

Original

Installation And Service Manual



TWO POST LIFT

Model: OHX-10/OHX-10H

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I. PRODUCT FEATURES AND SPECIFICATIONS CLEAR-FLOOR DIRECT-DRIVED MODEL FEATURES Model OHX-10 (See Fig. 1)

- · Direct-drived design, minimize the lift wear parts and breakdown ratio
- · Dual hydraulic cylinders, designed and made as USA 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, provide unobstructed floor space
- . Overhead safety shut-off device prevents vehicle damages
- · Stackable rubber pads



Fig. 1

SPECIFICATIONS

Model	Lifting Capacity	Lifting Time	Lifting Height	Overall Height	Overall Width	Minimum Pad Height	Motor
OHX-10	10000lbs	57S	71-1/2"~80-1/2"	144"	135″	3-1/2"~12-1/2"	2.0HP

Model OHX-10H (See Fig. 2)

- · Direct-drived design, minimize the lift wear parts and breakdown ratio
- · Dual hydraulic cylinders, designed and made as USA 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, provide unobstructed floor space
- . Overhead safety shut-off device prevents vehicle damage
- · Stackable rubber pads
- · Adjustable column height

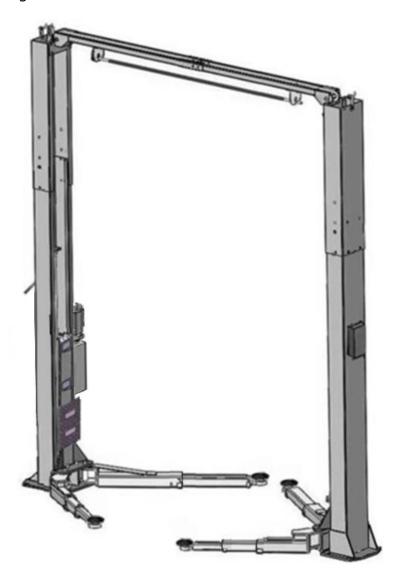


Fig. 2

SPECIFICATIONS

Model		Lifting Time		Overall Height	Overall Width	Minimum Pad Height	Motor
OHX-10H	10000lbs	63s	78-1/2"~87-1/2"	157"/168"	135"	3-1/2"~12-1/2"	2.0HP

Arm Swings View

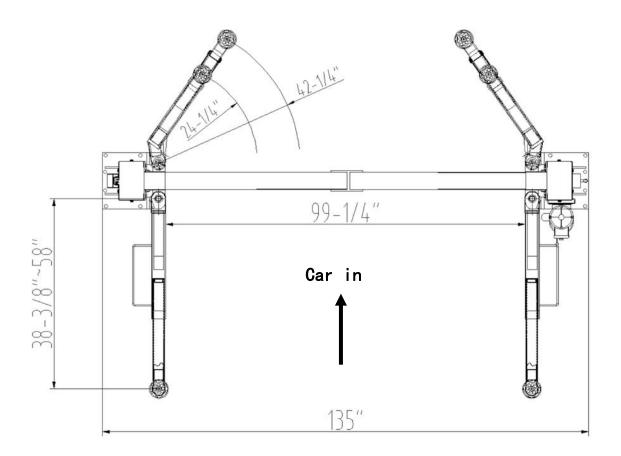


Fig. 3

Swing and extending the arms to the lifting point of vehicle

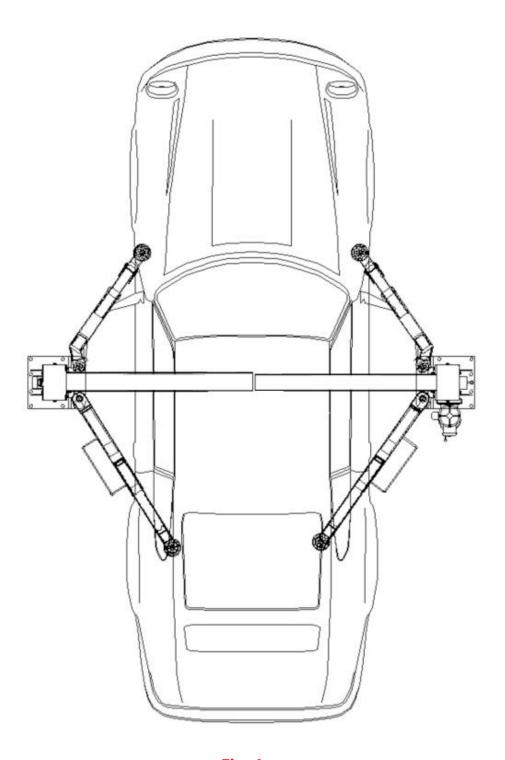


Fig. 4

II. INSTALLATION REQUIREMENT

A. TOOLS REQUIRED

✓ Rotary Hammer Drill (Ф3/4)



✓ Carpenter's Chalk



✓ Hammer



✓ Screw Sets



✓ Level Bar



✓ Tape Measure (7.5m)



✓ English Spanner (12")



✓ Pliers



✓ Ratchet Spanner with Socket (28*)



✓ Socket Head Wrench (6*)



Wrench set

(10[#]、13[#]、14[#]、15[#]、17[#]、19[#]、24[#]、27[#])

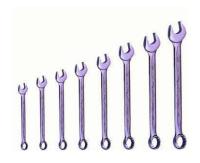


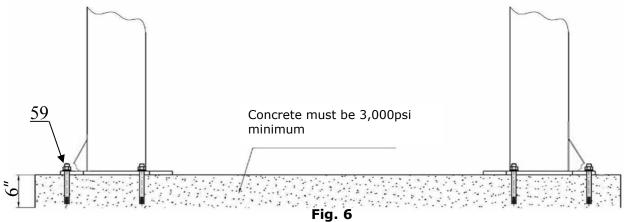


Fig. 5

B. SPECIFICATIONS OF CONCRETE (See Fig. 6)

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 6" 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 minimum.
- 3. Floors must be level without cracks.



C. POWER SUPPLY

The electrical source must be 2.0HP 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 base-plate (See Fig.7).

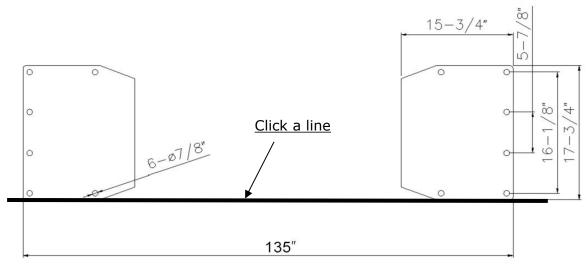


Fig. 7

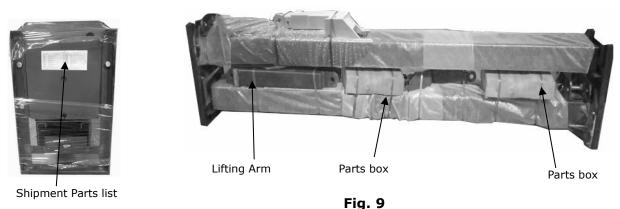
C. Check the parts before assembly.

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

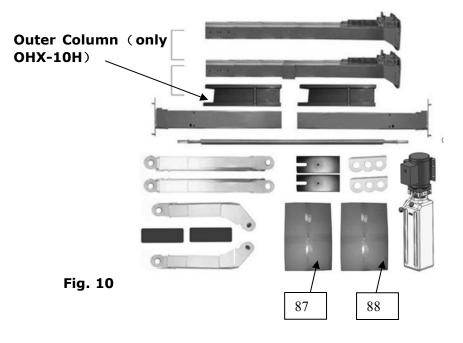


Fig. 8

2. Move 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.9).



- 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.10, 11, 12).



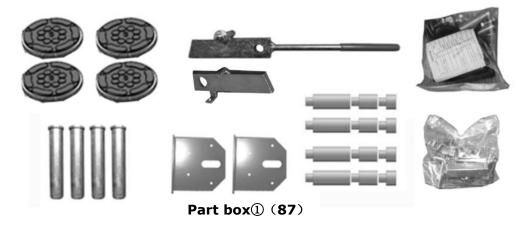


Fig. 11



Part box② (88)

Fig. 12

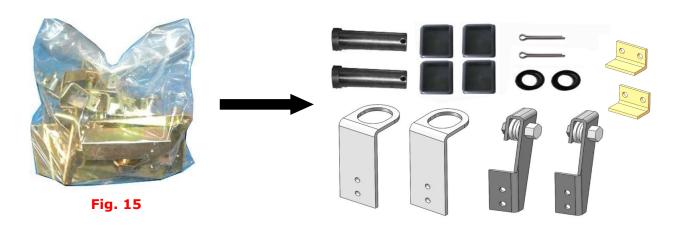
5. Open the bag 1 of parts and check the parts according to parts box list (See Fig. 13,14).



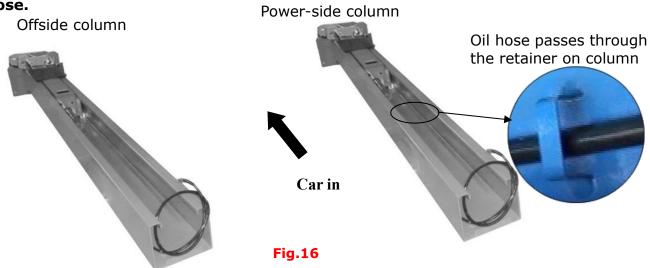
Fig. 13



6. Open the bag 2 of parts and check the parts according to parts bag list (See Fig. 15).



D. Place the two columns in parallel on the ground of installation position, and determine the installation position of the power side column according to the condition of the installation site. Under normal circumstances, the power side column is installed on the right side of the entering direction; then install the oil hose.



E. Install the cylinder and connect the oil hose to the cylinder.

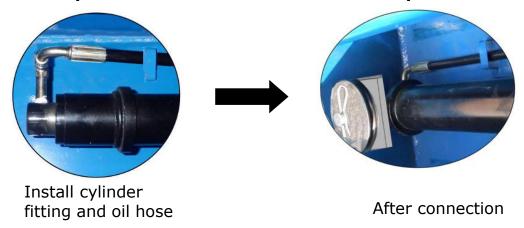
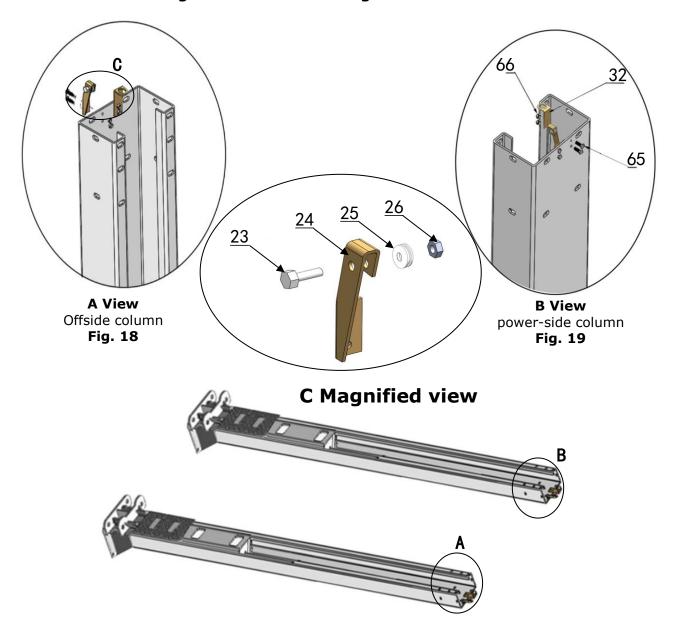
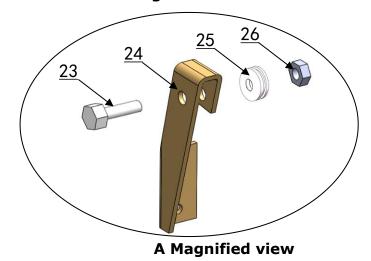


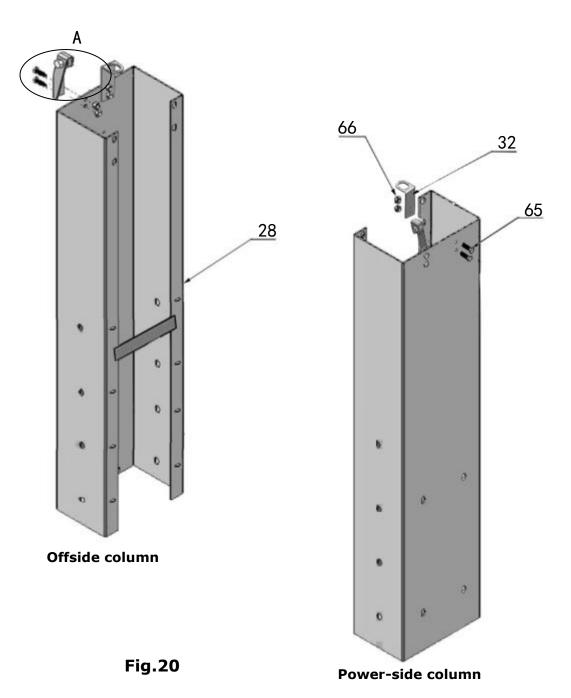
Fig.17

- F. Mounting column assemble.
- 1. OHX-10 mounting column assemble. Fig.18 & 19.

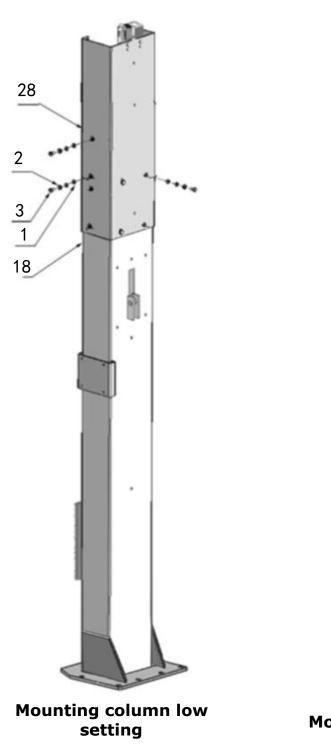


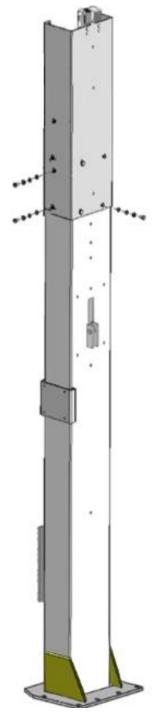
2. OHX-10H Mounting column assemble. Fig. 20.





Place the two columns in parallel on the ground of the installation position, and determine the installation position of the power-side column according to the condition of the installation site. Under normal circumstances, the power-side column is installed on the right side of the entering direction; when installing the outer column, it should be installed according to the height of the workshop. When the height is not more than 168", the mounting column is selected to install the lower position; when the height is more than 168", the mounting column can be installed with the high position. (See Fig.21)





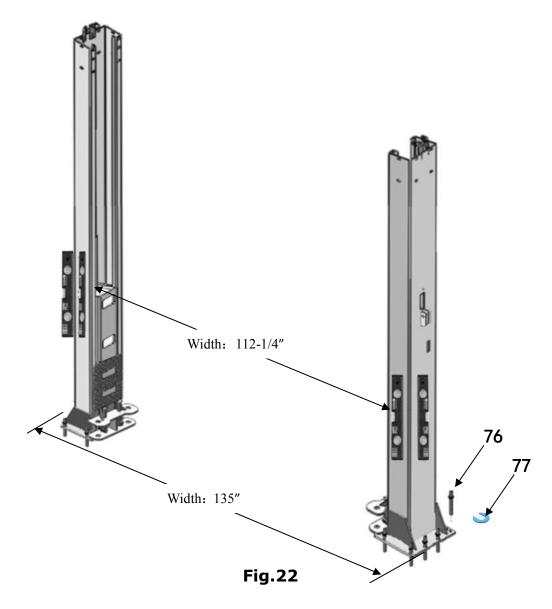
Mounting column high setting

Fig.21

G. Vertical leveling of columns (See Fig. 22)

1. OHX-10

Put the columns on the installation layout of base-plate, install the anchor bolts. Check the Columns plumpness with level bar, and adjusting with the shims if the columns are not vertical. Do not tighten the Anchor Bolts.

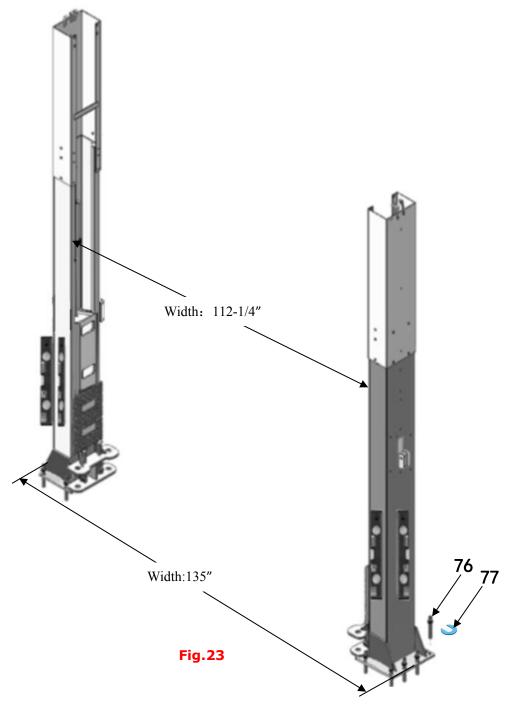


*Note: The anchor bolt is knocked into the ground at least 3-1/2".

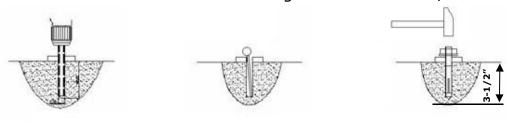


2. OHX-10H

Put the columns on the installation layout of base-plate, install the anchor bolts. Check the Columns plumpness with level bar, and adjusting with the shims if the columns are not vertical. Do not tighten the Anchor Bolts. (See Fig. 23)



*Note: The anchor bolt is knocked into the ground at least 3-1/2".



H. Install overhead top beam (See Fig. 24).

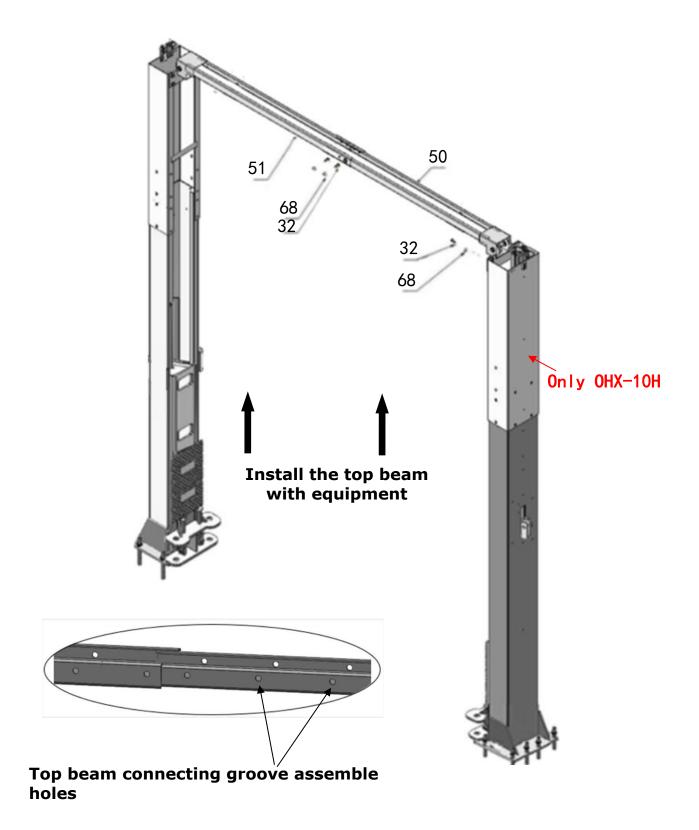


Fig.24

I. Installing the limit switch control bar and limit switch (See Fig. 25).

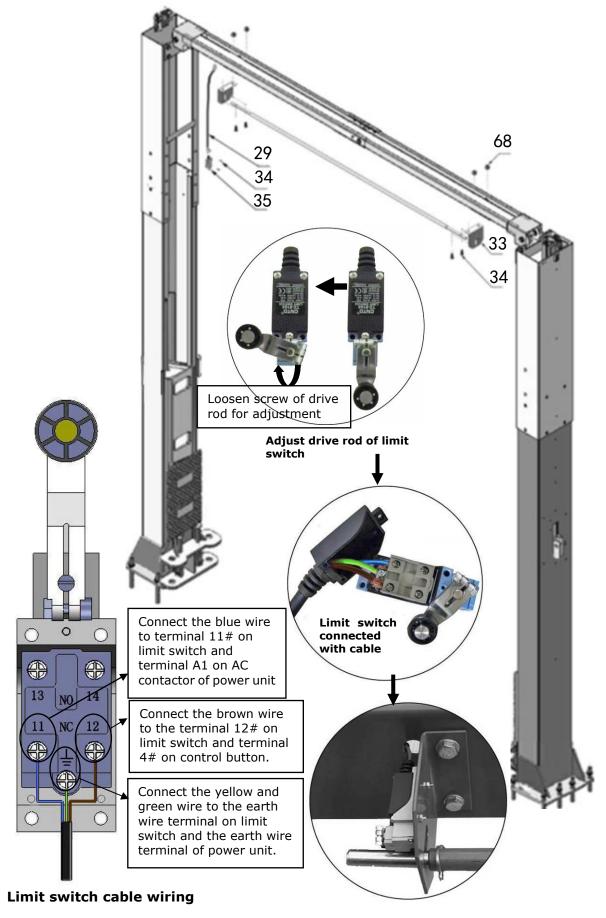


Fig. 25

I. Lift the carriages up and make them be locked at the same level (See Fig. 26).

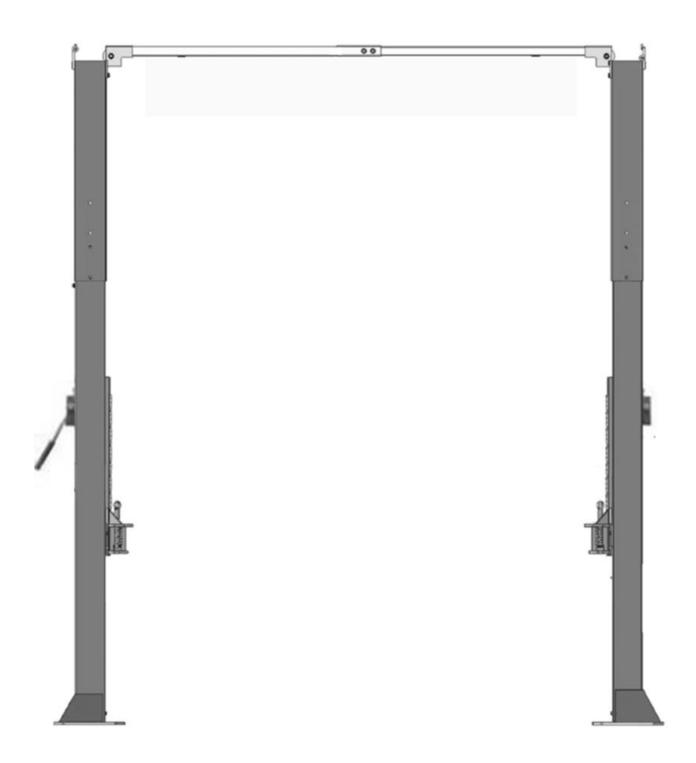
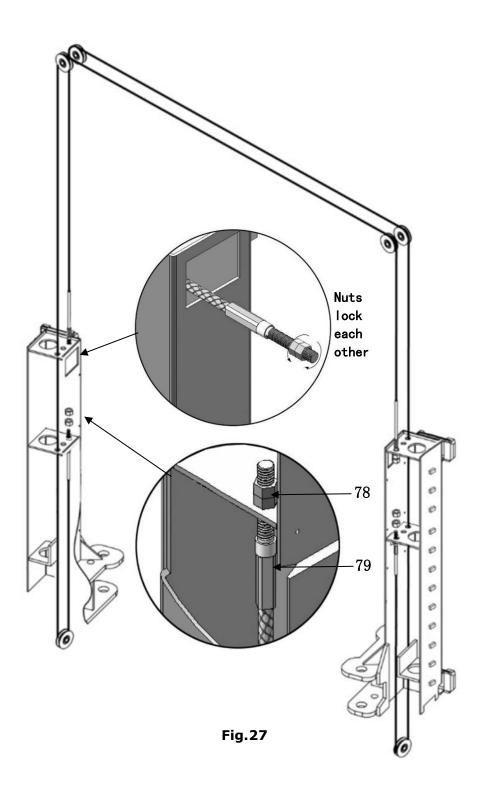


Fig.26

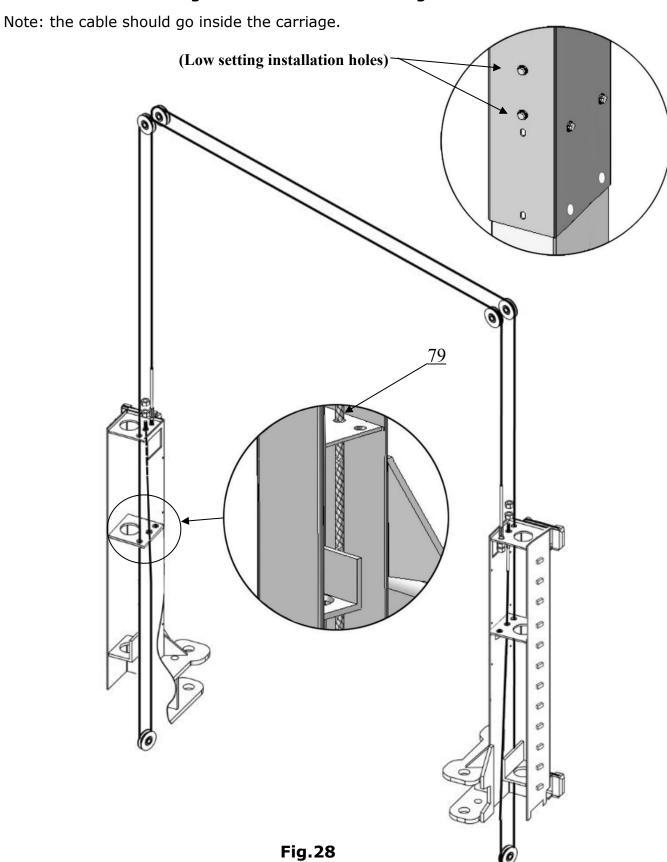
K. Install cables

1. OHX-10 cable connection.

Cables pass through the bottom of the carriages and be pulled out from the square hole of carriages, then screw the two cable nuts (See Fig. 27)

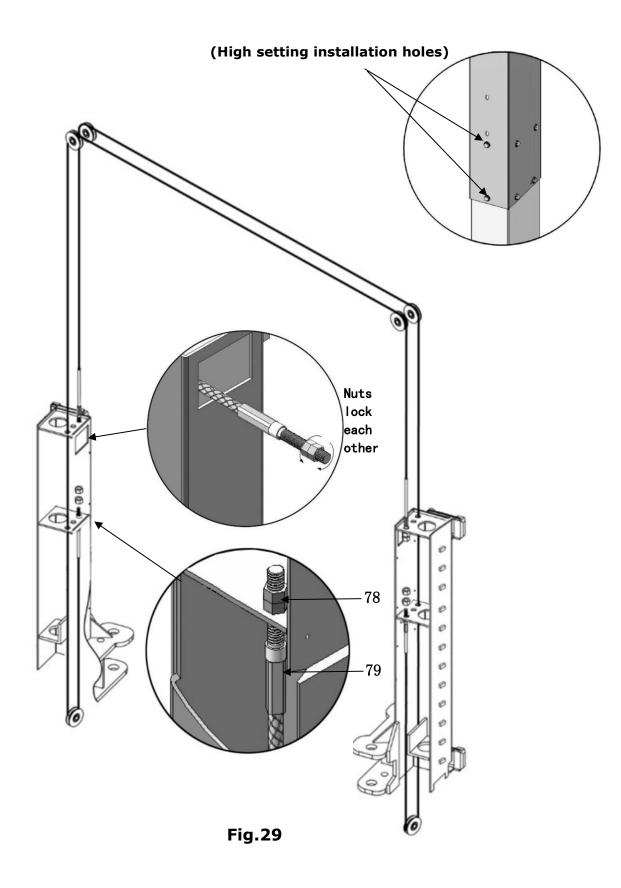


2. OHX-10H Low setting cable connection (See Fig. 28)



3. OHX-10H High setting cable connection

Cables pass through the bottom of the carriages and be pulled out from the square hole of carriages, then screw the two cable nuts (See Fig. 29).



L. Install oil hose and fitting

1. OHX-10 (See Fig. 30).

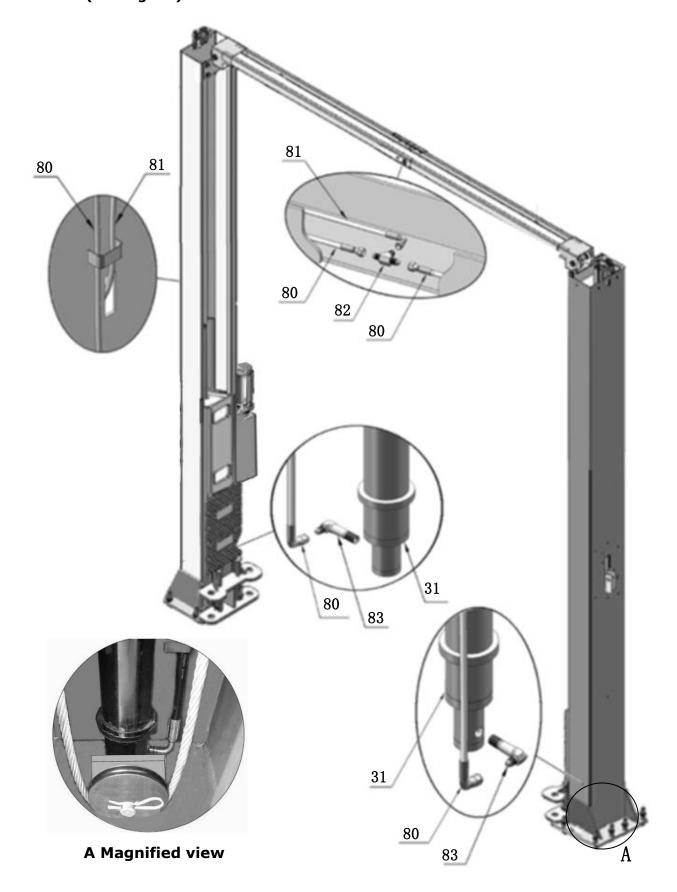


Fig.30

2. OHX-10H Oil hose Installation (See Fig. 31).

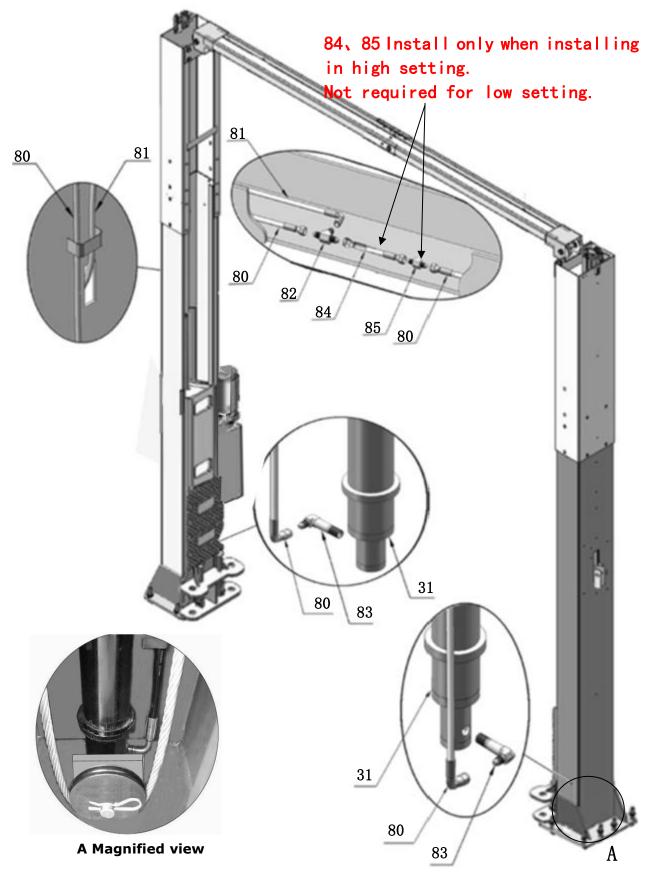


Fig.31

M. Install safety cable (See Fig. 32)

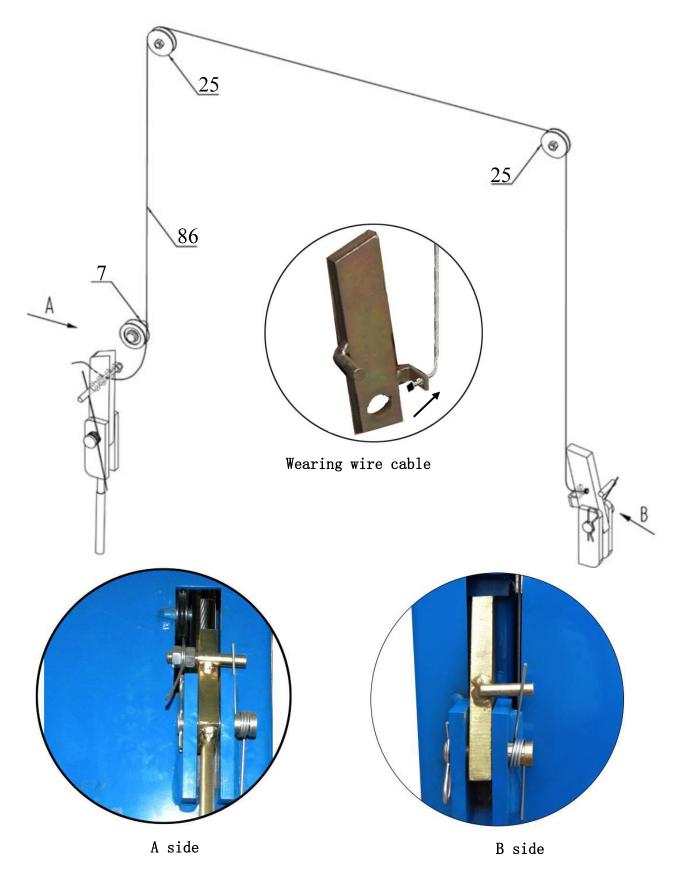
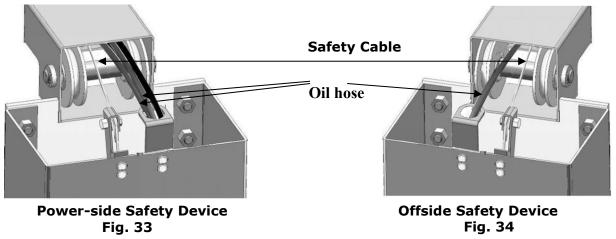


Fig.32

1. Note: Requirements and instructions for installation of oil hose and safety lock wire cable.

1. Install Oil Hose (both sides and safety lock).

Note: Don't cross the oil hose and safety cable (See Fig. 33, 34 & 35).



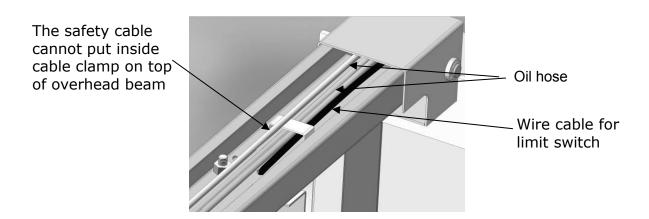
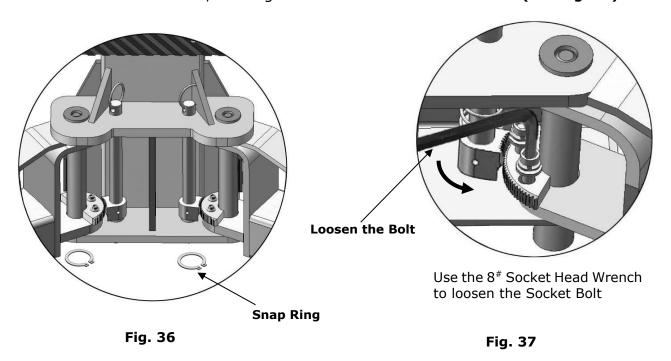


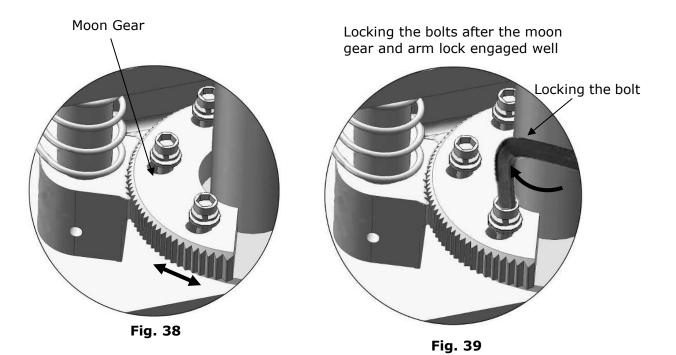
Fig.35

N. Install lifting arms and adjust the arm locks.

Install the lifting arms (See Fig. 36), lowing the carriages down to the lowest position, then use the $8^{\#}$ socket head wrench to loosen the socket bolt (See Fig. 37).

Adjust the arm lock as direction of arrow (See Fig. 38). Adjust moon gear and arm lock to make it to be meshed, then tighten the socket bolts of arm lock (See Fig. 39).





O. 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#.

P. Install electrical system

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

Note: 1. Install the limit switch well.

- 2. For the safety of operators, the power wiring must contact the floor well.
- 3. Pay attention to the direction of rotations when using three phase motors.

Single phase motor (See Fig. 40).

- 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. Terminal **4#** of control button is connected with terminals **A1** of AC contactor, Terminal **3#** of control button is connected with terminals **L1** of AC contactor.

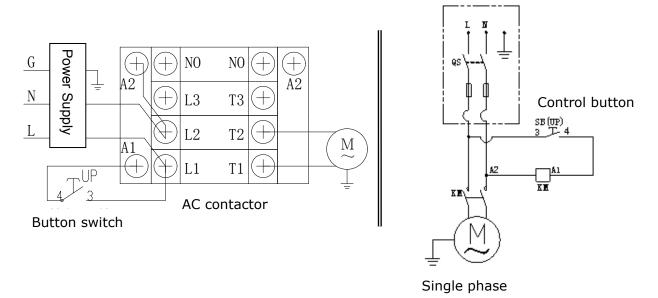


Fig. 40

- * Optional width extension kits installation guide:
- 1.1. OHX-10: oil hose, top beam installation. (Figure 41)

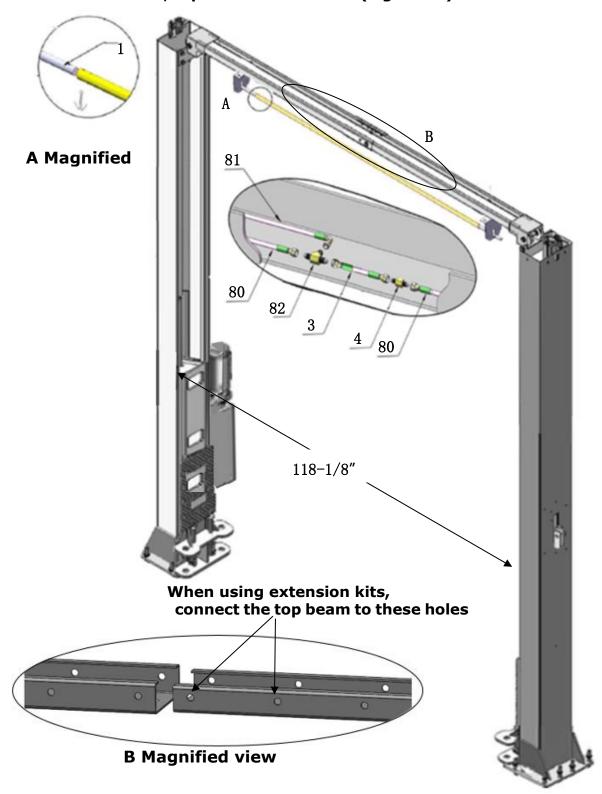
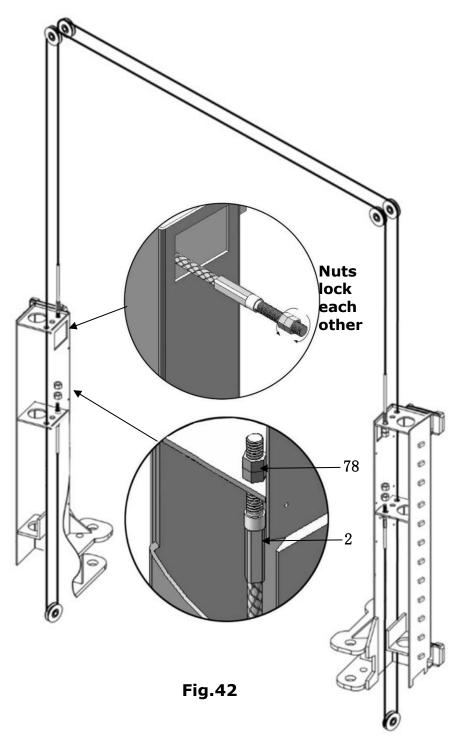


Fig.41

1.2. OHX-10: cable connection

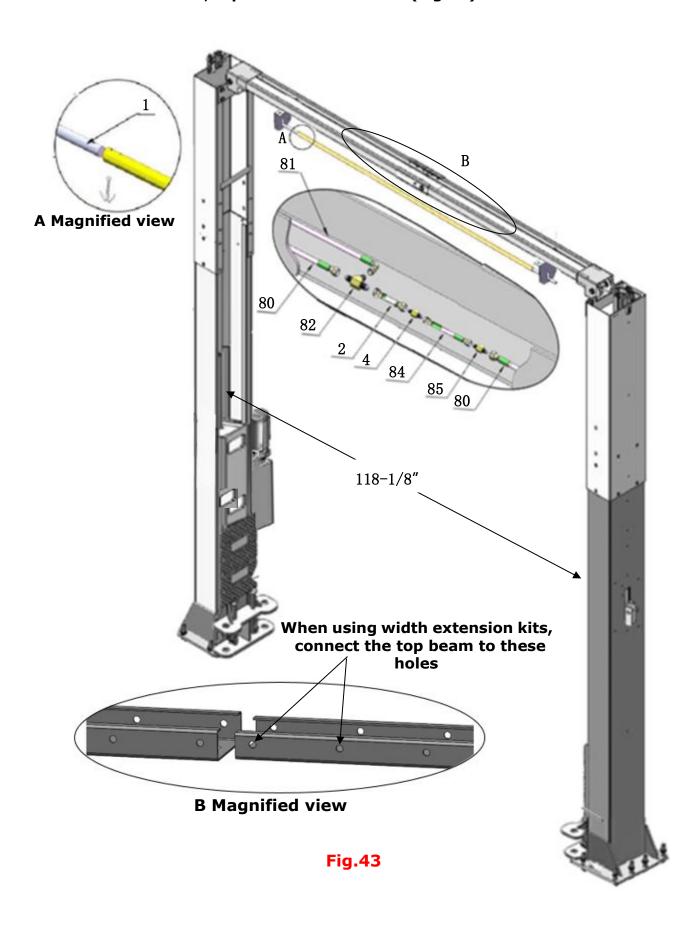
Cables pass through the bottom of the carriages and be pulled out from the square hole of carriages, then screw the two cable nuts (See Fig. 42).

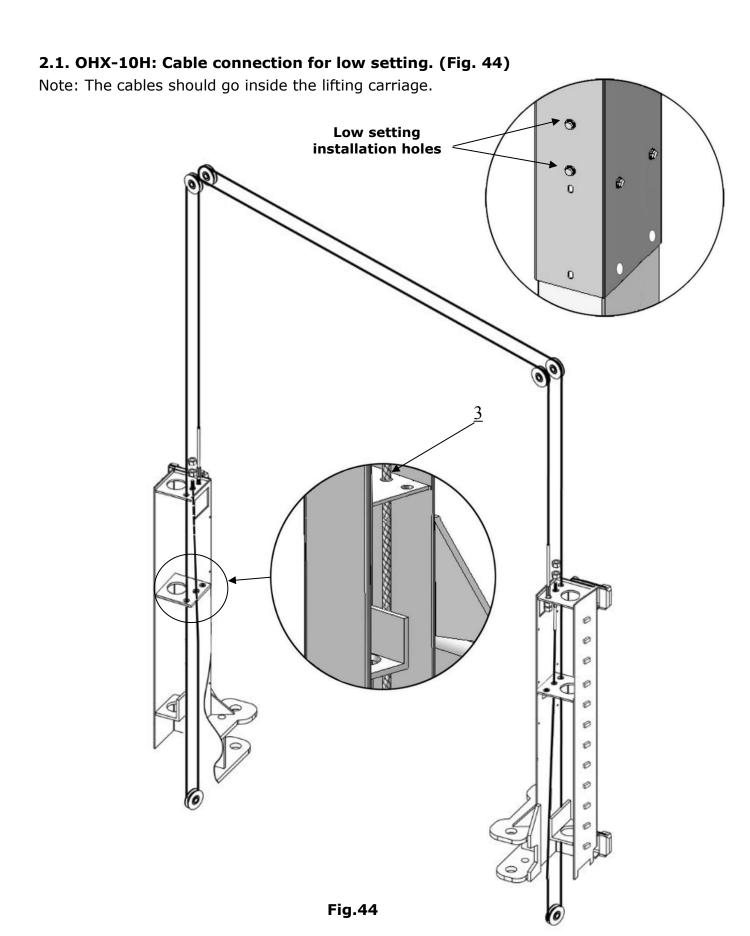


Optional parts list

Item	Part No.	Description	OHX-10 QTY
1	1102562008	Control connecting pin assy.	2
2	1002561009	Cable assy. φ9.52*9790mm	2
3	1002571011	Oil hose assy. 5/16"140mm	1
4	10620079	Straight fitting	1

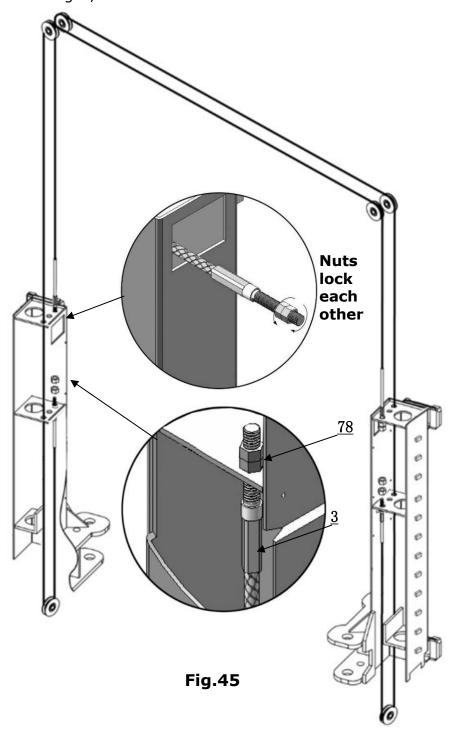
2. OHX-10H: oil hose, top beam installation. (Fig.43)





2. 2. OHX-10H: Cable connection for high setting (Fig. 45).

Cables pass through the bottom of the carriages and be pulled out from the square hole of carriages, then screw the two cable nuts.



Optional parts list

Item	Part No.	Description	OHX-10H QTY
1	1102562008	Control connecting pin assy.	2
2	1002571011	Oil hose assy. 5/16" *140mm (2 straight)	1
3	1002571012	Cable φ9.52*11010mm	2
4	10620079	Straight fitting	1

IV. EXPLODED VIEW

OHX-10

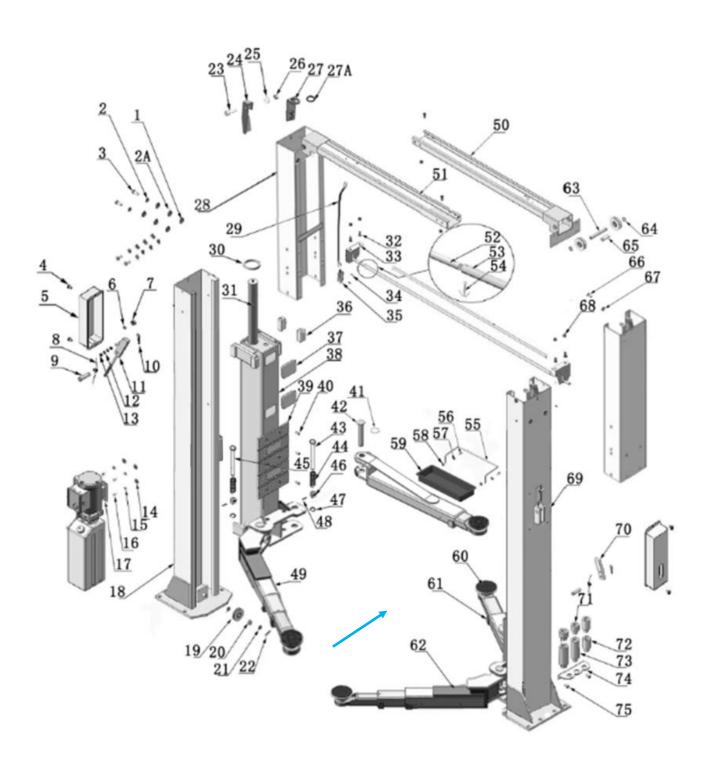


Fig. 46

OHX-10H

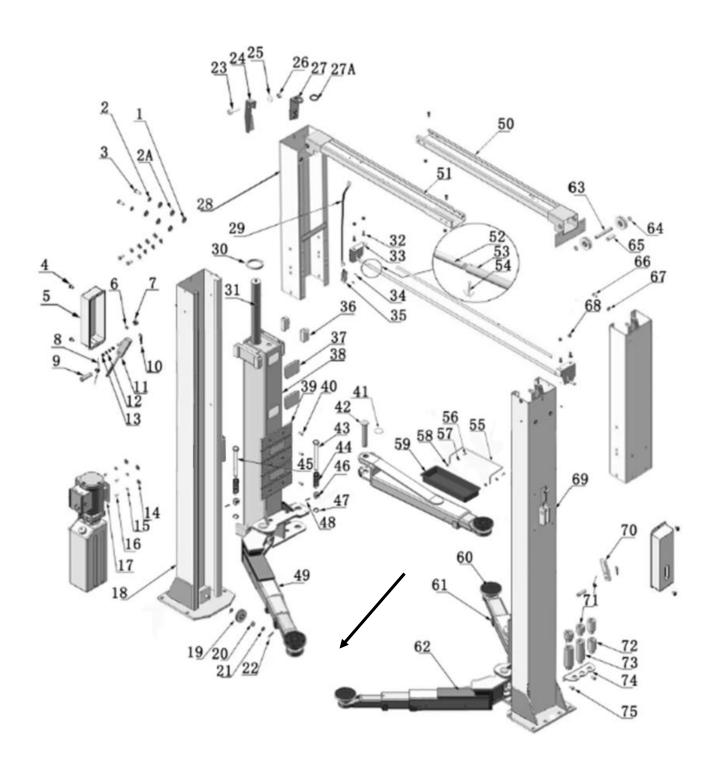


Fig. 47

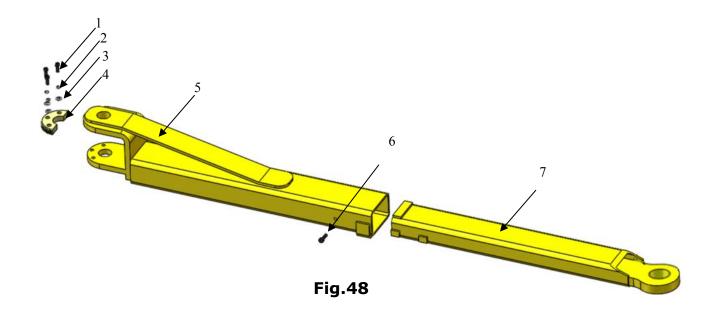
IX. PARTS LIST FOR OHX-10 and OHX-10H

Thom	Part No.	Decarinties	OHX-10	OHX-10H	
Item	Part No.	Description	QTY		
1	10206017	Hex Bolt M10*20	0	20	
2	10209039	φ10 Washer	12	32	
2A	10209022	φ10 Washer	12	52	
3	10209021	Hex Nut M10	0	20	
4	10209009	Cup Head Bolt M6*8	4	4	
5	10209008	Safety device protective cover	2	2	
6	10209010	Snap ring (φ10)	1	1	
7	10209049	Plastic pulley (Black)	1	1	
8	10209007	Safety Spring	2	2	
9	11206002	Safety lock pin	2	2	
10	10209012	Hair pin	8	8	
11	11209013	Power-side Safety Lock	1	1	
12	10206006	φ12 Washer	2	2	
13	10206023A	Hex Nut M12	2	2	
14	10209005	Self-locking nut (M8)	8	8	
15	10209004	Rubber ring φ8*20*3	4	4	
16	10209003	Hex bolt M8*25	4	4	
17	071101	Power unit	1	1	
18	1102561001A	Power-side column	1	1	
19	11206020	Pulley	6	6	
20	10209057B	Bronze bush	6	6	
21	10209128	Washer φ20	8	8	
22	10209012	Hair pin φ3.2	4	4	
23	10209046	M10*35 Hex Bolt	2	2	
24	11206008C	Pulley support bracket	2	2	
25	10206009	Plastic pulley (white)	2	2	
26	10209056	Self-locking Nut M10	2	2	
27	1102561006	Oil hose support bracket	2	2	
27A	1061K074	Protective coil	2	2	
28	1102561003A	Outer column	0	2	
20	1002561003A	Outer column	1	0	
29	1002571003	Cable	0	1	
30	10209111	Cylinder guard coil	2	2	
	11217056	Cylinder φασία con	2	0	
31	1002576001	Cylinderφ50*1905	0	2	
32	10206024	M12*25 Hex bolt	14	14	
33	11206042	Control stick fixing block	2	2	
34	10206011	Cup head bolt M5*12	2	2	
35	10206011	Limit switch	1	1	
36	10209015	Slider block	16	16	
37	10209016	Carriage plastic cover	4	4	
38	1102563000A	Carriage	2	2	
39	10209018	Protection rubber	2	2	
40	10209019	M6*16 Screw	12	12	
41	10520023	Snap ring ϕ 38	4	4	
42	11217168	Lift arm pin	4	4	
43	11206046A	Arm lock handle (Left)	2	2	
		` '			
44	10206050A	Spring	4	4	

Item	Part No.	Description	OHX-10	OHX-10H
45	11206046	Arm lock handle (Right)	2	2
46	10217044	Arm lock	4	4
47	10206032	Snap ring φ25	4	4
48	10206036	Hair pin φ6*40	4	4
49	10279010	Right front arm assy.	1	1
50	1102562000B	Top beam 2	1	1
51	1102562000A	Top beam 1	1	1
52	11206025C	Control bar contacting pin	2	2
53	11206129	Limit switch control bar L=2400mm	1	1
54	10201005	Split Pin (φ4*50)	2	2
55	11206154	Rear guard	2	2
56	10201002	M8*16 Hex bolt	4	4
57	10209034	φ8 Lock Washer	4	4
58	10209033	φ8 Washer	4	4
59	10206156	Tool tray	2	2
60	10201046A	Rubber pad assy.	4	4
60A	10420138	Socket bolt M6*16	4	4
60B	10209134	Rubber Pad	4	4
60C	11680030C	Rubber pad pallet	4	4
61	10279011	Rear arm assy.	2	2
62	10279009	Left front arm assy.	1	1
63	11206021	Pulley pin	2	2
64	10206019	Snap ring φ19	4	4
65	11206022	Pulley shaft limit cap	2	2
66	10217013	M6*20 Hex bolt	8	8
67	10420018	M6 Self-locking Nut	8	8
68	10206023	M12 Self-locking Nut	18	18
69	1102561002A	Offside column	1	1
70	11211013	Offside safety device	1	1
71	11209051B	Stackable adaptor (1.5 ")	4	4
72	11209052B	Stackable adaptor (2.5 ")	4	4
73	11209053B	Stackable adaptor (5 ")	4	4
74	11209054A	Stackable adaptor bracket	2	2
75	10680003	M8*12 Hex bolt	4	4
76	10201140	Anchor bolt 3/4*6-1/2	12	12
77	10201090	Shim (1mm)	10	10
77	10620065	Shim (2mm)	10	10
78	10209066	M16 Hex Nut	4	4
79	1002561004	Cable assy. φ9.52*9640mm	2	0
79	1002571005	Cable assy. φ9.52*10860mm	0	2
80	1002561005	Oil hose assy. L=5150mm	2	0
80	1002571002	Oil hose assy. L=5460mm	0	2
81	1002561001	Oil hose assy. L=4160mm	1	0
81	1002571001	Oil hose assy. L=4490mm	0	1
82	10211016	T fitting	1	1
83	10211017	90° fitting for cylinder	2	2
84	1002571009	Oil hose assy. 5/16*550mm	0	1
85	10620079	Straight fitting	0	1

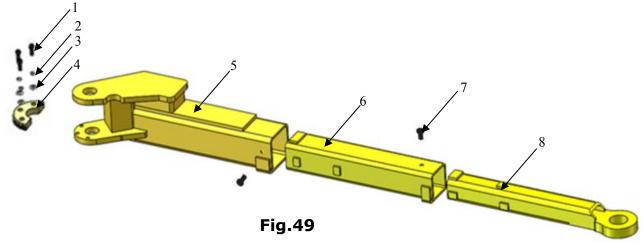
Item	Part No.	Description	OHX-10	OHX-10H
86	1002561003	Wire cable assy. L=6980mm	1	0
86	1002571004	Wire cable assy. L=8225mm	0	1
87	1102561500	Parts box1	1	0
87	1102571500	Parts box1	0	1
88	1102561501	Parts box2	1	0
88	1102571501	Parts box2	0	1
89	10209060	90° fitting for power unit	1	1

4.1 Rear arm (10279011) explosive view



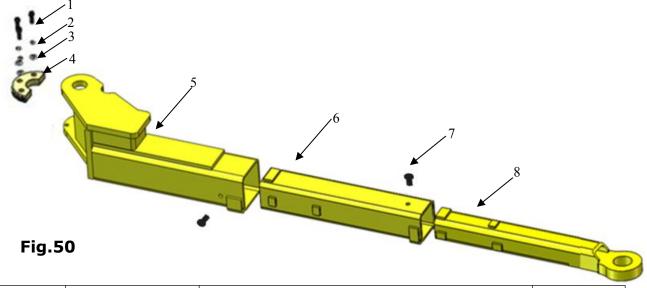
Item	Part #	Description	QTY
1	10206048	Socket bolt M10*30	6
2	10209039	Lock washer	6
3	10209022	Washer	6
4	11206049	Moon gear	2
5	11206192	Outer rear arm assy.	2
6	10201149	screw 8*12	2
7	11206193	Inner rear arm assy.	2

4.2 Left front arm (10279009) explosive view



Item	Part #	Description	QTY
1	10206048	Socket bolt M10*30	3
2	10209039	Lock Washer	3
3	10209022	Washer	3
4	11206049	Moon gear	1
5	11206183	Outer front left arm	1
6	11206189	Mid front left arm	1
7	10201149	Cup head bolt	2
8	11201049A	Inner front arm assy.	1

4.3 Right front arm (10279010) explosive view



No	Part No.	Description	QTY
1	10206048	Socket bolt	3
2	10209039	Lock Washer	3
3	10209022	Washer	3
4	11206049	Moon gear	1
5	11206182	Outer front right arm	1
6	11206189	Mid front arm	1
7	10201149	Cup head bolt	2
8	11201049A	Inner front arm	1

4.4 Cylinder (10209014/1002576001) explosive view

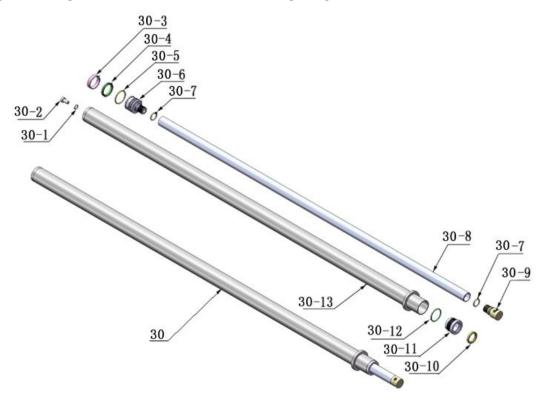


Fig. 51

Part list for cylinder

Item	Part #	Description	QTY
30-1	10209069	O-ring	2
30-2	10209070	Bleeding Plug	2
30-3	10209071	Support Ring	2
30-4	10209072	Y-ring	2
30-5	10209073	O-ring	2
30-6	11209074	Piston	2
30-7	10209075	O-Ring	4
30-8	11209076	OHX-10 piston rod	2
30-6	1102576002	OHX-10H piston rod	2
30-9	11209077	Piston Rod Fitting	2
30-10	10209078	Dust wing	2
30-11	11209079	cover	2
30-12	10209080	O ring	2
30-13	11209081	OHX-10 Cylinder weldment	2
30-13	1102576003	OHX-10H Cylinder weldment	2

5. Power unit (071101) explosive view

single phase,220V/60HZ

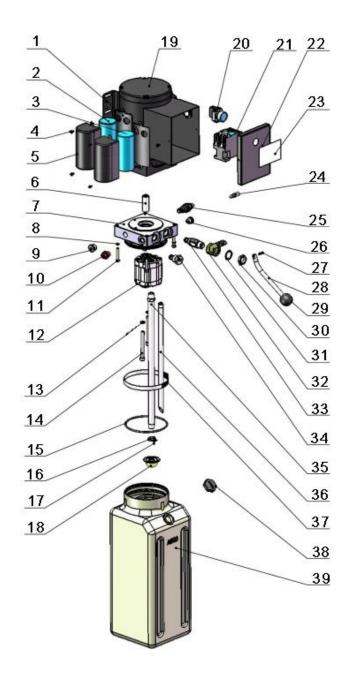


Fig. 52

Part list of power unit (220V/60HZ/single phase)

Item	Part No.	Description	QTY
1	81400180	Rubber pad	2
2	81400250	Starting capacitor	1
3	81400200	Running capacitor	1
4	10420148	Hex nut with washer	4
5	81400066	Capacitor cover	2
6	81400363	Motor connecting shaft	1
7	80101013	Manifold block	1
8	10209149	Spring washer	4
9	81400276	Inner iron plug	1
10	81400259	Plastic plug	1
11	85090142	Hex nut	4
12	81400280	Gear pump	1
13	10209034	washer	2
14	81400295	Hex nut	2
15	81400365	O-ring	1
16	10209152	Belt	1
17	85090167	Magnet	1
18	81400290	Filter net	1
19	81400413	Steel plate motor	1
20	10420070	Button switch	1
21	41030055	AC contractor	1
22	81400528	Motor wiring cover	1
23	71111216	AMGO plate	1
24	81400560	Throttle valve	1
25	81400266	Relief valve	1
26	81400284	Hex iron plug	1
27	10720118	Elastic shaft pin	1
28	81400451	Release handle	1
29	10209020	Handle plastic ball	1
30	81400421	Release valve nut	1
31	81400422	Self-locking washer	1
32	81400447	Valve seat(short)	1
33	81400567	Release valve	1
34	81400560	Check valve	1
35	81400288	Oil suction hose	1
36	81400289	Oil return hose	1
37	81400364	Steel hoop	1
38	81400263	Oil tank cap	1
39	81400275	Oil tank	1

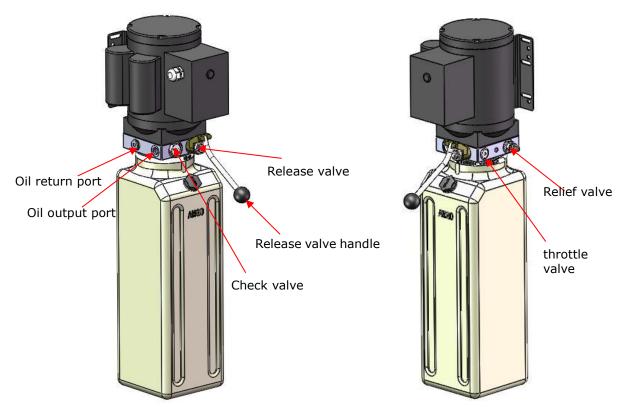


Fig. 53

V. TEST RUN

1. Adjust synchronous cable (See Fig. 54)

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 head.

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

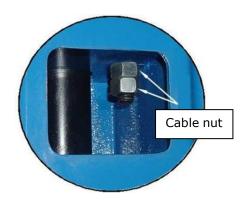


Fig. 54

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. 55).

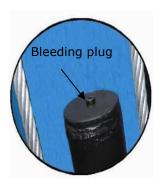


Fig. 55

4. Adjust the lower speed

You can adjust the lower speed of the lift if needing: turn the throttle valve clockwise to decrease the lower speed, or counterclockwise to increase the lower speed.

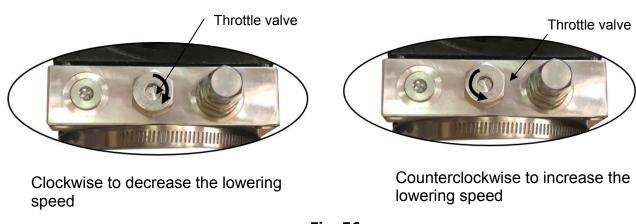
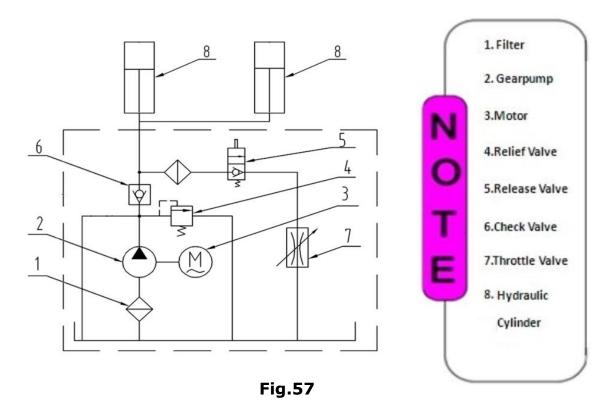


Fig. 56

5. Test with loading

After finishing the above adjustment, test running the lift with loading. 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.

Hydraulic schematic



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 contact the vehicle's lifting point at the same time 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 N.M;
- 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 plumpness.
- 4. Check Rubber Pads and replace as necessary.
- 5. Check Safety device and make sure proper condition.

VIII.TROUBLE SHOOTING

TROUBLE	CAUSE	REMEDY
	1. Button does not work	1. Replace button
	2. Wiring connections are not in good	2. Repair all wiring connections
Motor does not	condition	
run	3. Motor burned out	3. Repair or replace motor
	4. AC contactor burned out	4. Replace AC Contactor
	Motor runs in reverse rotation	1. Reverse two power wire
	2. Gear Pump out of operation	2. Repair or replace
Motor runs but	3. Release Valve in damage	3. Repair or replace
the lift is not	4. Relief Valve or Check Valve in damage	4. Repair or replace
raised	5. Low oil level	5. Fill tank
	Release Valve out of work	
Lift does not	2. Relief Valve or Check Valve leakage	Repair or replace
stay up	3. Cylinder or Fittings leaks	
	1. Oil line is jammed	1. Clean the oil line
	2. Motor running on low voltage	Check Electrical System
	3. Oil mixed with air	3. Fill tank
Lift raises slowly	4. Gear Pump leaks	4. Replace Pump
	5. Overload lifting	5. Check load
	or everious many	or enesk load
	1. Safety device are in activated	1. Release the safeties
	2. Release Valve in damage	2. Repair or replace
Lift cannot lower	3. Safety cable broken	3. Replace
	4. Oil system is jammed	4. Clean the oil system

IX. Lift disposal.

When the car lift cannot meet the requirements for normal use and needs to be disposed, it should follow local laws and regulations.



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