



Original

# Installation And Service Manual

## SCISSORS LIFT

### Model: AX-16A

#### Cargo Claims

If there is any missing or damaged product during transportation, the buyer must not ate on the shipping paperwork or refuse the shipment.  
NOTATE ALL DAMAGE OR REFUSE DAMAGED SHIPMENT!

#### DANGER

Read the entire contents of this manual before using this product. Failure to follow instructions and safety precautions could result in serious injury or even death. Make sure all other operators also read this manual. Keep this manual near the machine so that it can be seen by all users. By proceeding with installation and operation, you agree that you are fully understand the contents of this manual and take full responsibility for the use of the product.

## CONTENTS

PROFILE .....	1
IMPORTANT SAFETY INSTRUCTIONS .....	3
I. PRODUCT FEATURES AND SPECIFICATIONS .....	5
II. INSTALLATION REQUIREMENT .....	6
III. INSTALLATION STEPS .....	8
IV. EXPLODED VIEW .....	26
V. OPERATION INSTRUCTIONS .....	34
VI. MAINTENANCE SCHEDULE .....	34
VII. TROUBLE SHOOTING .....	37
VIII. CAR LIFT SAFETY TIPS .....	38
IX. LIFT DISPOSAL .....	38

### **Explanation of the safety warning symbols used in this manual**

-  DANGER Risk of death or injury
-  WARNING Dangerous or unsafe practices that may result in death or injury
-  CAUTION Dangerous or unsafe practices that may result in personal injury, product damage or property damage
- ATTENTION Conditions that may result in damage to products or property

## PROFILE

This instruction manual is specially prepared for you. Your new lift is the product of over a decade of continuous research, testing and development and is the most technologically advanced lift on the market today.

**Please make sure to read through this manual before operating the lift.**

Record the information on the nameplate label here:

Model No.:\_\_\_\_\_

Serial No.:\_\_\_\_\_

Manufacturer date:\_\_\_\_\_

## WARRANTY

The warranty period for the steel structure part of new car lift is 5 years, hydraulic components, bronze bushings, sliders and plastic parts are under warranty for 2 years, and electrical components and sync cable, lock release cable warranty for 1 year.

Rubber pads are without warranty. During the warranty period, the manufacturer will repair or replace the defective parts free of charge including shipping costs.

This warranty does not cover damage caused by normal wear and tear, improper use, damage in transit, or damage caused by lack of maintenance.

This warranty is unique and supersedes what is expressed and implied in all other warranties. The manufacturer shall not be liable for any particular, indirect or accidental damage resulting in breach of or delay in the execution of the warranty. The manufacturer reserves the right to design and improve the product and has no obligation to make notice of the changes in advance.

The product warranty based on the above clause is based on the model number and serial number of the equipment. This information must be provided in conjunction with all warranty information at the time of service and warranty.

## SAFETY WARNING LABEL



Fig .1

## **IMPORTANT SAFETY INSTRUCTIONS**

In order to properly maintain your product and ensure operator safety, it is the responsibility of the product owner to read and follow these instructions!

1. Ensure product installation complies with all applicable local regulations and rules, such as Occupational Safety and Health Administration regulations and electrical codes.
2. Ensure that all operators are properly trained, know how to operate the unit safely, and are properly supervised.
3. Do not operate the lift until you are sure all parts are in place and operating correctly.
4. Keep your hands and feet away from the machine. Keep hands and feet away from any moving parts. Keep your feet away from the lift as it descends to avoid pressing on pointed objects.
5. Keep the work area clean. A cluttered workspace can lead to injuries.
6. The machine is only approved for indoor installation and use. Outdoor installation is prohibited.
7. Only trained operators are allowed to handle the lift machine. All untrained persons must stay away from the workplace. Never allow untrained persons to handle or operate the machine.
8. Use the lift properly. Use the lift in the correct way.
9. Warning! Keep persons and objects from the lift when lifting the a vehicle.
10. If the vehicle is at risk of falling, make sure no one is around the lift.
11. Before preparing to approach or service the vehicle, ensure that the safety device is in effect.
12. Dress appropriately when operating machines, and consider wearing non-slip steel-toe shoes for added safety..
13. Beware of electric shock. In order to protect the operator from electric shock, the lift in use must be grounded. Do not connect the green wire to the terminal. This is the ground wire.
14. Danger! The power supply used in this type of lift has high voltage. Please disconnect the power supply before any circuit repair. Unplug in case the power supply is accidentally switched on during maintenance.
15. Warning! There is a risk of explosion. There are parts in the equipment that produce arc light and spark. Do not operate near flammable gas. This machine should not be placed in the lounge or basement.
16. Maintain with care. Keep the machine clean for better and safer operation. Perform

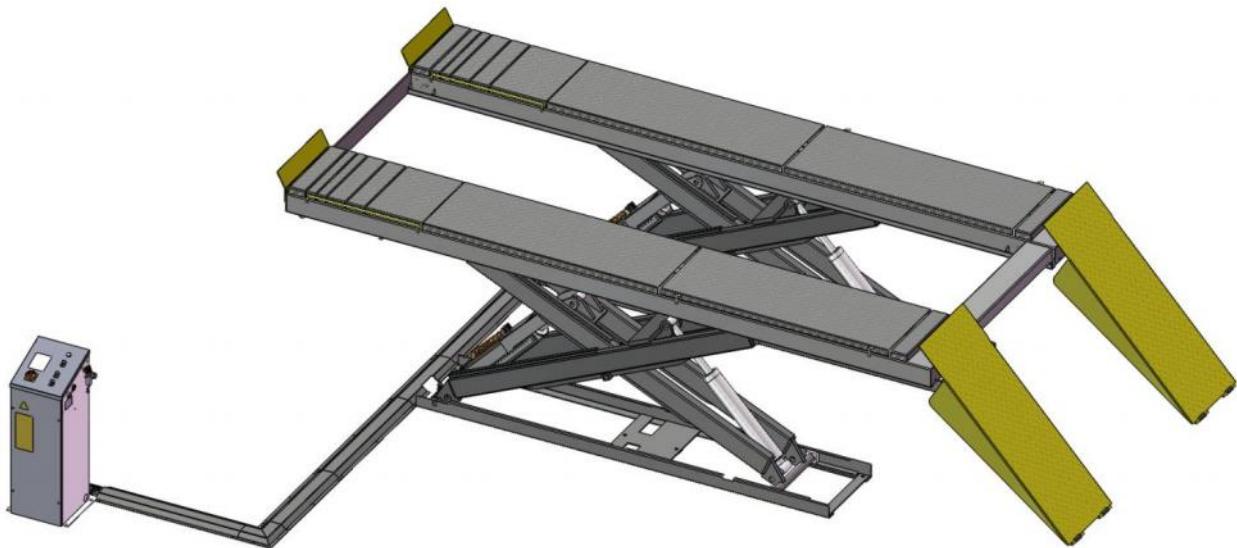
proper lubrication and maintenance procedures according to the manual. Keep handles or buttons clean, dry, and free of oil.

17. Stay alert. Use common sense to observe what you are doing and stay alert.
18. Check for damaged parts. Check for adjustments to moving parts, damage to parts, or anything that may affect their operation. Do not use the machine if the parts are damaged.
19. Do not remove relevant safety parts from the machine. Do not use a lift if it is damaged or missing.
20. Only operate the lift at temperature between 5°C to 40°C(41°F to 104°F).



**DANGER** Be very careful when installing, operating, maintaining or repairing this equipment. Failure to comply may result in property damage, product damage, injury or (in very rare cases) death. Ensure that only authorized personnel operate the equipment. All repairs must be carried out by an authorized technician. Do not modify the machine, this voids the warranty and increases the probability of personal injury or property damage. Ensure to read and follow this instructions on the label.

## I. PRODUCT FEATURES AND SPECIFICATIONS (See Fig.2)



**Fig .2**

### FEATURES OF MODEL AX-16A

- Electronic control operating system, easy to use.
- Dual teeth self-locking mechanism, pneumatic release, safe and reliable.
- 2 groups of dual cylinders are applied to assure the platforms synchronous.
- Super wide non-skid diamond platforms.
- Strengthened structure, is capable to service various vehicles from passenger cars to minibuses.
- Optional jack (with pneumatic pump)
- Optional turnplate

### MODEL AX-16A SPECIFICATIONS

Model	Lifting Capacity	Lifting Time	Max Lifting Height	Max Locking Height	Overall Length	Overall Width	Min. Height	Runway Width	Distance Between Runway	Motor
AX-16A	16,000lbs	110S	72 13/16"	71 1/16"	274 3/16"	94 1/16"	13"	24 5/8"	44 7/8"	2.0HP

**⚠ CAUTION** When driving the vehicle, stay in the middle between the platforms. If you hit any part of the lift, you could damage the car or lift.

## II. INSTALLATION REQUIREMENT

### A. TOOLS REQUIRED

- ✓ Rotary Hammer Drill  
(Φ19、Φ10、Φ4)



- ✓ Hammer



- ✓ Level Bar



- ✓ Adjustable Spanner (12")



- ✓ Wrench set ( 8# 14# 15#  
17#、19# )



- ☒ Grease gun



- ✓ Carpenter's Chalk



- ✓ Screw Sets



- ✓ Tape Measure (7.5m)



- ✓ Pliers



- ☒ Lock Wrench



- ☒ Ratchet Spanner with Socket



Fig. 3

## **B. Equipment storage and installation requirements.**

- 1 . Store the equipment in a dry, non-moldy, non-flammable environment.
- 2 . The lift is generally approved for indoor installation and use. If need outdoor installation, the optional motor protect cover is required.
- 3 . When installing the device, take safety precautions according to the instructions to avoid device damage.
- 4 . During installation, all parts should be fastened to ensure the stability and smooth operation of the machine.
- 5 . After installation, the whole machine should be checked to make sure that every component is working properly.

## **C. SPECIFICATIONS OF CONCRETE**

Specifications of concrete must be adhered to the specifications as following.

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

1. Concrete must be thickness 100mm 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/cm<sup>2</sup>) minimum.
3. Floors must be level and no cracks. The two pits should be at the same level for flush mount installation.
4. Do not install the lift on asphalt or any surface other than concrete.

## **D. POWER SUPPLY**

1. You are required to use a licensed and qualified electrician for the installation process.
2. The power supply capacity must be more than 2.2KW minimum, with a cord larger than 2.5mm<sup>2</sup>, and must be properly grounded.



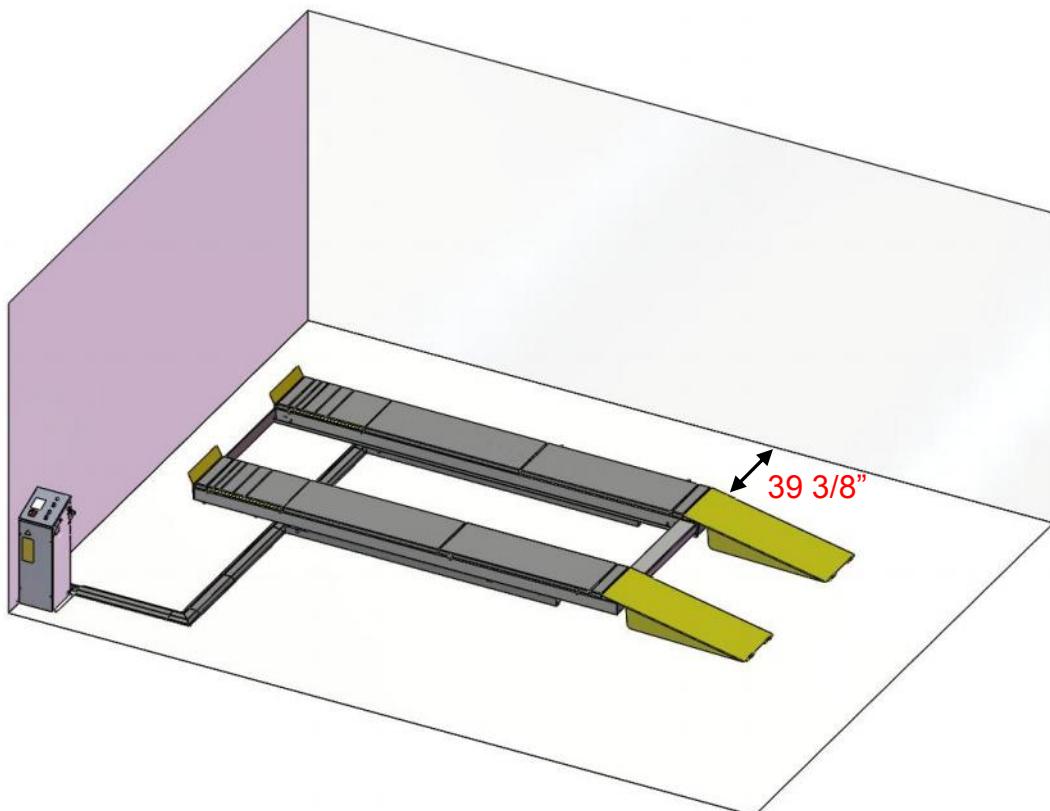
**DANGER** All electrical wiring must be performed by a licensed and certified electrician. Attempting to connect the circuit without proper certification may result in damage to the lift or electrocution, resulting in serious injury or death.

### III. INSTALLATION STEPS

#### A. Location of installation

1. Installation space: Ensure there is enough space for the lift. Accurately measure the front, back, side and top mounting dimensions and refer to the below figure data .
2. Overhead obstacle: Check for overhead obstacles, such as building supports, heaters, lights, wires, and low ceilings, etc..
3. Installation: The lift is only approved for indoor installation and use, and outdoor installation is prohibited.
4. Floor: Install lift only on flat concrete floor. Do not install on asphalt or any other surface.

#### 5. On surface installation



**Fig. 4**

6. Flush mount installation foundation (Fig.5) .

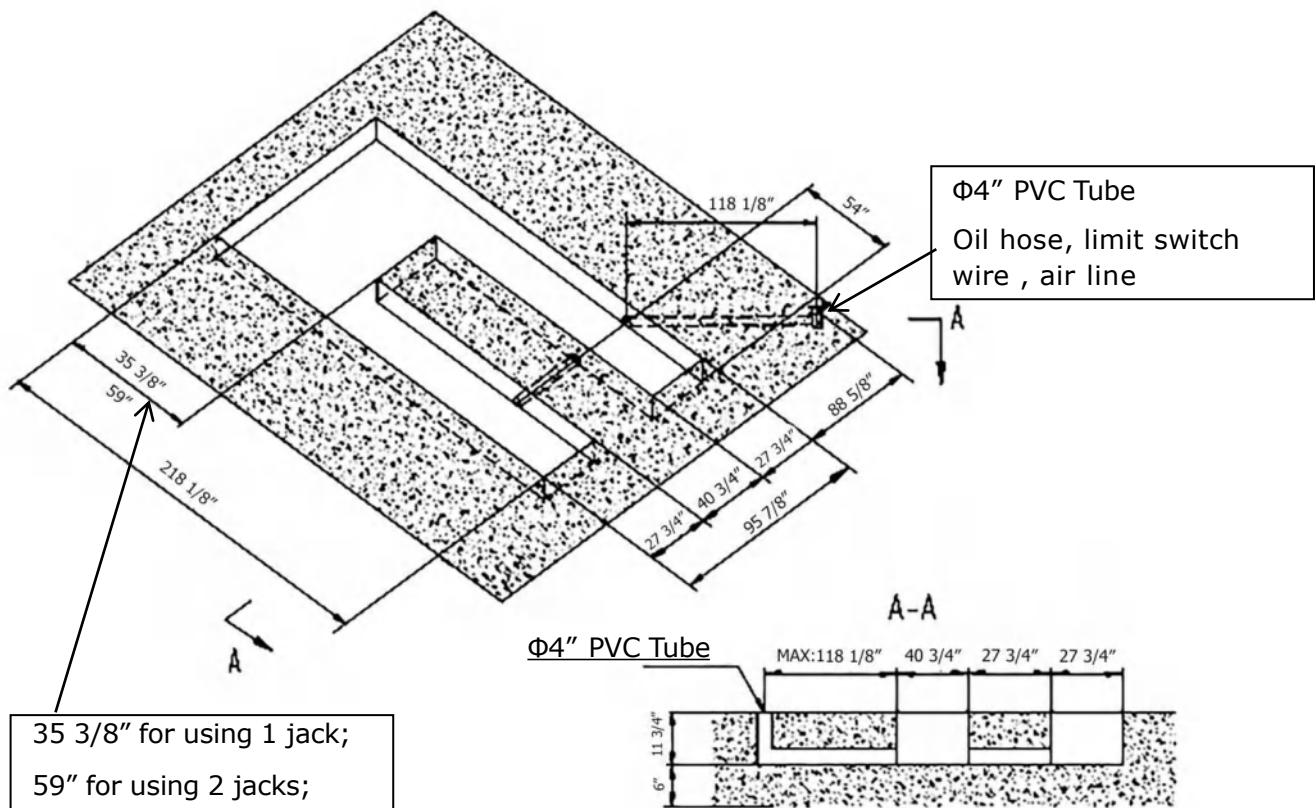


Fig. 5

**B. Check the parts before assembly, make sure all the parts are well received.**

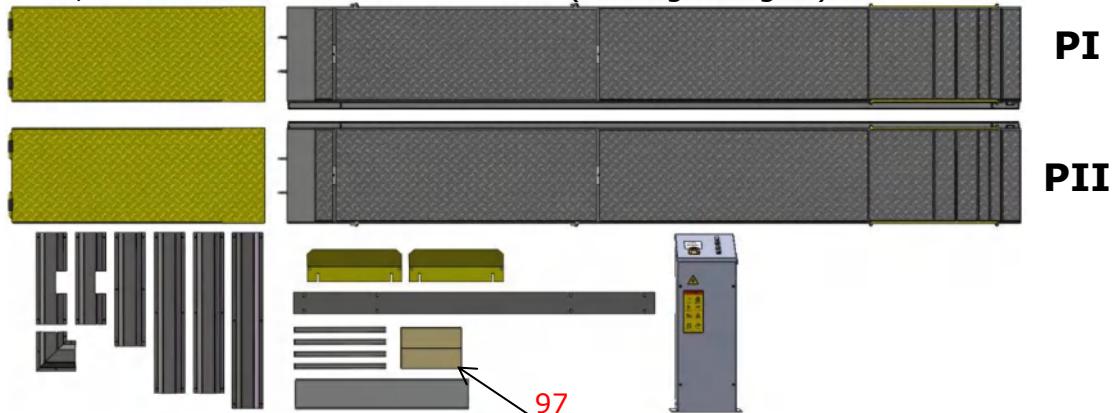
1. Whole set of one unit (Packaged lift, parts box, control cabinet, drive-in ramps) **(See Fig.6)**



Fig. 6

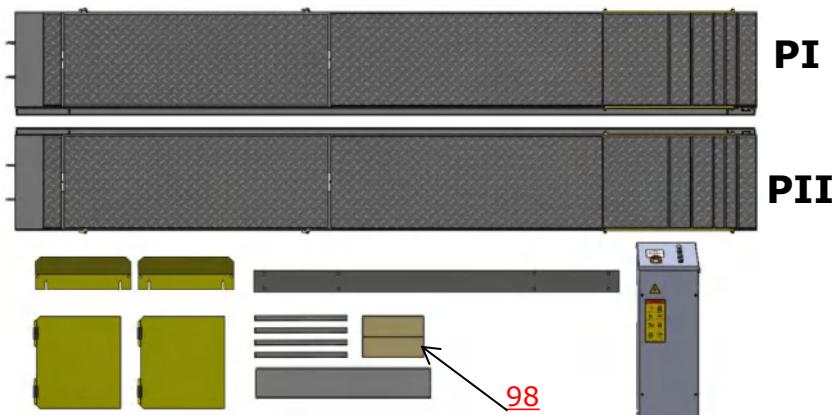
2. Take off the packing shelf, move all parts to installation site, open the packing and checked the parts according to the shipment parts list.

2.1, Parts for on surface installation (see Fig. 7 Fig. 8)



**Fig. 7**

2.2, Parts for flush mount installation (see Fig. 9)



**Fig. 8**

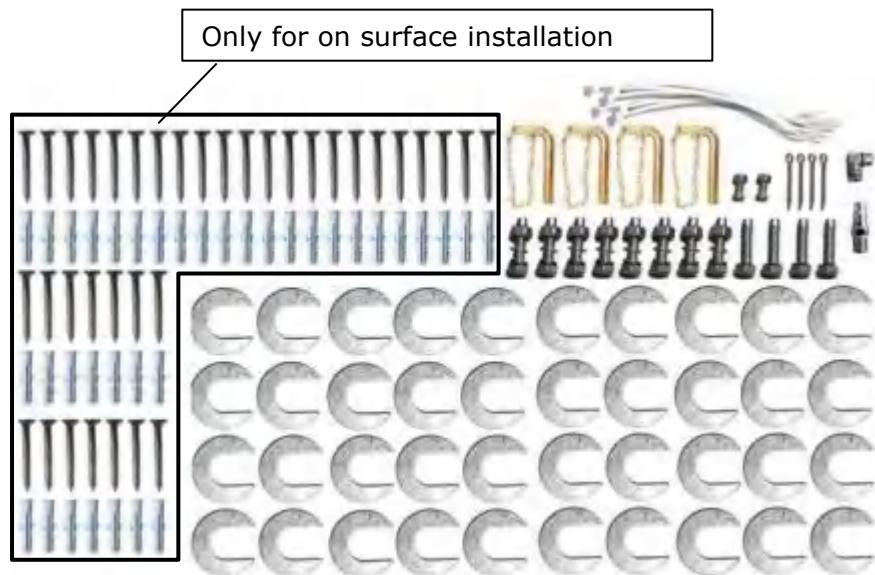
3. Open the parts box, check the parts according to the part list. (See Fig. 9)



**Fig. 9**

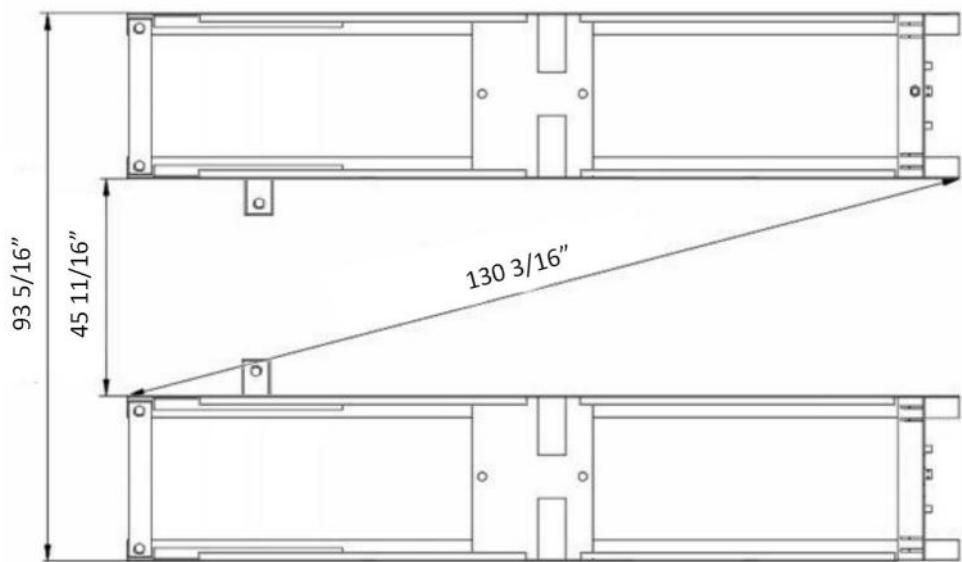
4. Check the parts of the parts bag according to the parts bag list.

4.1 Parts bag for on surface installation, see Fig 10



**Fig.10**

**C. Start the installation. Place the machine in the preset position firstly(See Fig. 11)**



**Fig.11**

**D. Connect oil hoses and metal bellow pipes.**

**Installation method 1:** The control cabinet is installed on the left side of the car-in direction. (Fig. 12)

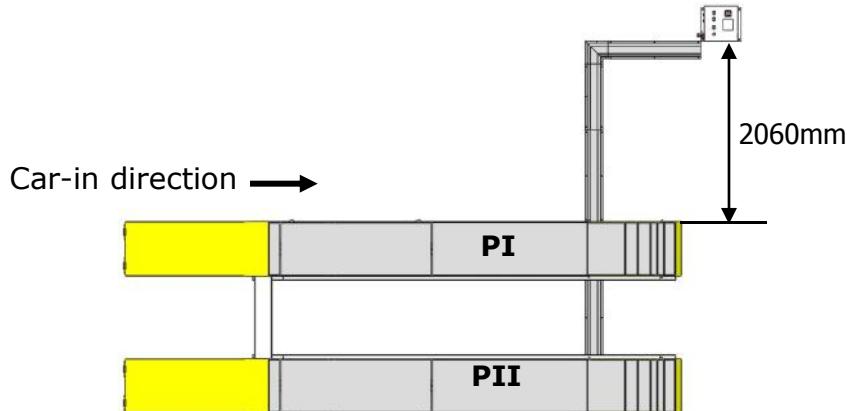


Fig. 12

1. Pull out the shelf and take out oil hoses. (Fig. 13)
2. Pass oil hoses ① and ③ through the back of the control cabinet and connect them on the respective fittings on the power unit as shown in the diagram. (Fig. 14)
3. Fill the power unit with hydraulic oil, connect the power supply and turn the hydraulic valve handle to the normal working position. Press UP button on the control cabinet to raise PI and PII to approximately 1 meter. Then press LOCK button to lower the machine to the safety position. (Fig. 15)

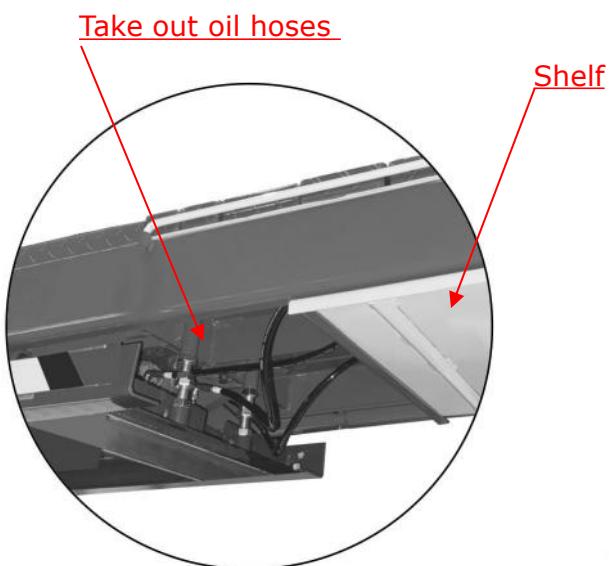
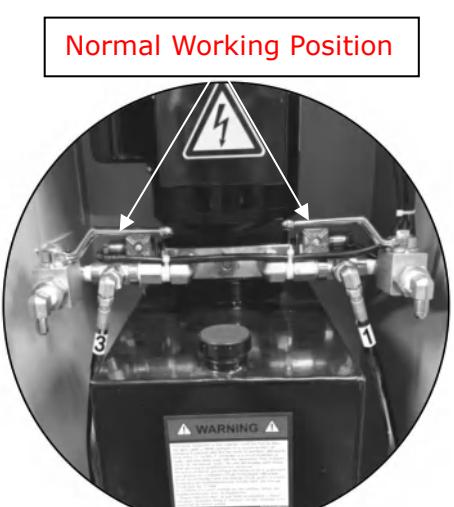
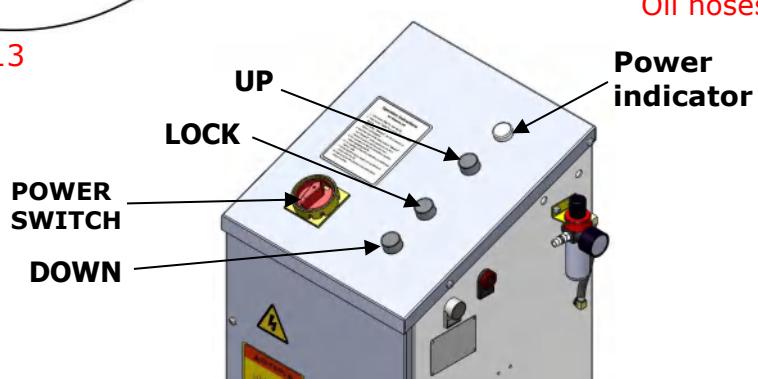


Fig. 13



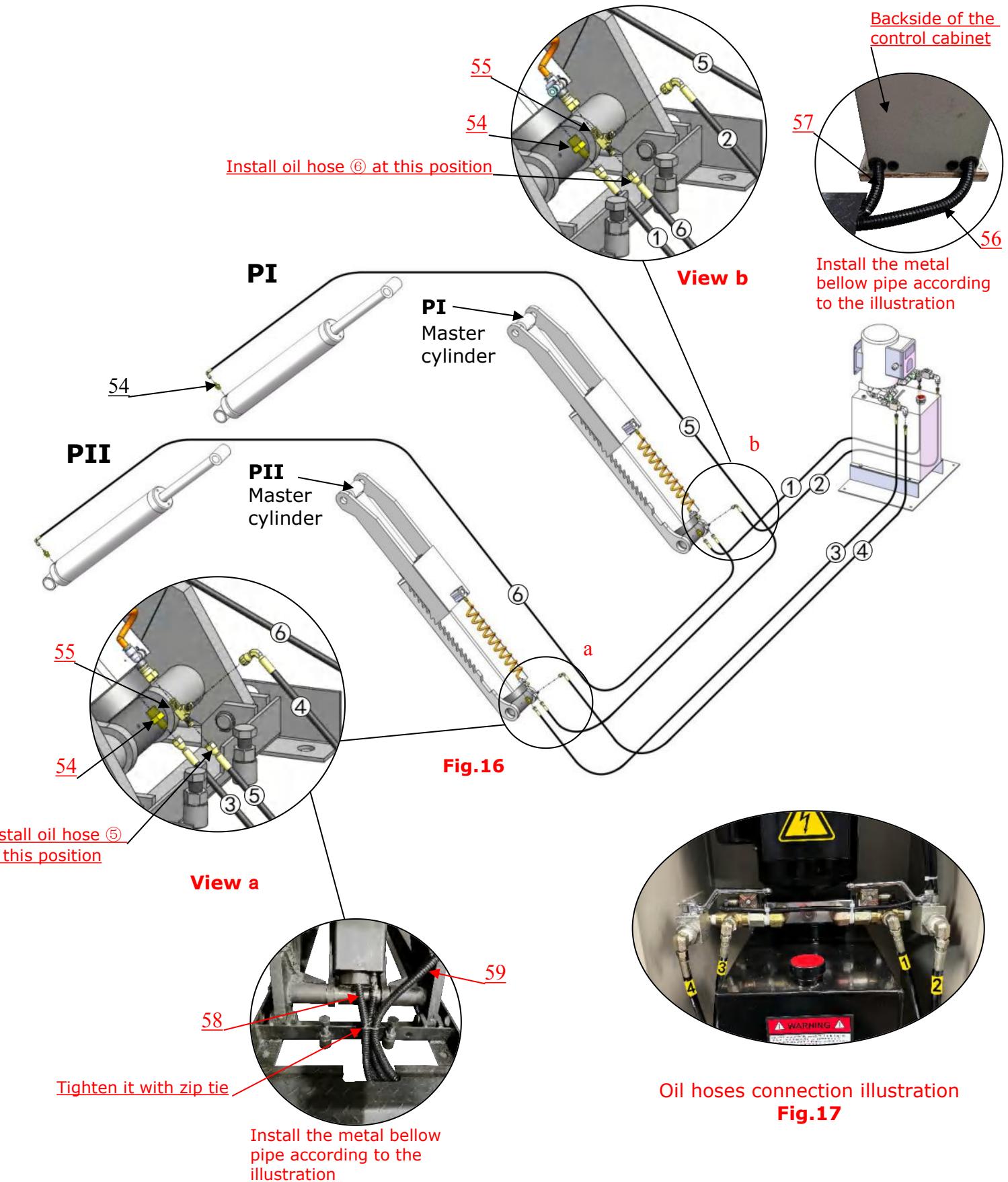
Oil hoses connection illustration  
Fig. 14



Operation panel buttons  
Fig. 15

4. Connect the oil hose ⑤ to the T fitting on **PII** master cylinder(View a), connect the oil hose ⑥ to the T fitting on **PI** master cylinder(View b), pass oil hoses ② and ④ through the back of the control cabinet,then connect them to respective fittings of the power unit as shown in the diagram. (**Fig.** 16 and 17)

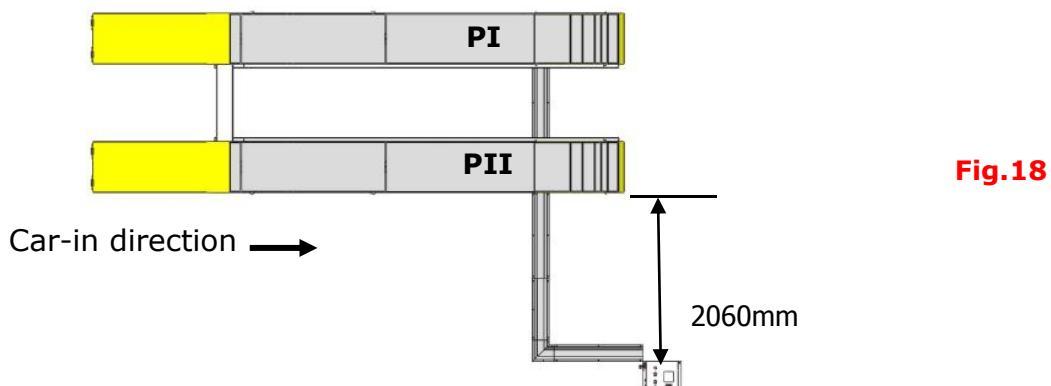
Note: Before connecting oil hoses, insert them into the metal bellow pipe.



## Part list for oil hose installation

Item	Part NO.	Description	QTY.
51	1003245006	①Oil hose assy.1/4"*179 1/8"	1
51A	10540019-02	②Oil hose assy.1/4"*179 1/8"	1
52	1003245008	③Oil hose assy.1/4*257 7/8"	1
52A	1003245007	④Oil hose assy.1/4*257 7/8"	1
53	1003245009	⑤⑥Oil hose assy.1/4*212 5/8"	2
54	10510023	Straight fitting G3/8-19(M)*1/4JIC(M)	4
55	1003315002	T fitting 1/4JIC(M)*1/4JIC(M)*3/8JIC(M)	2
56	1003205004	Metal bellow pipe 1 7/16"*1 1/4"*19 11/16"	1
57	1003205005	Metal bellow pipe 1 7/16"*1 1/4"*9 13/16"	1
58	1003245002	Metal bellow pipe 1"*13/16"*15 3/4"	6
59	1003245003	Metal bellow pipe 1"*13/16"*23 5/8"	2

**Installation method 2:** The control cabinet is installed on the right side of the car-in direction. **Fig. 18**



1. Pull out the shelf and take out oil hoses. (**Fig. 19**)
2. Pass oil hoses① and ③ through the back of the control cabinet and connect them on the respective fittings on the power unit as shown in the diagram. (**Fig. 20**)
3. Fill the power unit with hydraulic oil, connect the power supply and turn the hydraulic valve handle to the normal working position. Press UP button on the control cabinet to raise PI and PII to approximately 1 meter. Then press LOCK button to lower the machine to the safety position. (**Fig. 15**)

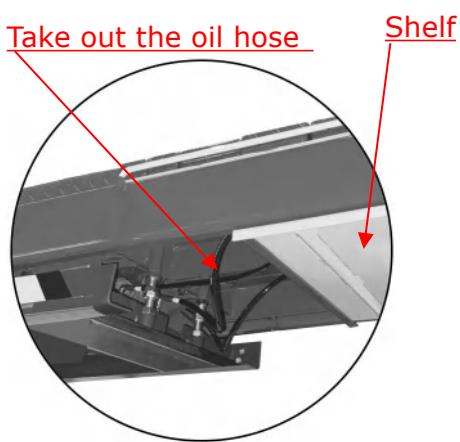
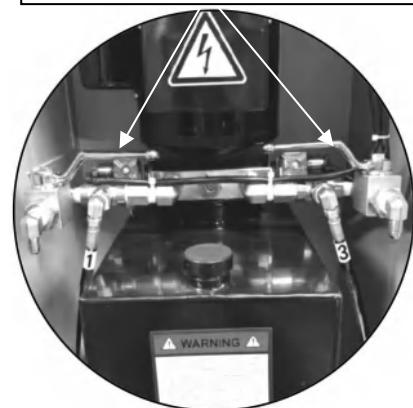


Fig.19

Normal Working Position

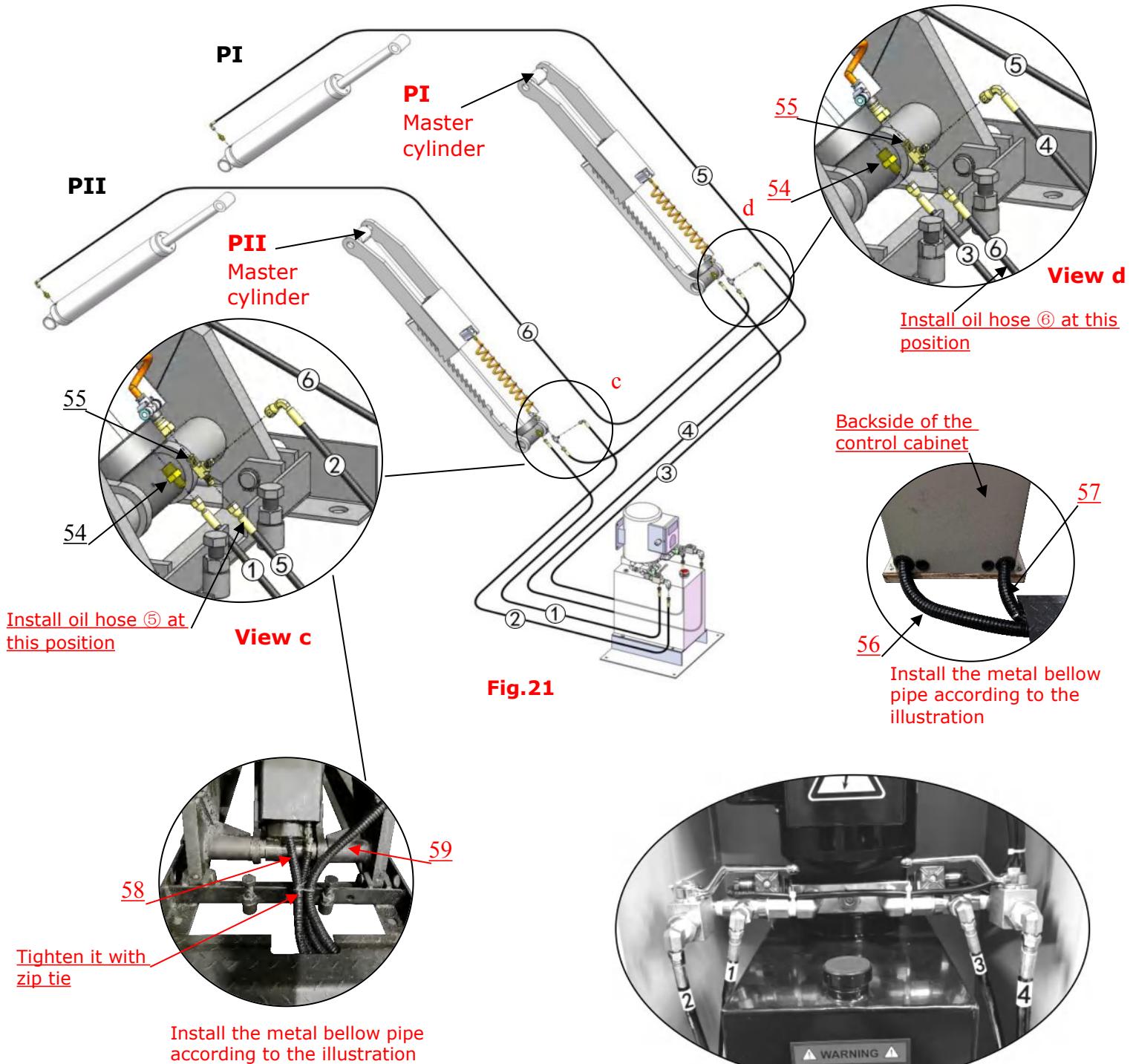


Oil hoses connection illustration  
Fig.20

4. Remove oil hoses ①②③④ from the cylinder, using a reservoir to collect any residual hydraulic oil in oil hoses. Then connect oil hoses ①② to the master cylinder on the **PII** and oil hoses ③④ to the master cylinder on the **PI**; **Fig. 21**

5. Connect the oil hose ⑤ to the T fitting on the **PII** master cylinder (View c), and the oil hose ⑥ to the T fitting on the **PI** master cylinder (View c). Pass oil hoses ②④ through the back of the control cabinet and connect them to respective fittings of the power unit as shown in the figure. **Fig. 22**

Note: Before connecting oil hoses, insert them into the metal bellow pipe.



**Oil hoses connection illustration**  
**Fig.22**

E. Connect air lines. (Fig.23)

1. Connect the control cabinet and the air lines according to the illustration

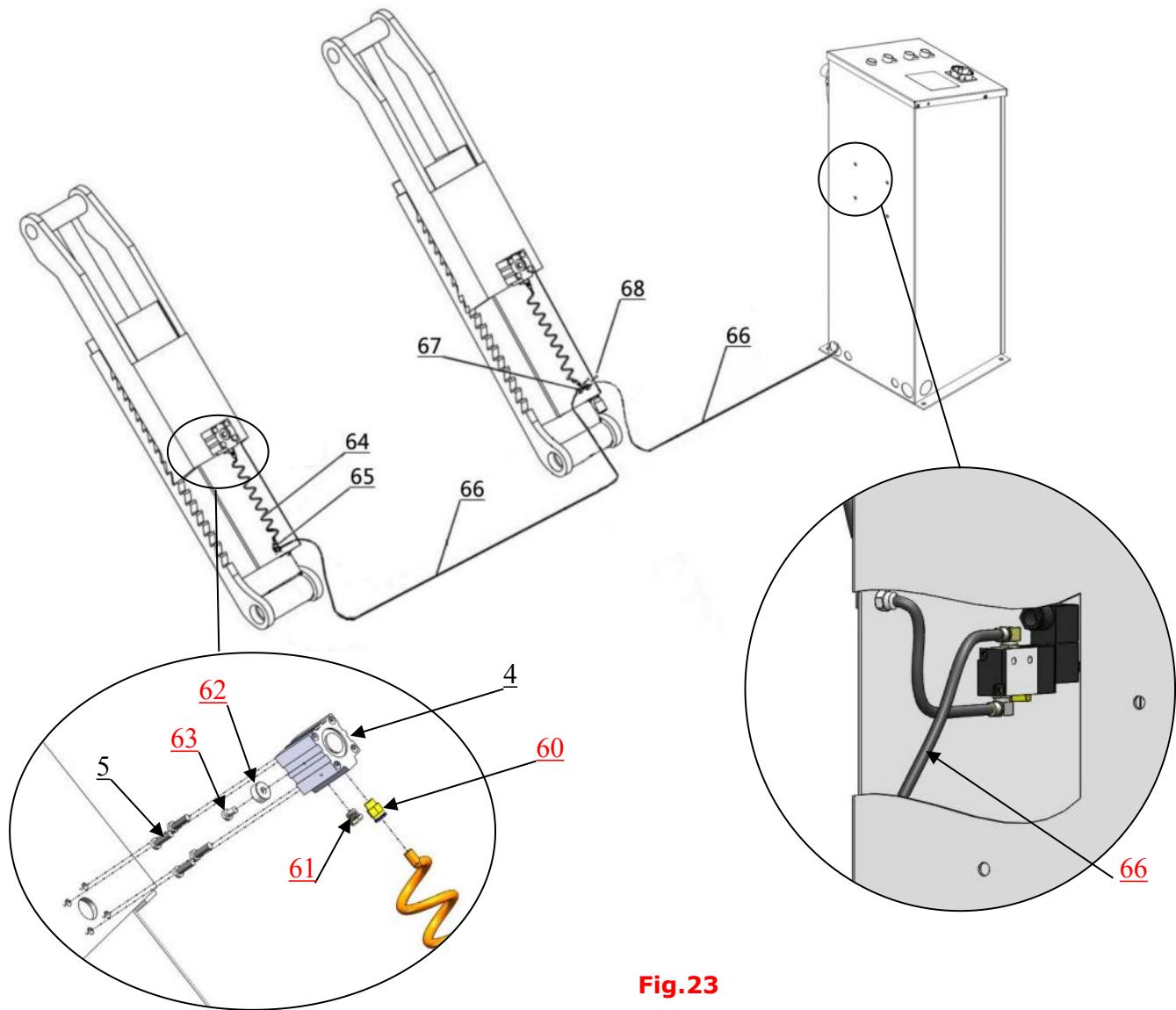
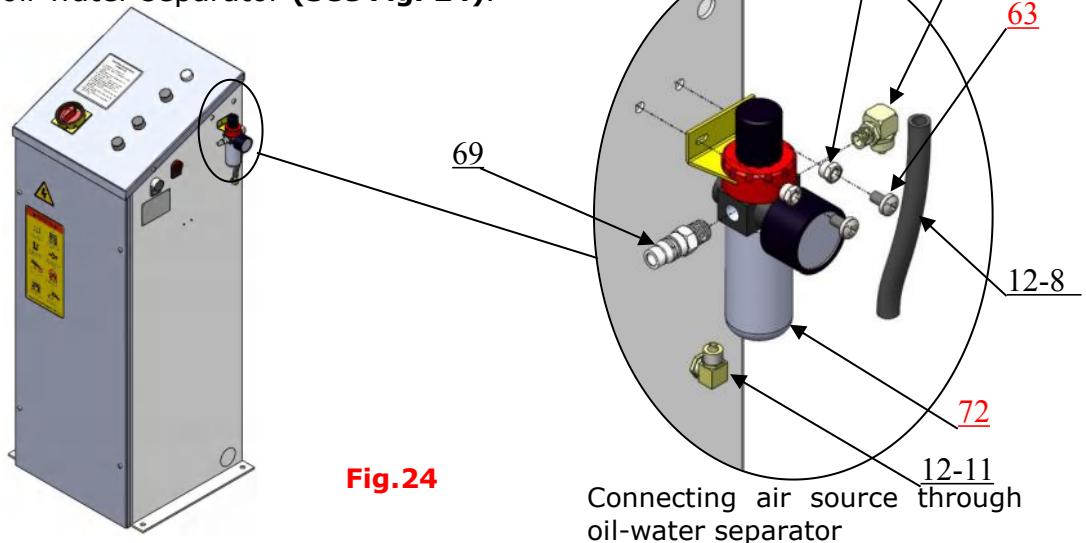


Fig.23

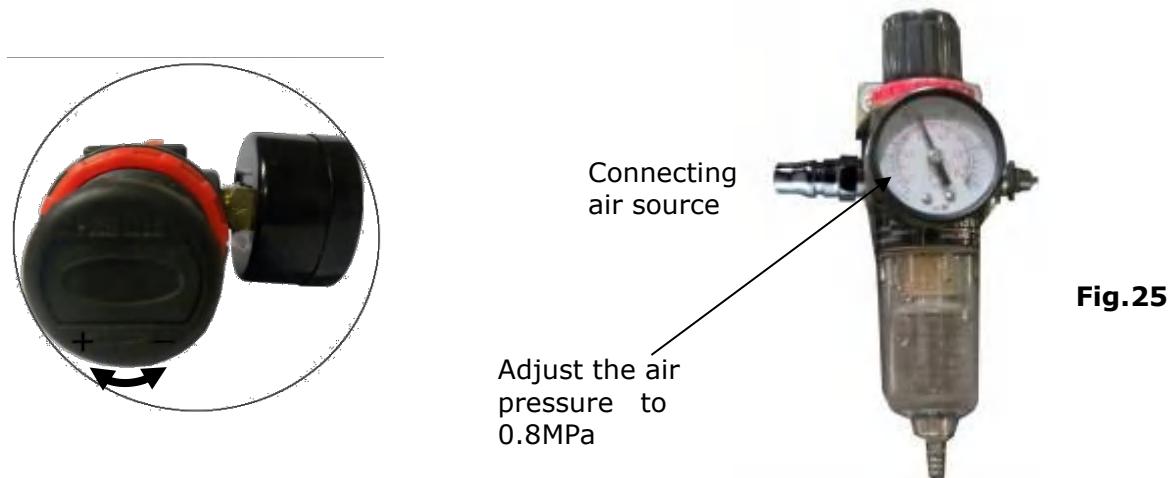
Part list for air line installation

Item	Part No.	Description	Qty.
60	10420047	Quick fitting for air cylinder	2
61	10520059	Air cylinder muffler	2
62	10510048	Slide block	2
63	10680005	Round head bolt M6*10	4
64	10520065	Air hose	2
65	10520069	90° Quick fitting for air line	1
66	10510036	Air hose 1/4" * 3/16" * 318 7/8" (Black)	1
67	10420124	T fitting	1
68	10510039	Round head bolt M3*16	3

2. Install the oil-water separator (See Fig. 24).



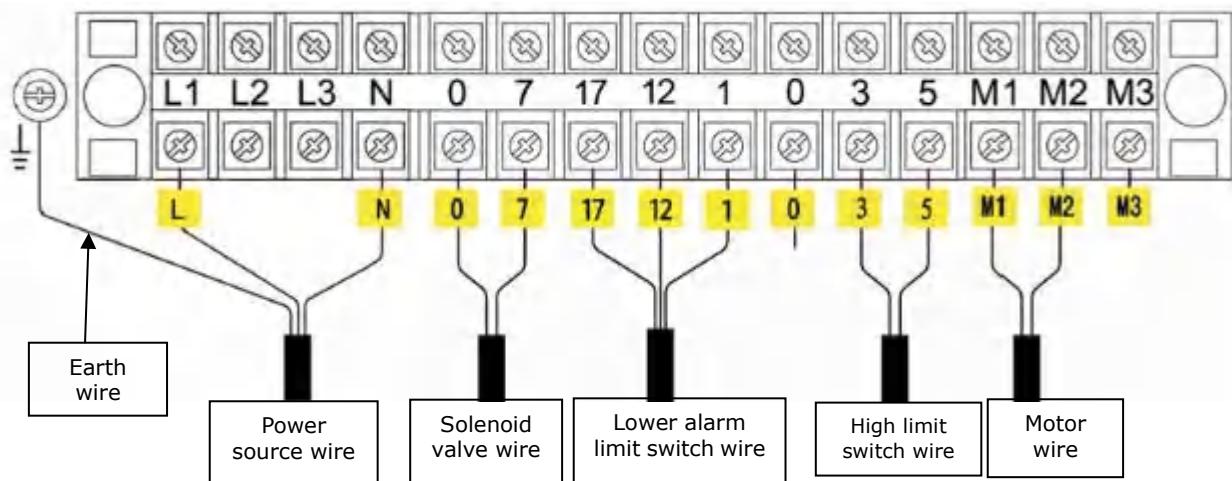
3. Connecting the air source , adjust the air pressure to 0.8MPa (See Fig.25).



## F. Install electric system

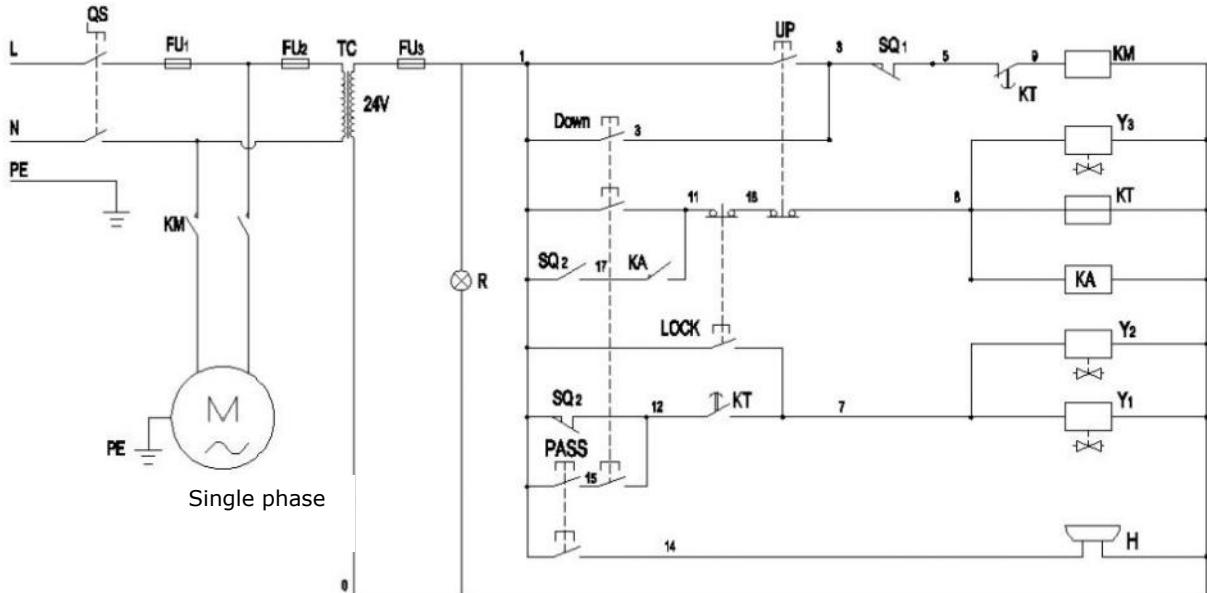
1. Wire connection for single phase power unit

1.1 Connect the wire of power source and limit switch according to the wiring diagram (See Fig. 26)



**Fig.26**

## 1.2 Single phase power unit circuit diagram (See Fig. 27)



**Electric Component of single phase list**

**Fig.27**

Item	Name	Code	Specification
1	Power switch	QS	220V AC
2	Breaker	FU <sub>1</sub>	2P
3	Breaker	FU <sub>2</sub>	1P
4	Breaker	FU <sub>3</sub>	1P
5	AC Contactor	KM	24V AC
6	Time relay	KT	24V AC
7	High limit switch	SQ1	10A
8	Lower alarm limit switch	SQ2	10A
9	Hydraulic solenoid valve	Y <sub>1</sub> Y <sub>2</sub>	24V AC
10	Air solenoid valve	Y <sub>3</sub>	24V AC
11	Push button	UP	Duplex
12	Push button	Lock	Duplex
13	Push button	Down	Triple
14	Lower alarm button	Pass	Duplex
16	Buzzer	H	24V AC
17	Transformer	TC	24V AC
18	Intermediate Relay	KA	24V AC
19	Power indicator	R	24V AC

**⚠ DANGER** All electrical wiring must be performed by a licensed and certified electrician.

Before ensuring the main power has disconnected from the lift and cannot be re-applied until all procedures have been completed, do not perform any maintenance or installation to the lift.

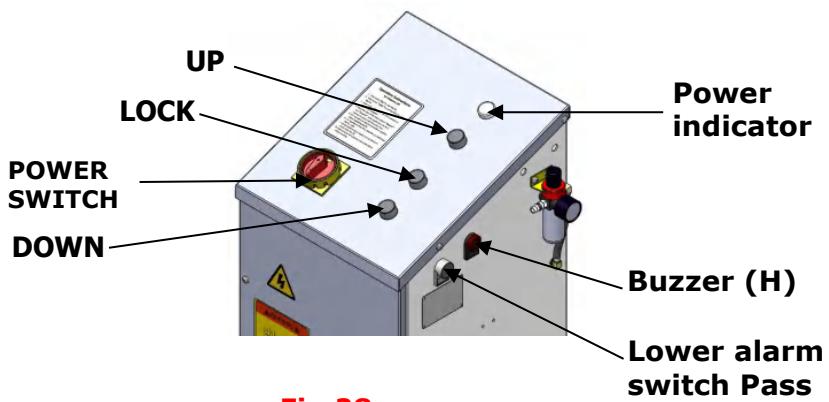
**⚠ DANGER** Do not use the lift if the wires are damaged or severely worn. If the vehicle rises without noticing damage or extreme wear, carefully lower the vehicle to the ground. Once the lift is on the ground, remove it, disconnect the power, and arrange for protection.

## G. TEST RUN

### 1. Prepare for synchronization adjustment

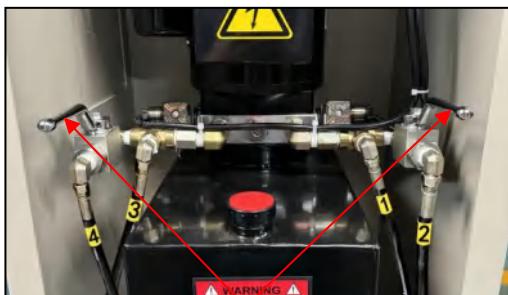
- 1.1 Fill the reservoir with hydraulic oil. In consideration of hydraulic power unit's durability and keep the equipment running in the perfect condition, please use Hydraulic Oil 46#.
- 1.2 Turn on the power after connecting oil system correctly. Push the **UP** button, and check the rotated direction of the Motor. Shut off power and exchange the phase connection if the direction is wrong. ( only for three phase motor)

### 2. Description of buttons on the control cabinet panel



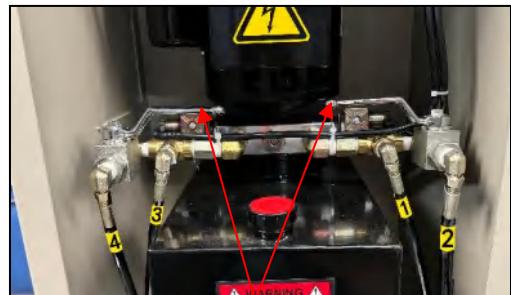
### 3. Synchronous adjustment

- 3.1 Lower both platforms to the lowest position.
- 3.2 Turn the two-way valves to oil filling position (see Fig. 29)
  - a. Push the button **UP** to fill the cylinders. Release the button when the platforms starts to rise.
  - b. Push button **LOCK** at the same time for 5 seconds to bleed the air, with buzzer sound and bleeding sound from oil tank.
  - c. Repeat a and b step 2-3 times until no air in the hydraulic system.
  - d. The lift is in the lowest state, quickly click button **UP** until the platforms just start to rise.
- 3.3 Turn the two-way valves to the normal working position ( see Fig. 30), press button **UP** to rise the lift. Check if both platforms are at the same height, if not, lower the lift to the lowest position and repeat step 3.2, till the platforms can rise synchronously.



Oil Filling Position

Fig. 29



Normal Working Position

Fig. 30

3.4 After the platform **PI** and **PII** are confirmed synchronous, test run a full cycle without loading.

#### H.Platforms leveling adjustment and install anchor bolts.

1.Raise the lift to 1000mm.(For the convenience of installing anchor bolts)

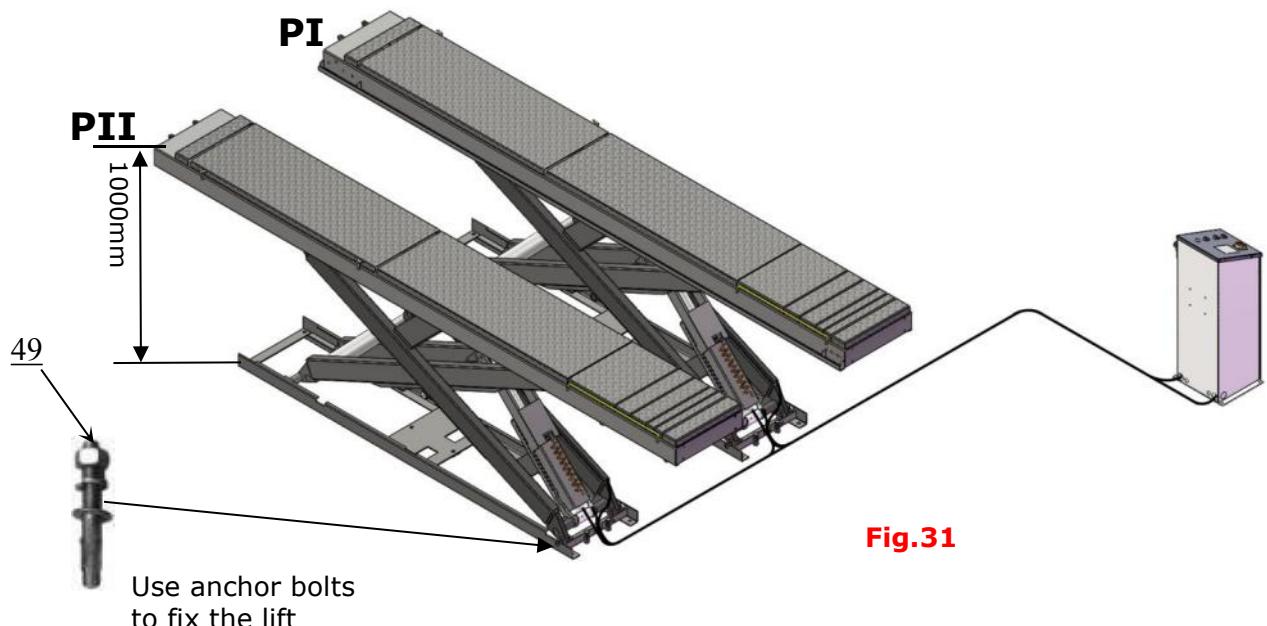


Fig.31

2.Drill the holes for the anchor bolt with the rotary hammer drill, type the anchor bolt into the ground, use shims to level the bolts and then fasten with ratchet spanner. See Fig.34.

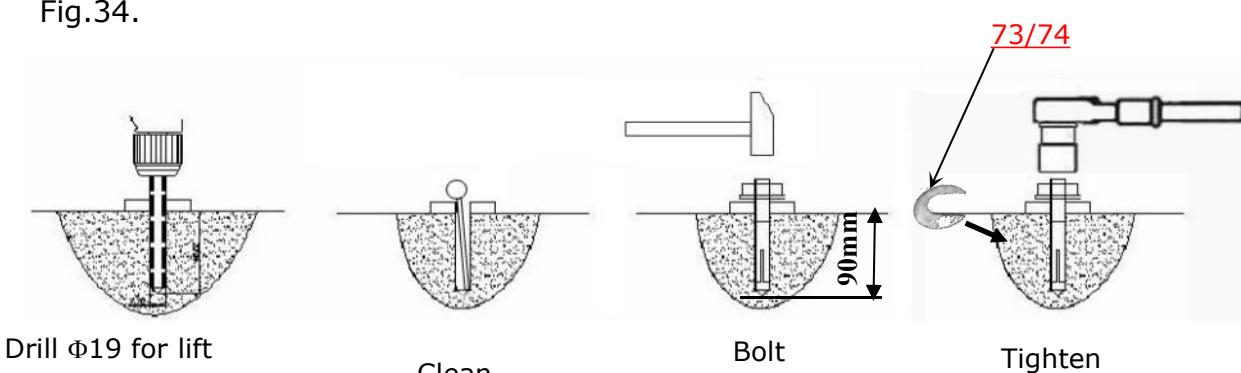
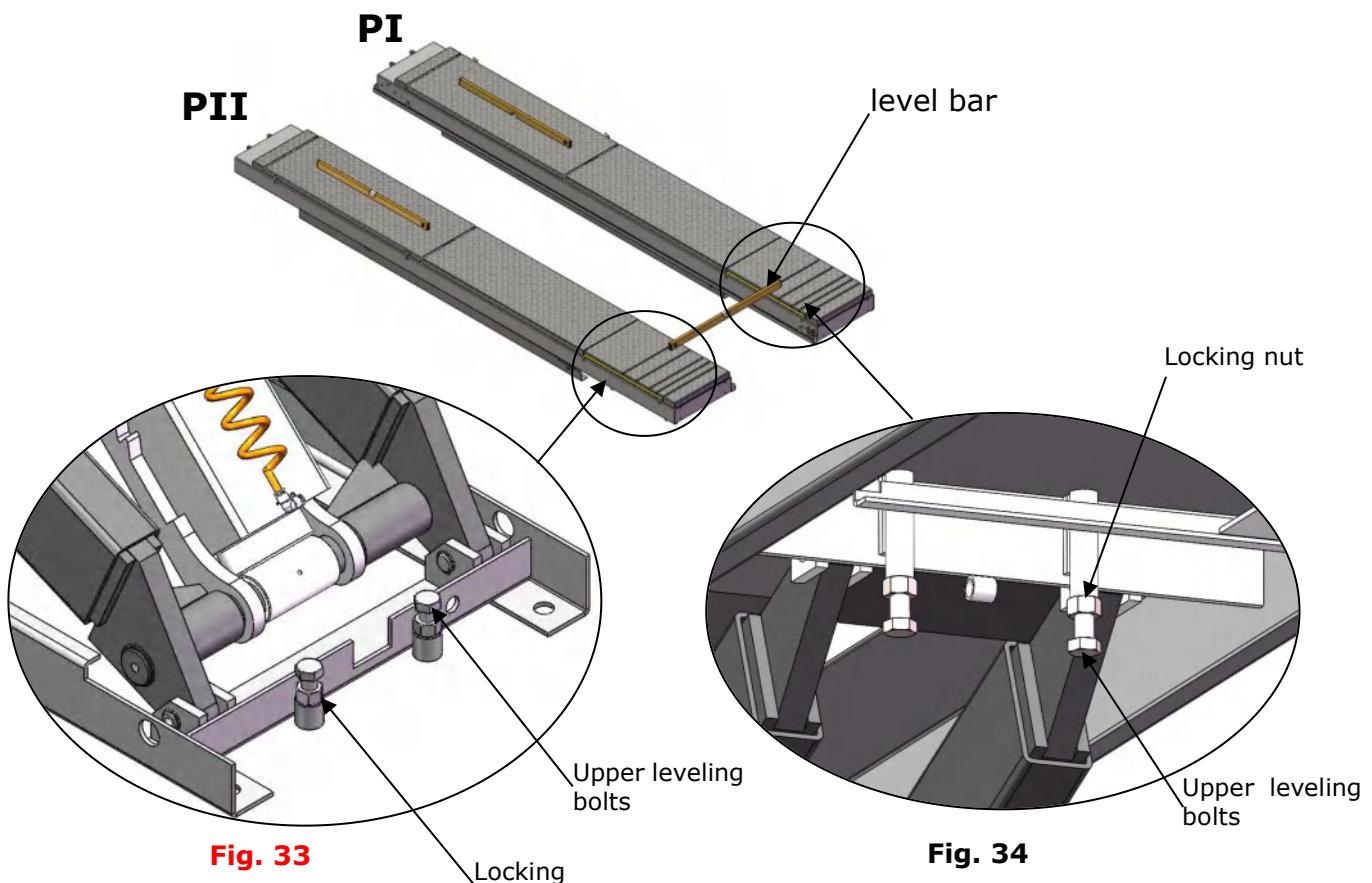


Fig.32

**⚠ CAUTION** Concrete and anchor bolts must comply with above specifications. Install lifts only on concrete surfaces. If you are in asphalt or either any other surface on which the lift is mounted, or the concrete or anchor bolts do not meet these specifications, it may result in product damage, vehicle damage, personal injury, or even loss of life.

3. Measure with level bar, adjust lower leveling bolt (see Fig. 33) and use shims to level the platforms until the platforms are leveled front and rear. Then adjust the upper leveling bolt (see Fig. 34), making it just in contact with the lower leveling bolt when the platforms are lowered to the lowest. Tighten the nuts.

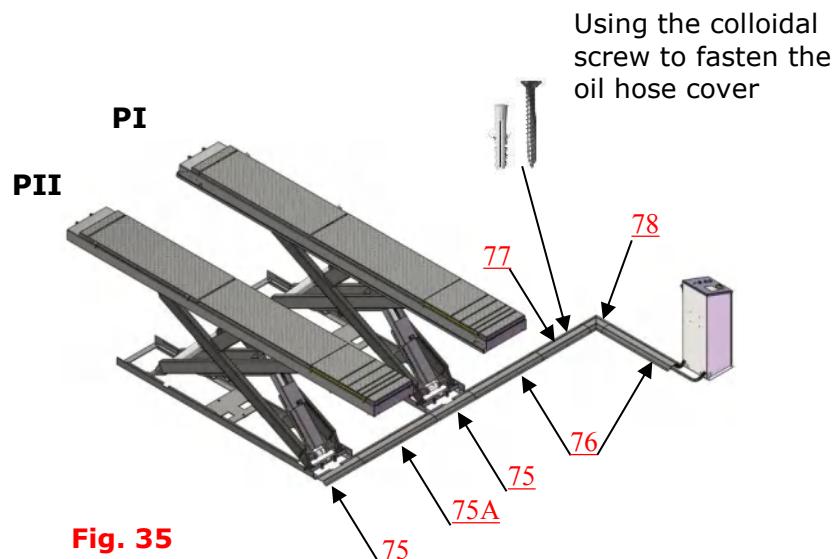


Tighten the anchor bolts with spanner after leveling. (see fig 32)

**Note: The tightening torque for the anchor bolt is 150N.m. Tap anchor bolts into the ground at least 90mm.**

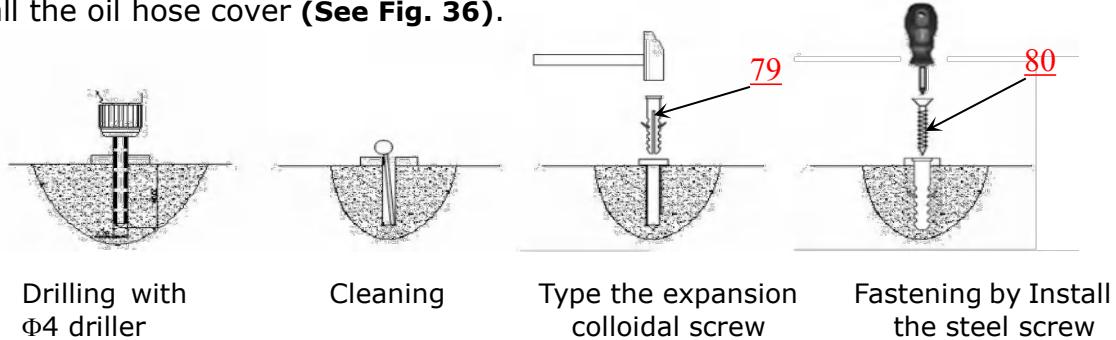
**I. Install oil hose cover (Only for surface installation).Install control cabinet screws.**

1.Tidy up the oil hose and air line, cover the oil hose cover (See Fig. 35).

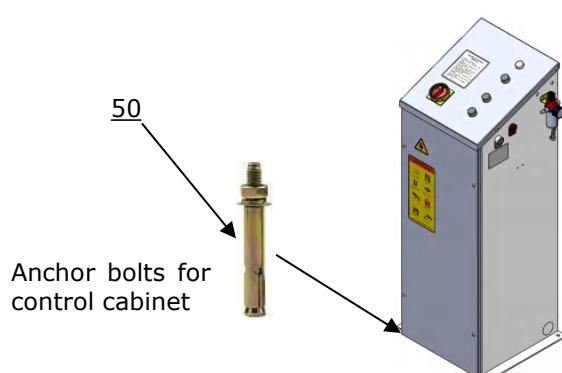


Note: When the control cabinet can be installed at the right side of the lift in the car-in direction,it can also be installed at right angles and straight lines.

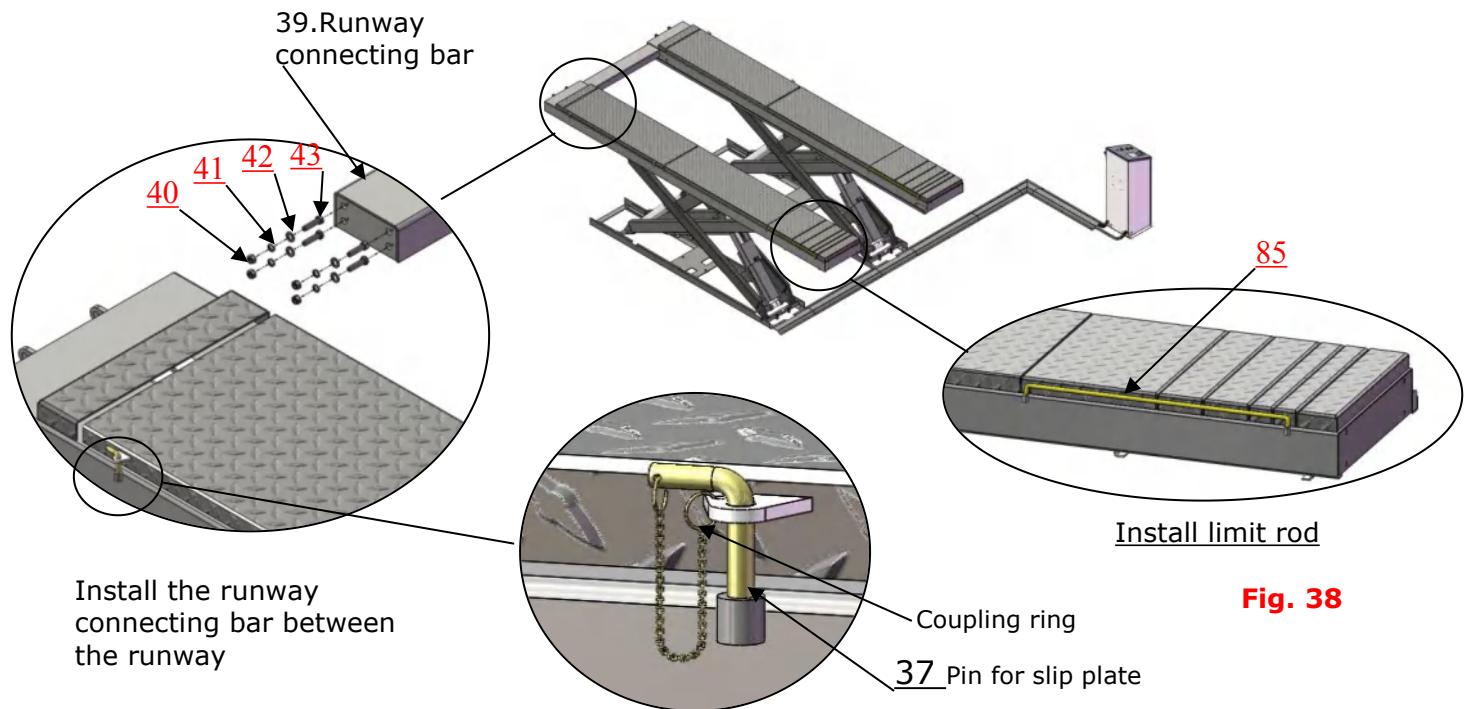
2.Install the oil hose cover (See Fig. 36).



3.Place the control cabinet onto the ground, drill holes for anchor bolts,install anchor bolts for the control cabinet(anchor bolts M10\*100): Use  $\Phi 10$  driller to drill hole.



### **J. Install platform connecting bar, pin for slip plate.**



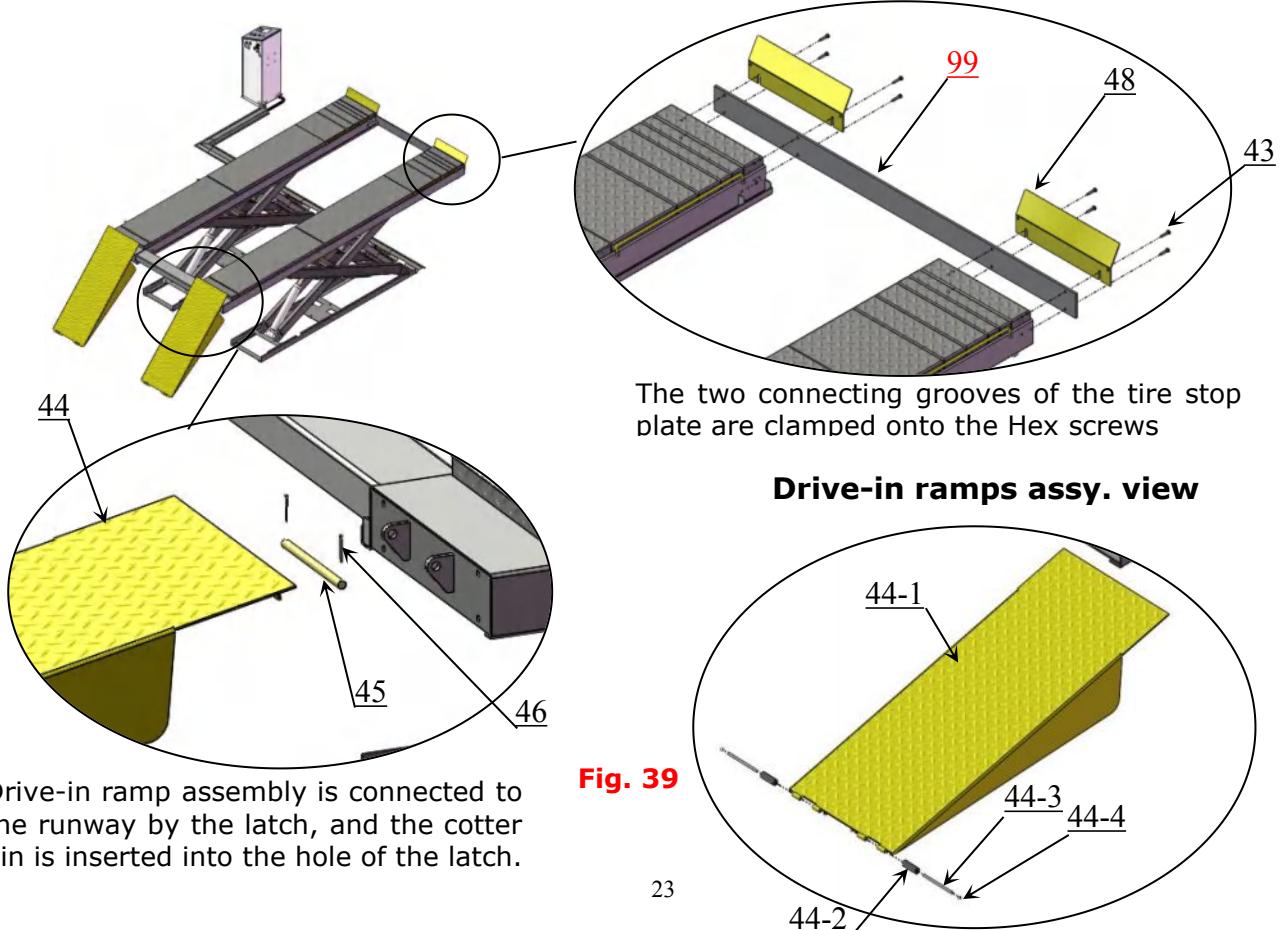
**Fig. 38**

Install the runway connecting bar between the runway

Fasten the connecting ring on the small hole of the connecting ear, then insert the latch into the big hole of the connecting ear and the inserting ring of the runway.

## **K. Install drive-in ramps , platform connecting bar,tire stop plate.**

1. Drive-in ramps assy. (11540610) (Only for For on surface installation )



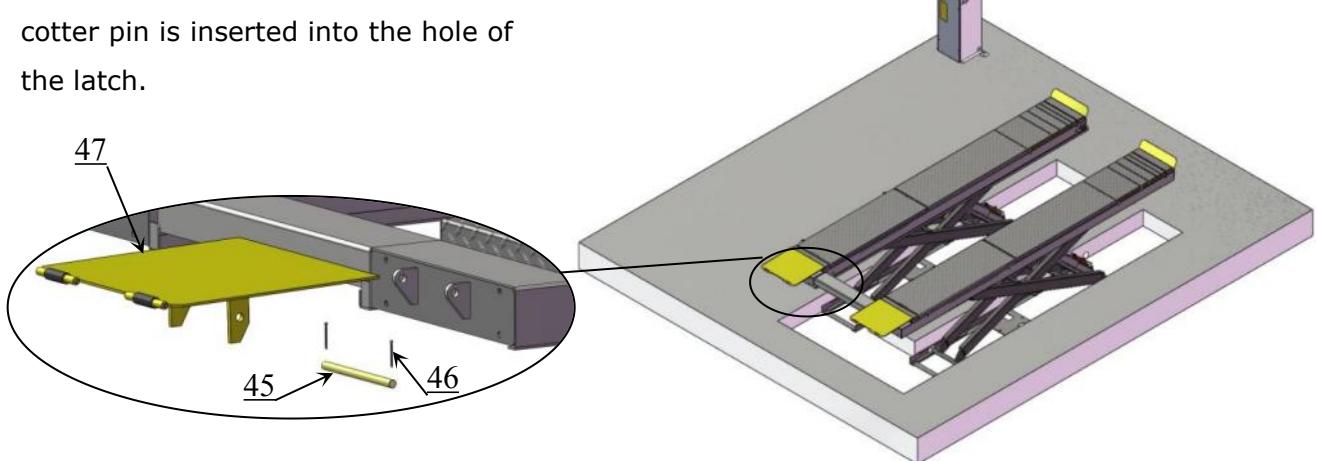
**Fig. 39**

**Part list for drive-in ramp assy.(Only for surface installation) :**

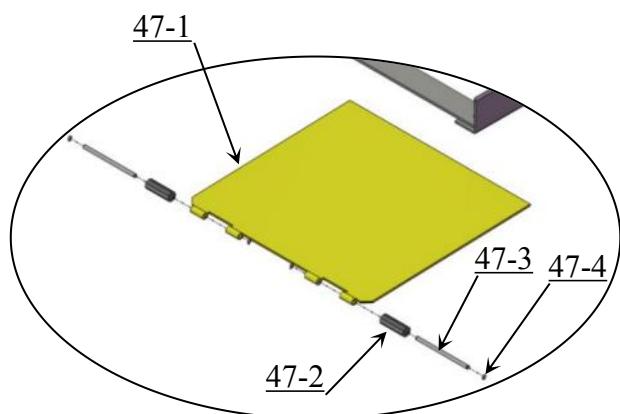
Item	Part No.	Description	QTY.
44-1	11520005A	Drive-in ramp	2
44-2	10620063	Drive-in ramp roller	4
44-3	11610667	Roller pin	4
44-4	10209010	Clip pin φ10	8

2. Drive-in ramps assy.(**86010505**) (Only for flush mount installation )

Drive-in ramp assembly is connected to the runway by the latch, and the cotter pin is inserted into the hole of the latch.



**Drive-in ramps assy. view**



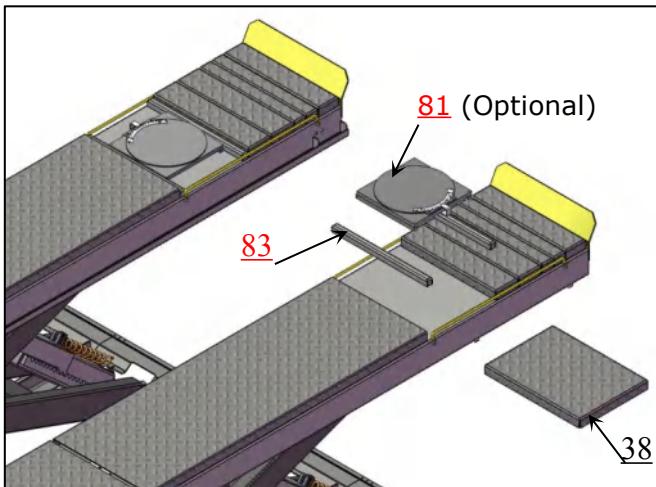
**Fig. 40**

**Part list for drive-in ramp assy.**

(Only for flush mount installation) :

Item	Part No.	Description	QTY.
47-1	11510018	Drive-in ramp (AX-16A)	2
47-2	10620063	Drive-in ramp roller	4
47-3	11610667	Roller pin	4
47-4	10209010	Clip pin φ10	8

## L. Install turnplate (Optional )



First, remove the turnplate cover and place the turnplate; then place 35mm height turnplate adjusting block on both sides of the turnplate.

**Fig. 41**

## M. Test Run

Ensure the limit switch, hoses, and air line connections are in good condition before performing the test run. The lift can be used only after successfully passing the test load.

## IV. EXPLODED VIEW

Model : AX-16A

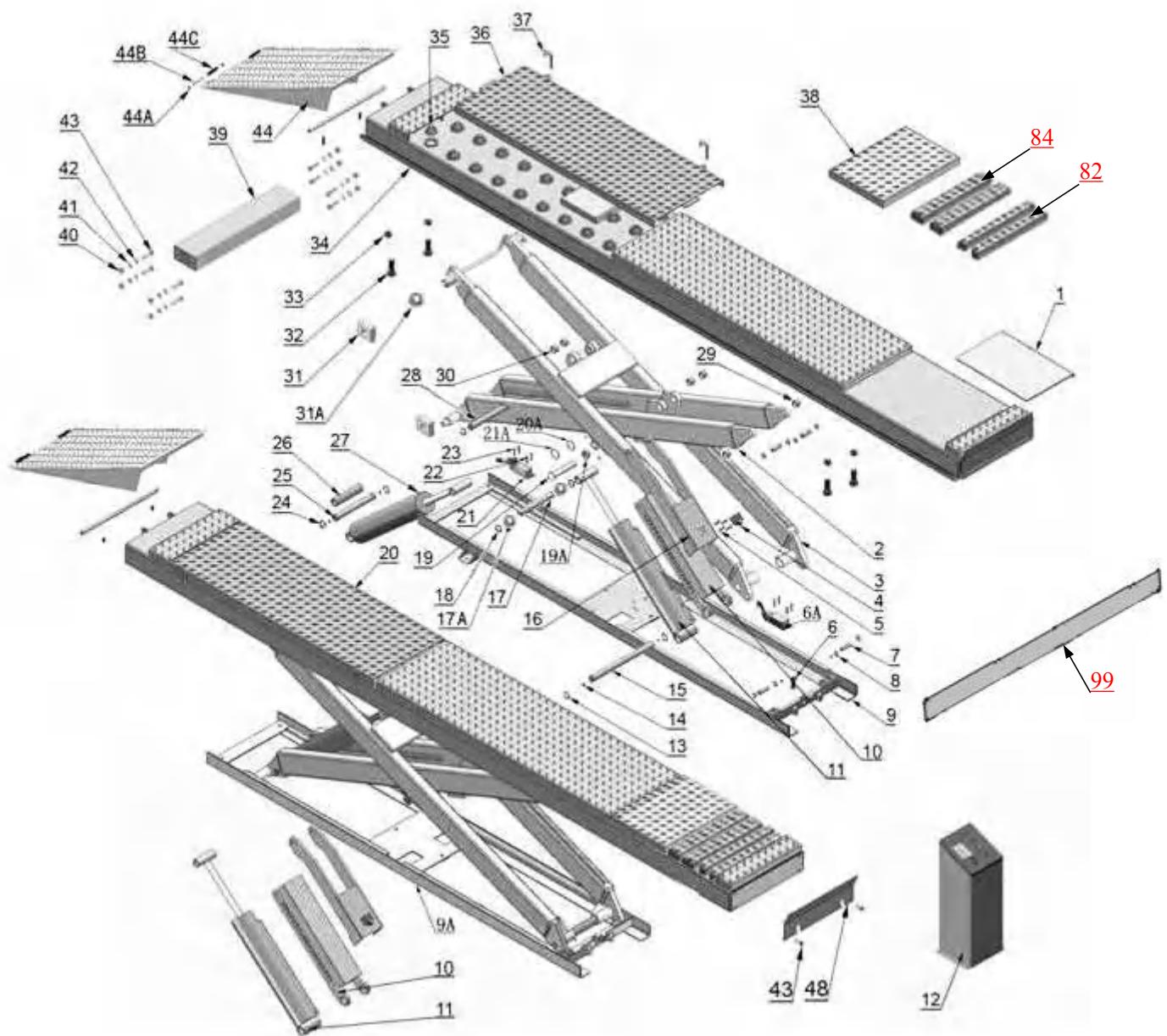


Fig.42

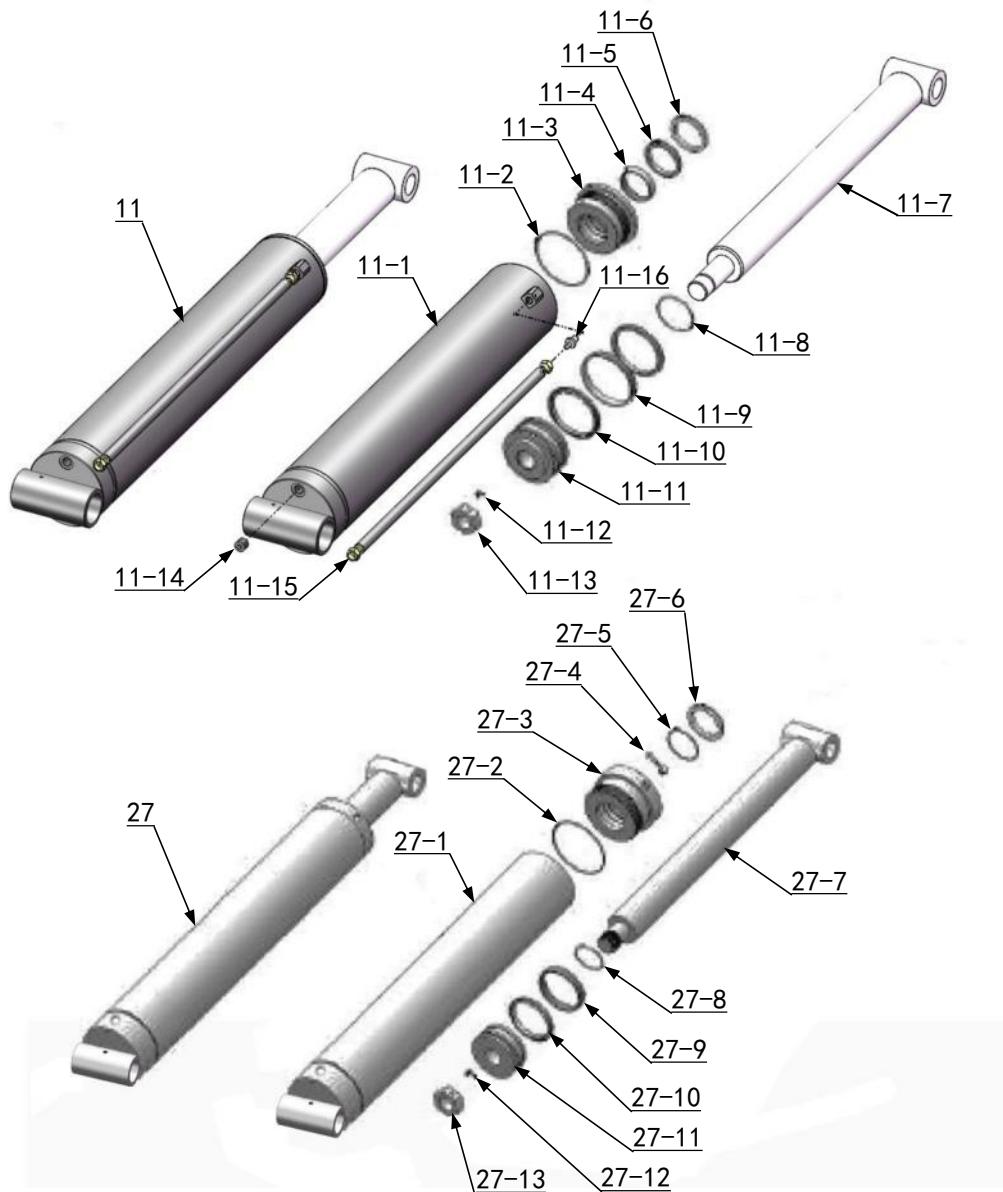
## PARTS LIST For Model AX-16A

Item	Part NO.	Description	QTY.
1	11520003	Shelf	2
2	11530002A-01	Inner scissor	2
3	11530003A-01	Outer scissor	2
4	10520011	Air cylinder	2
5	10420153	Round head bolt M6*20	8
6	10510012	Hex bolt M20*75	4
6A	10510040	Limit switch assy.	1
7	11520013A-01	Connecting pin	8
8	10610008	Clip ring φ30	16
9	11520015C-01	Base	1
9A	11520015D-01	Base	1
10	11520038B	Self-locking teeth plate	2
11	10520028B-01	Master cylinder	2
12		Control cabinet	1
13	10520020	Clip ring φ50	4
14	10620064	Grease fitting	24
15	11520018A	Connecting pin for master cylinder	2
16	11520021A	Self-locking support plate	2
17	11610005A-01	Connecting pin for cylinder	4
17A	1103242002	Shaft sleeve φ80*φ35.5*6	4
18	10610098	Clip ring φ35	8
19	11520024A	Connecting pin for scissors	4
19A	10610019	Nylok nut M30*3.5	4
20	11570002-02	Off side platform	1
20A	11610108	Flat washer	4
21	10510041	Limit switch assy.	1
21A	11530023	Flat washer	4
22	10620109	Round head bolt M4*18	4
23	10420164	Round head bolt M4*30	4
24	10520023	Clip ring φ38	4
25	11560026A	Connecting pin for slave cylinder	2
26	11560027	Pin bush	2
27	10520017B	Slave cylinder	2
28	1103222001-01	Cylinder coupling shaft	2
29	1003205002	Bush 1 3/16"*1 5/16"*1 3/16"	4
30	1003125002	Bush 1 3/8"*1 9/16"*1"	8
31	10530012	Slide block	8
31A	1103242001	Shaft sleeve φ60*φ45.5*6	4
32	10510028	M20*110 hex bolt	8
33	10420175A	Hex nut M20	12
34	11570001-02	Power side platform	1
35	10420157	Ball seat	86
36	11570003	Slip plate	2
37	11520037	Pin for slip plate	4

<b>Item</b>	<b>Part No.</b>	<b>Description</b>	<b>QTY.</b>
38	11560003	Turnplate cover	2
39	11570004-01	Connecting bar	1
40	10206023B	Hex nut M12	8
41	10420026	Lock washer φ12	8
42	10206006	Flat washer φ12	8
43	10420136	Hex bolt M12*45	16
44	11540610	Drive-in ramps assy. (for on surface installation only )	2
45	11510006	Pin	2
46	10201005	Cotter pin 4*50	4
47	86010505	Guide ramps assy. (for flush mount installation only)	2
48	11520004A	Tire stop plate	2
49	10209059	Anchor bolt 3/4*5-1/2	14
50	10620071	Anchor bolt M10*100	4
51	1003245006	①Oil hose assy.1/4"*179 1/8"	1
51A	10540019-02	②Oil hose assy.1/4"*179 1/8"	1
52	1003245008	③Oil hose assy.1/4*257 7/8"	1
52A	1003245007	④Oil hose assy.1/4*257 7/8"	1
53	1003245009	⑤⑥Oil hose assy.)1/4*212 5/8"	2
54	10510023	Straight fitting G3/8-19(M)*1/4JIC(M)	4
55	1003315002	T fitting 1/4JIC(M)*1/4JIC(M)*3/8JIC(M)	2
56	1003205004	Metal bellow pipe 1 7/16"*1 1/4"*19 11/16"	1
57	1003205005	Metal bellow pipe 1 7/16"*1 1/4"*9 13/16"	1
58	1003245002	Metal bellow pipe 1"*13/16"*15 3/4"	6
59	1003245003	Metal bellow pipe 1"*13/16"*23 5/8"	2
60	10420047	Air line quick fitting	2
61	10520059	Air cylinder muffler	2
62	10510048	Slide block	2
63	10680005	Round head bolt M6*10	4
64	10520065	Air line	2
65	10520069	90°pneumatic quick fitting	1
66	10510036	Air line 1/4"*3/16"*318 7/8" (Black)	1
67	10420124	T fitting	1
68	10510039	Round head bolt M3*16	3
69	10420146	Air line quick straight fitting	1
70	10420076	90° fitting	1
71	10420018	M6 nylok nut	2
72	10420145	Oil-water separator AFR-2000	1
73	10620065	Shim(2mm)	20
74	10201090	Shim(1mm)	20
75	11570618	Oil hose protective cover (L=23 13/16")	2
75A	11540028	Oil hose protective cover (L=45 11/16")	1
76	11540027	Oil hose protective cover (L=41 3/4")	2
77	11540025	Oil hose protective cover (L=2 15/16")	1

<b>Item</b>	<b>Part No.</b>	<b>Description</b>	<b>QTY.</b>
78	11540029	Oil hose protective cover	1
79	10620070	Plastic expansion anchor φ6	36
80	10620069	Wood screw M4*30	36
81	40101	Turnplate (optional)	2
82	11580090	Turnplate adjustable block	4
83	11580097	Turnplate adjustable block 1	4
84	11520116	Turnplate adjustable block 2	4
85	11440090	Turnplate adjustable block stop rod	4
86		Power unit	1
87	10440009	Straight fitting 3/8SEA <sup>O/R</sup> (M)*1/4NPT(M)	2
88	1052K027	90° fitting 1/4NPT(M)*1/4NPT(F)	2
89	10630103	Straight fitting J0020: 1/4NPT(M)*1/4NPT(F)	2
90	1061K107	T fitting 1/4NPT(F)*1/4NPT(F)*1/4NPT(F)	2
91	10680072	90° fitting 1/4"NPT(M)*1/4"NPT(M)	2
92	1003105005	Two way valve KHB-1/4NPT	2
93	10420097	90° fitting 1/4NPT(M)*1/4JIC(M)	4
94	10209043	Hex bolt M8*20	4
95	10209034	Lock washer φ8	4
96	10209033	Flat washer φ8	12
97	10570500	Parts box ( for on surface installation only)	1
98	10570501	Parts box ( for flush mount installation only)	1
99	11570027	Platform connecting bar L=94"	1

#### 4.1 CYLINDERS EXPLODED VIEW(10520028B/10520017B)



**Fig.43**

## Parts list for cylinders

Item	Part No.	Description	QTY.
11-1	11510008B-1	Master cylinder	1
11-2	10520053	O ring ( $\phi 118*5.3$ )	1
11-3	11520043	Head cap(master)	1
11-4	10520052	Support ring ( $\phi 67*\phi 73*15$ )	1
11-5	10520051	Y ring ISI( $\phi 67*\phi 77*6$ )	1
11-6	10520050	Dust ring ( $\phi 67*\phi 75$ )	1
11-7	11510009B	Piston rod (master)	1
11-8	10520054	O ring ( $\phi 38*3.55$ )	1
11-9	10520056	Support ring ( $\phi 114*\phi 120*15$ )	1
11-10	10520055	Y ring OSI ( $\phi 105*\phi 120*9$ )	2
11-11	11520045	Piston (master)	1
11-12	10520049	Set screw	1
11-13	10520047	Hex nut (master)	1
11-14	80206004A	Anti-explosion valveG3/8	1
11-15	1103316001A	Oil hose assembly	1
11-16	10217147	Straight fitting 3/8NPT(M)*3/8JIC(M)	1
27-1	11510010B	Slave cylinder	1
27-2	10510083	O ring ( $\phi 100*3.55$ )	1
27-3	11520044	Head cap (slave)	1
27-4	10201034	Bleeding plug	2
27-5	10520058	O ring ( $\phi 45*3.55$ )	1
27-6	10217078	Dust ring ( $\phi 45*\phi 53$ )	1
27-7	11510011B	Piston rod (slave)	1
27-8	10520061	O ring ( $\phi 28*3.55$ )	1
27-9	10520062	Support ring ( $\phi 94*\phi 100*15$ )	1
27-10	10520063	Y ring OSI( $\phi 85*\phi 100*9$ )	1
27-11	11520046	Piston (slave)	1
27-12	10520049	Set screw	1
27-13	10520048	Hex nut (slave )	1

## 4.2 CONTROL CABINET EXPLODED VIEW

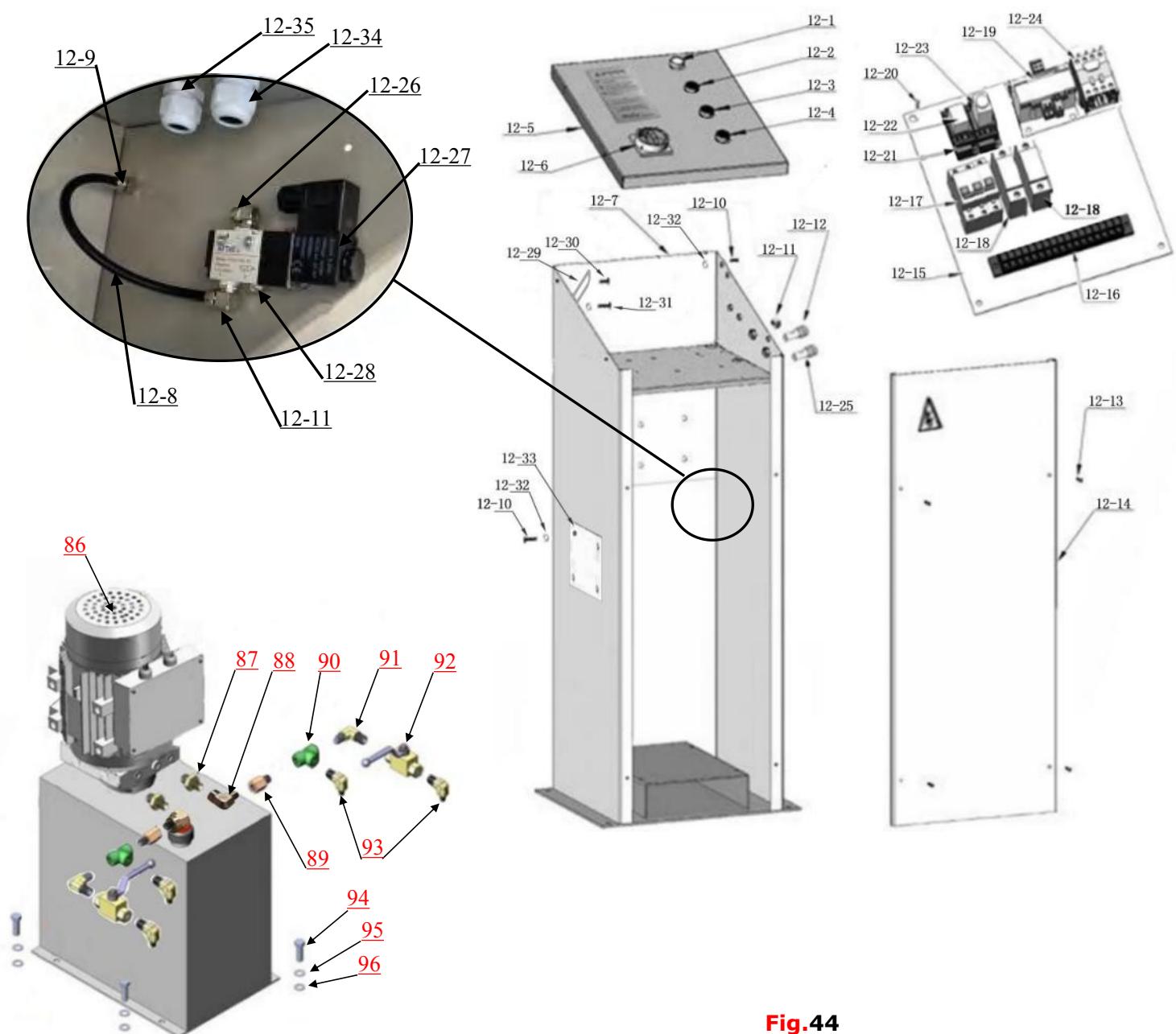


Fig.44

<b>Item</b>	<b>Part No.</b>	<b>Description</b>	<b>QTY.</b>
12-1	10201094	Indicator	1
12-2	10420071	Push button UP	1
12-3	10420071	Push button Lock	1
12-4	10420072	Push button Down	1
12-5	11510724	Control panel	1
12-6	1004187002	Power switch (For single phase)	1
	1004187003	Power switch (For three phase)	1
12-7	11510701	Cabinet	1
12-8	10420167C	Air line 1/4" * 5/16" * 7 7/8"	2
12-9	1061K110	Straight fitting	1
12-10	10420153	Round head bolt M6*20	2
12-11	10420076	90° fitting	2
12-12	10420143	Buzzer (H)	1
12-13	10720038	Round head bolt M6*30	4
12-14	11510693	Cabinet panel	1
12-15	11510754	Electrical component mounting plate	1
12-16	10620082	Terminal	1
12-17	10202046	Breaker 2P	1
12-18	10202049	Breaker 1P	2
12-19	10580114	Transformer (TC)	1
12-20	1061K052	Round head bolt with washer M4*8	17
12-21	10420135	Time relay bracket	2
12-22	10420141	Intermediate relay (KA)	1
12-23	10420083	Time relay (KT)	1
12-24	10420084A	AC contactor(KM)	1
12-25	10420142	Lower alarm switch Pass	1
12-26	10420166	90° fitting	1
12-27	10420077	Air solenoid valve(Y2)	1
12-28	10201034	Bleed plug	1
12-29	11510691	Electrical component support plate	1
12-30	1061k108	Hex bolt M6*12	1
12-31	10217066	Hex bolt M6*15	1
12-32	10420018	Nylok nut M6	6
12-33	11510757	Cabinet cover	1
12-34	10720095	Wire connector M24*1.5	2
12-35	10420088	Wire connector M20*1.5	1

## V. OPERATION INSTRUCTIONS

### To lift vehicle

1. Keep clear of site near the lift, and down the lift to the lowest position.
2. Drive vehicle to the platform and put on the brake.
3. Turn on the power and push the button **UP**, raise the lift to the working position.  
**Note:** make sure the vehicle is steady when the lift is rising
4. Push button **LOCK** to lock the lift in the safety device. Make sure the safety is locked in the same height before working.

**⚠WARNING** It is unsafe to work under the lift without locking at the safety device after it has been lifted up, which may causes vehicle fall, damage, lift damage, human injury or even death.

### To lower vehicle

1. Be sure clear of around and under the lift, only leaving operator in lift area.
2. Turn on the power switch, push the button **DOWN**, the lift is lowered continually and stopped at the height 24" from ground. Push button **DOWN** and the lower alarm button **PASS** at the same time , the lift will then lower to ground with alarm tone;
3. Drive away the vehicle when the lift is lowered to the lowest position.
4. Turn off the power, clean the lift's appearance, clean the work site.

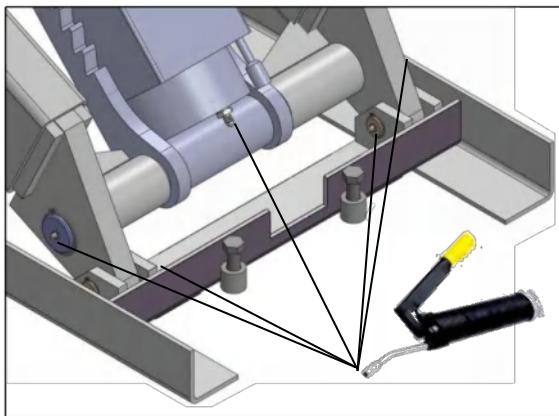
## VI. MAINTENANCE SCHEDULE

### Monthly:

1. Re-torque the anchor bolts to 150 Nm.
2. Check all fittings, anchor bolts, pins, ensure all are in good condition.

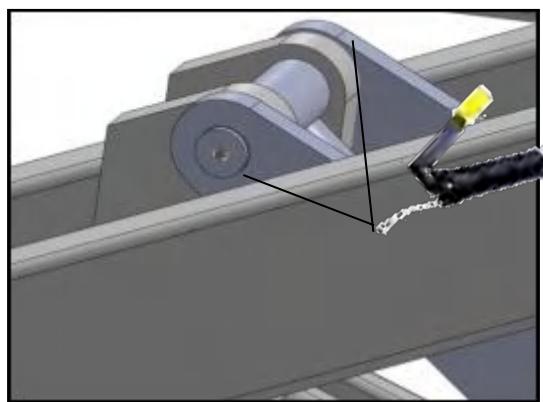
**Note:** All anchor bolts should take full torque. If any of the bolts does not function for any reason, **DO NOT** use the lift until the bolt has been replaced.

3. Make a visual inspection of all hydraulic hoses/lines for possible wear or leakage.
4. Adjust the synchronization of the platforms.
5. Lubricate all moving parts, see fig 45~50



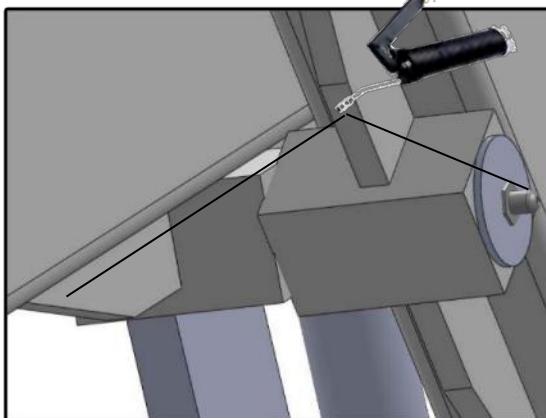
**For master cylinder connecting pin**

**Fig.45**



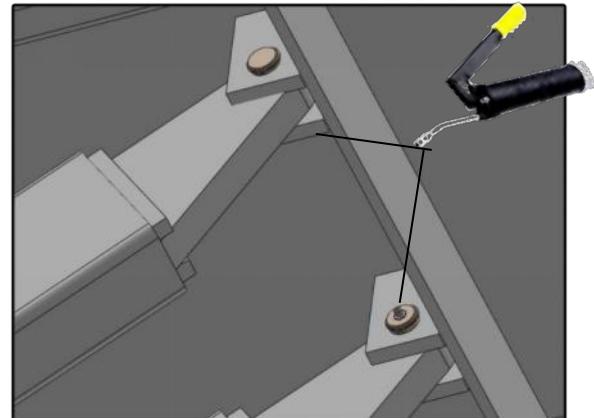
**For pin of the master cylinder piston rod**

**Fig.46**



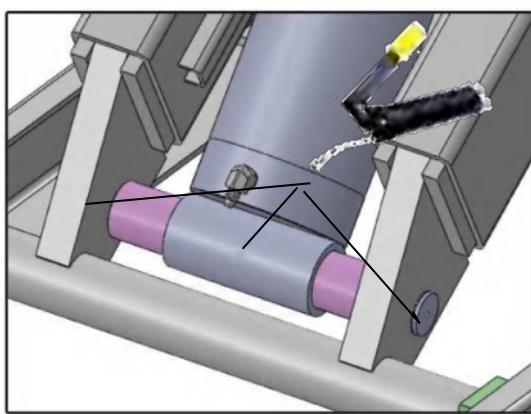
**For pins of connecting platforms and scissors**

**Fig.47**



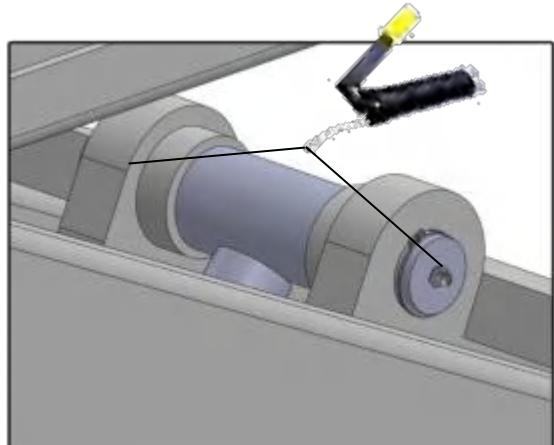
**For connecting pins of scissors**

**Fig.48**



**For slave cylinder connecting pin**

**Fig.49**



**For pin of the slave cylinder piston rod**

**Fig.50**

**Every six months:**

1. Make a visual inspection of all moving parts for possible wear, interference or damage.
2. Check and adjust the platform as necessary to insure level lifting.
3. Check all fastener and re-torque.

**Oil cylinder maintenance:**

In order to extend the service life of the oil cylinder, please operate according to the following requirements.

1. Recommend to use N46 anti-wear hydraulic oil.
2. The hydraulic oil of the lifts should be replaced regularly during using.  
Replace the hydraulic oil 3 months after the first installation, Replace the hydraulic oil once a year afterwards.
3. Make at least one full trip raising and lowering per day. For exhausting the air from the system, which could effectively avoid the corrosion of the cylinder and damage to the seals caused by presence of air or water in the system.
4. Protect the outer surface of the oil cylinder's piston rod from bumping and scratching, and timely clean up the debris on the oil cylinder dust-ring and the piston rod.

**⚠ DANGER**

Make sure the lift is completed disconnected from the power source before maintenance. If there is any external electrical lock/shutdown device, make sure to implement them before maintenance. The contact with high voltage/current, may cause injury or even death.

## VII.TROUBLE SHOOTING

TROUBLE	CAUSE	REMEDY
Motor does not run	1.Button does not work 2.Wire connections not in good condition. 3. Motor burned out 4. AC contactor burned out	1. Replace button 2. Repair. 3.Repair or replace motor 4.Repair or replace.
Motor runs but the lift is not raised	1. Solenoid valve out of service 2. Gear pump in damage 3. Relief valve or check valve in damage. 4. Oil low level.	1. Repair or replace. 2. Repair or replace 3. Repair or replace 4.Fill tank
Rise and falls automatically	1. Solenoid valve out of service 2. Relief valve or check valve in damage. 3. Cylinder or fitting leaks.	1. Repair or replace. 2. Repair or replace. 3. Replace oil seal or fitting.
Lift rise slowly	1.Oil line is jammed 2. Gear pump leaks 3.Overload lifting 4.Power Voltage low 5.Oil mixed with air	1.Clean the oil line 2.Replace Pump 3.Check load 4.Check electrical system 5.Fill tank and bleeding air
Lift cannot lower	1. Air solenoid valve out of operation 2. Solenoid valve out of operation 3. Air cylinder in damage 4. Air line leaks.	1. Replace Air solenoid valve 2. Replace solenoid valve. 3. Replace air cylinder. 4. Check air line.

**⚠WARNING** A lift would be dangerous if operated by inexperienced or distracted operators. Operators should be fully aware that lifting a vehicle is a potentially life-threatening operation, especially if ignoring the mandatory safety precautions.

## **VIII. CAR LIFT SAFETY TIPS**

Put this safety tips in a place where you can always alert the operator. Please reference to the lift manufacturer's manual for specific information about the lift.

1. Check the lift daily. If the machine breaks down or has damaged parts, do not operate, and use original equipment parts to repair.
2. **Do not** overload . The rated weight of the manufacturer design is indicated on the label of the lift.
3. Position control of the vehicle and operation of the lift can only be done by a trained and authorized person.
4. **Do not** lift a car with occupants inside. Keep the customers or bystanders away from the lift.
5. Keep the area around the lift free of obstacles, lubricating oil, grease, garbage and other debris for a long time.
6. Carefully drive the vehicle onto the lift and lifting up to the required height for operation. **Noted:** lift it high enough if you are working underneath, and make sure the safety devices are locked.
7. **Noted:** removing( install) parts from(to) a vehicle would cause a sudden shift of gravity which may result in instability of the vehicle. Please refer to the vehicle manufacturer's service manual as a recommended procedure if you need remove/install parts from(to) the vehicle
8. Before lowering the lift , make sure all obstacles underneath, include tool tray, tool rack etc., are all removed.

## **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.

**Address:**

SC Division: 1931 Joe Rogers Jr Blvd, Manning, SC 29102, USA  
TX Division: 4310 Adler Dr., Suite #200, Dallas, TX 75211, USA

<http://www.amgohyd.com>

Manual No.: **72257406**  
Revision Date: **2025/06**