackable rubber pads

. Standard adjustable heights accommodates varying ceiling heights

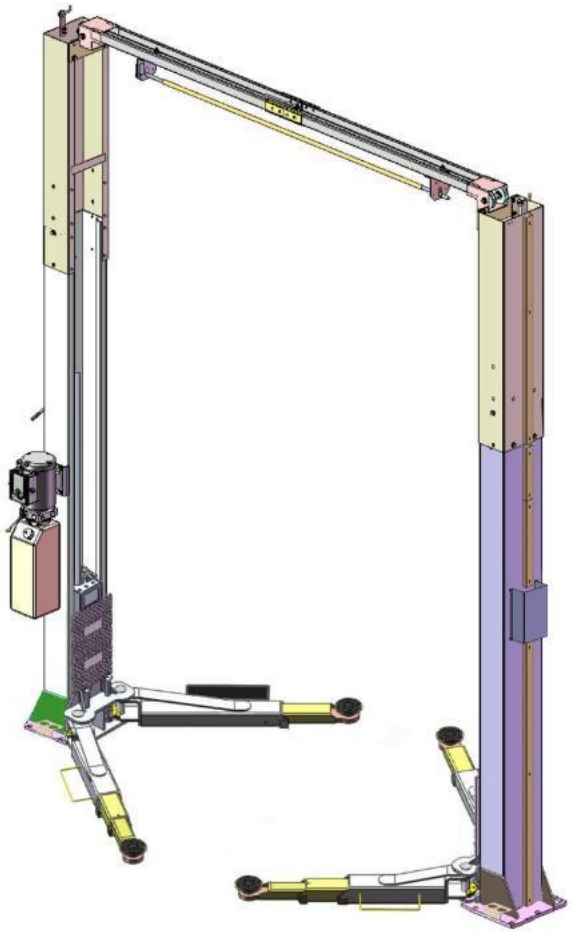


Fig. 1

MODEL TP10AS SPECIFICATIONS

Model	Style	Lifting Capacity	Lifting Time	Lifting Height	Overall Height	Overall Width	Width Between Columns	Minimum Pad Height	Motor
TP10AS	Clear-floor Direct-drived	4.5T 10,000 lbs	52S	1815-2044mm 71 1/2"–80 1/2"	3621/3821mm 142 1/2"/ 150 1/2"	3428mm 135"	2850mm 112 1/4"	90mm 3 1/2"	3.0 HP 220V 50/60HZ

Arm Swings View
For Model TP10AS

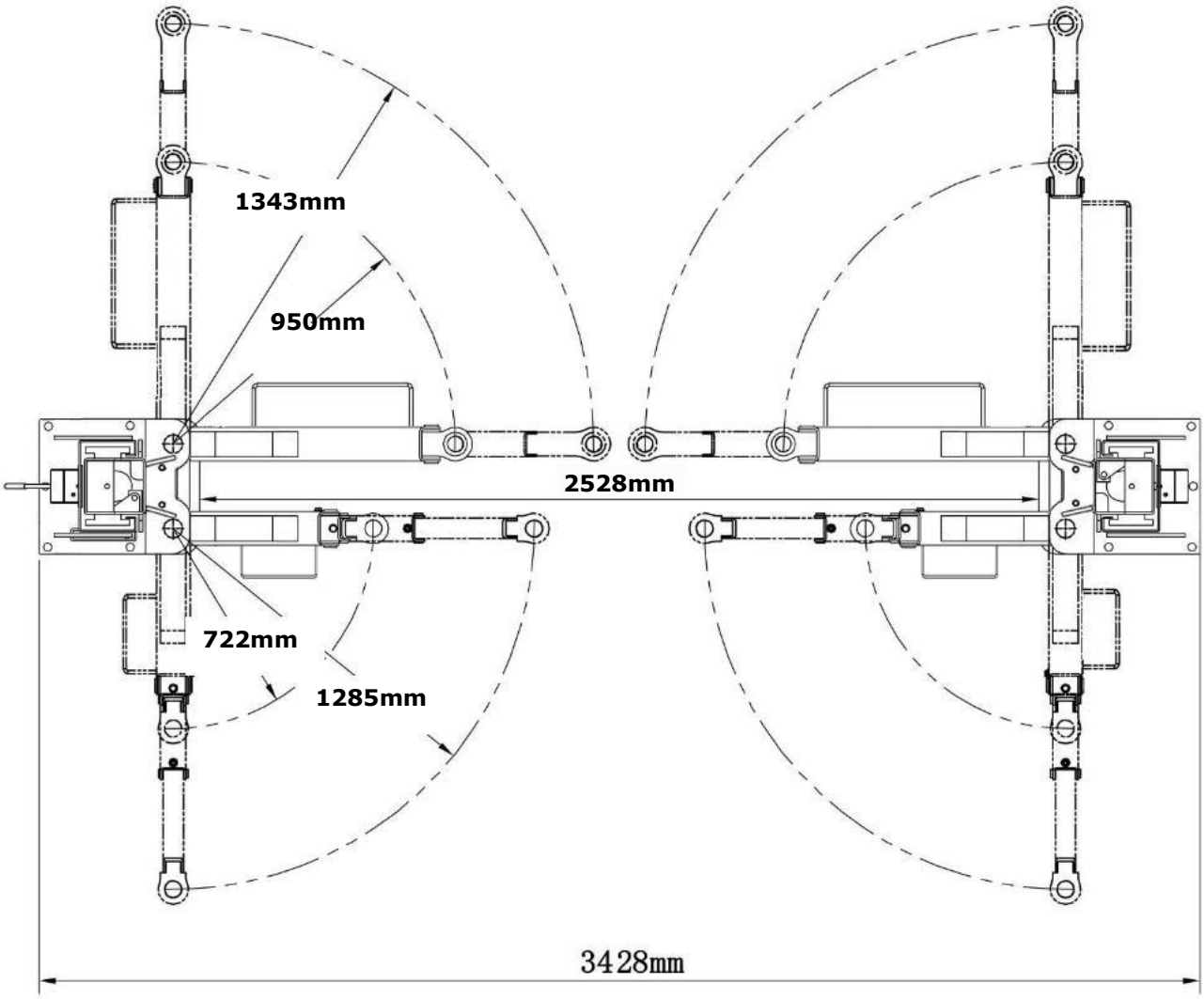


Fig. 2

II. INSTALLATION REQUIREMENT

A. TOOLS REQUIRED

✓Rotary Hammer Drill (Φ19)

✓Hammer

✓Level Bar

✓ English Spanner (12")

✓Ratchet Spanner With Socket (28 #)

✓ Wrench set

(8#, 10#, 13#, 14#, 17#, 19#, 24#)

✓ Carpenter's Chalk

✓ Screw Sets

✓ Tape Measure (7.5m)

✓ Plier s

✓ Socket Head Wrench (3 # , 5 # , 8 #)

✓ Lock Wrench

Fig. 3

B. SPECIFICATIONS OF CONCRETE (See Fig. 4)

Specifications of concrete must be adhered to the specification as following. Failure to do so may result in lift and/or vehicle falling.

1. Concrete must be thickness 100mm minimum and without reinforcing steel bars, and must be dried completely before the installation.
2. Concrete must be in good condition and must be of test strength 3,000psi (210kg/cm²) minimum.
3. Floors must be level and no cracks.

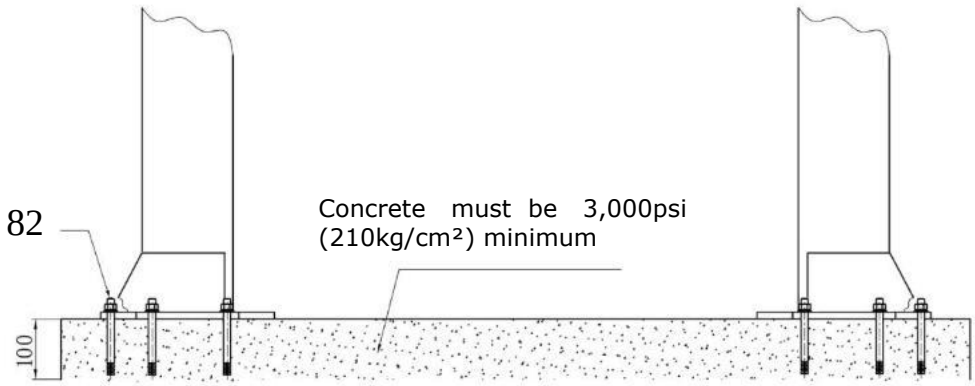


Fig. 4

C. POWER SUPPLY

The electrical source must be 2.2kw minimum. The source cable size must be 2.5mm² and in good condition of contacting with floor.

III. STEPS OF INSTALLATION

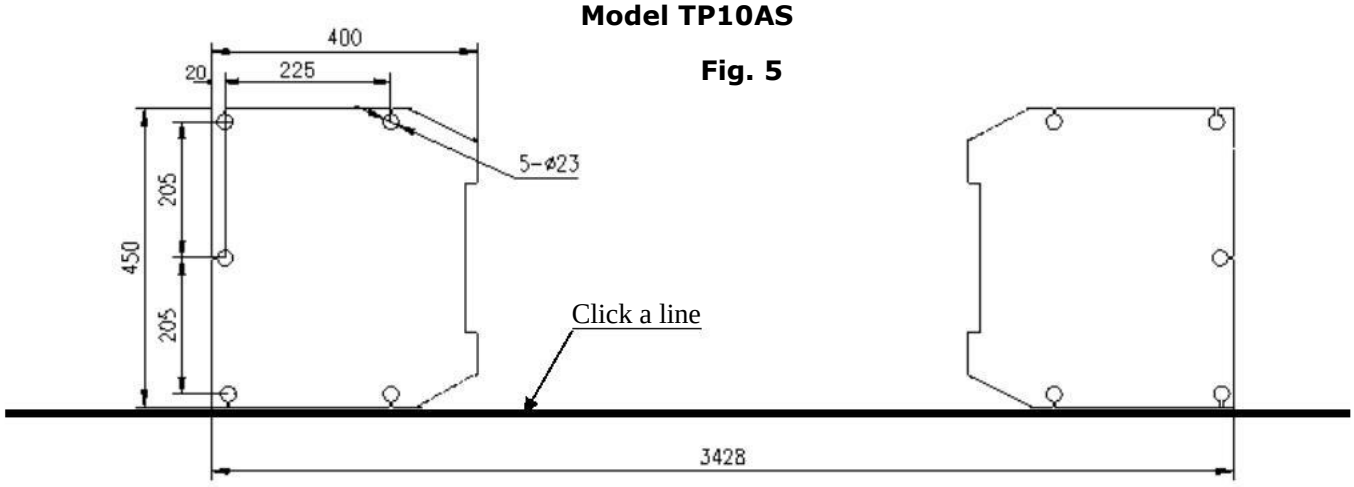
A. Location of Installation

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.5)**.

Model TP10AS

Fig. 5



C. Check the parts before assembly.

1. Packaged lift and hydraulic power unit **(See Fig. 6).**

Fig. 6

2. Move aside the lift with fork lift or hoist, and open the extension packing carefully, take off the lifting arms and parts box from upper and inside the column, then move them to location nearby installation site, check the parts according to the shipment parts list **(See Fig.7).**

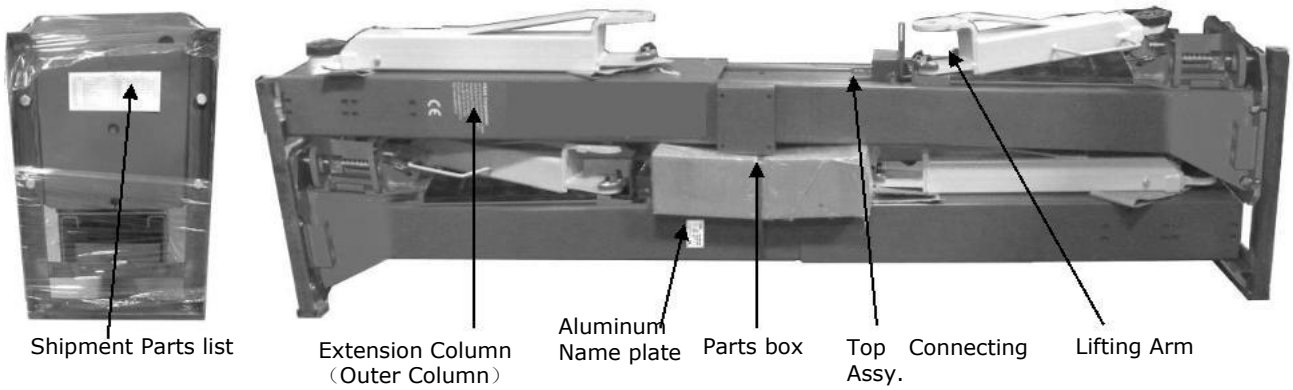


Fig. 7

3. Loose the screws of the upper package stand, take off the upper extension columns, take out the parts in the inner column and remove the package stand
4. Move aside the parts and check the parts according to the shipment parts list **(See Fig.8, 9).**

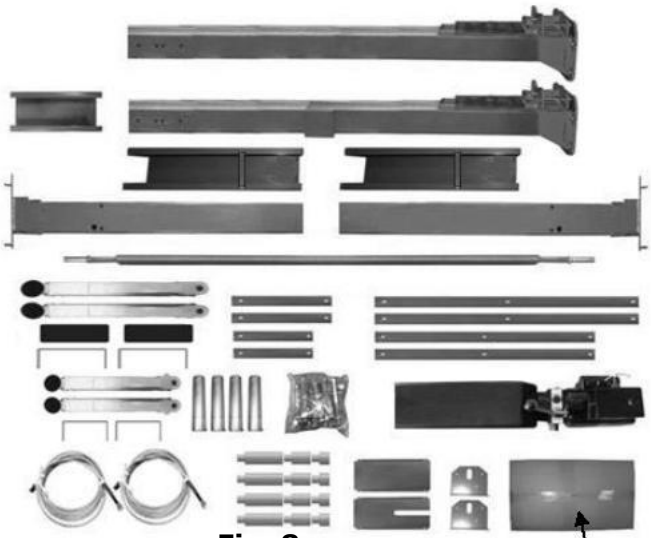


Fig. 8
Parts in the shipment parts list

96

Fig. 9
Parts in the parts box (96)

5. Open the bag 1 of parts and check the parts according to parts box list **(See Fig. 10).**

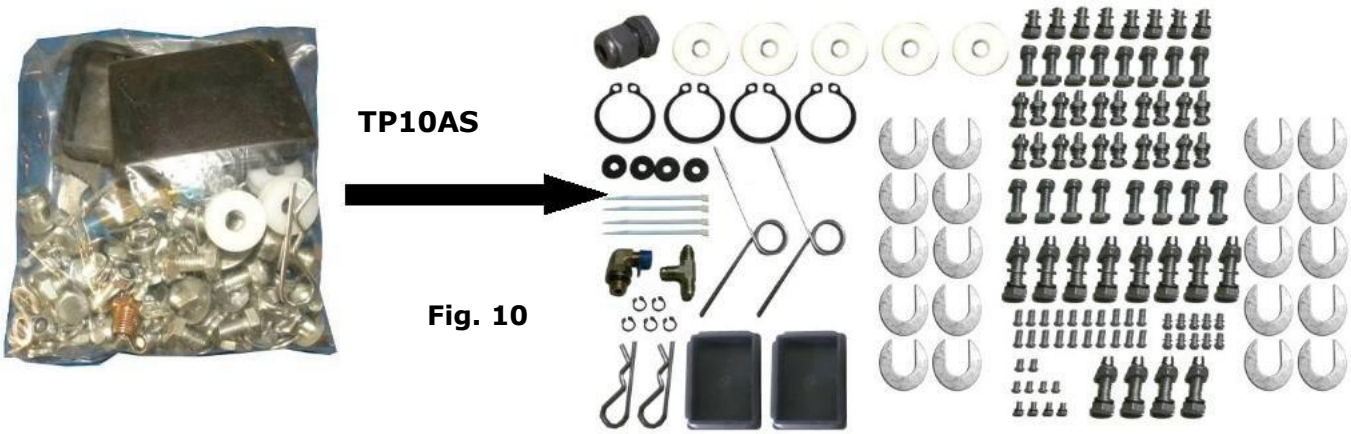


Fig. 10

6. Open the bag 2 of parts and check the parts according to parts bag list **(See Fig. 11).**

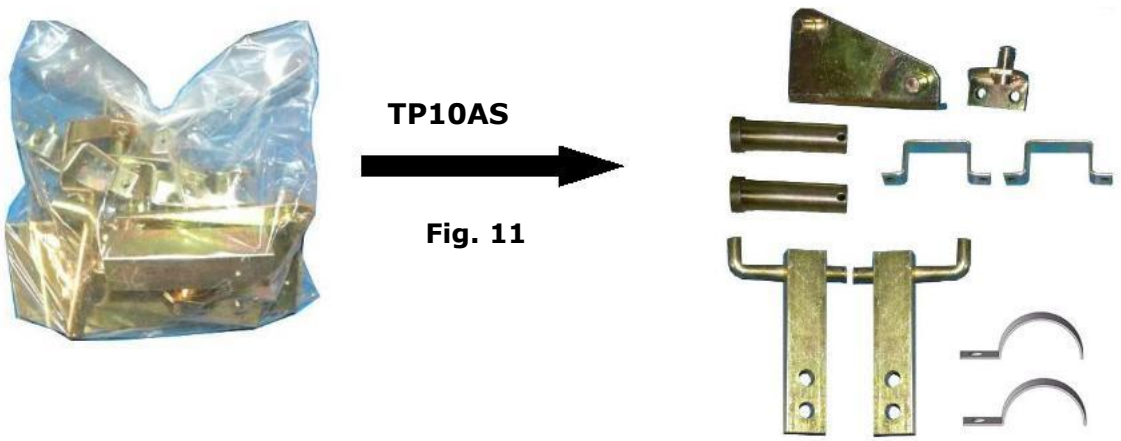


Fig. 11

D. Install parts of extension columns (See Fig. 12).

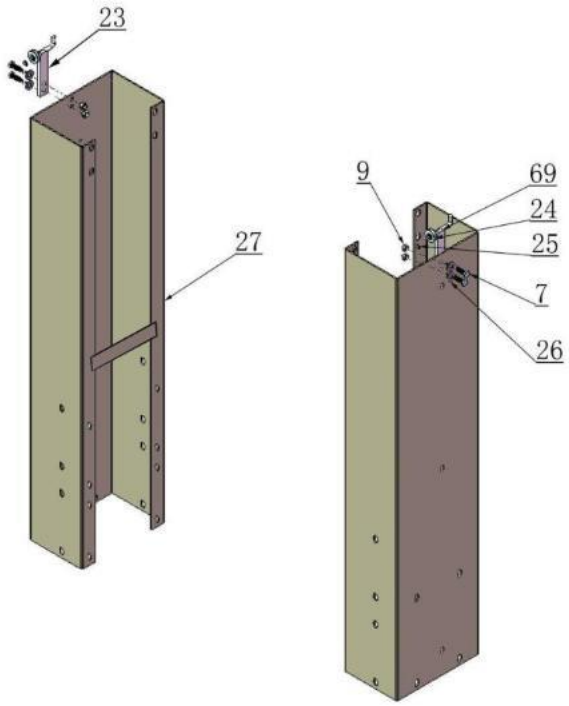


Fig. 12

E. Position Powerside column

Lay down two columns on the installation site parallel, 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. This lift is designed with 2-Section columns. Adjustable height according to the ceiling height and connecting the inner and extension columns.

1. When the ceiling height is less than 3850mm (151 1/2”) for TP10AS, connecting the extension columns with the upper hole **(See Fig.13)**.
2. When the ceiling height is over 3850mm (151 1/2”) for TP10AS, connecting the extension columns with the lower hole **(See Fig.14).**

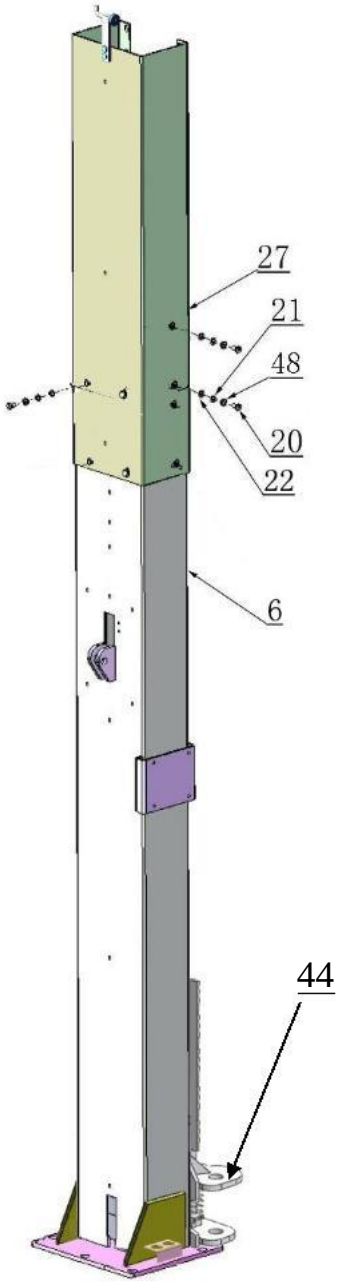


Fig. 13 Low Setting

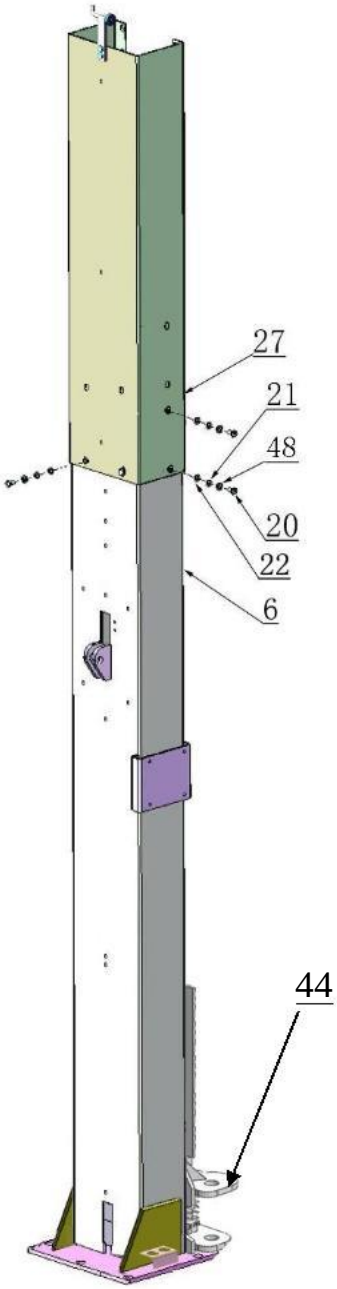
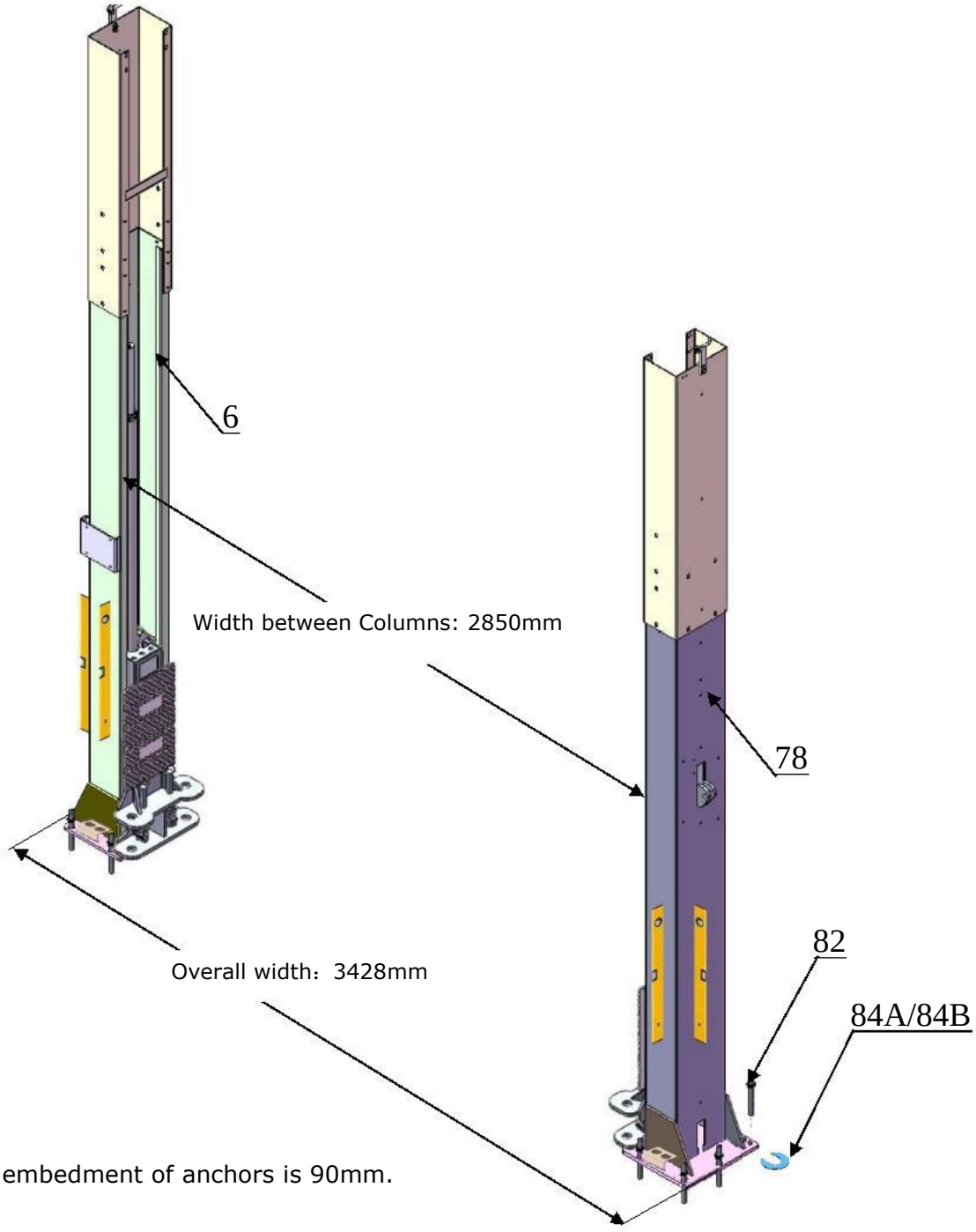


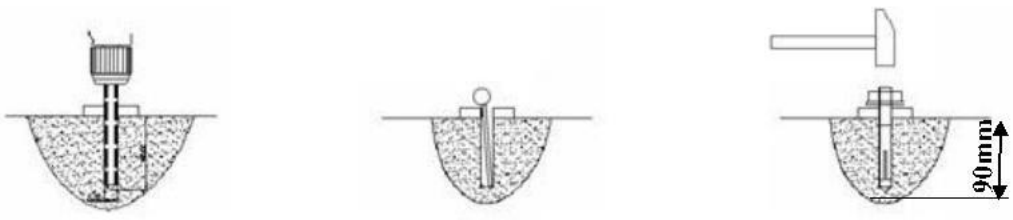
Fig. 14 High Setting

F. Position columns (See Fig. 15)

Position the columns on the installation layout of baseplate, Install the anchor bolts. Check the Columns plumbness with level bar, and adjusting with the shims if the columns are not vertical. Do not tighten the Anchor Bolts.



Note: Minimum embedment of anchors is 90mm.



Drilling **Cleaning** **Bolting**

Fig. 15

G. Install overhead top beam

1. With help of the hook of top beam, put one side of top beam on top of the extension column and connecting the top beam to extension column by bolts, tighten the bolts. Then assemble the connecting bracket **(See Fig. 16)**.

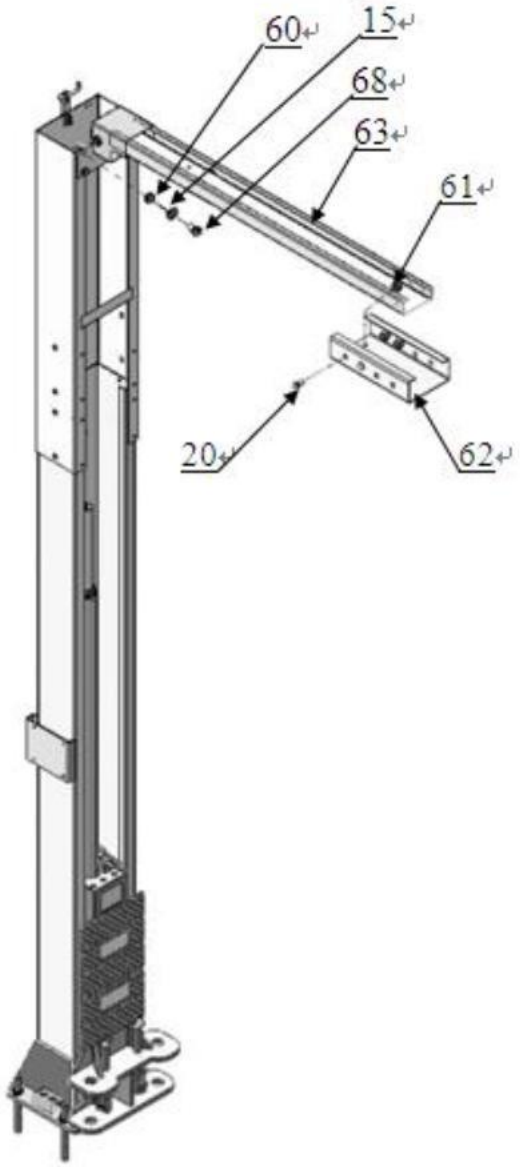
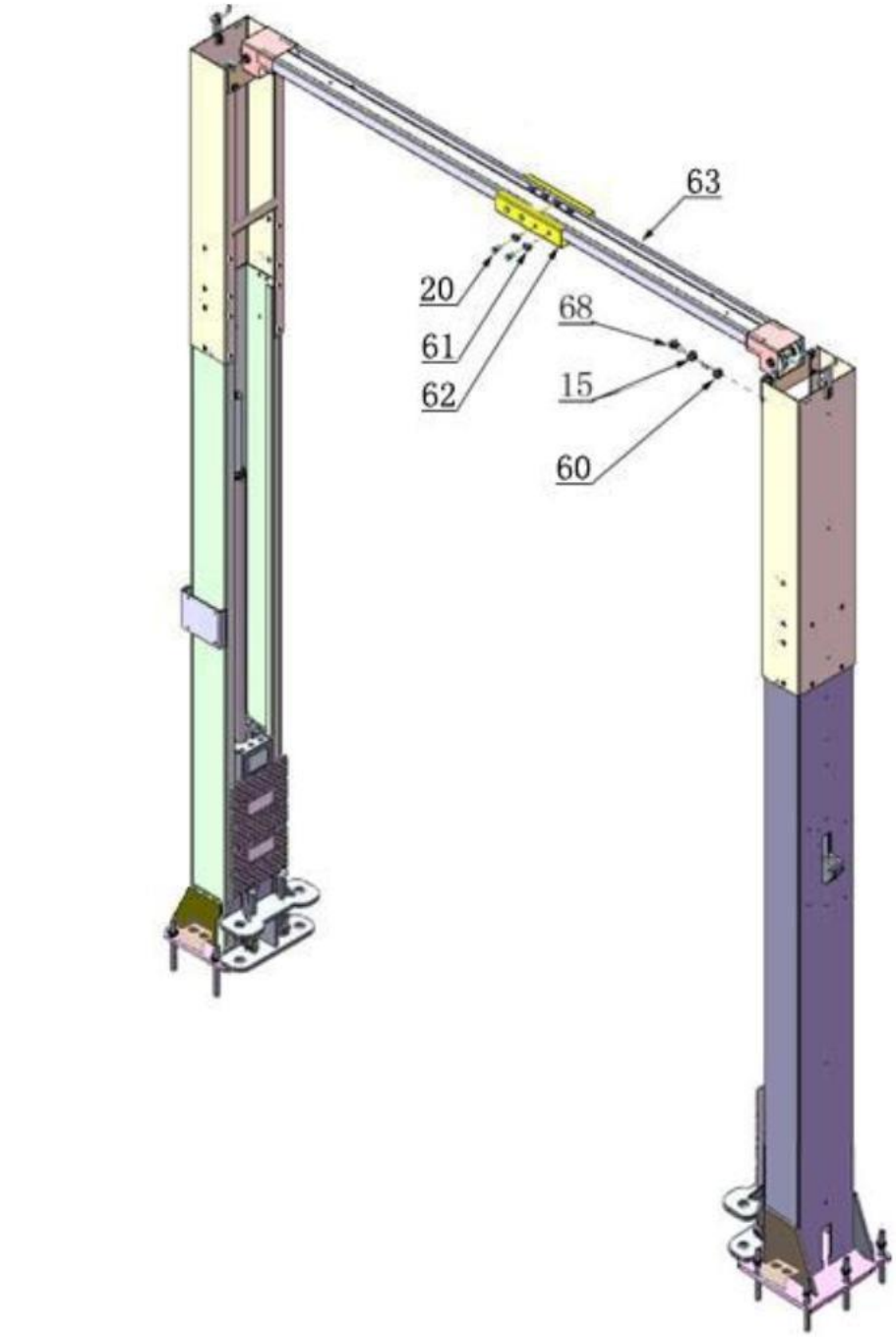
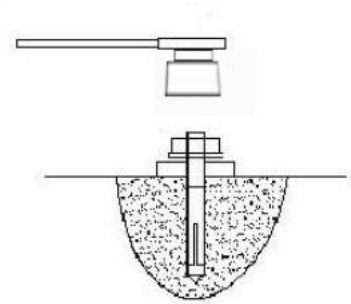


Fig. 16

2. Assemble overhead top beam, tighten the columns anchor bolts **(See Fig. 17)**.





Tighten the anchor bolts with ratchet spanner with socket

Note: Torque of Anchors is 150N.m.

Fig. 17

H. Installing the limit switch control bar and limit switch (See Fig. 18).

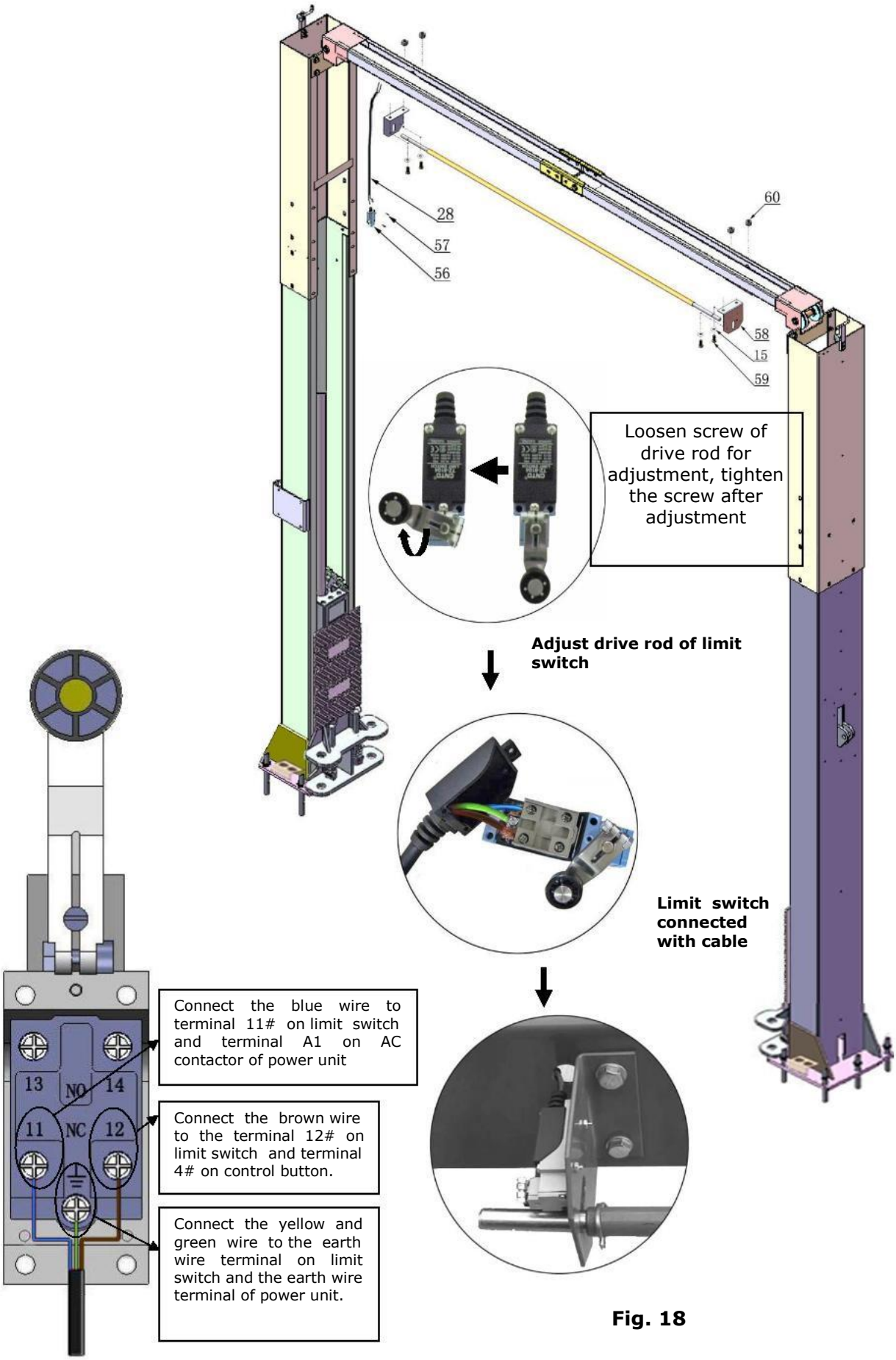


Fig. 18

NC: Normal contact

I. Install safety device (See Fig. 19 & Fig. 20).

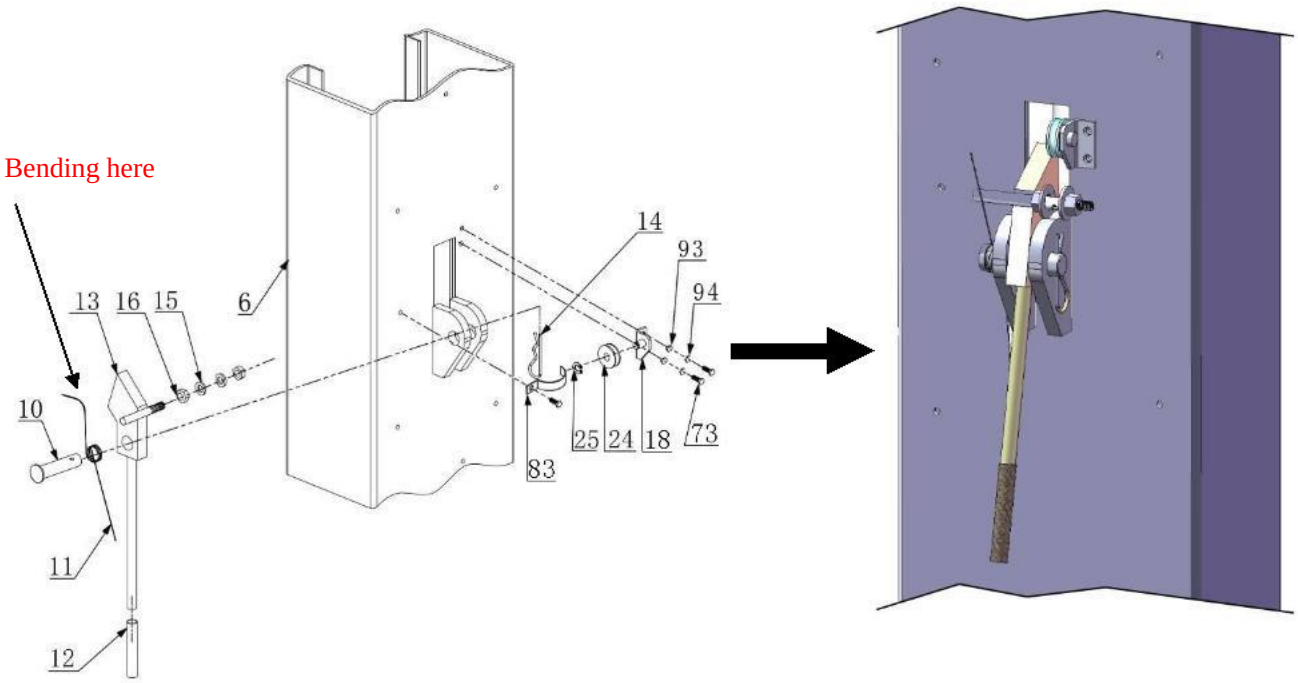


Fig. 19 Powerside Safety Device

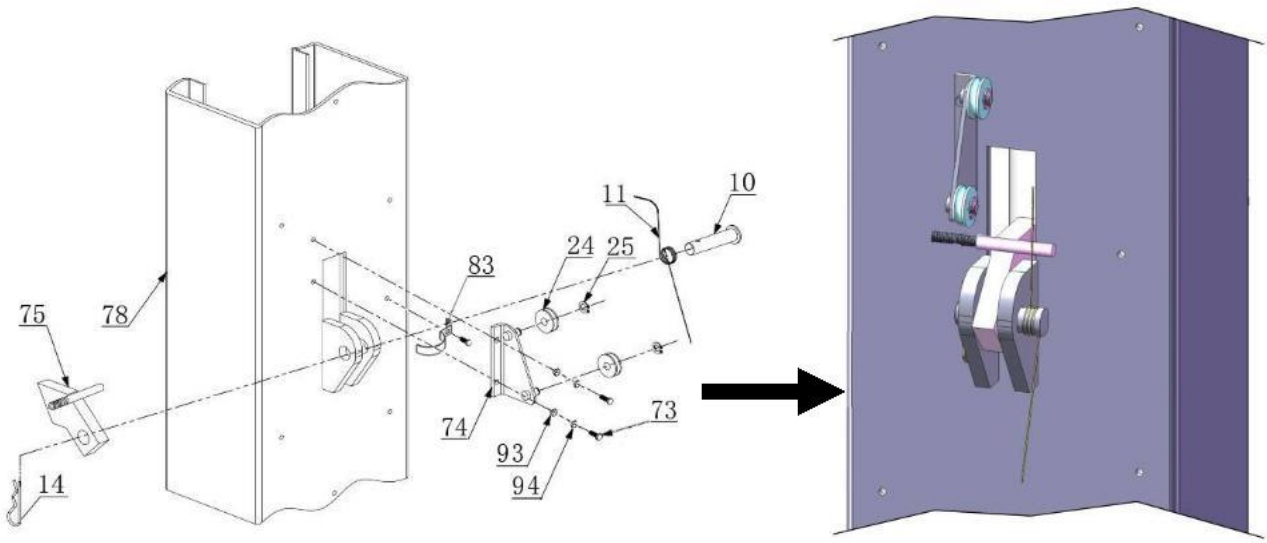


Fig. 20 Offside Safety Device

J. Lift the carriages up to about one meter high by hand and make them be locked at the same level **(See Fig. 21).**

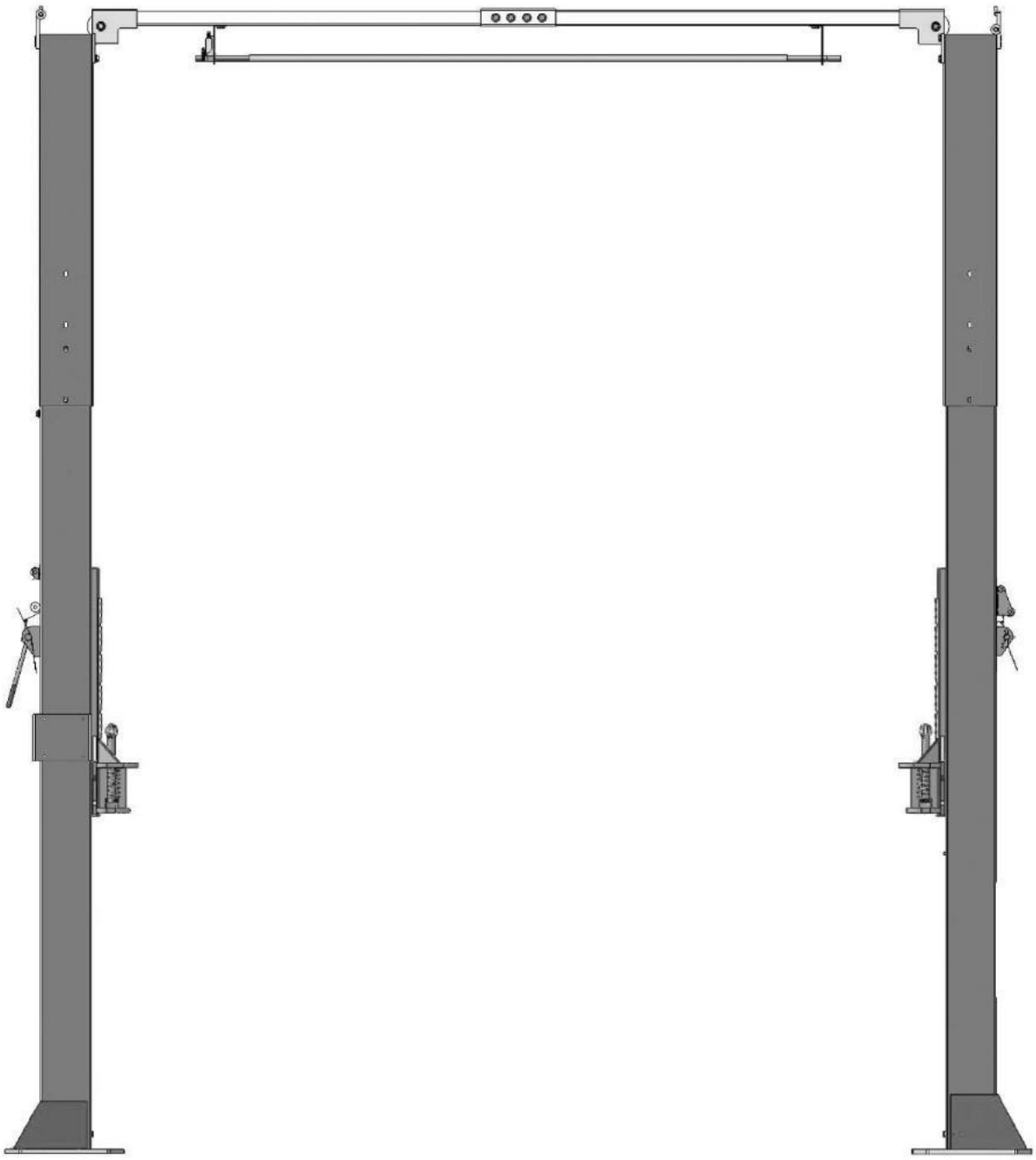


Fig. 21

K. Install cables

1. Low setting cable connection **(See Fig. 22).**

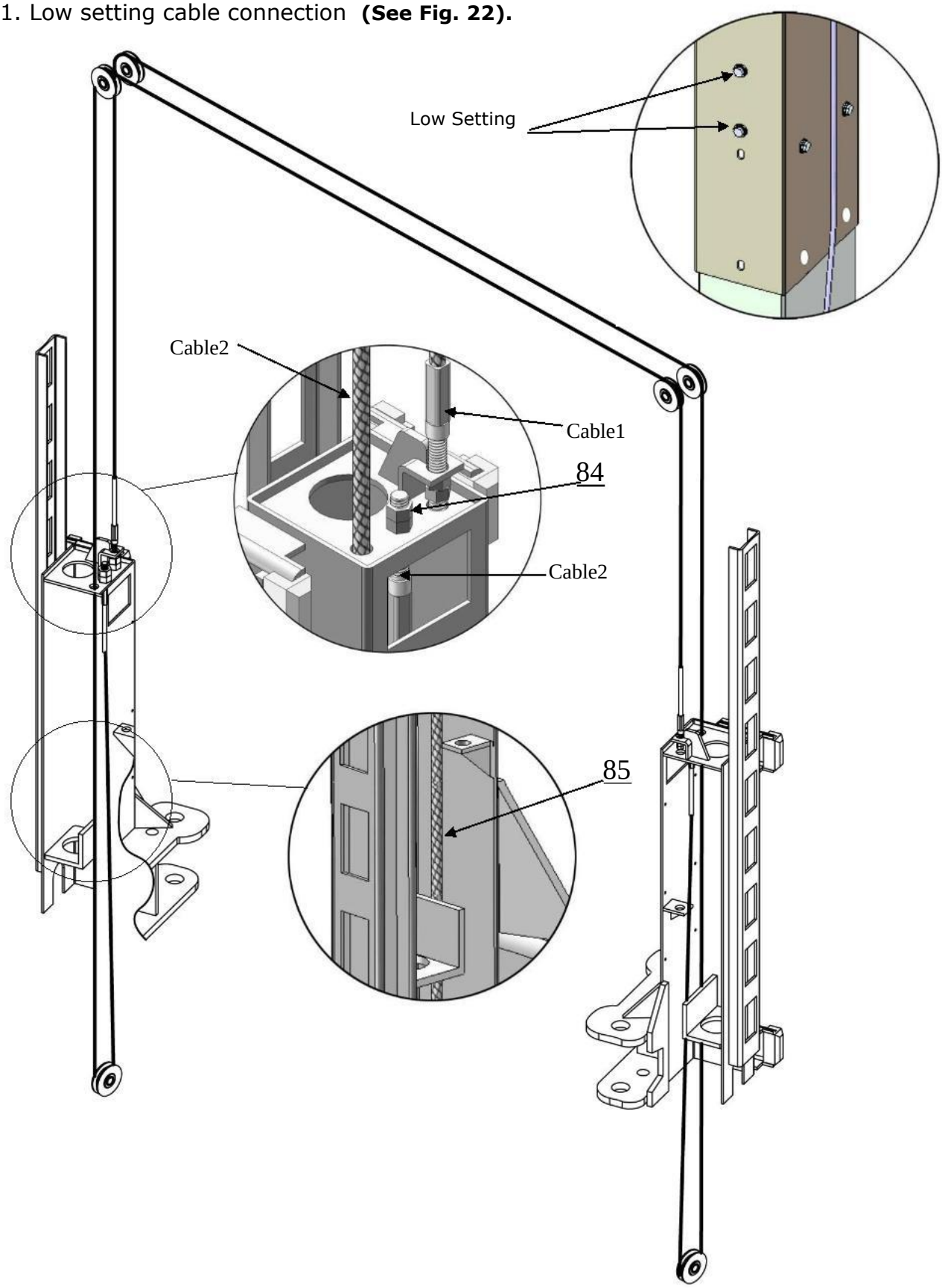


Fig. 22

2. **High setting cable connection**

2.1. Cable pass through from the bottom of the carriages and be pulled out from the open of carriages, then screw the two cable nuts **(See Fig. 23).**

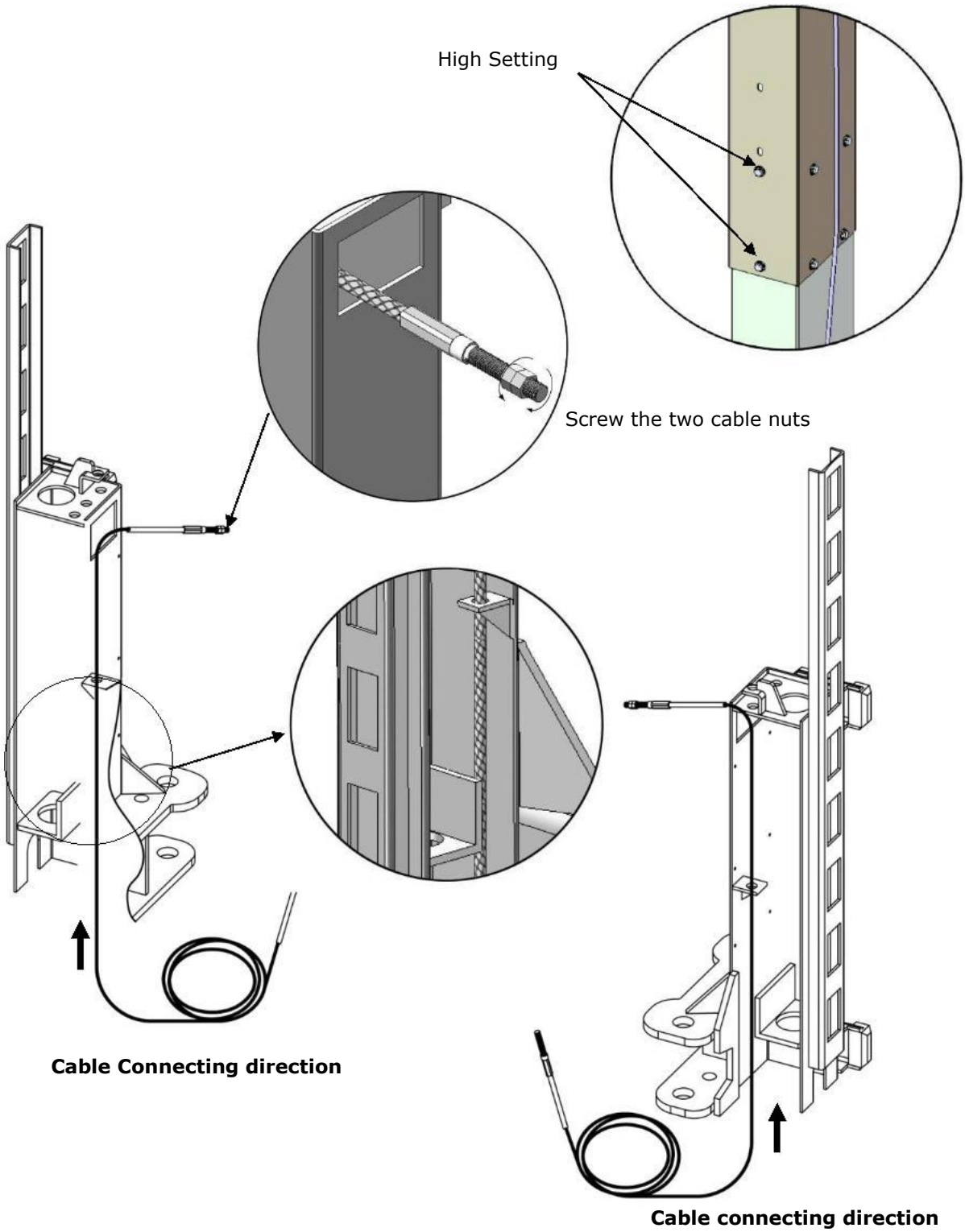


Fig. 23

2.2 Connecting cable for high setting **(See Fig. 24).**

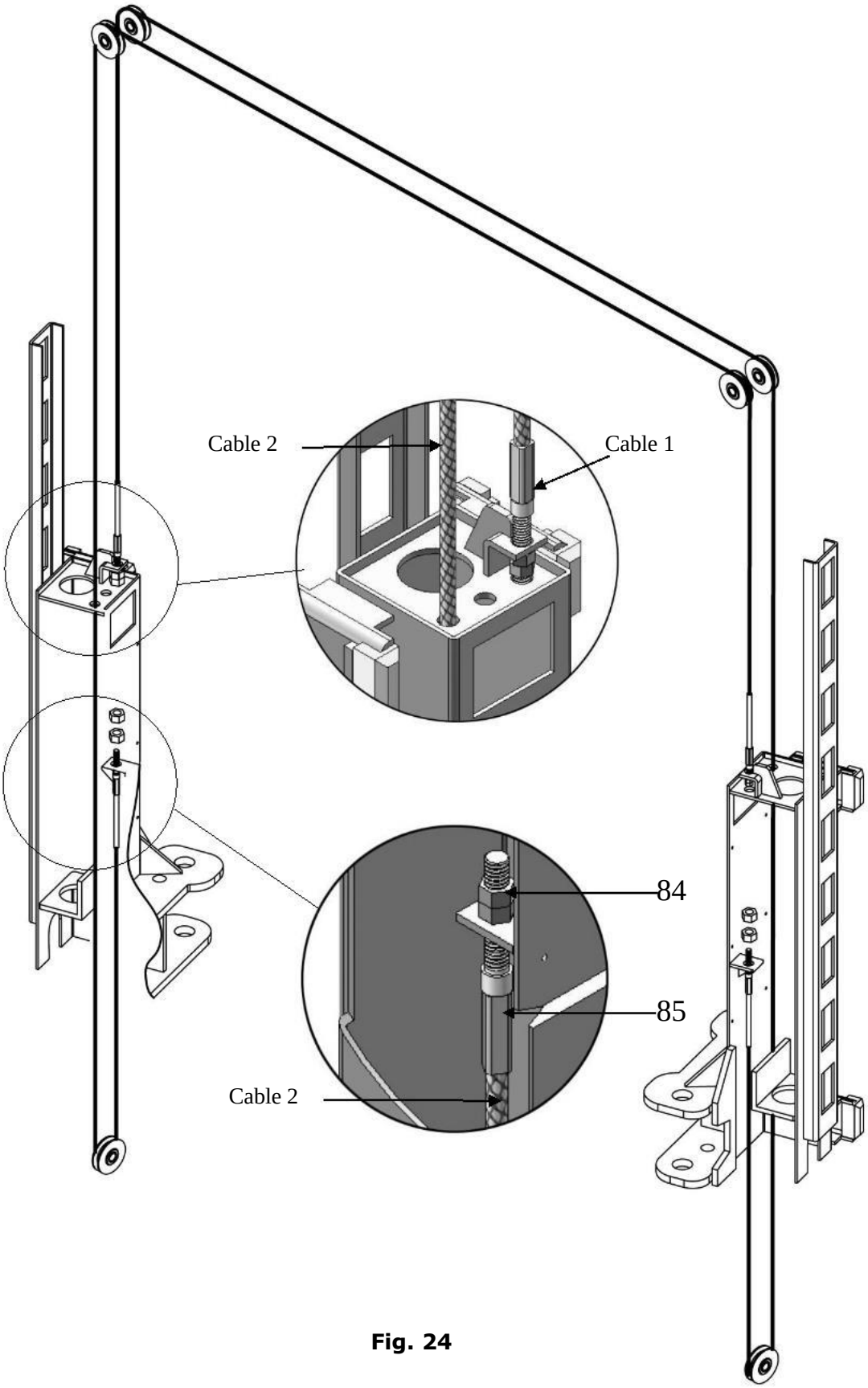


Fig. 24

L. Install hydraulic power unit and oil hose assy. (See Fig. 25).

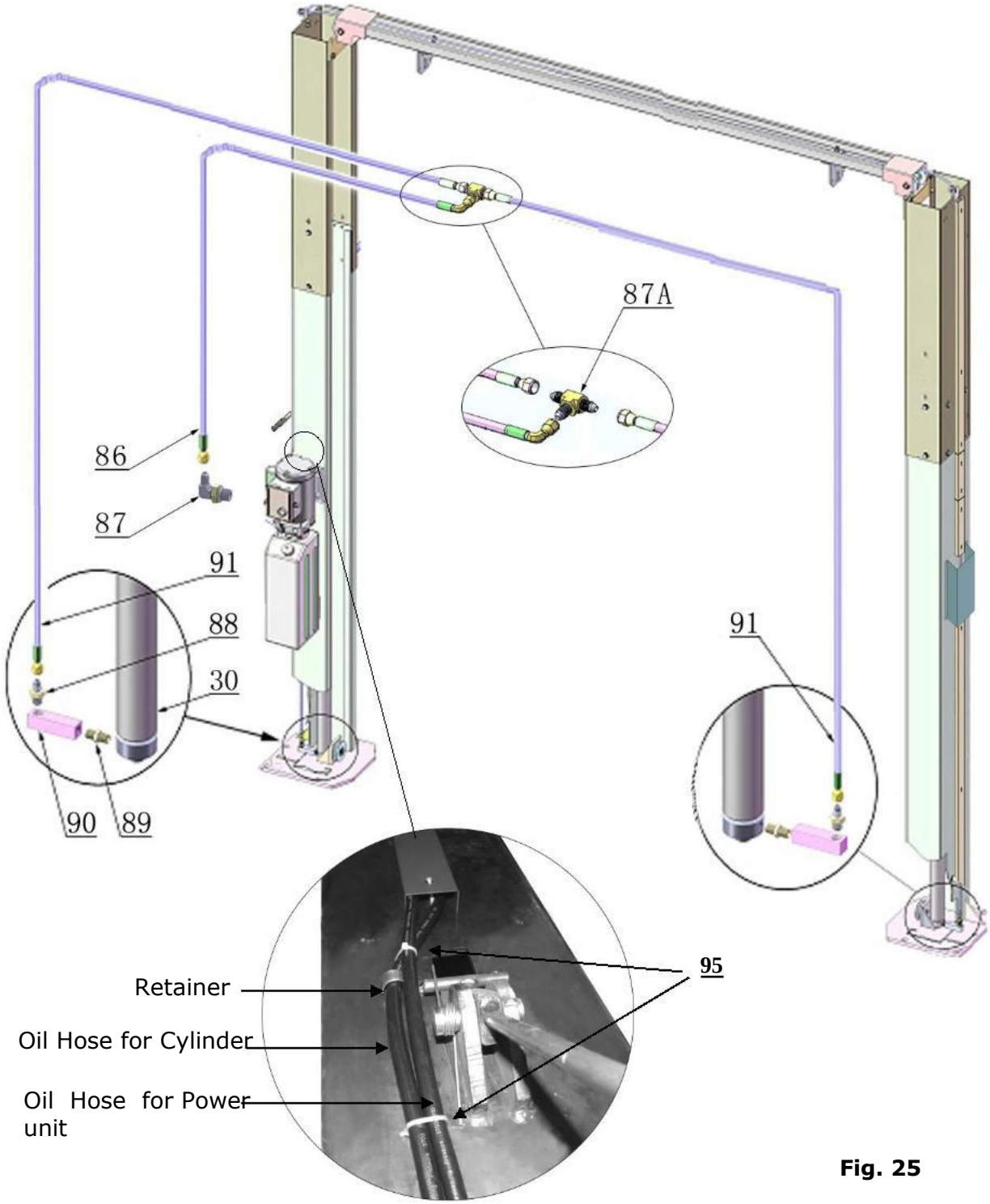


Fig. 25

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 46#.

M. Install safety cable (See Fig. 26)

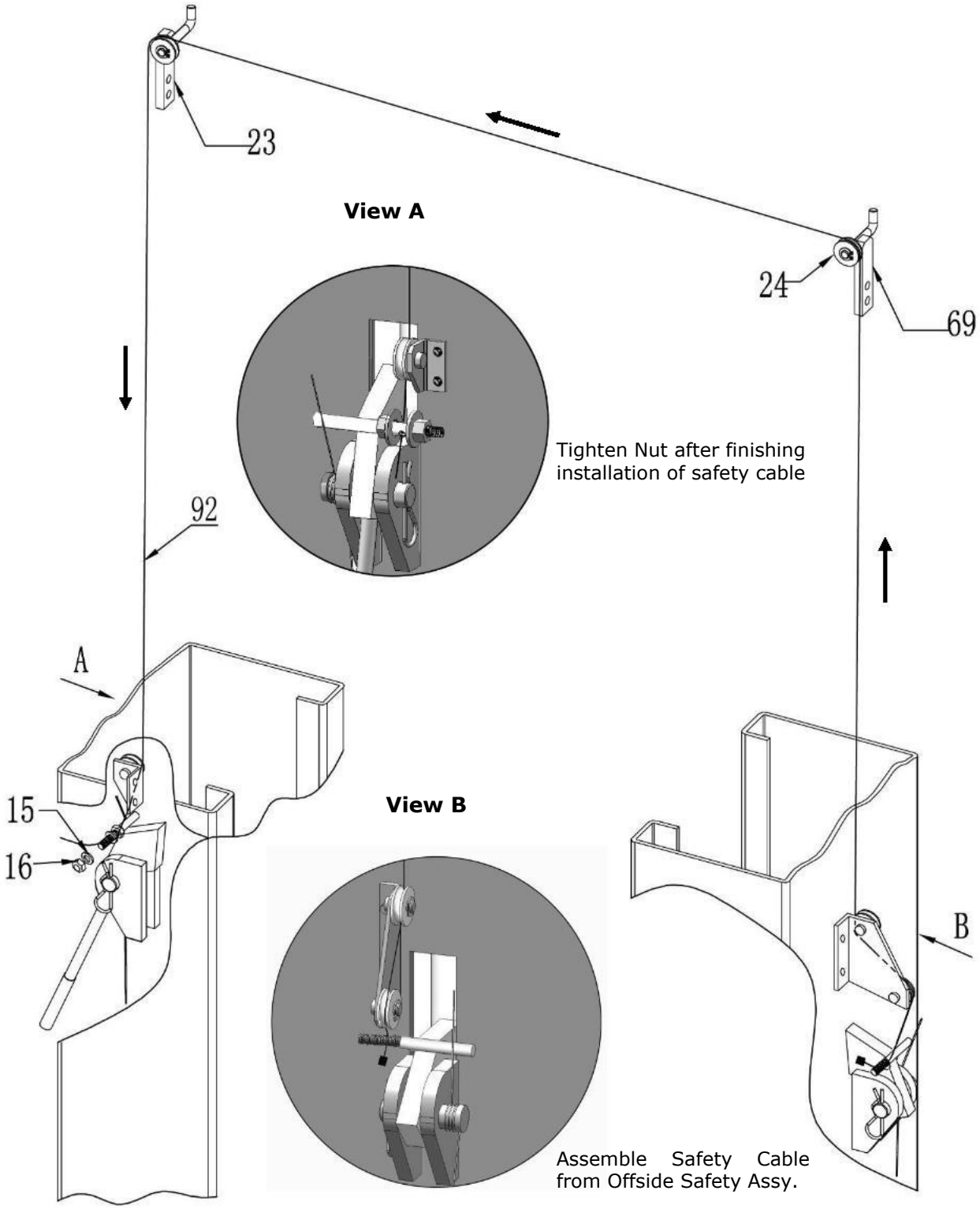
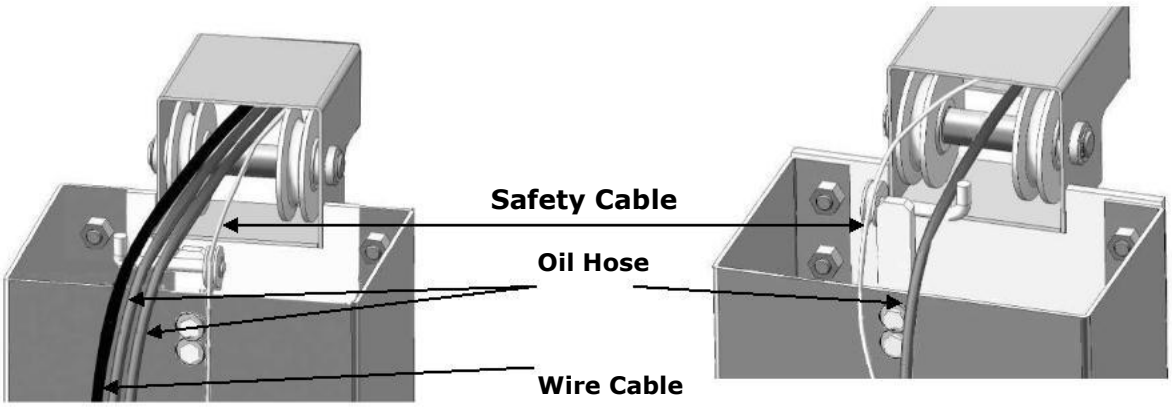


Fig. 26

N. Oil Hose & Protective Covers

1. Install Oil Hose.

Note: Don't cross the oil hose and safety cable together **(See Fig. 27 & Fig. 28).**

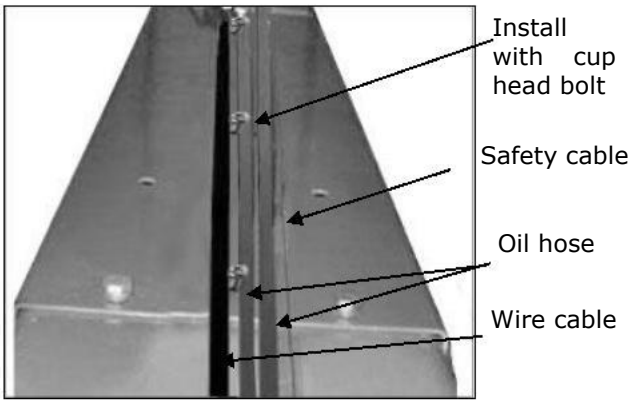


Powerside Safety Device
Fig. 27

Offside Safety Device
Fig. 28

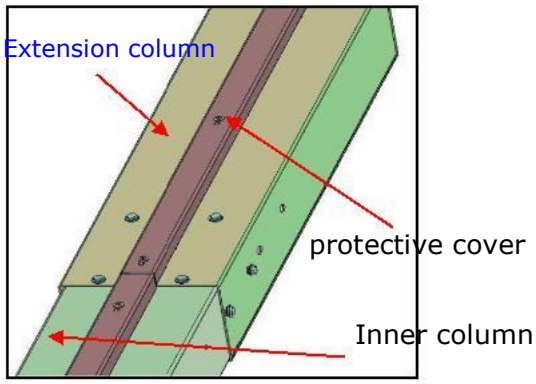
2. Install safety cable, oil hose and protective cover **(See Fig. 29 & Fig. 30 & Fig. 31)**.

Note: Install the protective cover on the extension column with M6*35 cup head bolt, Install the protective cover on the inner column with M6*40 cup head bolt.



Before install the wire protective cover

Fig. 29



After install the wire protective cover

Fig. 30

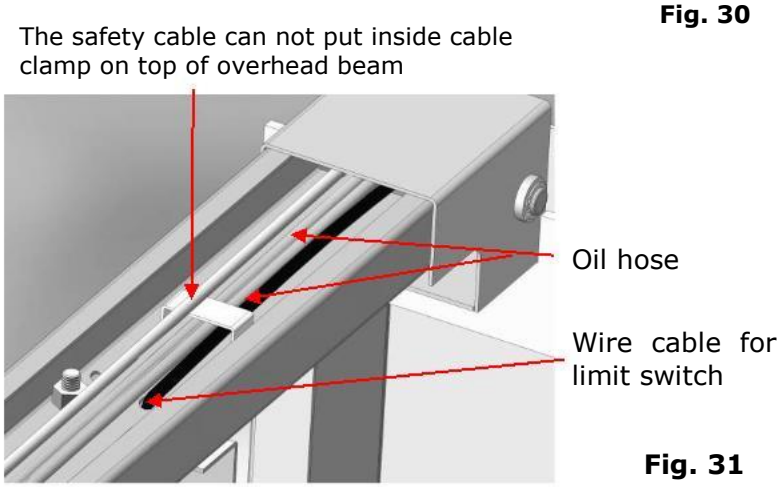


Fig. 31

O. Install lifting arms and adjust the arm locks.

1. Install the lifting arms **(See Fig. 32).**
2. Lowing the carriages down to the lowest position, then use the 8# socket head wrench to loose the socket bolt **(See Fig. 33).**

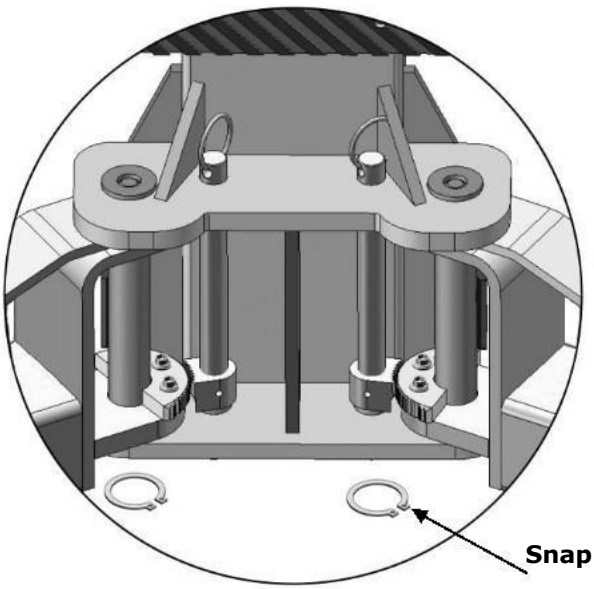
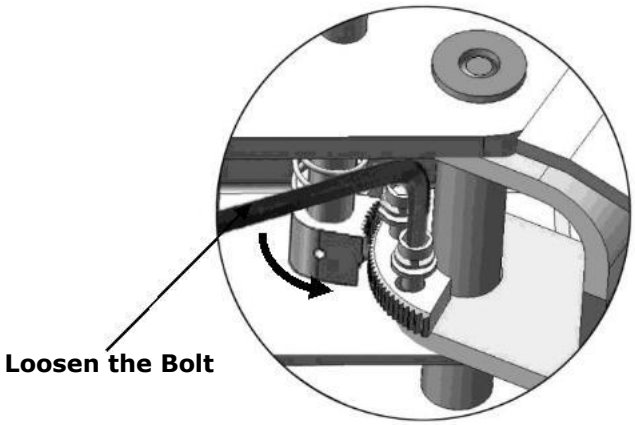


Fig. 32



Use the 8 Socket Head Wrench to loose the Socket Bolt

Fig. 33

3. Adjust the arm lock as direction of arrow **(See Fig. 34)**

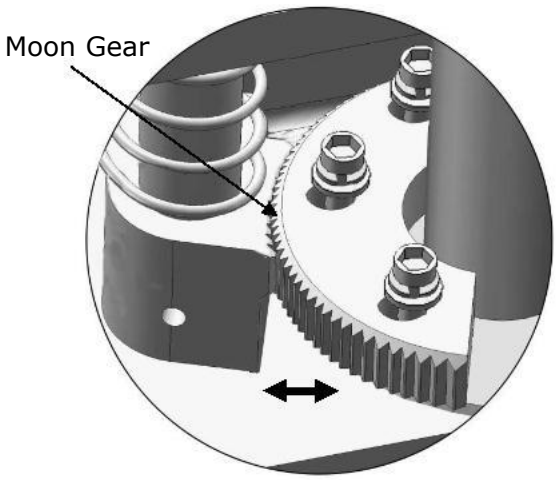


Fig. 34

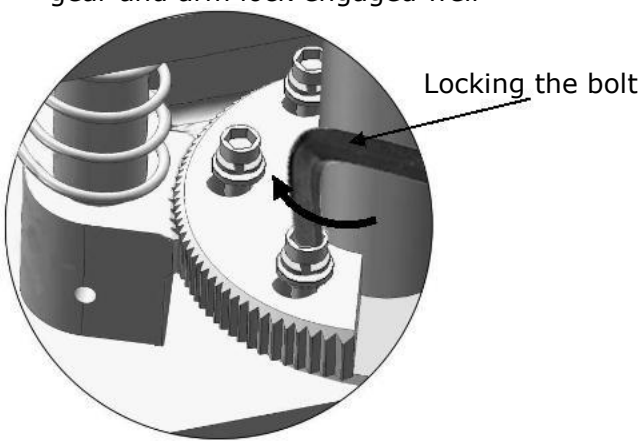


Fig. 35

4. Adjust moon gear and arm lock to make it to be meshed, then tighten the socket bolts of arm lock **(See Fig. 35).**

P. 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.

INDYPRO single phase motor (See Fig. 36).

1. Connecting the two power supply wires (active wire **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#** of control button and **A1** of AC contactor firstly **(See Fig. 37)**, then connecting wire**12#**(brown wire) of limit switch with terminal **4#** of control button and connecting wire **11#**(blue wire) with terminals **A1** of AC contactor respectively. Connecting the earth wire of limit switch to the earth wire terminal on the motor. **(See Fig. 38)**.
5. Terminal 3# on the control button is connected with terminal L1 on the AC contactor.

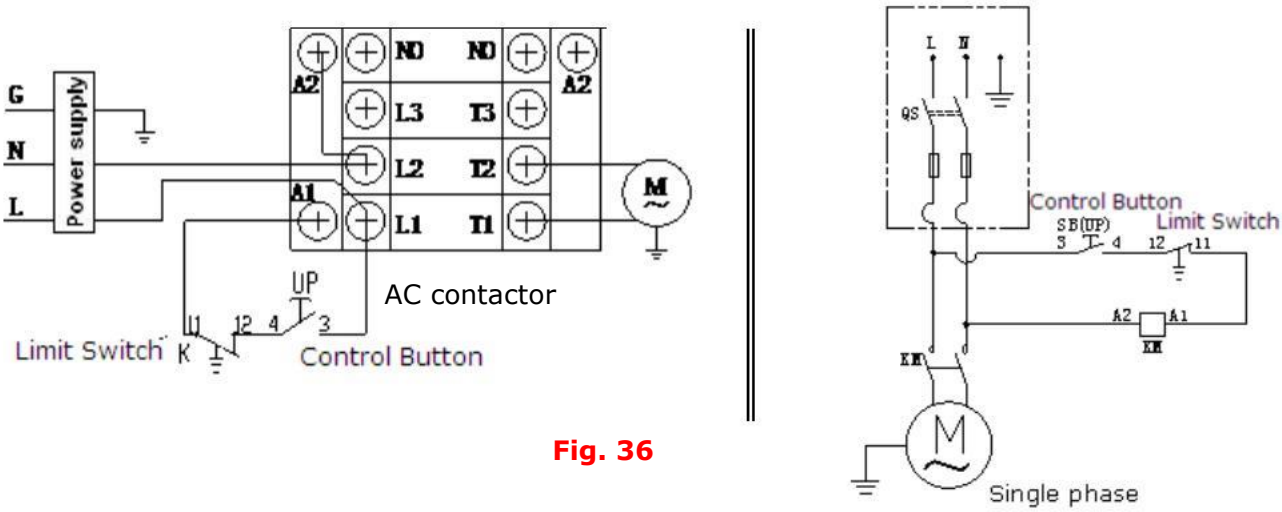


Fig. 36

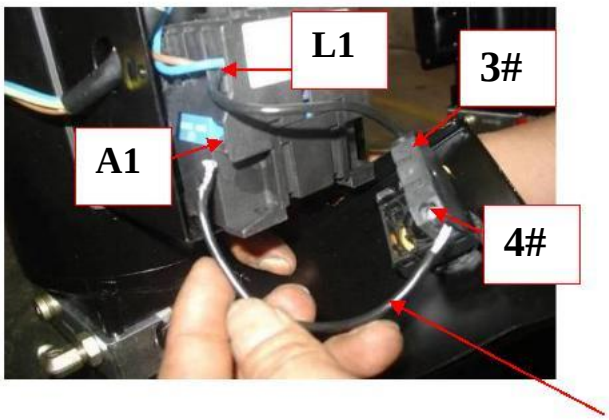


Fig. 37

Remove this wire before connecting the Limit Switch

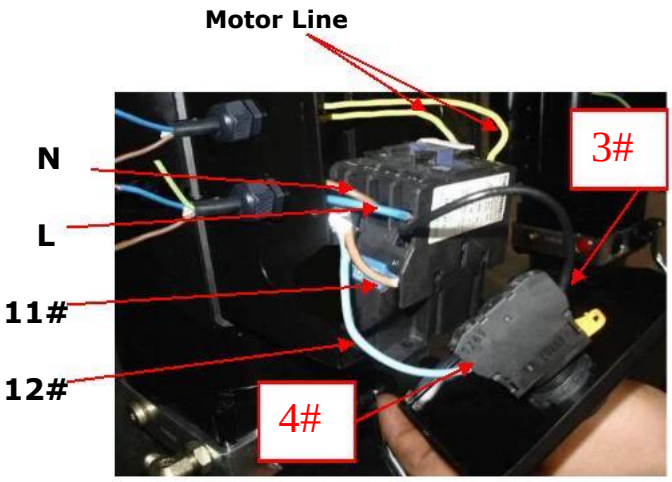


Fig. 38

SPX single phase motor (See Fig. 39)

1. Power supply wire (neutral wire **N**) is connected with wire **5#** of motor.
2. Wire **11#** (blue wire) of limit switch is connected with wire **6#** of the motor.
3. Wire **12#**(Brown wire) of limit switch is connected with wire **4#** of control button.
4. Earth wire (yellow and green wire) of limit switch is connected with the earth wire terminal on the motor.
5. Power supply wire (active wire **L**) is connected with wire **3#** of control button.

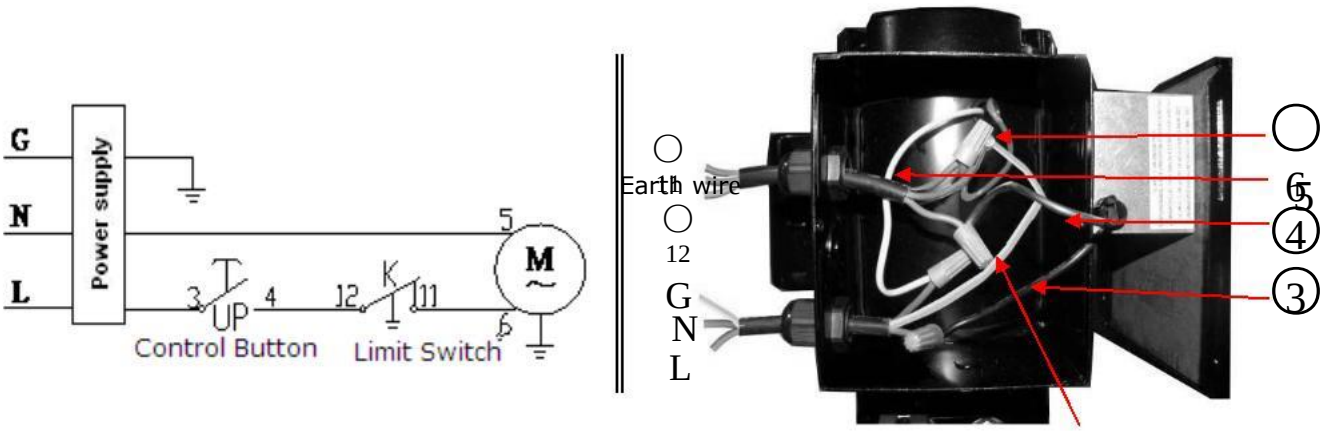
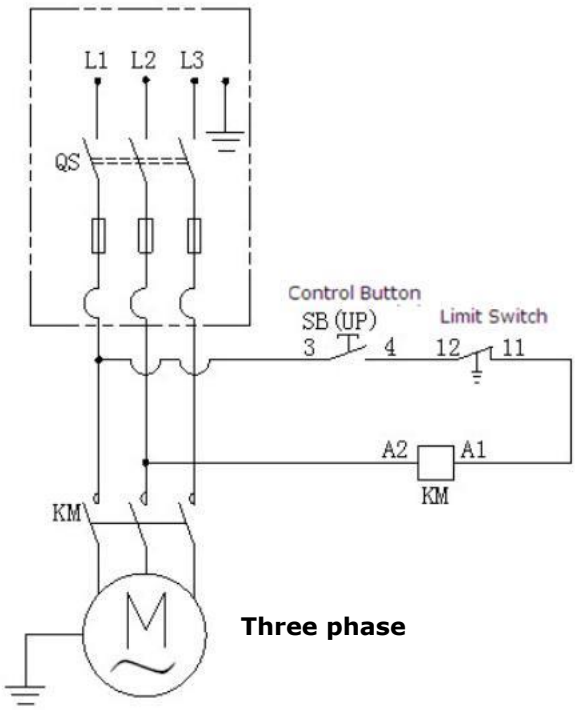


Fig. 39

Three phase motor

1. Circuit diagram **(See Fig. 40)**



Three phase

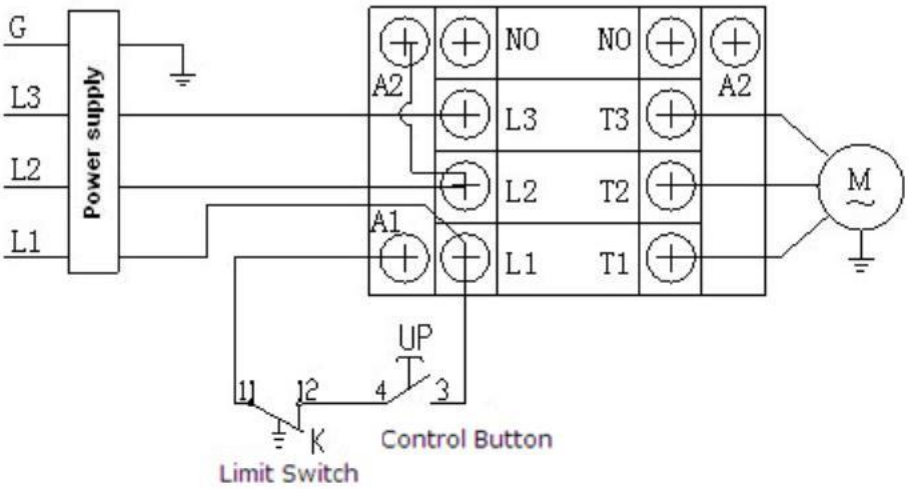
Fig. 40

2. Connection step **(See Fig. 41)**

a. The source wires (**L1, L2, L3**) are connected with terminals of AC contactor marked **L1, L2, L3** respectively.

b. Terminals **4#** of control button is connected with wire **12#**（brown wire） of limit switch; wire **11#**(blue wire) is connected with **A1** terminal of AC contactor, Earth wire(yellow and green wire) of limit switch is connected with the earth wire terminal of the motor.

C. Terminals **3#** of control button is connected with **L1** terminals of AC contactor.



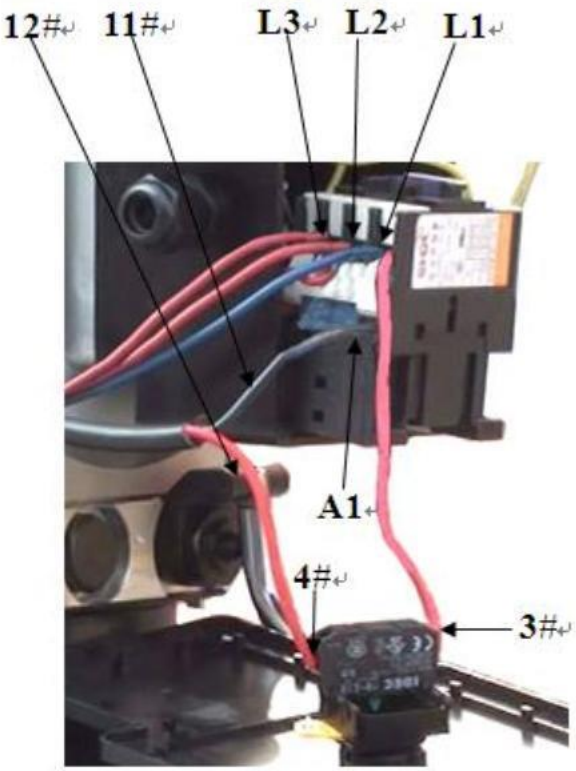


Fig. 41

IV. EXPLODED VIEW

Model TP10AS

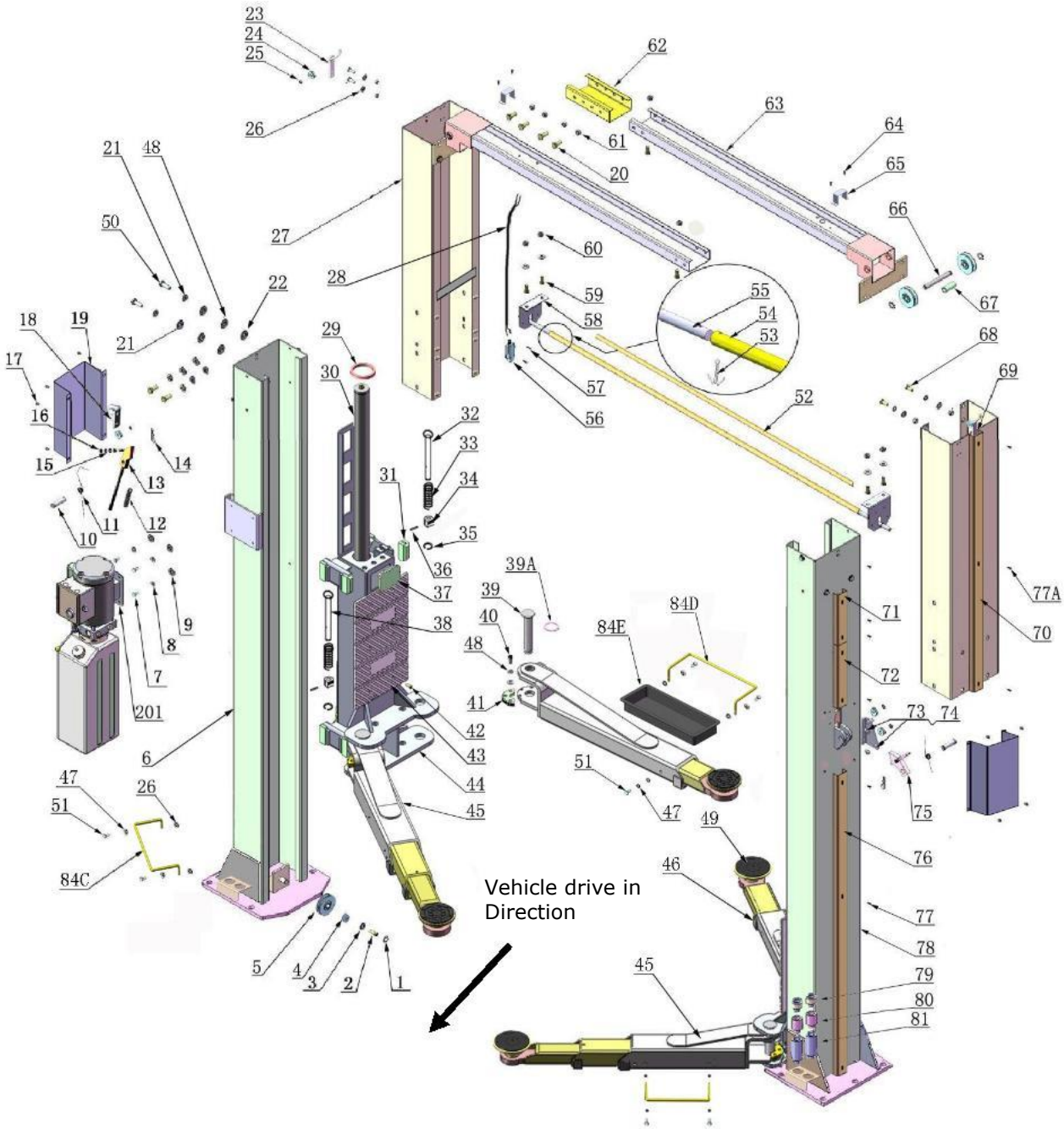


Fig. 42

Cylinders

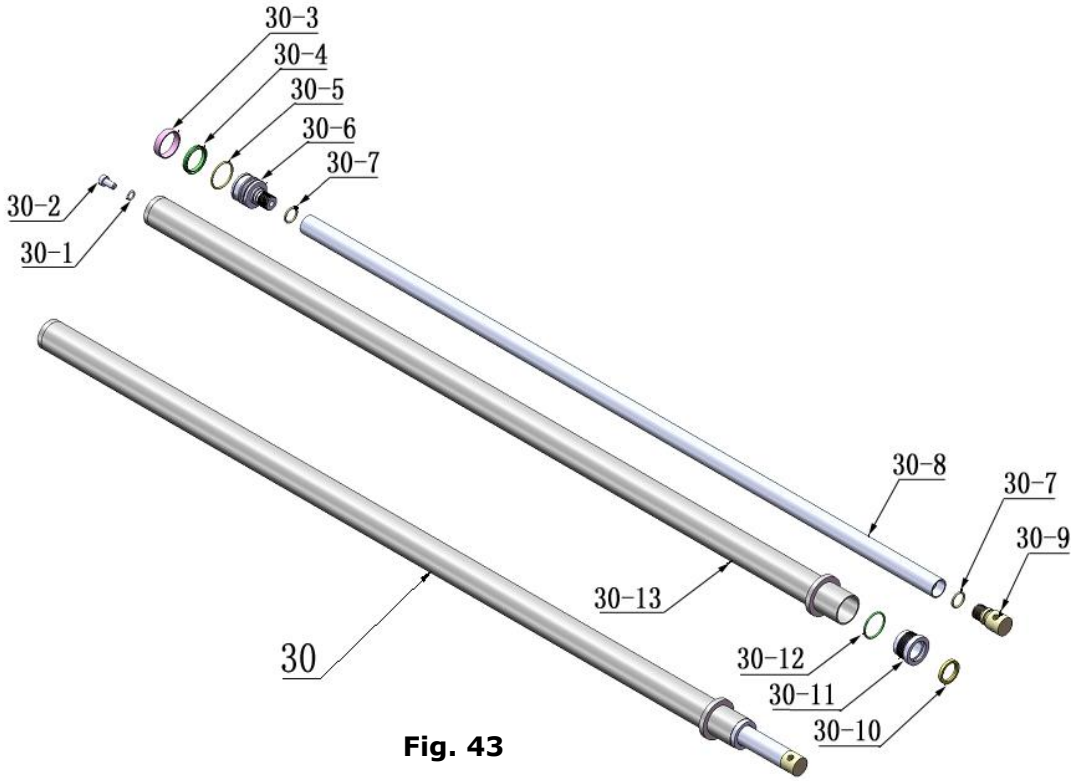


Fig. 43

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

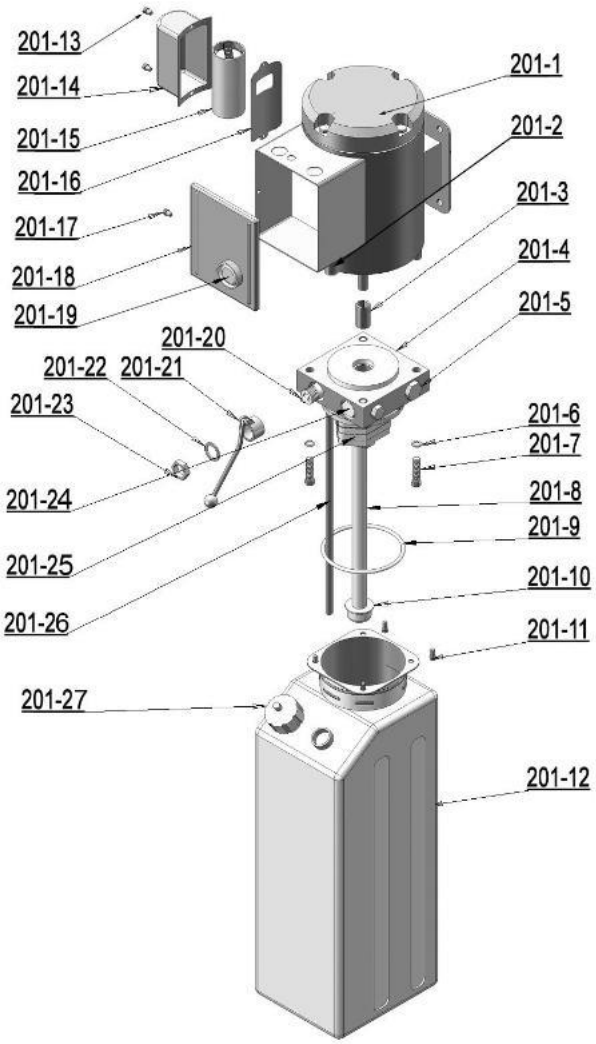
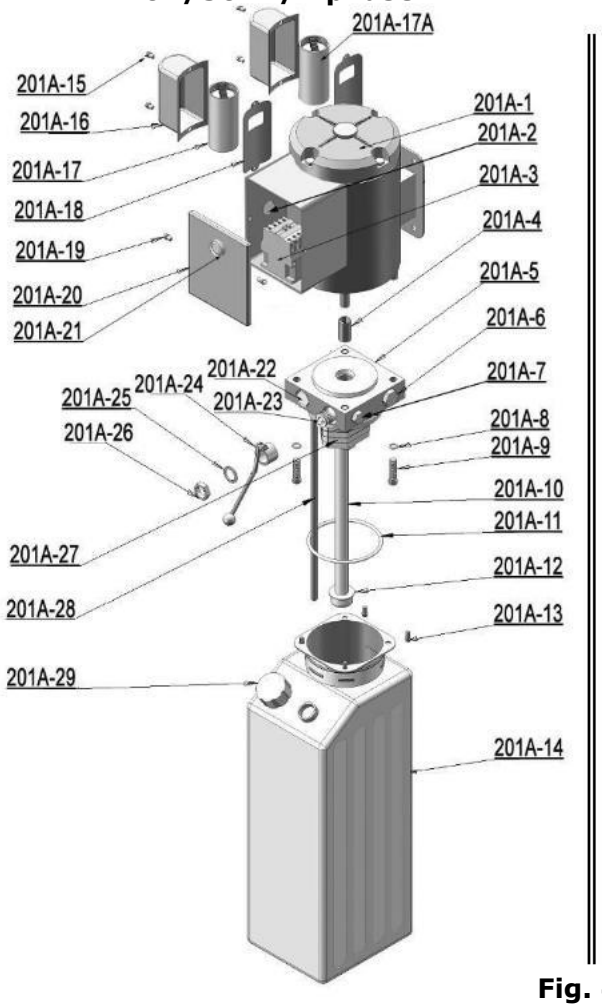


Fig. 44

INDYPRO MANUAL POWER UNIT

220V/50HZ/1 phase



380V/50HZ/3 phase

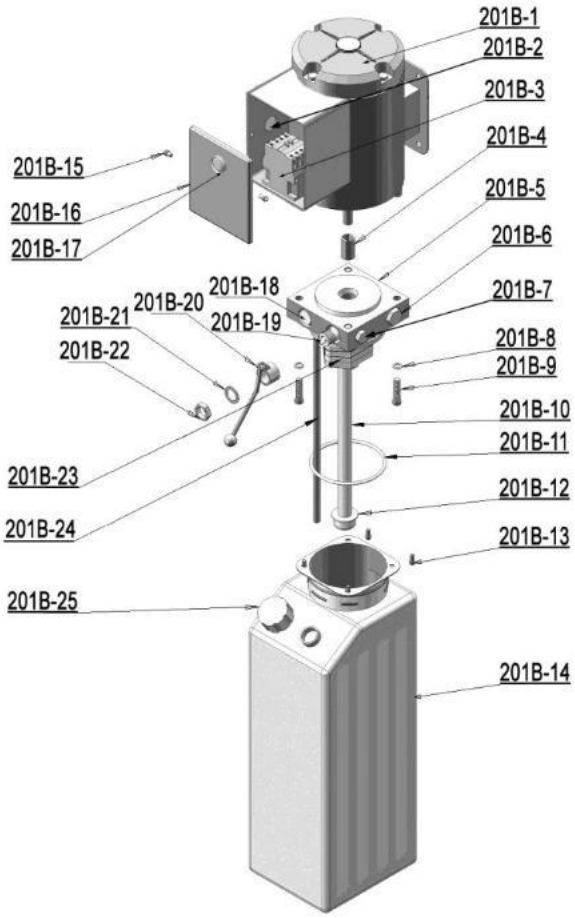


Fig. 45

Illustration of hydraulic valve for SPX & Indypro hydraulic power unit

a. SPX manual power unit, 220V/50HZ, Single phase (See Fig. 46)

Fig. 46

b. Indypro manual power unit, 220V/50HZ, Single phase (See Fig. 47)

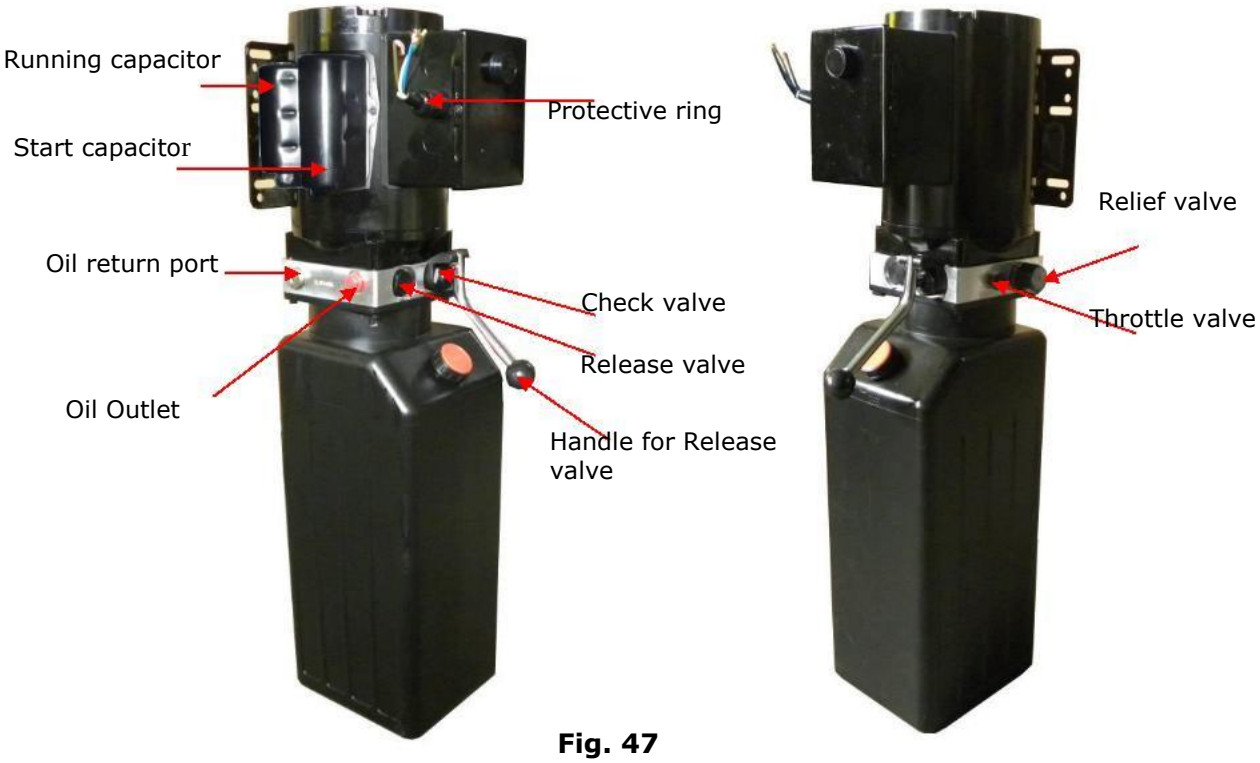


Fig. 47

C. Indypro manual power unit, 380V/50HZ, 3 phase (See Fig. 48)

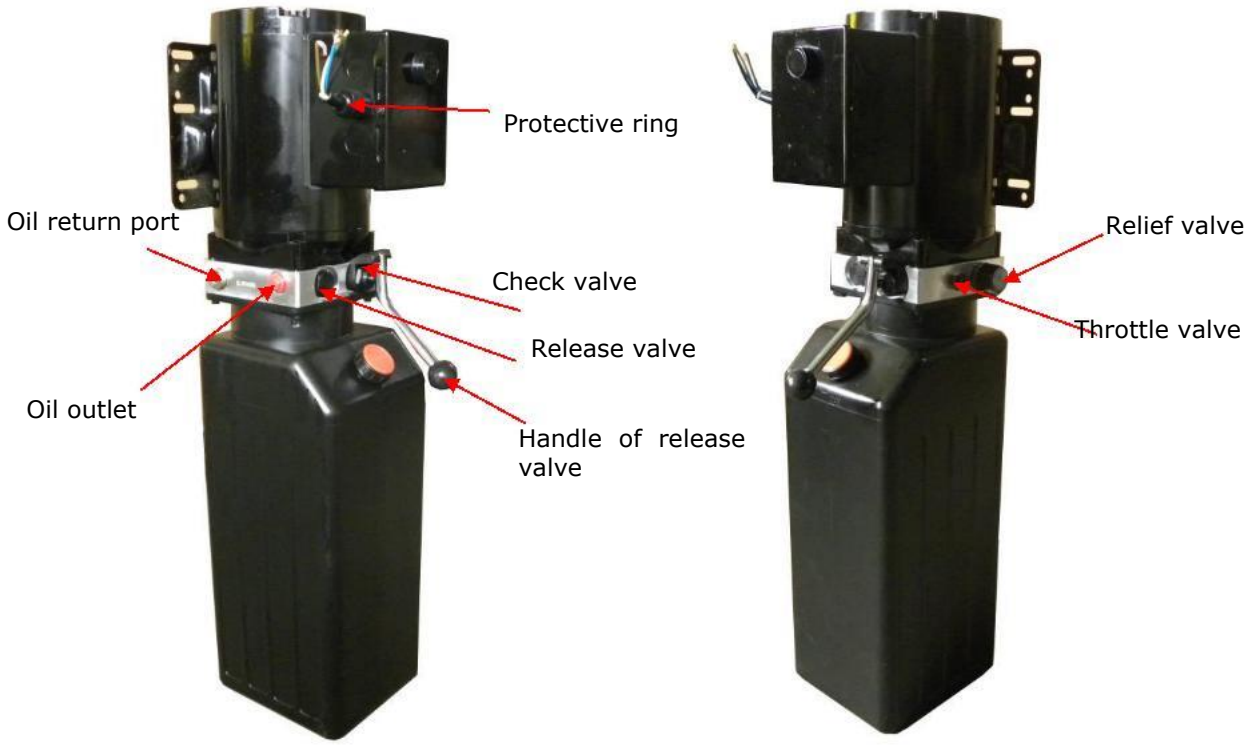


Fig. 48

V. TEST RUN

1. Adjust synchronous cable (See Fig. 49)

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.

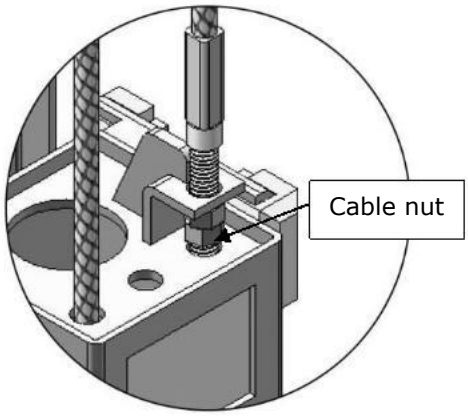


Fig. 49

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.

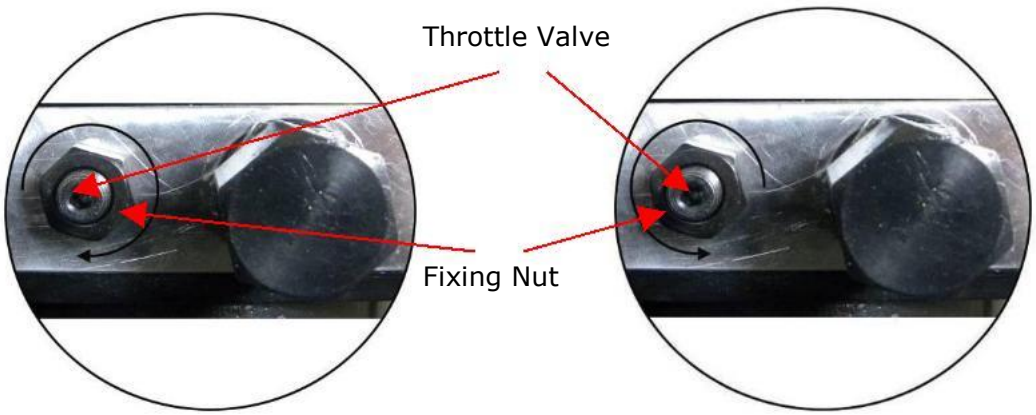
3. Bleeding air

This hydraulic system is designed to bleeding air by loosing 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. 50)**.

Fig. 50

4. Adjust the lower speed (Only for Indypro 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. 51

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, please lifting it with load for several times, the air would be bled and the vibration would be disappeared automatically.

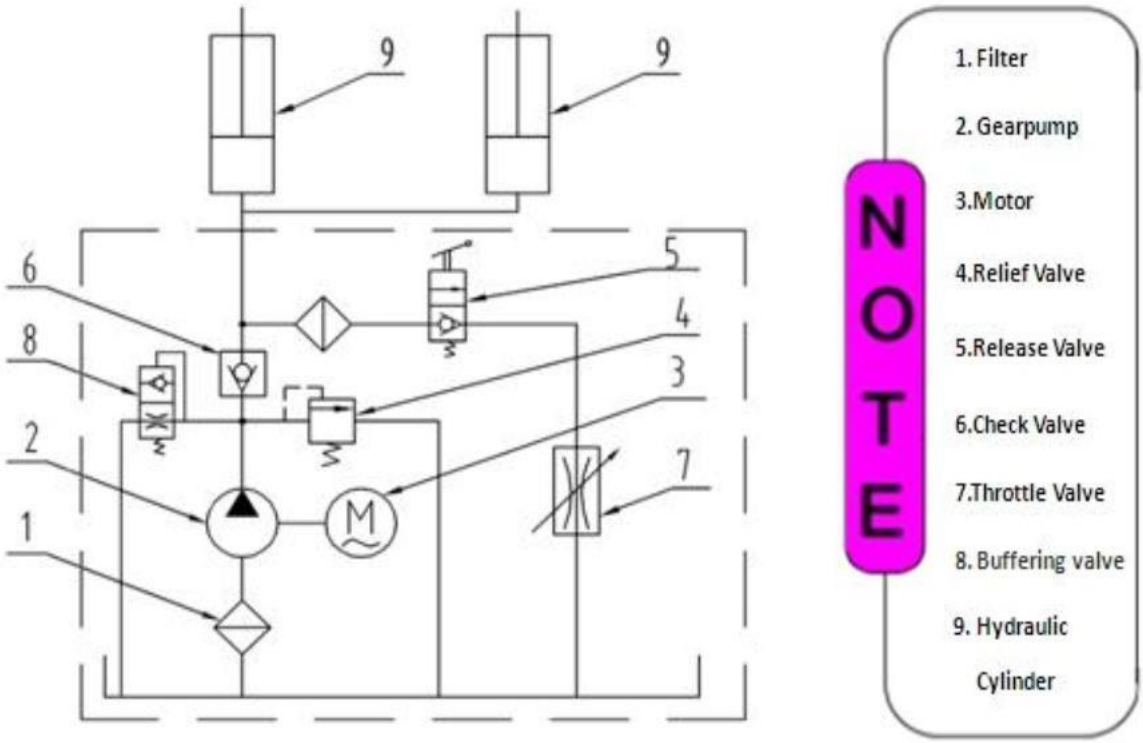


Fig. 52 Hydraulic System

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. Push button ”**UP”** 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. Push button ”**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 150 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 cannot lower	1. Safety device are in activated 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 TP10AS (See Fig. 42, Fig. 4)

Item	Part#	Description	TP10AS	Note
1	206019	Snap Ring	6	
2	206058	Screw	2	
3	206059	Washer	2	
4	209057B	Bronze Bush For Pulley	6	
5	206020	Pulley	6	
6	206001C	Powerside Inner Column	1	
201	209002	Manual Power Unit	1	
7	209003	Hex Bolt	8	
8	209004	Rubber Ring	4	
9	209005	Self locking Nut	8	
10	206002	Safety Pin	2	
11	209007A	Safety Spring	2	
12	206003	Handle Protective Plastic cushion	1	
13	206004	Powerside Safety Lock	1	
14	209012	Hair Pin	2	
15	206006	Washer	22	
16	206023A	Hex Nut	2	
17	209009	Cup Head Bolt	10	
18	206004A	Safety Pulley Bracket	1	
19	206081	Safety Cover	2	
20	206017	Hex Bolt	10	
21	209022	Washer	52	
22	209021	Hex Nut	20	
23	206010	Safety Pulley Bracket	1	
24	206009	Plastic Pulley	5	
25	209010	Snap Ring	5	
26	209033	Washer	18	
27	206151	Extension Column	2	
	206152		0	
28	206137	Wire Cable	1	
	206138		0	
29	209111	Protective Ring For Cylinder	2	
30	217056	Hydraulic Cylinder	2	
31	209015	Slider Block	16	
32	206046A	Arm Lock Bar (left)	2	
33	206050A	Spring	4	
34	217044	Arm Lock	4	
35	206032	Snap Ring	4	

Item	Part#	Description	TP10AS	Note
36	206036	Hair Pin	4	
37	209016	Carriage Plastic Cover	2	
38	206046B	Arm Lock Bar (right)	2	
39	206136	Arm Pin	4	
39A	520023	Snap Ring	4	
40	206048	Socket Bolt	12	
41	206049	Moon Gear	4	
42	209019	Screw	12	
43	209018	Protective Rubber	2	
44	206111A	Carriage	2	
45	206167	Lifting Arm - Front (drop-in)	2	
45A	206173	Extended Arm - Front	2	
45B	206174	Middle Arm - Front	2	
45C	206089A	Inner Arm - Front	2	
46	206168	Lifting Arm - Rear (drop-in)	2	
46A	206175	Extended Arm - Rear	2	
46B	206176	Inner Arm - Rear	2	
47	209034	Lock washer	12	
48	209039	Lock washer	32	
49	201046A	Rubber Pad Assy.	4	
49A	420138	Socket bolt	4	
49B	209134	Rubber Pad	4	
49C	680030C	Rubber Pad Frame	4	
50	209126	Hex Bolt	20	
51	201002	Hex Bolt	14	
52	206025A	Foam Cushion	1	
53	201005	Split Pin	2	
54	206129	Control Bar	1	
55	206025C	Connecting Pin for Control Bar	2	
56	206013	Limit Switch	1	
57	206011	Cup Head Bolt	2	
58	206042	Control Bar Support Bracket	2	
59	206041	Hex Bolt	4	
60	206023	Self locking Nut	12	
61	209056	Self locking Nut	10	
62	206016	Connecting Bracket	1	
63	206018B	Top Beam W/Bracket	2	
64	206028	Cup Head Bolt	4	
65	206029	Retainer	2	

Item	Part#	Description	TP10AS	Note
66	206021	Pin For Pulley	2	
67	206022	Top Pulley Tube	2	
68	206024	Hex Bolt	8	
69	206010A	Safety Pulley Bracket	1	
70	206085	Protective Cover(L=1240mm)	2	
	206086	Protective Cover(L=1850mm)	0	
71	206084	Protective Cover(L=200mm)	2	
72	206083	Protective Cover(L=385mm)	2	
73	640050	Socket bolt	4	
74	206008C	Safety Pulley Bracket	1	
75	206026A	Offside Safety Lock	1	
76	206080	Protective Cover(L=1565mm)	2	
77	206079	Cup Head Bolt	14	
77A	206110	Cup Head Bolt	6	
78	206030C	Offside Inner column	1	
79	209051B	Stackable Adapter (1.5”)	4	
80	209052B	Stackable Adapter (2.5”)	4	
81	209053B	Stackable Adapter (5”)	4	
82	209059B	Anchor Bolt	10	
83	217048	Retainer	2	
84	209066	Hex Nut	8	
84A	620065	Shim(2mm)	10	
84B	201090	Shim (1mm)	10	
84C	206155	Front toe guard	2	
84D	206154	Rear toe guard	2	
84E	206156	Tool tray	2	
85	206064A	Cable	2	
	206064B	Cable	0	
86	206132	Oil hose	1	
	206133		0	
87	209060	90°Fitting For Hydraulic Power Unit	1	
87A	211016	T fitting	1	
88	209064	Straight Fitting	2	
89	206062	Straight Fitting	2	
90	233009	Pipe Fitting	2	
91	206130	Oil Hose	2	
	206131		0	

Item	Part#	Description	TP10AS	Note
92	260149	Safety cable	1	
	206065A		0	
93	420045	Washer	14	
94	209149	Lock washer	4	
95	209152	Ties	4	
96	206500B	Parts Box	1	
	206501B		0	
30-1	209069	O-Ring	2	
30-2	209070	Bleeding Plug	2	
30-3	209071	Support Ring	2	
30-4	209072	Y-Ring	2	
30-5	209073	O-Ring	2	
30-6	209074	Piston	2	
30-7	209075	O-Ring	2	
30-8	217076	Piston Rod	2	
30-9	209077	Piston Rod Fitting	2	
30-10	209078	Dust Ring	2	
30-11	209079	Head Cap	2	
30-12	209080	O-Ring	2	
30-13	209081A	Bore Weldment	2	
201-1	81400030	Motor	1	
201-2	81400159	Protective Ring	1	
201-3	81400063	Motor Connecting Shaft	1	
201-4	81400031	Valve Body	1	
201-5	81400160	Relief Valve	1	
201-6	81400161	Lock Washer	4	
201-7	81400162	Socket Bolt	4	
201-8	81400121	Inlet Pipe	1	
201-9	81400163	O-Ring	1	
201-10	81400164	Filter	1	
201-11	81400165	Hex bolt	4	
201-12	81400093	Reservoir	1	
201-13	81400166	Head Screw	2	
201-14	81400167	Cover of Capacitor	1	
201-15	81400087	Capacitor	1	
201-16	81400168	Rubber Gasket	1	
201-17	81400169	Hex bolt	1	
201-18	81400062	Cover of Motor Terminal Box	1	
201-19	81400028	Push Button	1	

Item	Part#	Description	TP10AS	Note
201-20	81400105	Release Valve	1	
201-21	81400033	Handle For Release Valve	1	
201-22	81400170	Washer	1	
201-23	81400171	Hex Nut	1	
201-24	81400043	Check Valve	1	
201-25	81400123	Gear Pump	1	
201-26	81400122	Oil Return Pipe	1	
201-27	81400172	Tank Cap	1	
201A-1	81400048	Motor	1	
201A-2	81400178	Protective Ring	1	
201A-3	81400179	AC contactor	1	
201A-4	81400127	Motor Connecting Shaft	1	
201A-5	81400067	Valve Body	1	
201A-6	81400106	Relief Valve	1	
201A-7	81400107	Throttle valve	1	
201A-8	209149	Lock Washer	4	
201A-9	81400148	Socket Bolt	4	
201A-10	81400134	Inlet Pipe	1	
201A-11	81400144	O-Ring	1	
201A-12	81400150	Filter	1	
201A-13	81400145	Socket bolt	4	
201A-14	81400024	Reservoir	1	
201A-15	420148	Cup Head Bolt With Washer	4	
201A-16	81400066	Cover of Capacitor	2	
201A-17	81400130	Start Capacitor	1	
201A-17A	81400088	Running Capacitor	1	
201A-18	81400180	Rubber Gasket	2	
201A-19	420148	Cup Head Bolt With Washer	2	
201A-20	81400050	Cover of Motor Terminal Box	1	
201A-21	81400045	Push Button	1	
201A-22	81400044	Check Valve	1	
201A-23	81400075	Release Valve	1	
201A-24	81400117	Handle For Release Valve	1	
201A-25	81400181	Washer	1	
201A-26	81400182	Hex Nut	1	
201A-27	81400041	Gear Pump	1	
201A-28	81400084	Oil Return Pipe	1	
201A-29	81400113	Filter Cap	1	

Item	Part#	Description	TP10AS	Note
201B-1	81400183	Motor	1	
201B-2	81400178	Protective Ring	1	
201B-3	81400184	AC contactor	1	
201B-4	81400127	Motor Connecting Shaft	1	
201B-5	81400177	Valve Body	1	
201B-6	81400175	Relief Valve	1	
201B-7	81400107	Throttle valve	1	
201B-8	209149	Lock Washer	4	
201B-9	81400148	Socket Bolt	4	
201B-10	81400134	Inlet Pipe	1	
201B-11	81400144	O-Ring	1	
201B-12	81400150	Filter	1	
201B-13	81400145	Socket bolt	4	
201B-14	81400024	Reservoir	1	
201B-15	420148	Cup Head Bolt With Washer	2	
201B-16	81400050	Cover of Motor Terminal Box	1	
201B-17	81400045	Push Button	1	
201B-18	81400044	Check Valve	1	
201B-19	81400075	Release Valve	1	
201B-20	81400117	Handle For Release Valve	1	
201B-21	81400181	Washer	1	
201B-22	81400182	Hex Nut	1	
201B-23	81400041	Gear Pump	1	
201B-24	81400084	Oil Return Pipe	1	
201B-25	81400113	Tank Cap	1	

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