



WEAVER
E Q U I P M E N T

W9F-3D Baseplate Two Post Lift

Please read this manual before operation

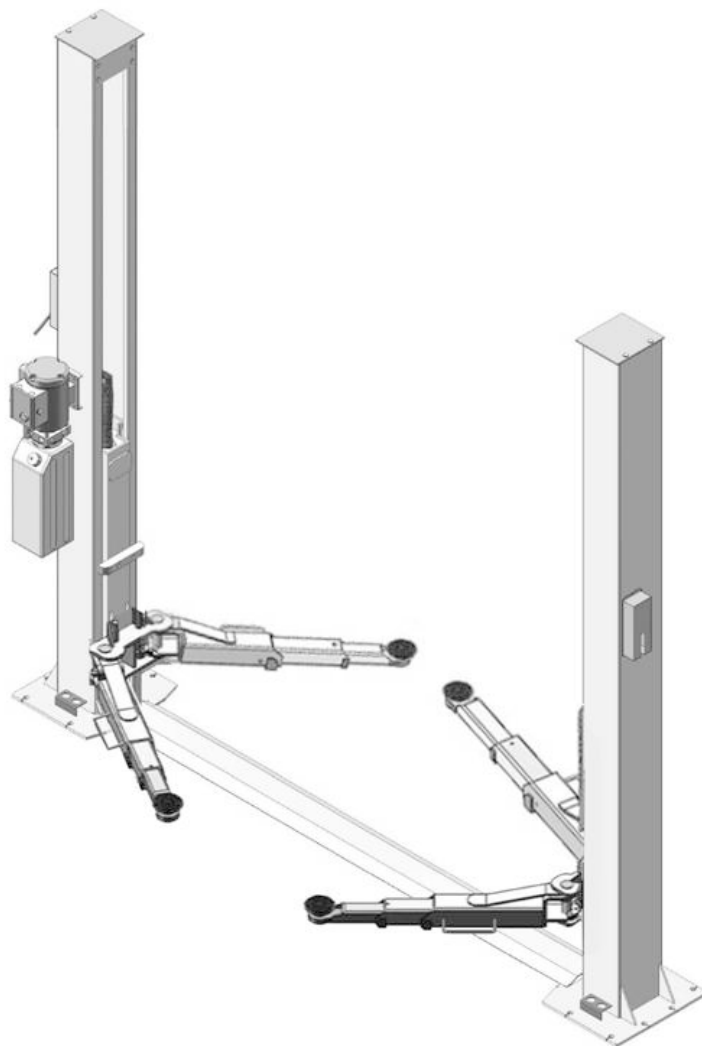
WEAVER

LIFT



W9F-3D Installation & Operation Manual

9000 lb. Capacity Baseplate
Super-Symmetric Two Post Lift



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I. PRODUCT FEATURES AND SPECIFICATIONS

FLOORPLATE CHAIN-DRIVE TWO POST LIFT

Model W9F-3D (See Fig. 1)

- Compact Floor-plate design
- Dual hydraulic cylinders, designed and made as ANSI standards, with imported oil seal in cylinder
- Self- lubricating UHMW Polyethylene sliders and bronze bush
- Single-point safety release, and dual safety design
- 4pcs of 3-stages arms with stackable rubber pads.

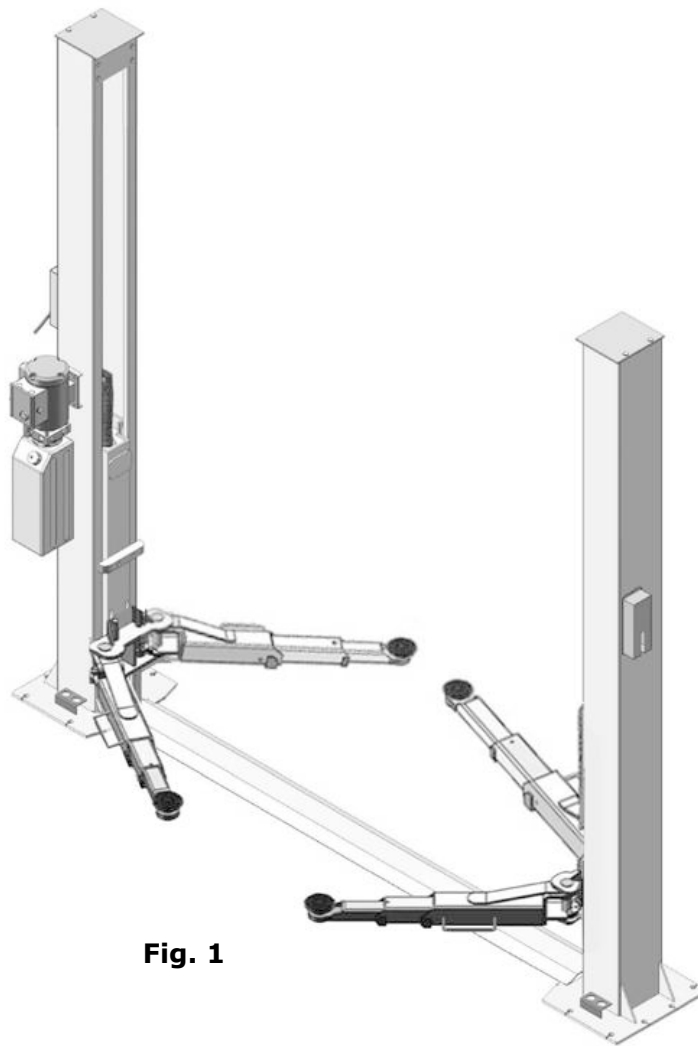


Fig. 1

MODEL W9F-3D SPECIFICATIONS

Model	Lifting Capacity	Lifting Time	Lifting Height	Overall Height	Overall Width	Minimum Pad Height	Motor
W9F-3D	4000kg	49S	1940-2169mm	2841mm	3460mm	90-319mm	2.0 HP

For Model W9F-3D

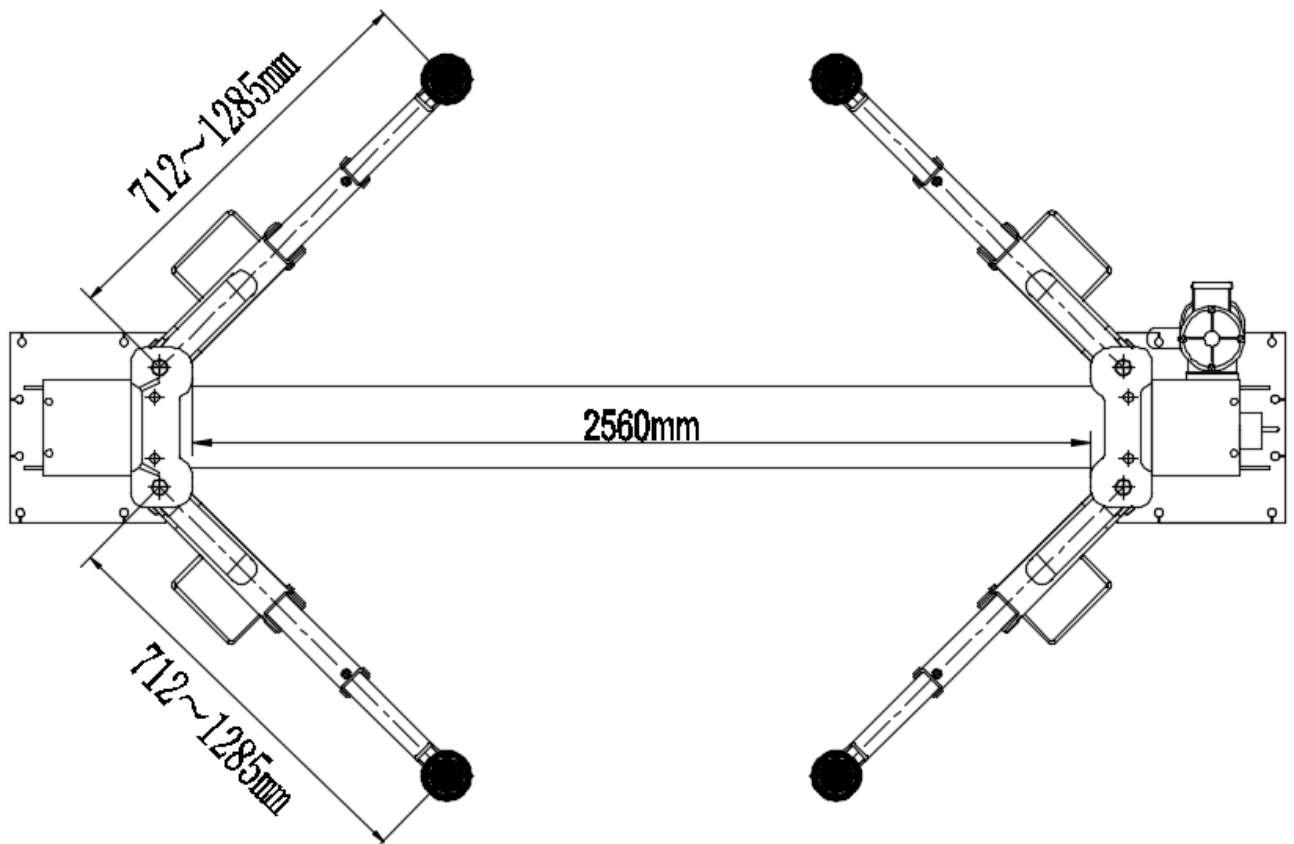


Fig. 2

II. INSTALLATION REQUIREMENT

A. TOOLS REQUIRED

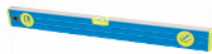
- ✓ Rotary Hammer Drill ($\Phi 19$)



- ✓ 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 (6#)



- ✓ Lock Wrench



Fig. 3

B. Equipment storage and installation requirements.

The equipment should be stored or installed in a shady, normal temperature, ventilated and dry place.

C. The equipment should be unload and transfer by forklift.

Fig.4

D. SPECIFICATIONS OF CONCRETE (See Fig. 5).

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 150mm 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.

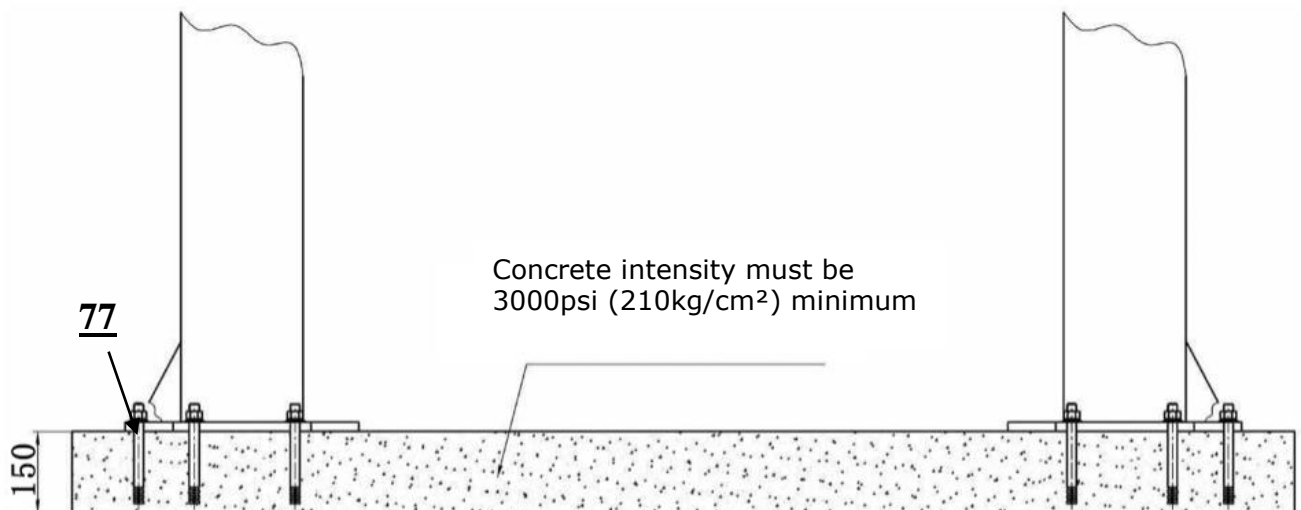


Fig. 5

E. POWER SUPPLY

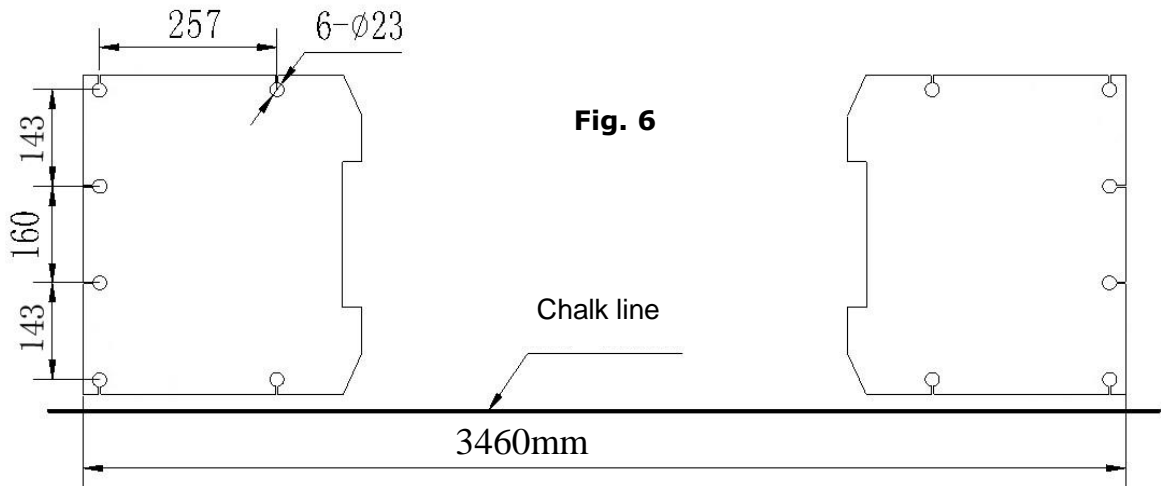
The electrical source must be 2.0HP minimum. The source cable size must be 2.5mm² and in good condition of contacting with floor.

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 baseplate (See Fig. 6).



C. Check the parts before assembly.

1. Packaged lift and hydraulic power unit (See Fig. 7).



Fig. 7

2. Move the lift aside with 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. 8).

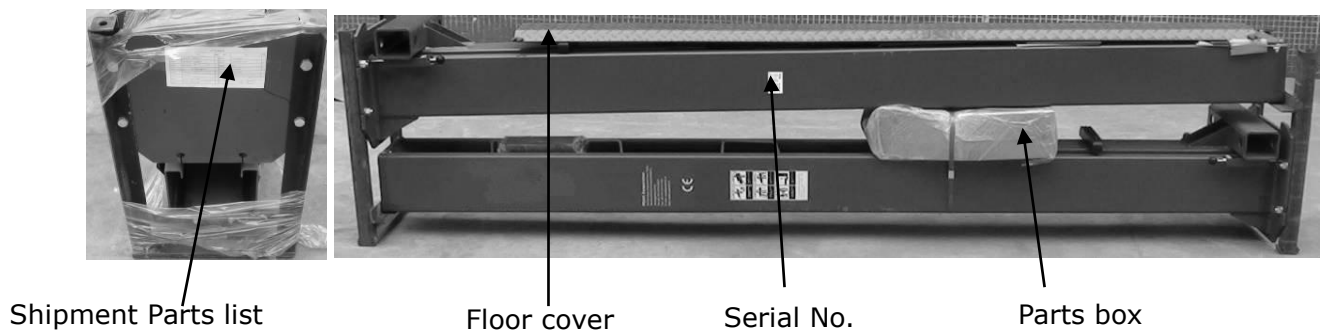


Fig.8

3. Loosen 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.
(See Fig. 9, Fig. 10).

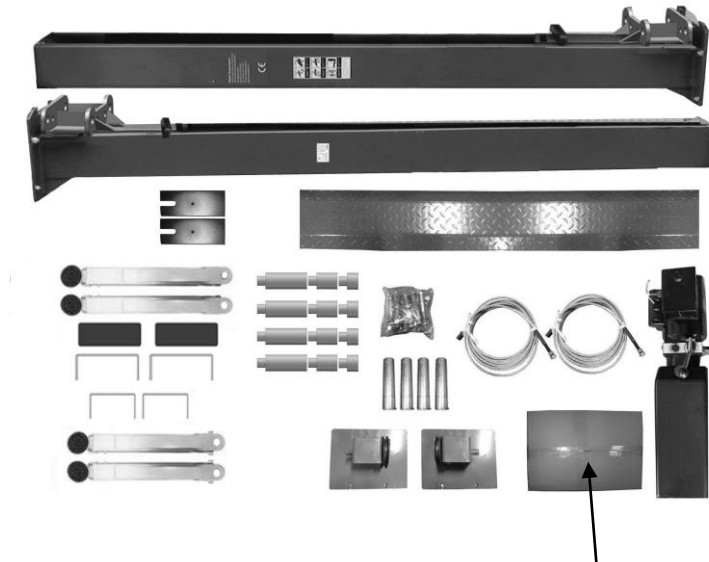


Fig. 9

79



Fig. 10

Parts in the parts box (42A)

5. Open the carton of parts and check the parts according to parts box list
(See Fig. 11).

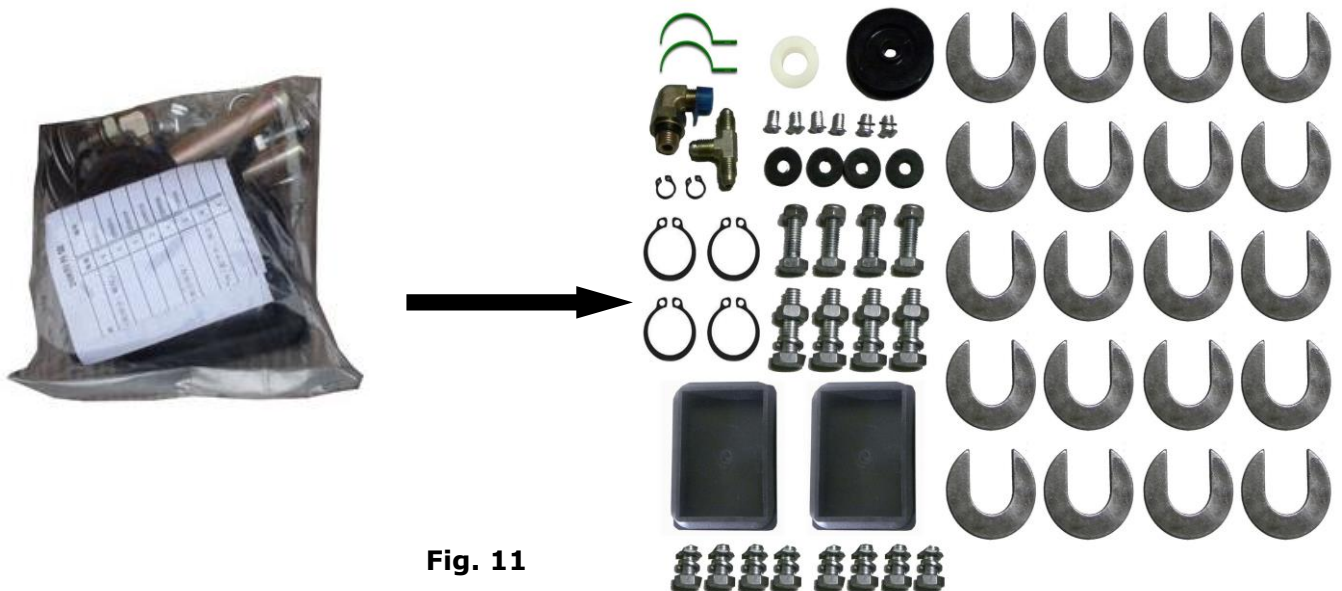
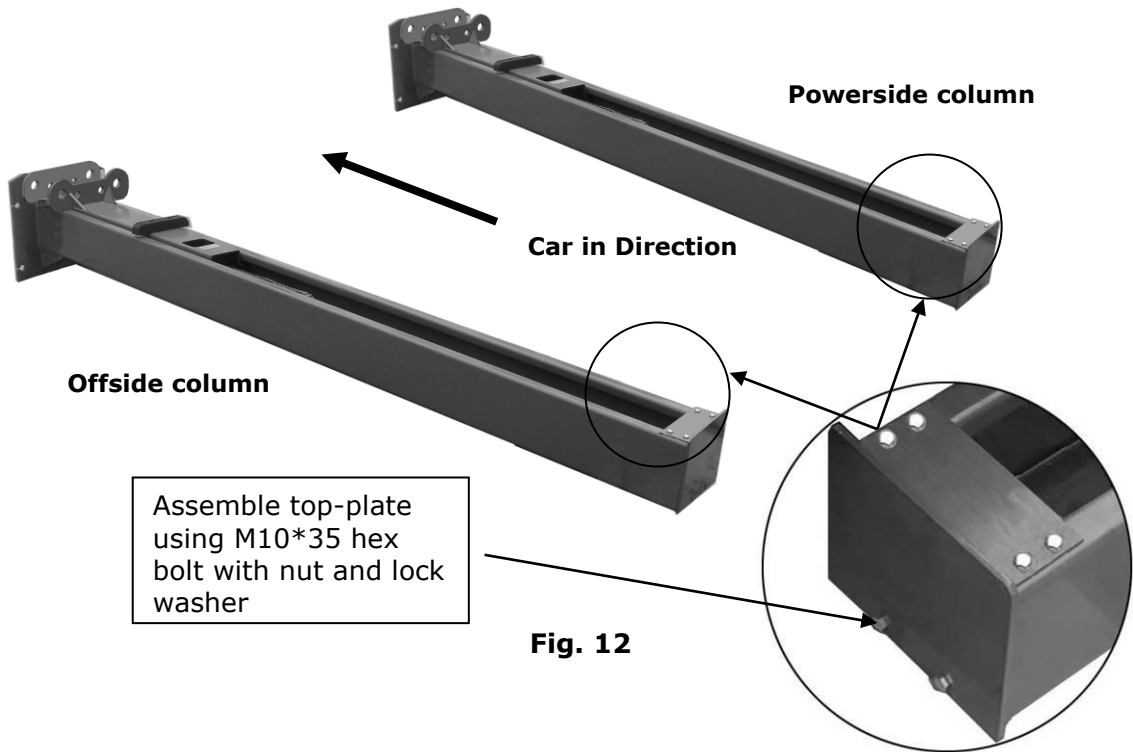


Fig. 11

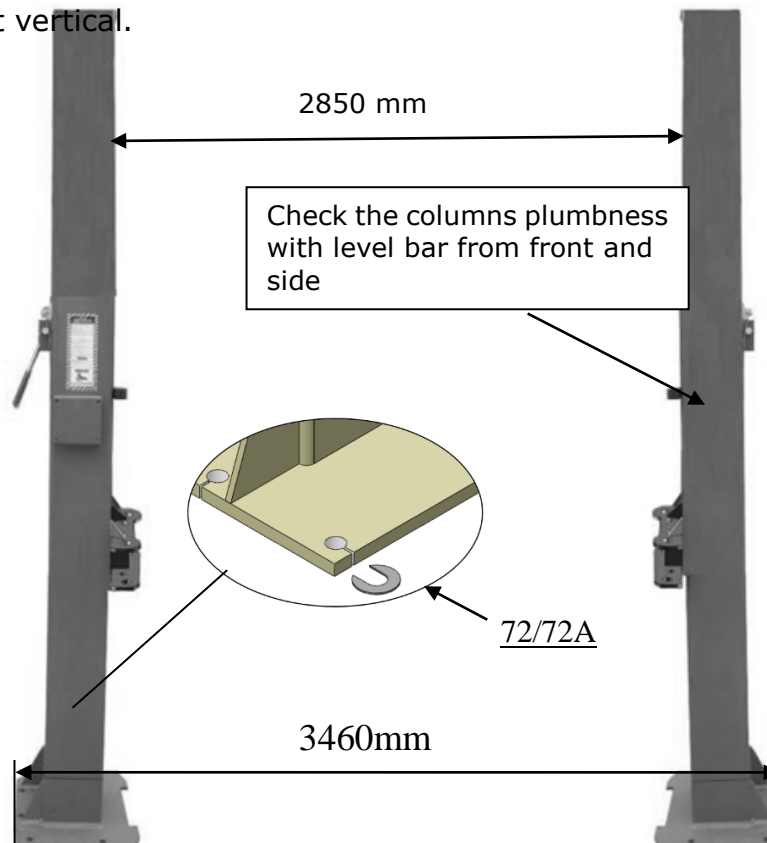
D. Position powerside columns

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. 12).



E. Position columns (See Fig. 13)

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



F. Fix anchor bolts

1. Prepare anchor bolts (See Fig. 14).

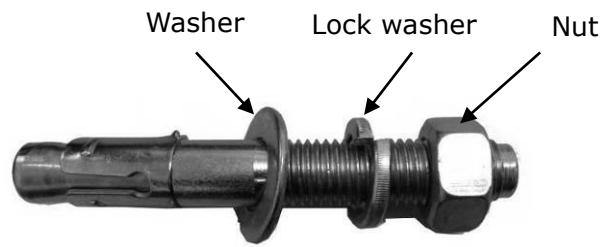


Fig.14

2. Using the prescribed rotary hammer drill, and drill all the anchor holes and install the anchor bolts. Then tighten the anchor bolts (See Fig. 15).

Note: Torque of Anchors is 150N.m .Minimum embedment of Anchors is 110mm.

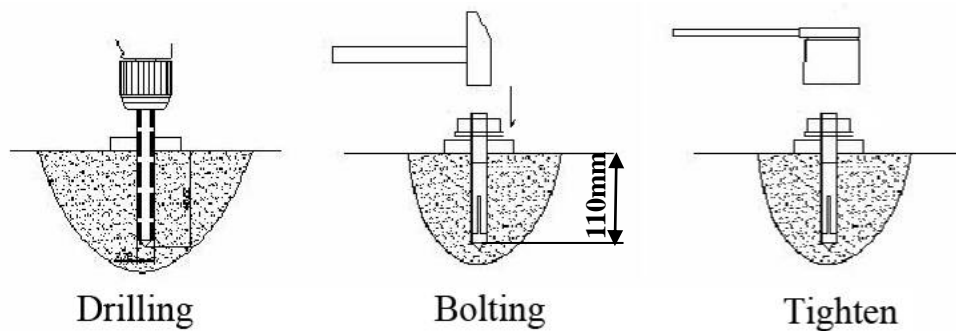


Fig.15

G. Lift the carriages up by hand and make them be locked at the same level (See Fig. 16).

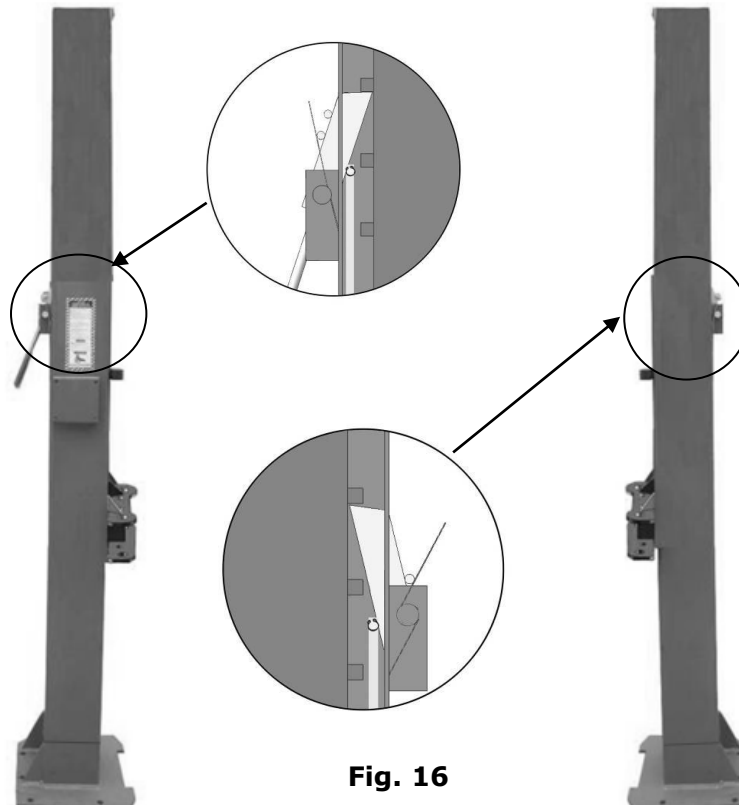


Fig. 16

H. Install cable (See Fig. 17)

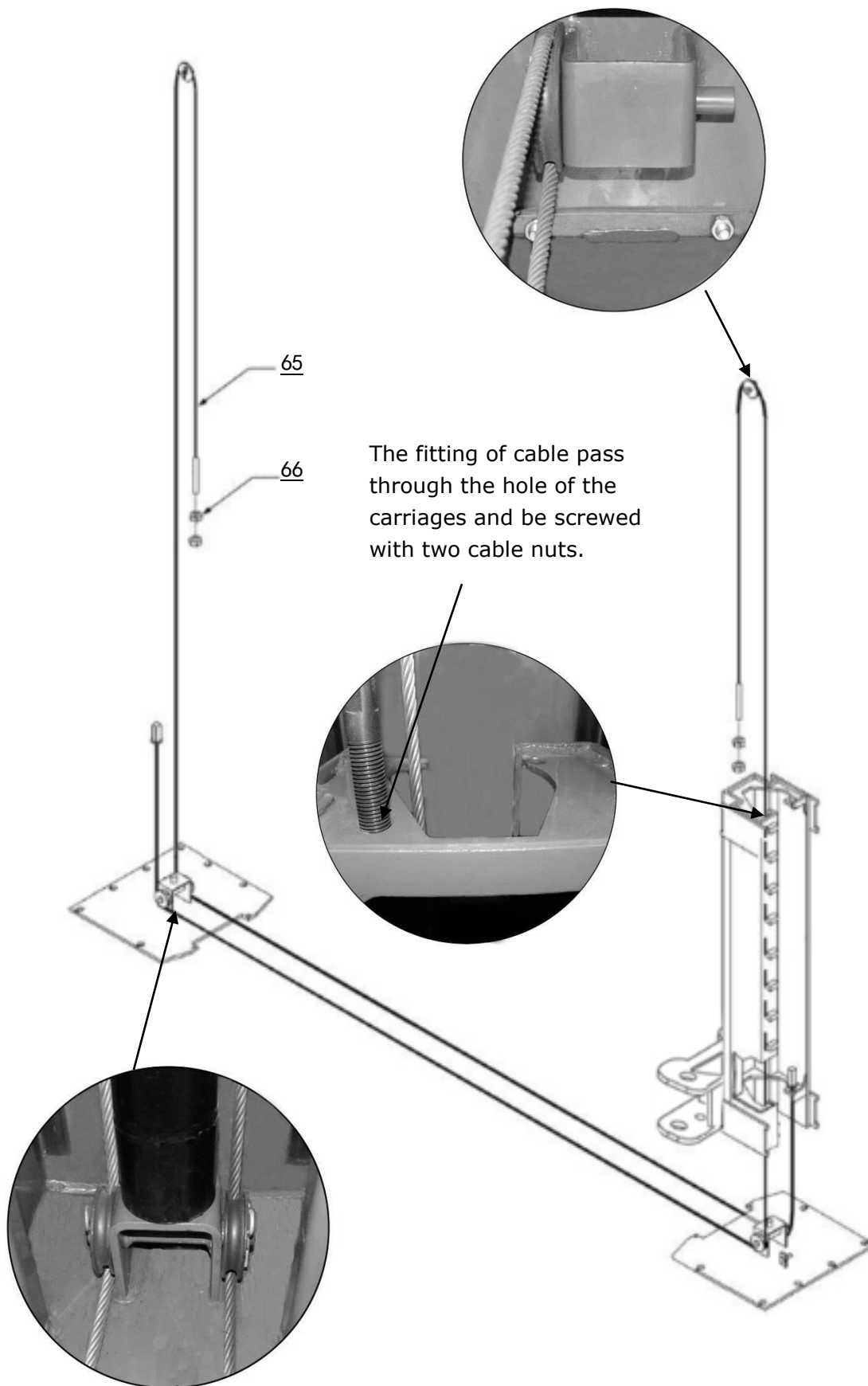


Fig. 17

I. Assembly oil hose assy. (See Fig. 18).

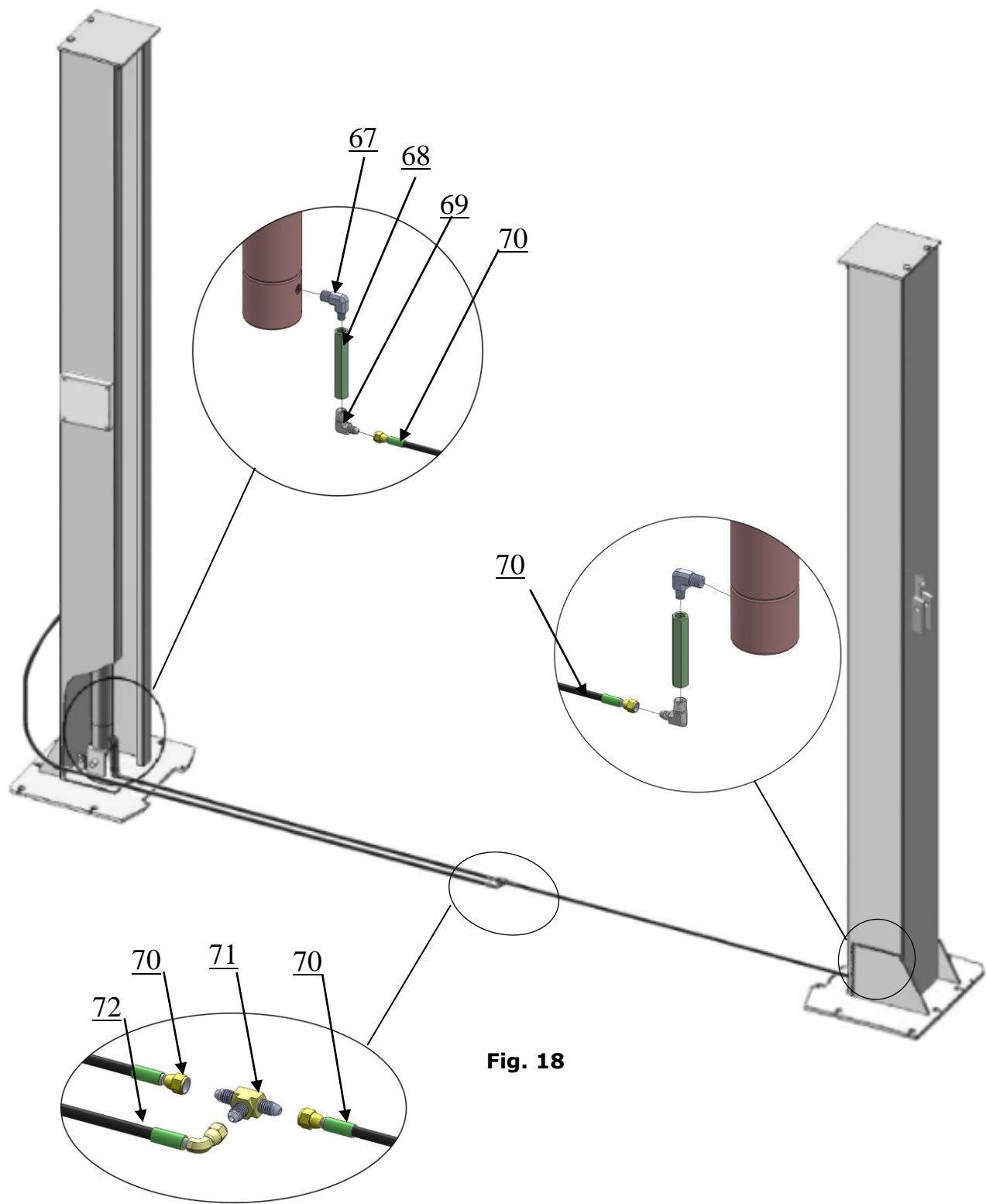


Fig. 18

J. Install hydraulic power unit and oil hose assy. (See Fig. 19).

Note: Make sure the tighten the fitting for oil hose and power unit to prevent oil leakage. Fix the power unit oil hose with retainer.

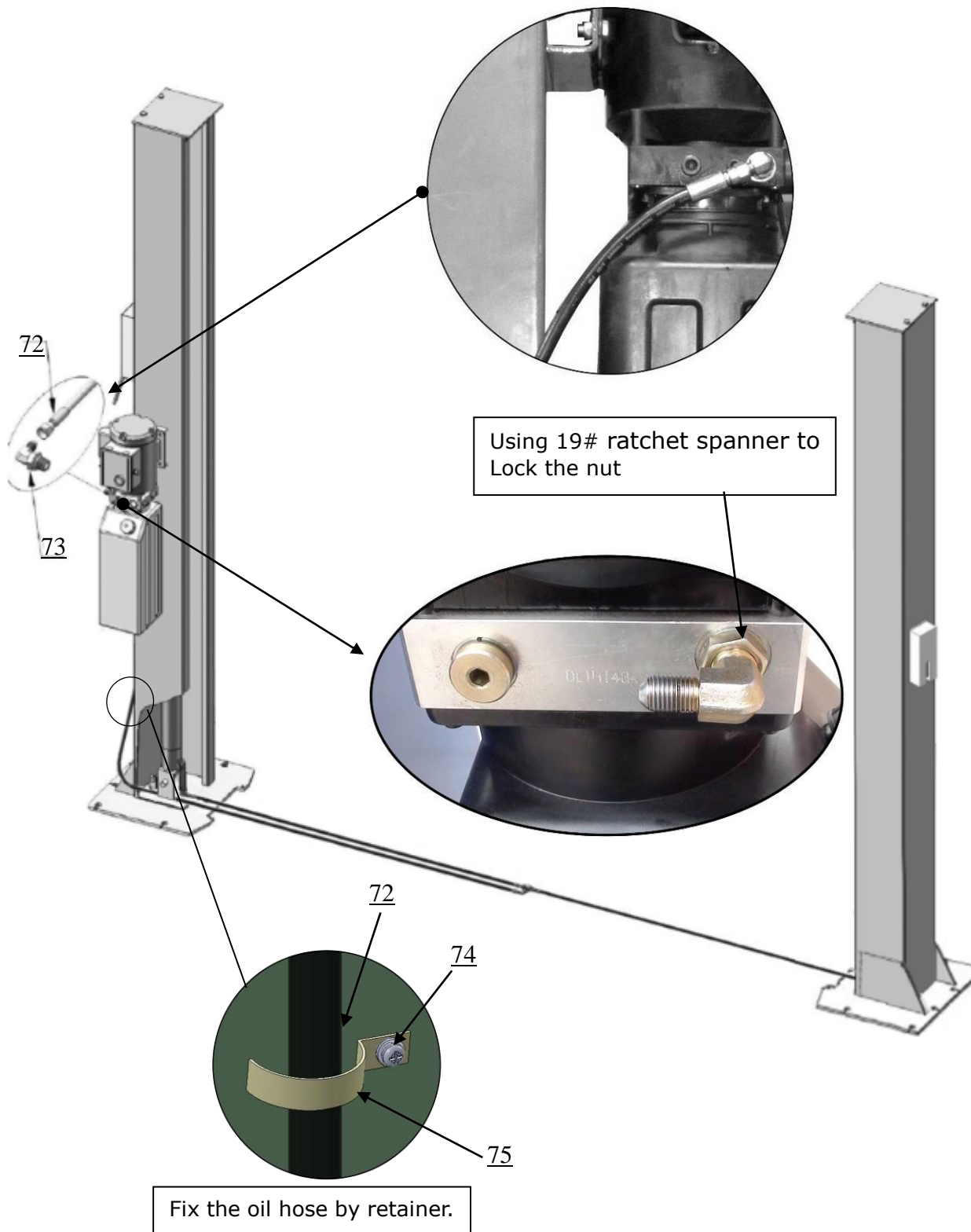


Fig. 19

K. Install safety device and safety cable (See Fig. 20).

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

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

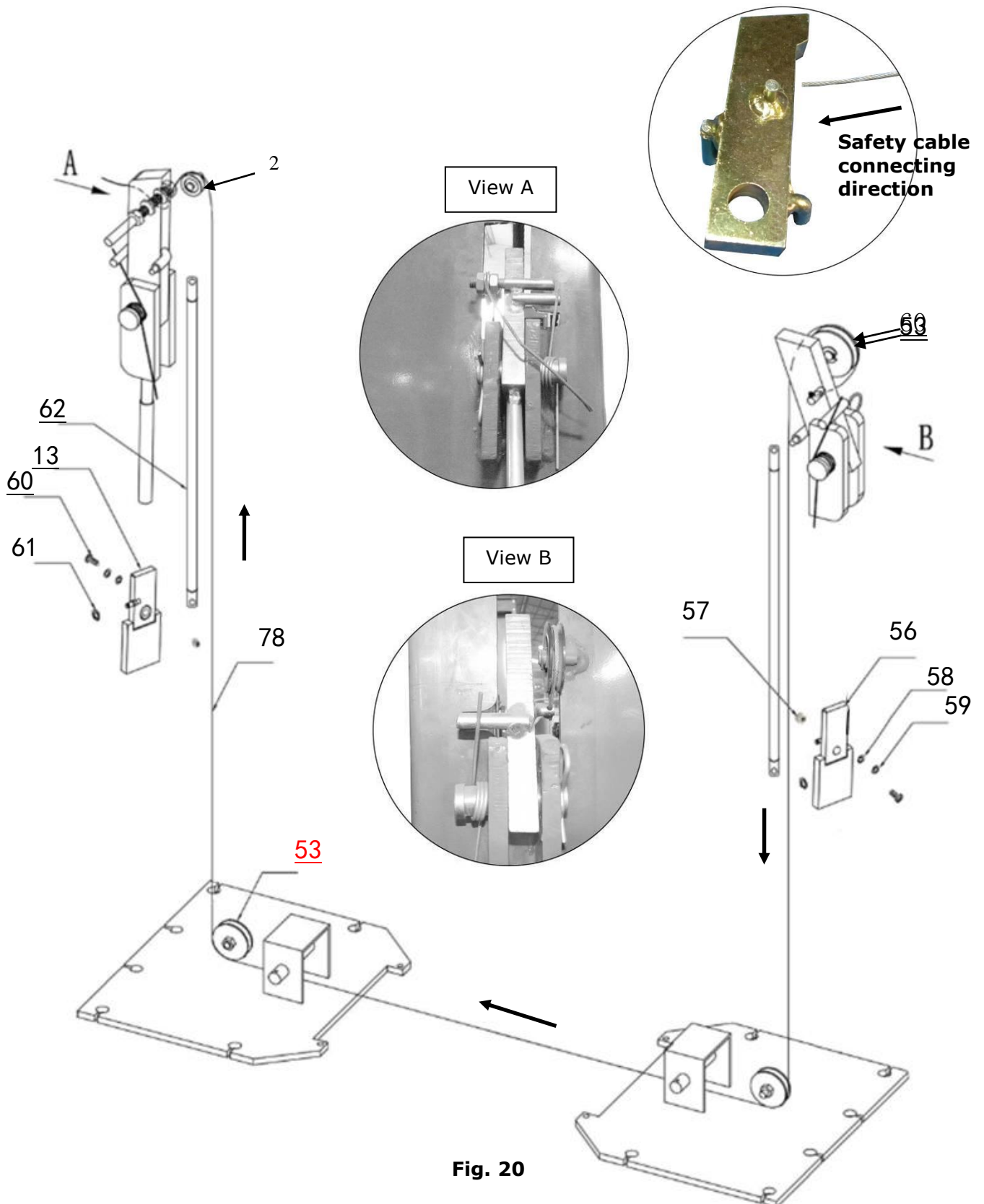


Fig. 20

L: Assemble floor cover (See Fig. 21).

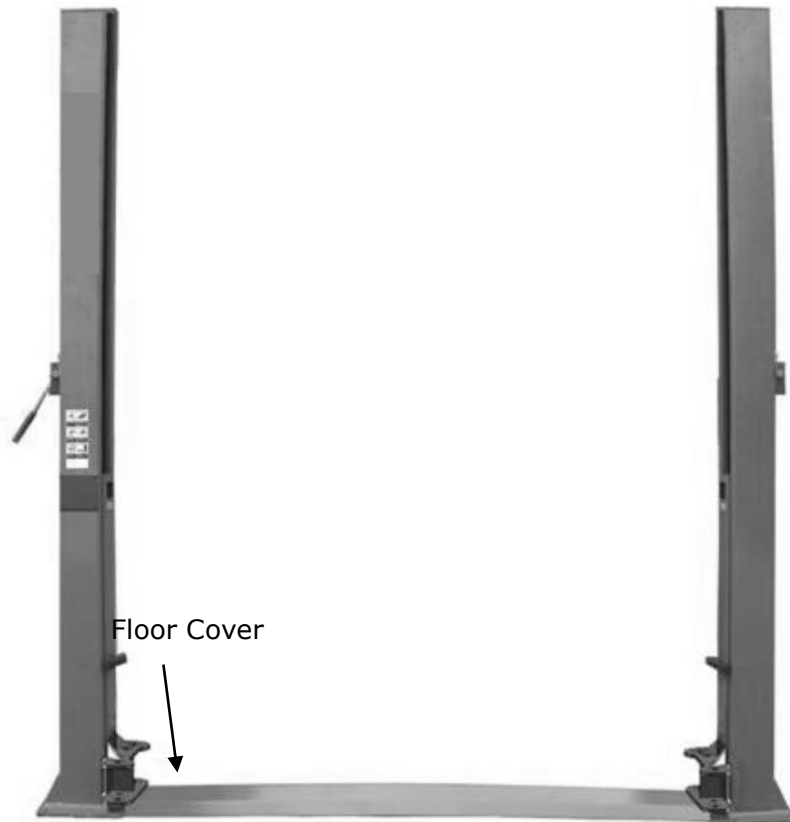


Fig. 21

M. Install lifting arms and adjust the arm locks

1. Install the lifting arms (See Fig. 22)

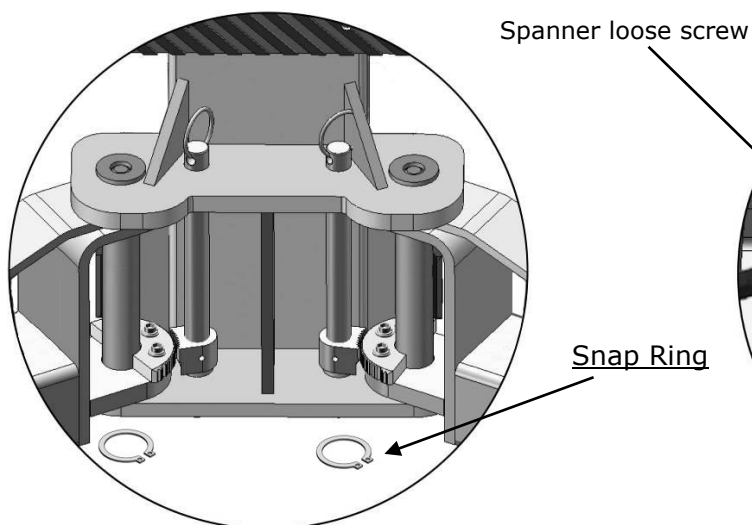
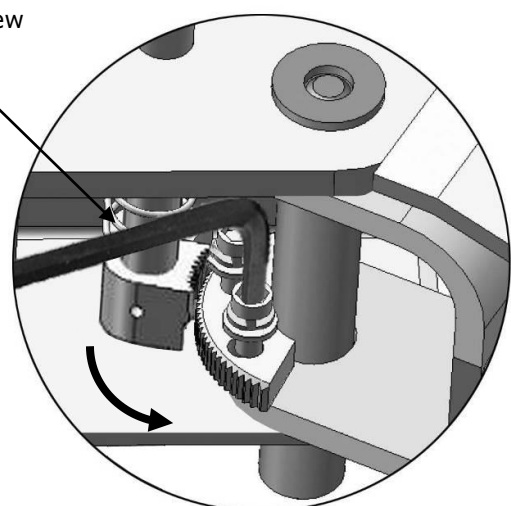


Fig. 22



Use the 8# socket head wrench to loosen the socket bolt

Fig. 23

2. Lowering the carriages down to the lowest position, then use the 8# socket head wrench to loosen the socket bolt (**See Fig. 23**)
3. Adjust the moon gear as arrow direction (**See Fig. 24**).
4. Adjust the moon gear and arm lock to make it to be meshed, then tighten bolts of arm lock (**See Fig. 25**).

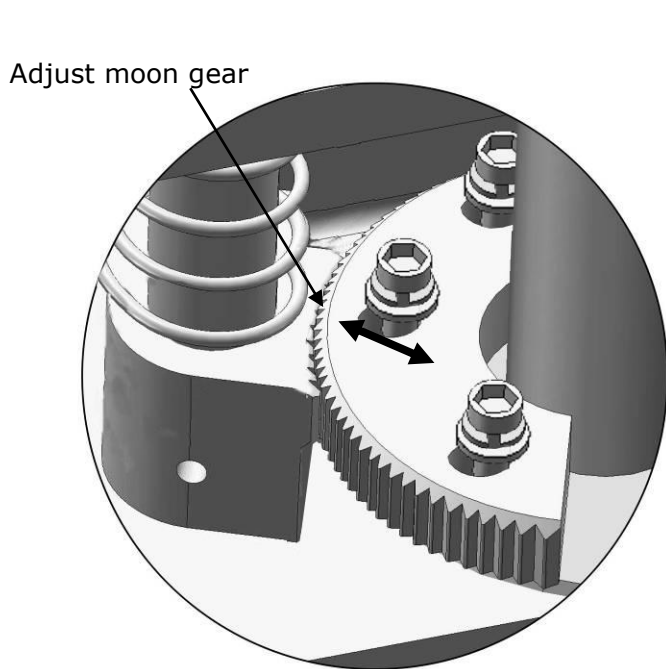


Fig. 24

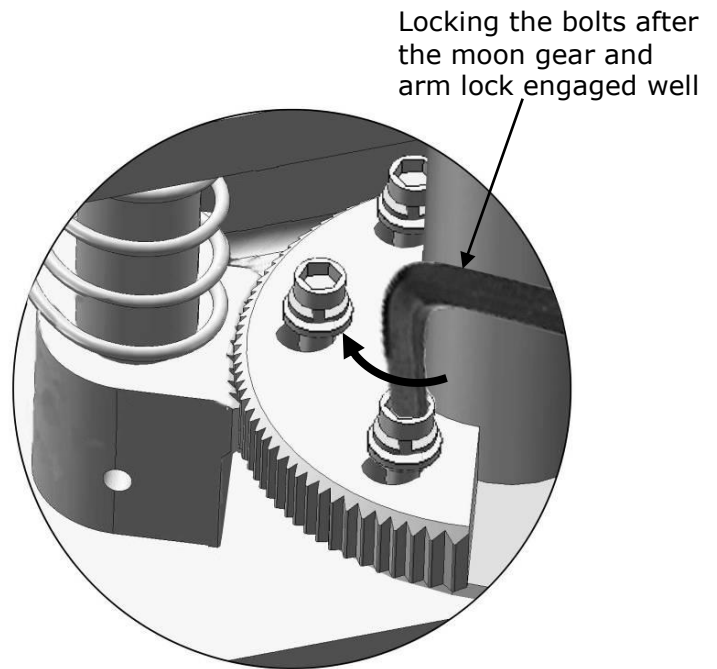


Fig. 25

N. Tighten all the hydraulic fittings, and fix the oil hose by retainer.

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

O. Install Electrical System

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

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

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

Single phase motor (See Fig. 26).

1. Connecting the two power supply lines (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.

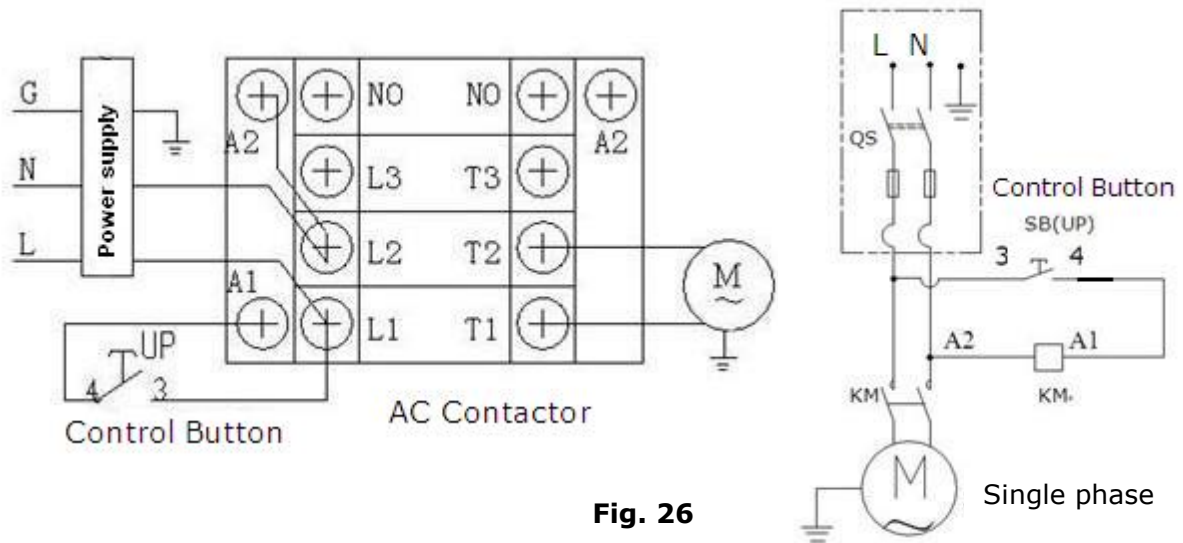


Fig. 26

IV. EXPLODED VIEW

Model W9F-3D

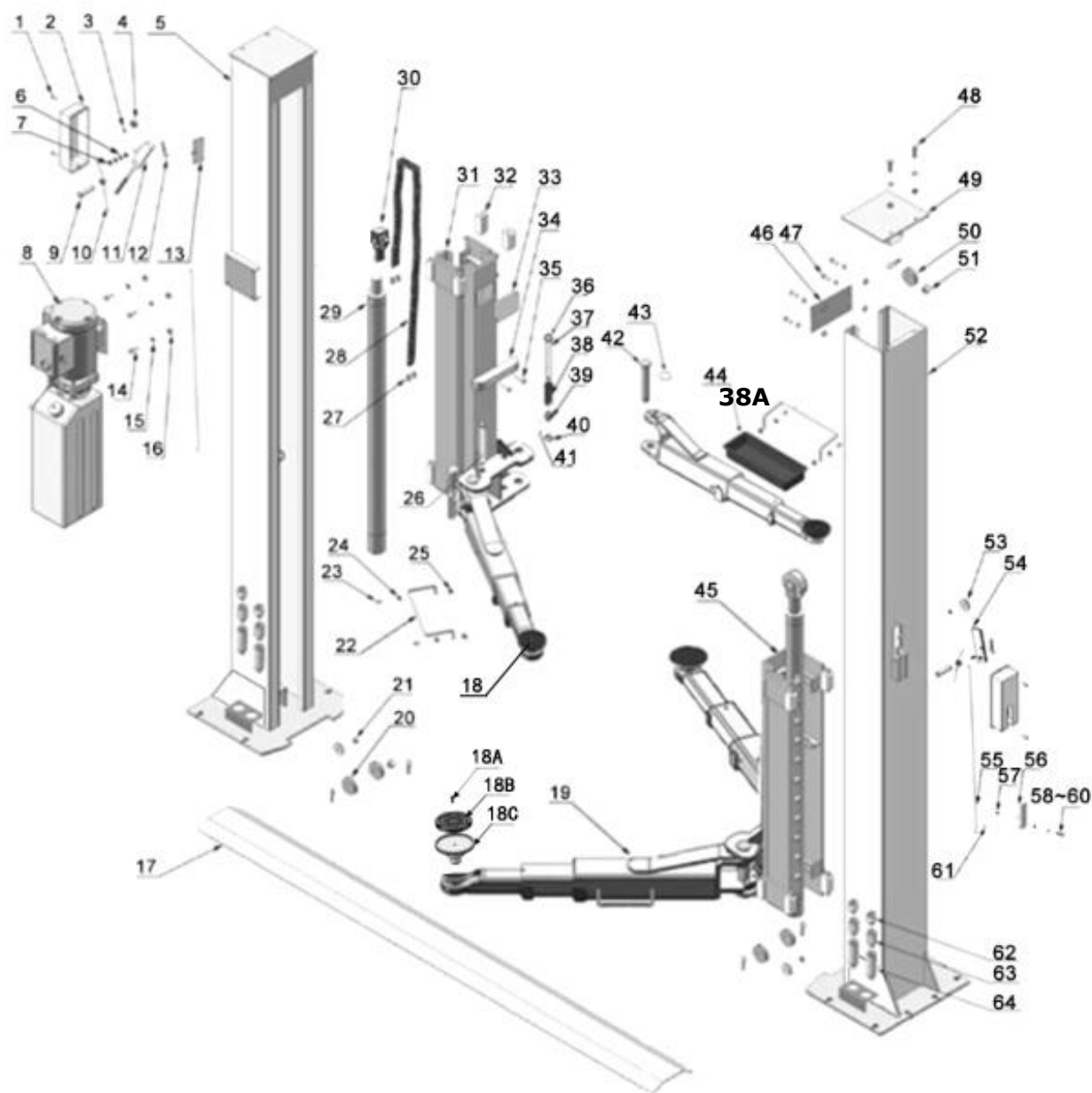


Fig. 27

Part list

No	Part No.	Name	W9F-3D	NOTE
			QTY	
1	10209009	Hex bolt	6	
2	10209008	Safe release cover	2	
3	10209010	Clip spring	2	
4	10209011	Safe release pulley	1	
5	11203257	Power Side column	1	
6	10206006	Washer	2	
7	10206023A	Hex nut	2	
8	071101	Power unit	1	
9	11206002	Safe block pin	2	
10	10209007	Torsion spring	2	
11	11203263	Power side safe device	1	
12	10209012	Elastic pin	8	
13	11203261	Power side safe block	1	
14	10209003	Hex bolt	4	
15	10209004	Plastic wing	4	
16	10209005	Self-lock nut	8	
17	11203003	Floor cover	1	
18	10201046A	Rubber pad ass	4	
18A	10420138	Socket Bolt	4	
18B	10209134	Rubber Pads	4	
18C	11680030C	Support Frame	4	
19	10203156	Lifting arm ass	4	
20	10209056	Self-lock nut	2	
21	11209057	pulley	4	
22	11206191	Short guard bar	4	
23	10201002	Hex bolt	8	
24	10209034	Spring Washer	8	
25	10209033	washer	8	
26	10206046	Arm Lock Bar (right)	2	
27	10201010A	connector	4	
28	10203005	chain	2	
29	10201008	Cylinder assy.	2	
30	11203176	Chain Pulley Seat Assy.	2	
31	11203267	Power side carriage	1	
32	10209015	slider	16	
33	10209016	Carriage plastic cover	2	
34	10206045	Rubber protective strip	4	
35	11206046	Screw	4	
36	10209153	Rack handle ring	4	
37	10206046A	Arm Lock Bar (left)	2	
38	10217045	Spring	4	
39	10217044	Arm Lock	4	
40	10206032	Snap spring	4	
41	10206036	Hair Pin	4	
42	11217168	Pin for Lifting Arm	4	
43	10520023	Snap Ring	4	
44	10206190	Tool tray(short)	2	

45	11203268	Offside carriage	1	
46	11203009	Connecting plate	2	
47	10209043	Hex bolt	8	
48	10209046	Hex bolt	4	
49	11203010	Top Plate	2	
50	11209045	Pulley	2	
51	10209057A	Pulley brush bronze	6	
52	11203258	Offside Column	1	
53	10209049	Plastic pulley(black)	3	
54	11203264	Offerside safety release	1	
55	11203784	Connecting bar	2	
56	11203262	Offside safety block	1	
57	10420018	Self-Lock Nut	2	
58	10420045	Washer	2	
59	10209149	Spring Washer	2	
60	10217013	Hex Bolt	2	
61	10420049	Splt Pin	4	
62	11209051B	Stackable Adapter (1.5 ")	4	
63	11209052B	Stackable Adapter (2.5 ")	4	
64	11209053B	Stackable Adapter (5 ")	4	
65	10203020	Cable ϕ 9.52*8215mm	2	
66	10209066	Hex Nut M16	4	
67	10207024	90 ⁰ Fitting	2	
68	11201082	Straight Fitting L=98mm	2	
69	10420097	90 ⁰ Fitting 1/4NPT(M)*1/4JIC(M)	2	
70	10203109	Oil Hose L=1445mm	2	
71	10211016	T Fitting	1	
72	10201081	Oil Hose L=3000mm	1	
73	10209060	90 ⁰ Fitting for power unit	1	
74	10209009	Cut head bolt M6*8	6	
75	11217048	Retainer	2	
76	10201090	Shim (1mm)	10	
77	10201140	Anchor Bolt 3/4*6-1/2	12	
78	10203021	Safety Cable ϕ 2.5*7250	1	
79	10203501B	Parts Box	1	

4.1 Chain Pulley Base Assy. (11203176) exploded view:

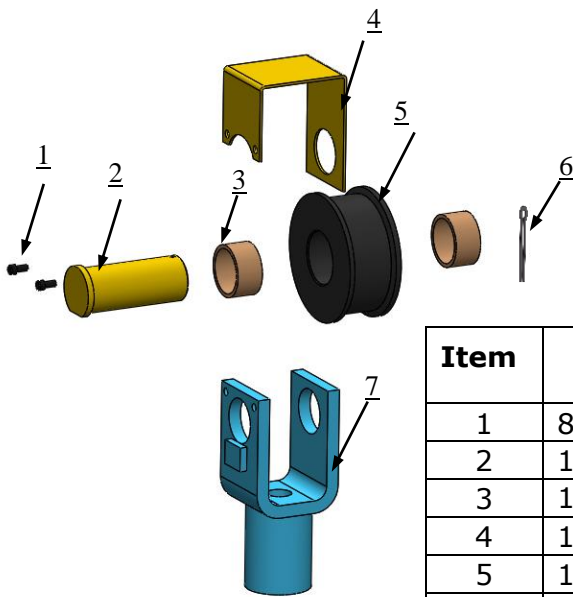


Fig 28

Item	Part#	Description	QTY
1	81400335	Socket bolt	4
2	11203040	Pin for chain pulley	2
3	10420132	Bronze bush for chain pulley	4
4	11201152	Chain stop plate	2
5	11203004	Chain Pulley	2
6	10201005	Split pin($\phi 4 \times 50$)	2
7	11201004	Chain pulley seat	2

4.2 Lifting arm Assy. (10203156) exploded view:

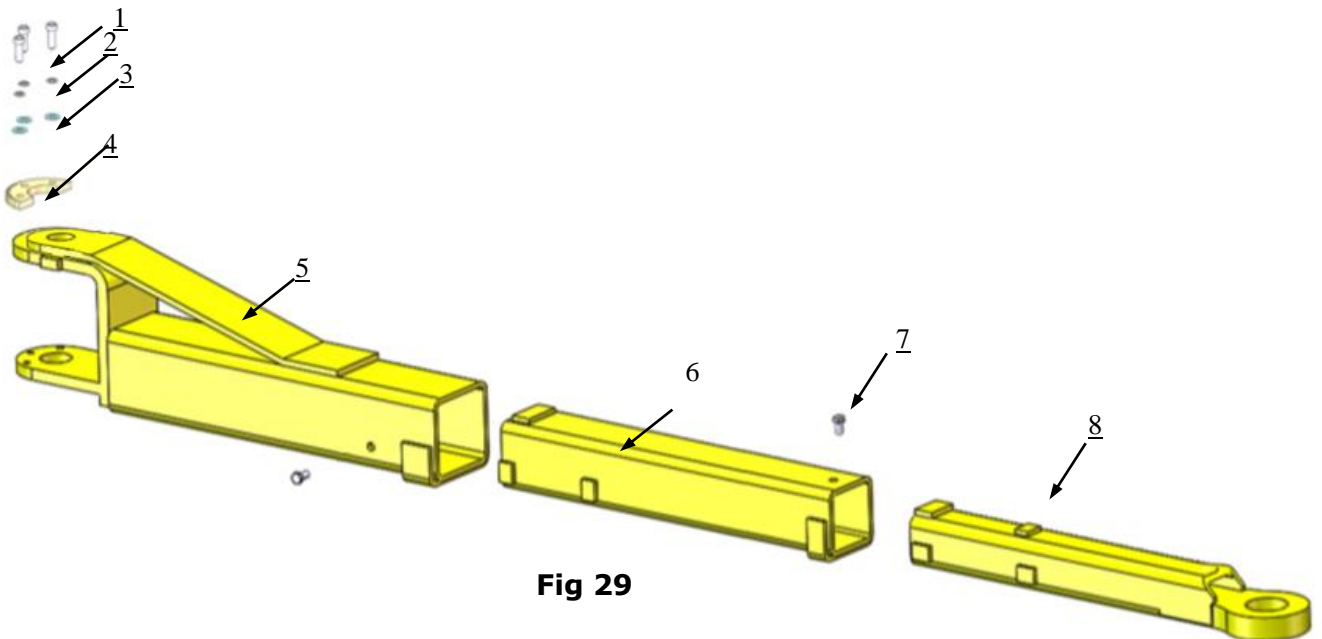


Fig 29

No	Part no	Name	Qty	No	Part no	Name	Qty
1	10206048	Socket Bolt	12	5	11203146	Outer arm	4
2	10209039	washer	12	6	11203147	Middle arm	4
3	10209022	washer	12	7	11201049	Cut Head Bolt M8*12	8
4	11206049	Alignment gear	4	8	10420138	Inner arm	4

4.3 Cylinder (10201008)exploded view:

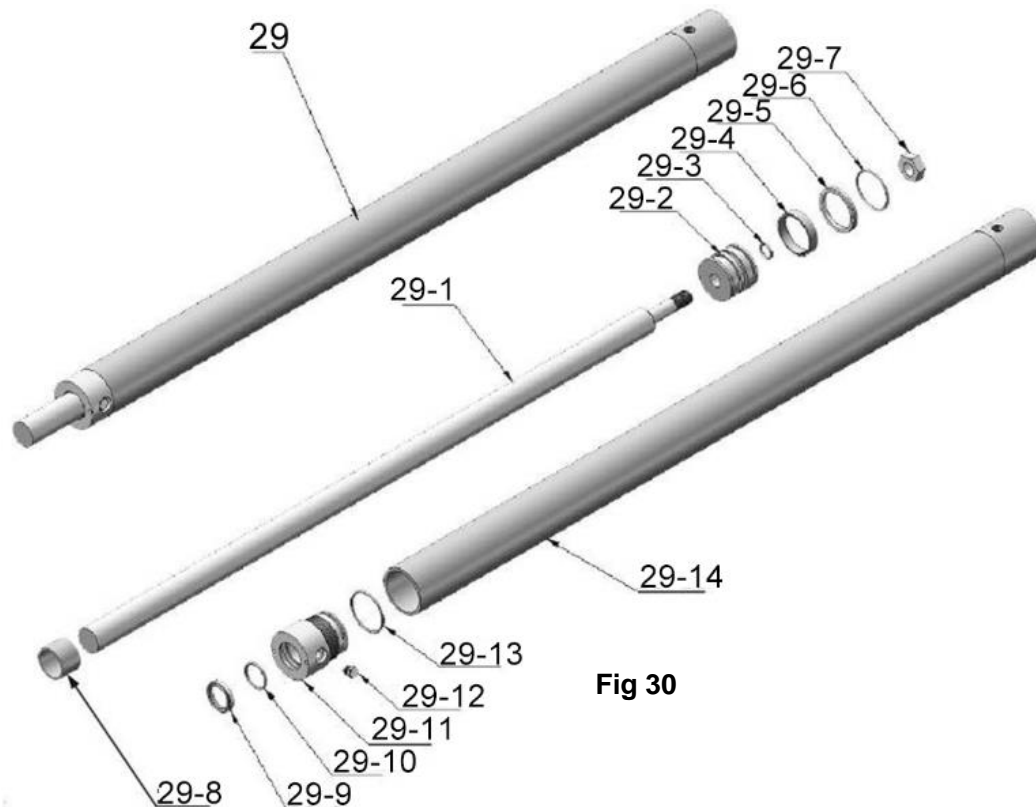


Fig 30

Parts of Cylinder

No	Part no	Name	W9F-3 D	NOTE
			QTY	
29-1	11201027	Piston Rod	2	
29-2	11201028	Piston	2	
29-3	10206069	O Ring	2	
29-4	10201029	Support Ring	2	
29-5	10201030	Y Ring	2	
29-6	10201031	O Ring	2	
29-7	10206071	Hex Nut	2	
29-8	11201037	Piston Rod Adjusting Sleeve	2	
29-9	10209078	Dust Ring	2	
29-10	10201032	O Ring	2	
29-11	11201033	End Cover	2	
29-12	10201034	Bleeding Plug	2	
29-13	10201035	O Ring	2	
29-14	11201036	Cylinder weldment	2	

4.4 Manual Power Unit (071101) exploded view:

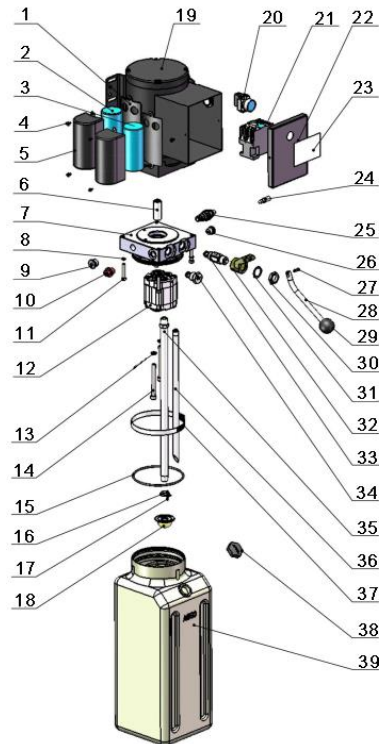
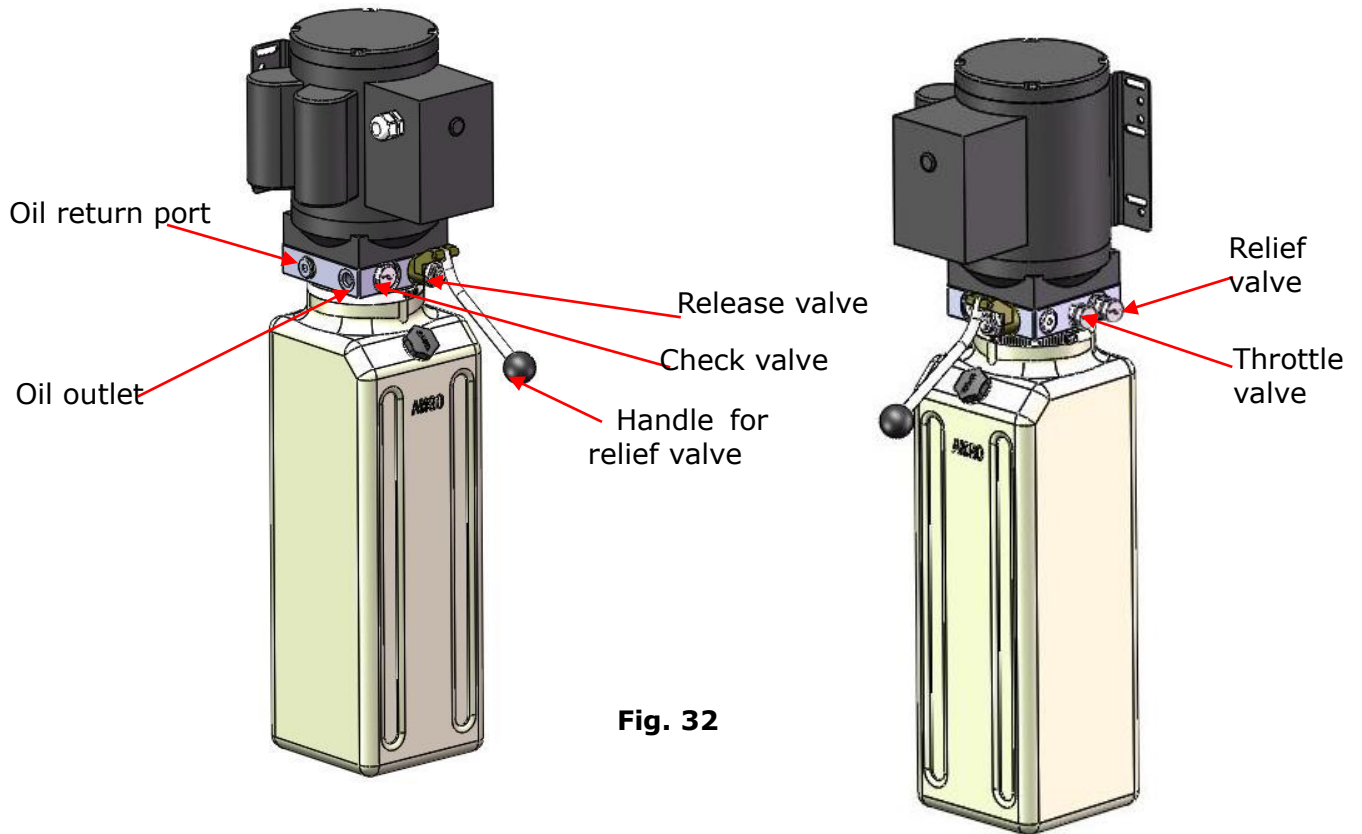


Fig. 31

Part list for 220V/60HZ

Item	Part#	Description	Qty	Item	Part#	Description	Qty
1	81400180	Rubber Pad	2	21	41030055	AC connector	1
2	81400130	Starting capacitor	1	22	81400287	Motor terminal box cover	1
3	81400088	Running capacitor	1	23	71111216	AMGO power unit label	1
4	10420148	Cup Head Bolt with washer	4	24	81400560	Throttle valve	1
5	81400066	Cover of Motor Terminal Box	2	25	81400266	Relief valve	1
6	81400363	Motor Connecting Shaft	1	26	81400284	Inner hex iron plug	1
7	090106	Manifold block	1	27	10720118	Hair pin	1
8	10209149	Washer	4	28	81400451	Release valve handle	1
9	81400276	Iron plug	1	29	10209020	Plastic ball	1
10	81400259	Red rubber plug	1	30	81400421	Release valve nut	1
11	85090142	Socket bolt	4	31	81400422	Shim	1
12	81400280	Gear pump	1	32	81400449	Valve Seat	1
13	10209034	Washer	2	33	070001	Release Valve	1
14	81400295	Socket bolt	2	34	070002	Check Valve	1
15	81400365	O ring	1	35	81400288	Oil suction pipe	1
16	10209152	Ties	1	36	81400289	Oil return pipe	1
17	85090167	Magnet	1	37	81400364	Clamp	1
18	81400290	Filter	1	38	81400263	Oil tank cap	1
19	81400413	Steel Motor	1	39	81400275	Oil tank	1
20	10420070	Push button	1				

Illustration of hydraulic valve for hydraulic power unit



V. TEST RUN

1. Adjust synchronous cable (See Fig. 33)

Push button "UP" to lift the carriages up to the position of the cable nut higher than chain pulley. 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.

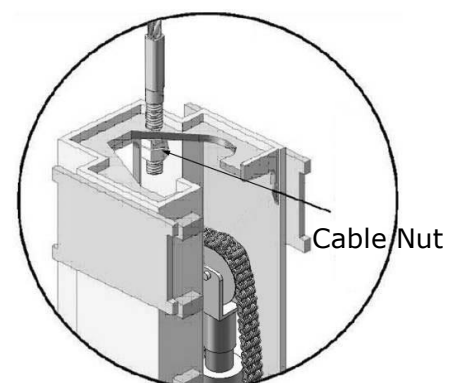


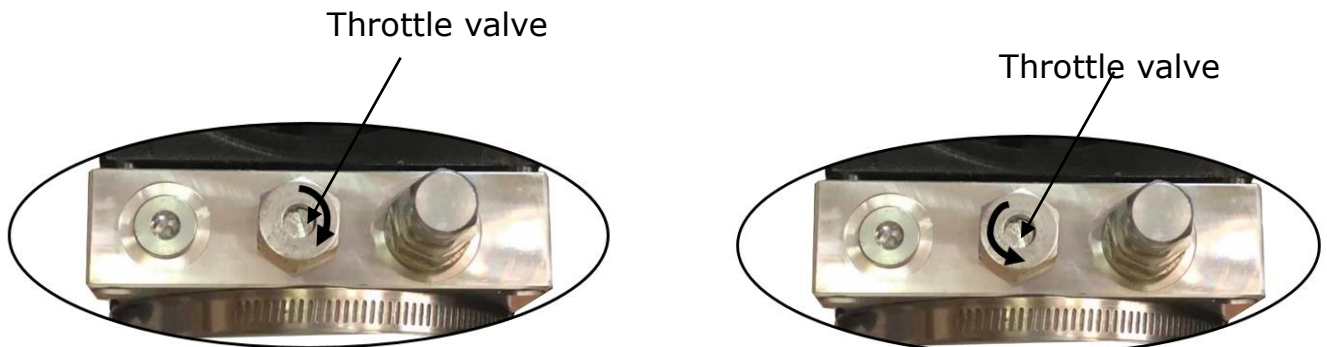
Fig. 33

2. Adjust safety cable

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

3. Adjust the lower speed

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.



Adjust clockwise, slow down to decent

Counter clockwise, faster descent

Fig. 34

4. Test with load

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

Hydraulic System

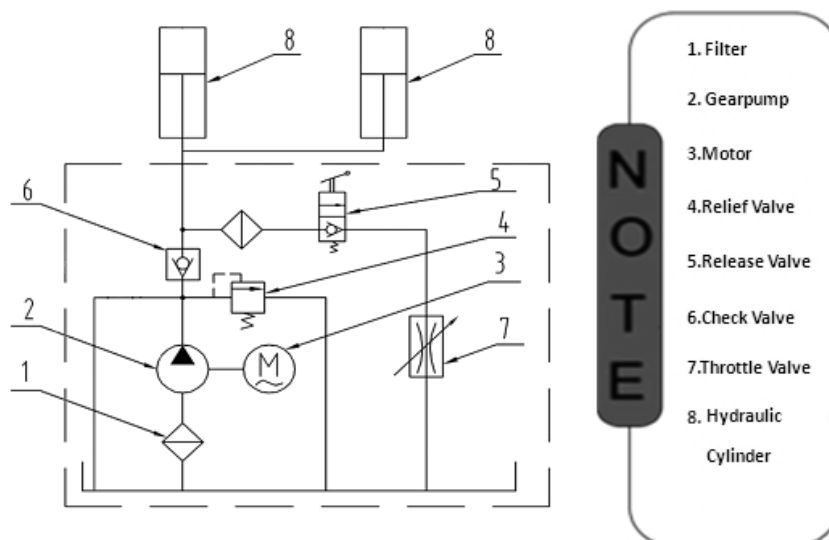


Fig. 35

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. Start Button does not work 2. Wiring connections are not in good condition 3. Motor burned out 4. AC contactor in damage	1. Replace Start button 2.Repair all wiring connections 3. Repair or replace motor 4. Replace or replace
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

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.

