



Original

# Installation And Service Manual

## DIRECT-DRIVE TWO POST LIFT

**Model: OHX-10**

**OHX-10H**

### **Cargo Claims**

If there is any missing or damaged product during transportation, the buyer must notate 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 .....           | 9  |
| III. INSTALLATION STEPS .....                | 12 |
| IV. EXPLODED VIEW .....                      | 40 |
| V. TEST RUN .....                            | 48 |
| VI. OPERATION INSTRUCTIONS .....             | 50 |
| VII. MAINTENANCE SCHEDULE .....              | 51 |
| VIII. TROUBLE SHOOTING .....                 | 52 |
| IX. CAR LIFT SAFETY TIPS .....               | 53 |
| X. LIFT DISPOSAL .....                       | 53 |

## 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

The two post lift is a commonly used vehicle repair and maintenance tool that uses a pneumatic hydraulic or electric system that can lift the car up to a certain height so that the vehicle can be placed in a suitable position for inspection and repair. Car lifts can be divided into pneumatic and electric, which have the characteristics of safe and reliable, simple structure and quick installation.

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 are warranty for 3 years, and electrical components and sync cable, lock release cable are warranty for 2 years. 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.



**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 41°F to 104°F (5°C to 40°C).

 **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

### Model: OHX-10

- Direct-drive design, minimize the lift wear parts and breakdown ratio;
- Dual hydraulic cylinders are designed and manufactured according to high standard, utilizing imported seals;
- Self- lubricating UHMW Polyethylene sliders and bronze bush;
- Single-point safety release with dual safety design;
- Clear-floor design, provide unobstructed floor use;
- Overhead safety shut-off device prevents vehicle damage;
- Double screw rubber pad assy.



Fig. 2

### SPECIFICATIONS

| Model  | Lifting Capacity | Lifting Time | Max. Lifting Height       |                           | Max. safety lock height   |                           | Overall Height | Overall Width       | Min. Pad Height | Motor |
|--------|------------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|----------------|---------------------|-----------------|-------|
|        |                  |              | Without extension adapter | Include extension adapter | Without extension adapter | Include extension adapter |                |                     |                 |       |
| OHX-10 | 10000lbs         | 57S          | 71 5/8"-73 9/16"          | 74 5/8"-76 9/16"          | 69 13/16" -71 11/16"      | 72 13/16"-74 11/16"       | 144"           | 134 15/16"-140 7/8" | 3 3/4"          | 2.0HP |

## Model OHX-10H

- Direct-drive design, minimize the lift wear parts and breakdown ratio;
- Dual hydraulic cylinders are designed and manufactured according to high standard, utilizing imported seals;
- Self- lubricating UHMW Polyethylene sliders and bronze bush;
- Single-point safety release with dual safety design;
- Clear-floor design, provide unobstructed floor use;
- Overhead safety shut-off device prevents vehicle damage;
- **Double screw rubber pad assy;**
- Adjustable height setting ;



**Fig. 3**

## SPECIFICATIONS

| Model   | Lifting Capacity | Lifting Time | Max. Lifting Height       |                           | Max. safety lock height   |                           | Overall Height | Overall Width       | Min. Pad Height | Motor |
|---------|------------------|--------------|---------------------------|---------------------------|---------------------------|---------------------------|----------------|---------------------|-----------------|-------|
|         |                  |              | Without extension adapter | Include extension adapter | Without extension adapter | Include extension adapter |                |                     |                 |       |
| OHX-10H | 10,000lbs        | 63S          | 78 3/4"-80 5/8"           | 81 3/4"-83 5/8"           | 76 7/8" -78 3/4"          | 79 7/8"-81 3/4"           | 157"-167 3/16" | 134 15/16"-140 7/8" | 3 3/4"          | 2.0HP |



## Arm Swings View

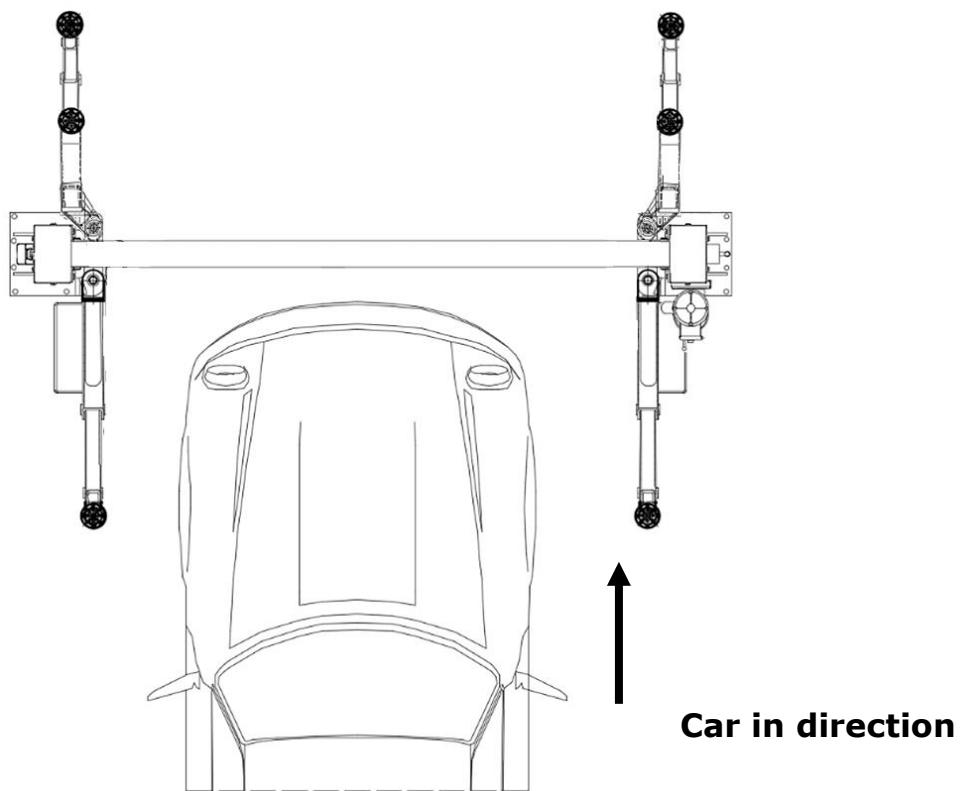
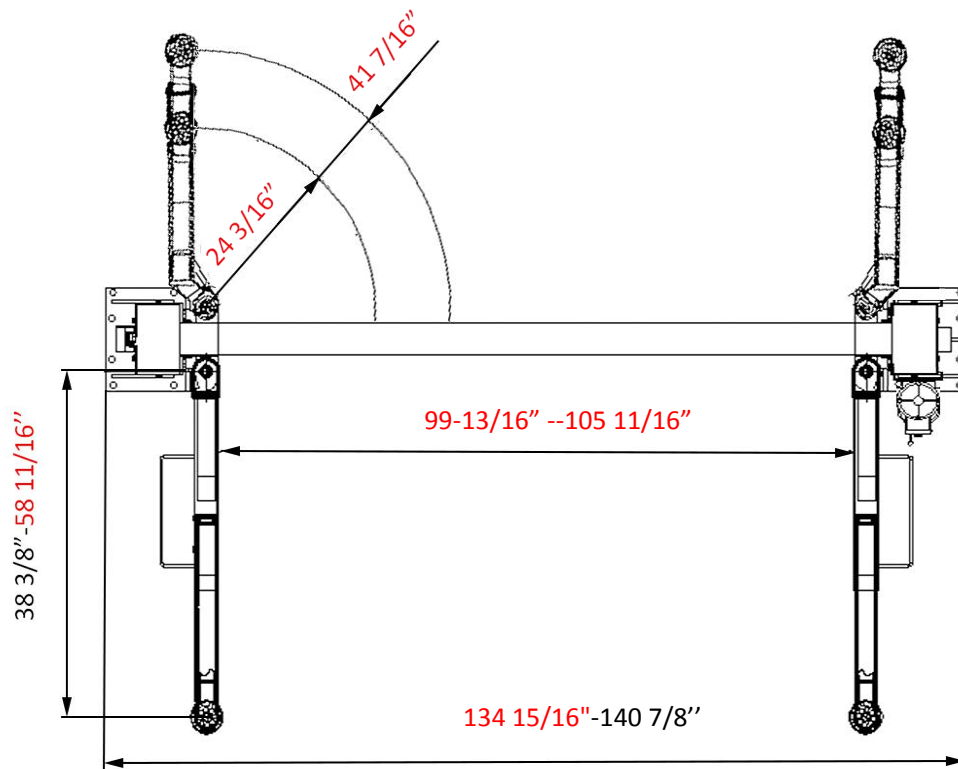
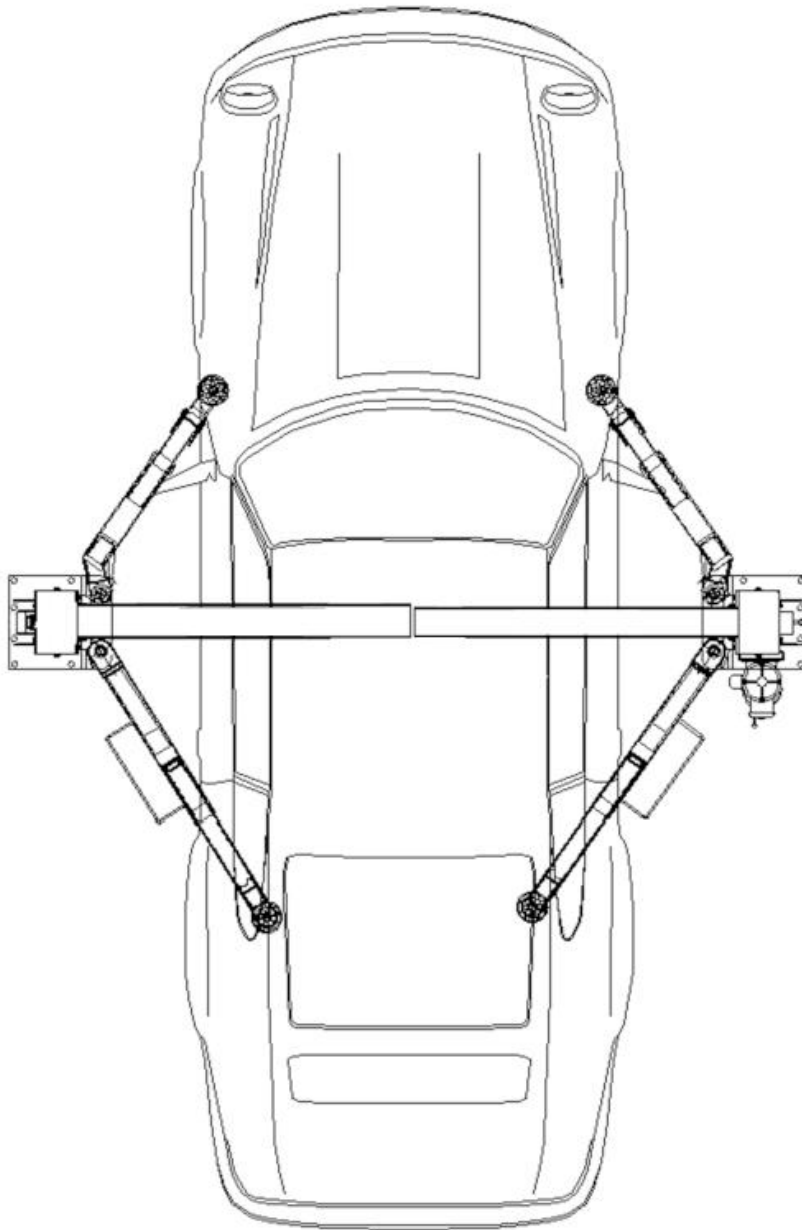


Fig. 4



**Fig. 5**

**Important note**

Follow the instructions to ensure proper installation or operation of your lift. Failure to follow these instructions may result in serious body injuries and not not under warranty.

The manufacturer is not liable for any form of loss or damage caused directly or indirectly by incorrect installation or operation of this product.

Please read this manual thoroughly before installation.

## II. INSTALLATION REQUIREMENT

### A. TOOLS REQUIRED

↪ Rotary Hammer Drill ( $\Phi 3/4$ )



↪ Hammer



↪ Level Bar



↪ English Spanner (12")



↪ Wrench set: (10#, 13#, 14#, 15#, 17#, 19#, 24#, 27#, 30#)



↪ Ratchet Spanner With Socket (28#)



↪ Carpenter's Chalk



↪ Screw Sets



↪ Tape Measure (295")



↪ Pliers



↪ Lock Wrench



↪ Socket Head Wrench (8#)



Fig. 6

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

- 1 . Store the equipment in a dry, non-moldy, non-flammable environment.
- 2 . The lift is only approved for indoor installation and use, and outdoor installation is prohibited.
- 3 . When installing the device, take safety precautions according to the instructions to avoid device damage.
- 4 . Do not install the device outdoors if the installation area is not protected.
- 5 . During installation, all parts should be fastened to ensure the stability and smooth operation of the machine.
- 6 . After installation, the whole machine should be checked to make sure that every component is working properly.

## **C. The equipment should be unloaded and transferred by forklift.**

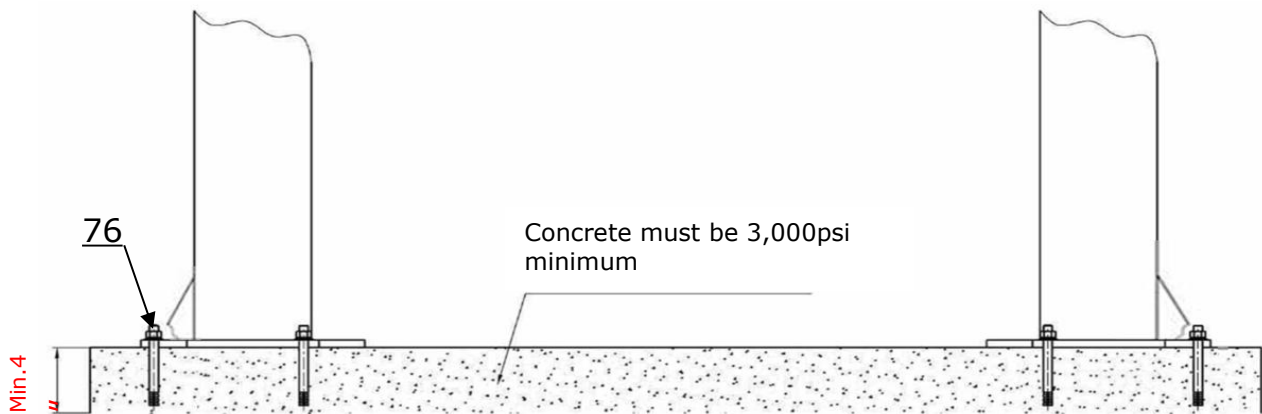


**Fig.7**

## **D. SPECIFICATIONS OF CONCRETE (See Fig. 8)**

**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 4" minimum thick and without reinforcing steel bars, and must be completely dry before lift installation.
2. Concrete must be in good condition and must be of test strength 3,000psi.  
Solidify at least 15 days.
3. Floors must be level and contain no cracks or holes.
4. Do not install the lift on asphalt or any surface other than concrete.



**Fig. 8**

### **E. POWER SUPPLY**

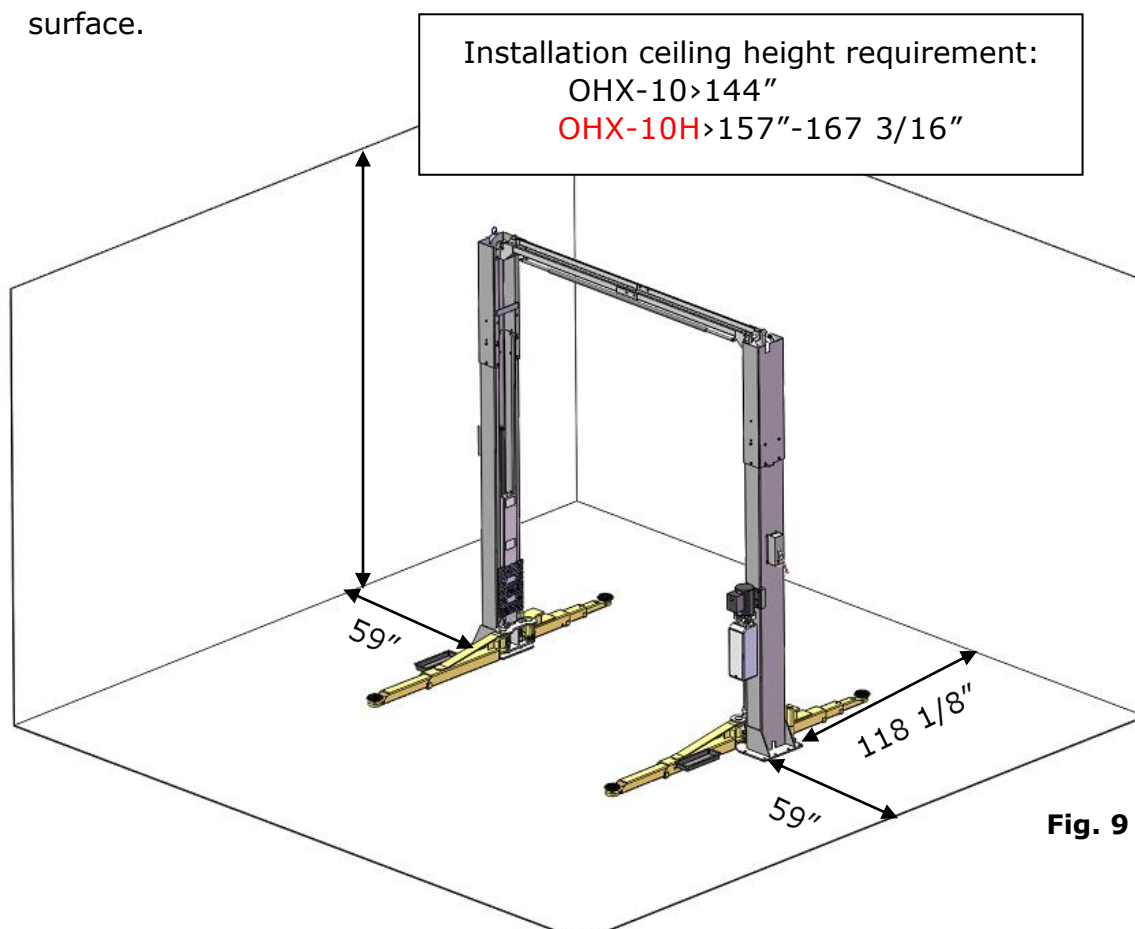
1. You are required to use a licensed and qualified electrician for the installation process.
2. The power supply requires 220VAC, with a cord larger than 12AWG, and must be properly grounded.

**⚠ 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(**See Fig. 8**).
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.

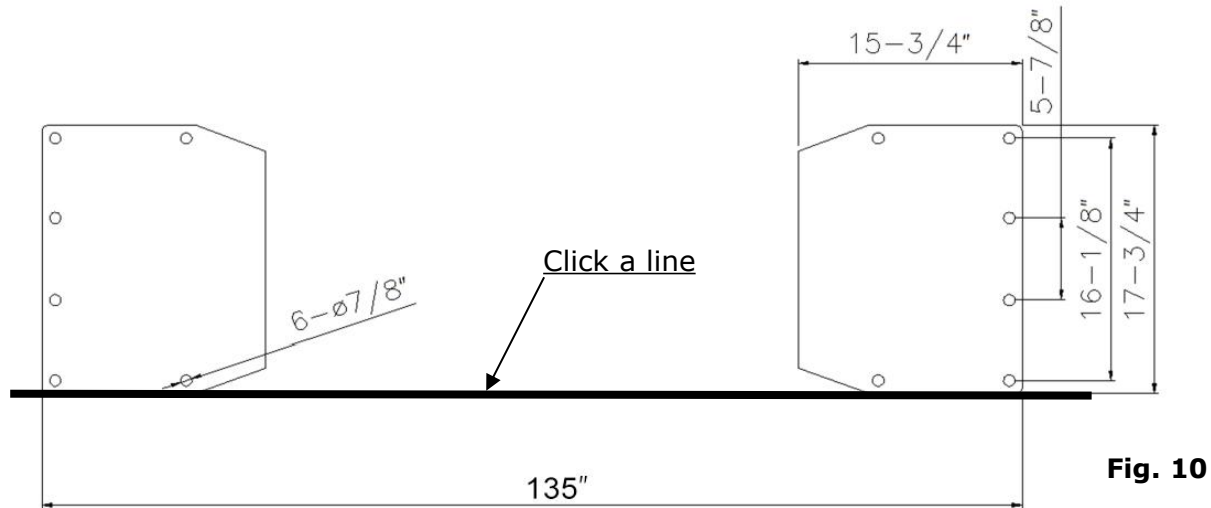


**Fig. 9**

**⚠ CAUTION** Installing the lift on a surface with slopes more than 3° could lead to injury or even death. This lift is designed for installation on a flat and level surface only. (Defined as no more than 3/8" difference over the installation area). If the floor cannot be leveled, consider changing installation locations.

**ATTENTION** The lift installation and concrete construction must meet the latest version of the national standard "Automotive Hoist-Safety Requirements for Construction, Testing and Verification".

**B.** Use a carpenter's chalk line to establish installation layout of base-plate (**See Fig.10**).



**Fig. 10**

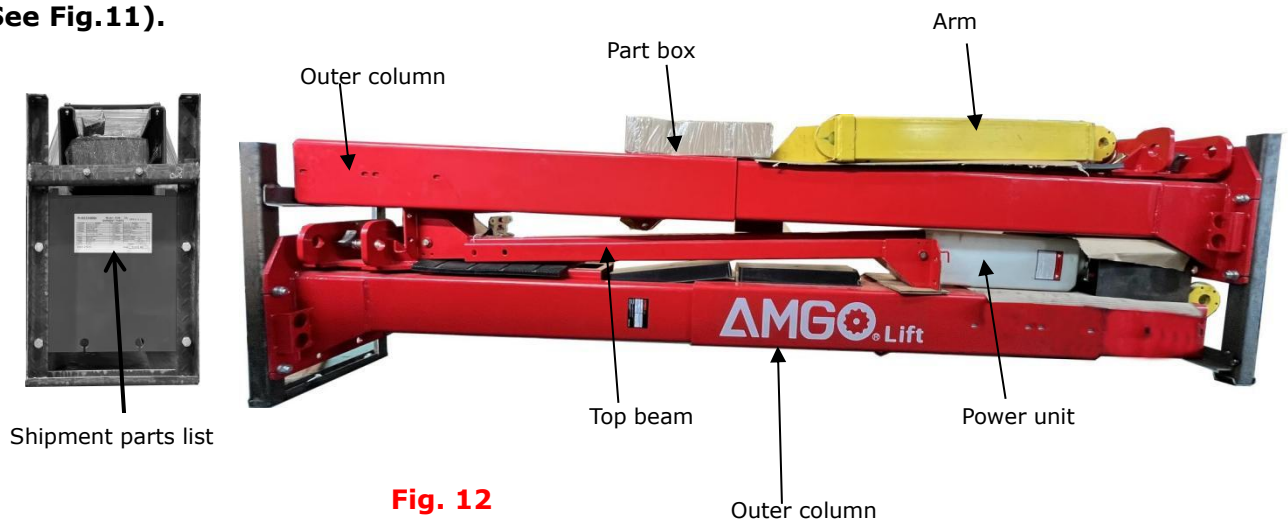
**C. Check the parts before assembly.**

Packaged lift and hydraulic power unit (**See Fig. 11**). (**OHX-10H package for reference**)



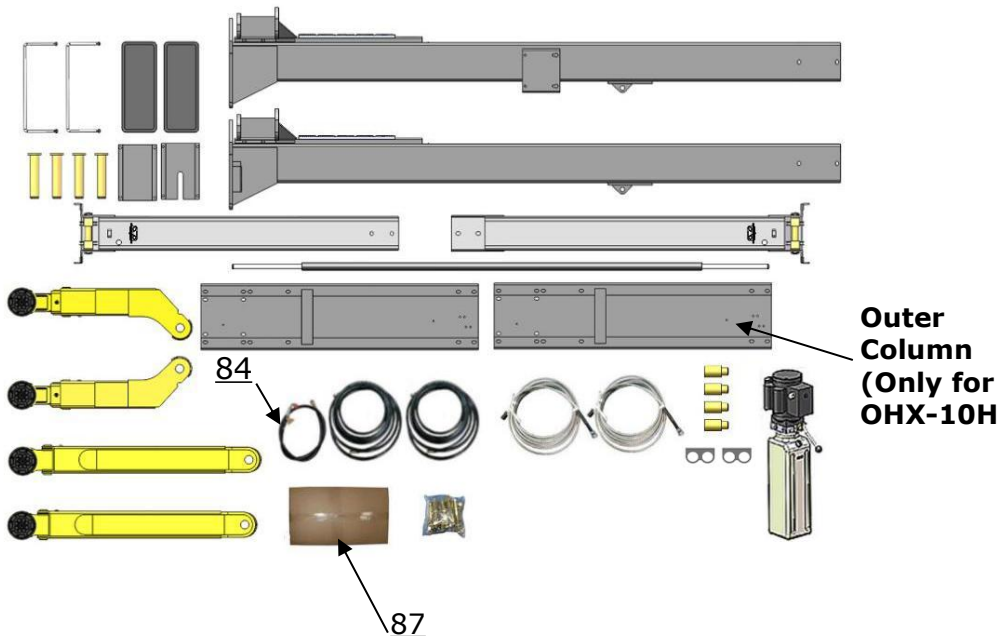
**Fig. 11**

**1.** Move aside the lift with fork lift or hoist, open the package, take out the parts above/in upper outer column, check the parts according to the shipment parts list (**See Fig.11**).



**Fig. 12**

2. Remove the upper bolts of package bracket, lift the upper column with forklift or manually, remove the package bracket.
3. Move aside the parts and check the parts according to the shipment parts list **(See Fig.13).**



**Fig. 13**



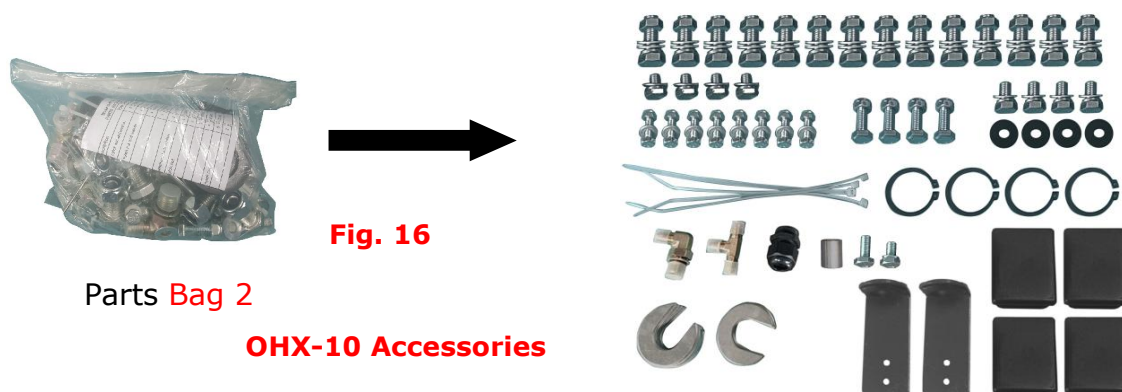
**Parts box(87)  
Fig. 14**

5. Open the parts bag 1 and check the parts according to parts box list **(See Fig. 15).**



**Fig. 15**

6. Open the **Parts Bag 2** of parts and check the parts according to parts bag list **(See Fig. 16 & 17).**



**Fig. 16**



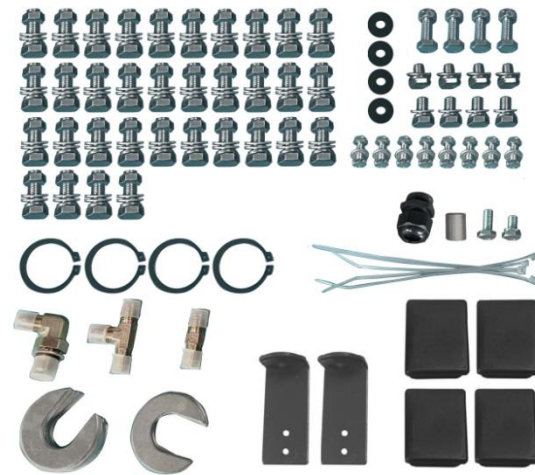


Parts Bag 2



Fig. 17

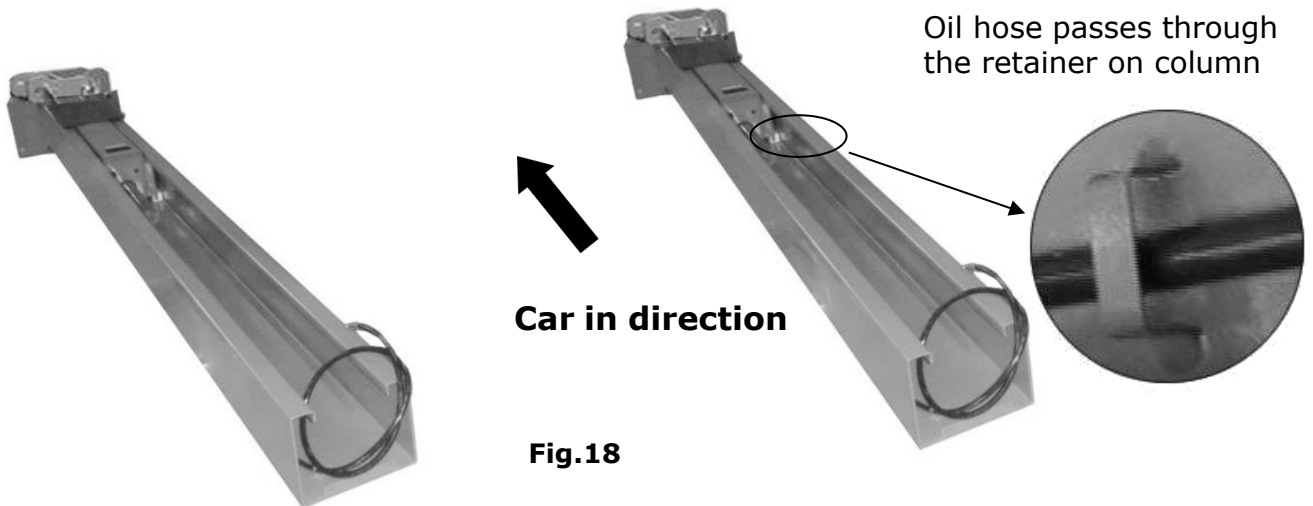
**OHX-10H Accessories**



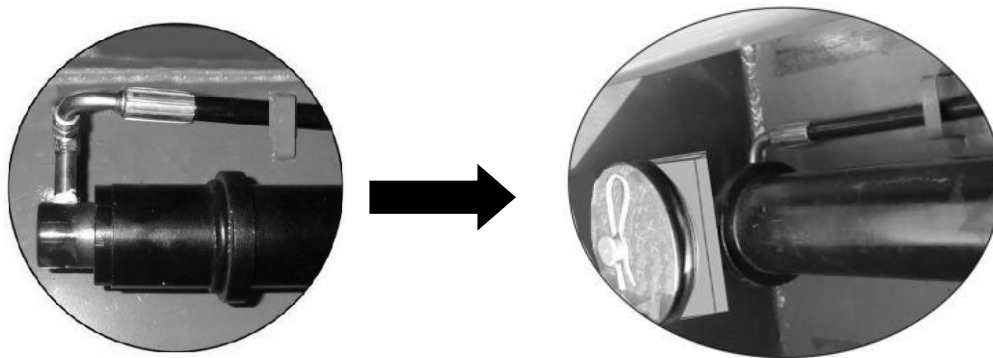
**D. Place the two columns in parallel on the ground of installation position, and determine the installation position of the power side column according to the condition of the installation site. Under normal circumstances, the power side column is installed on the right side of the entering direction;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

Off side column

Power side column



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



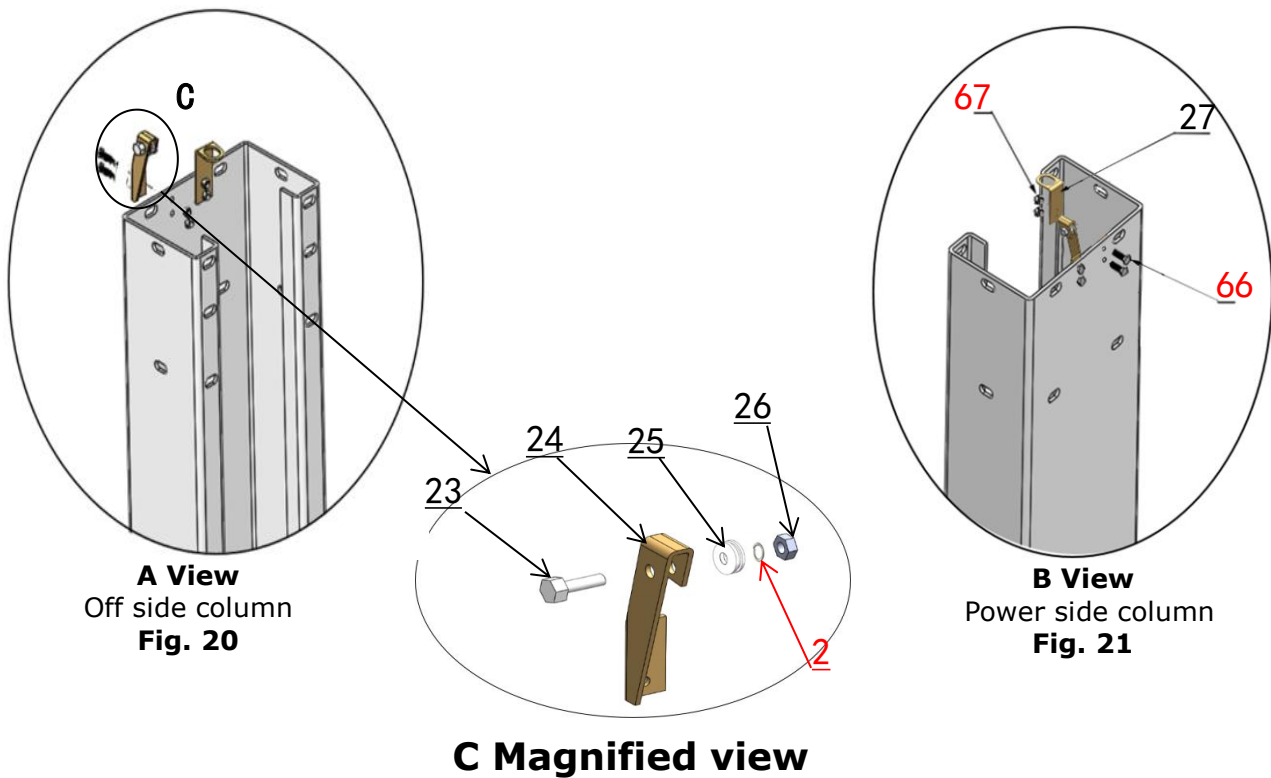
Install cylinder fitting  
and oil hose

**Fig.19**

After installation

**F. Install column parts.**

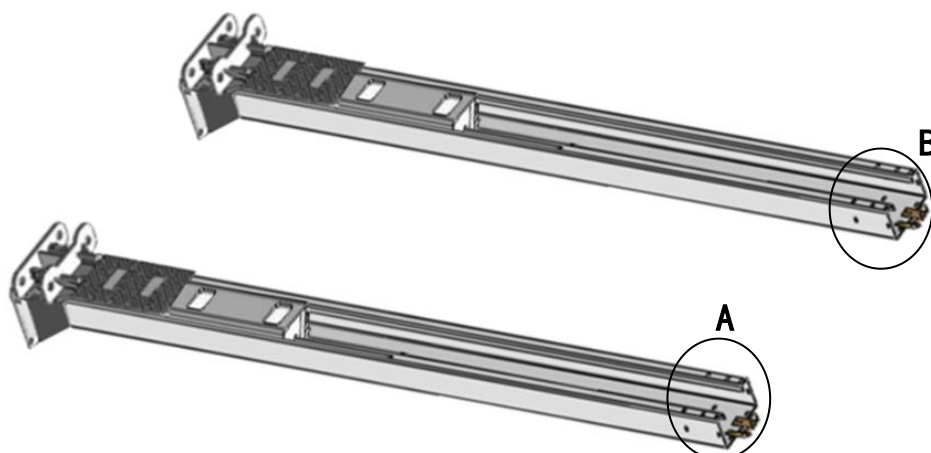
**1. OHX-10 installation of column parts Fig.20 & 21.**



**A View**  
Off side column  
**Fig. 20**

**B View**  
Power side column  
**Fig. 21**

**C Magnified view**



2. OHX-10H installation of outer column parts. Fig. 22

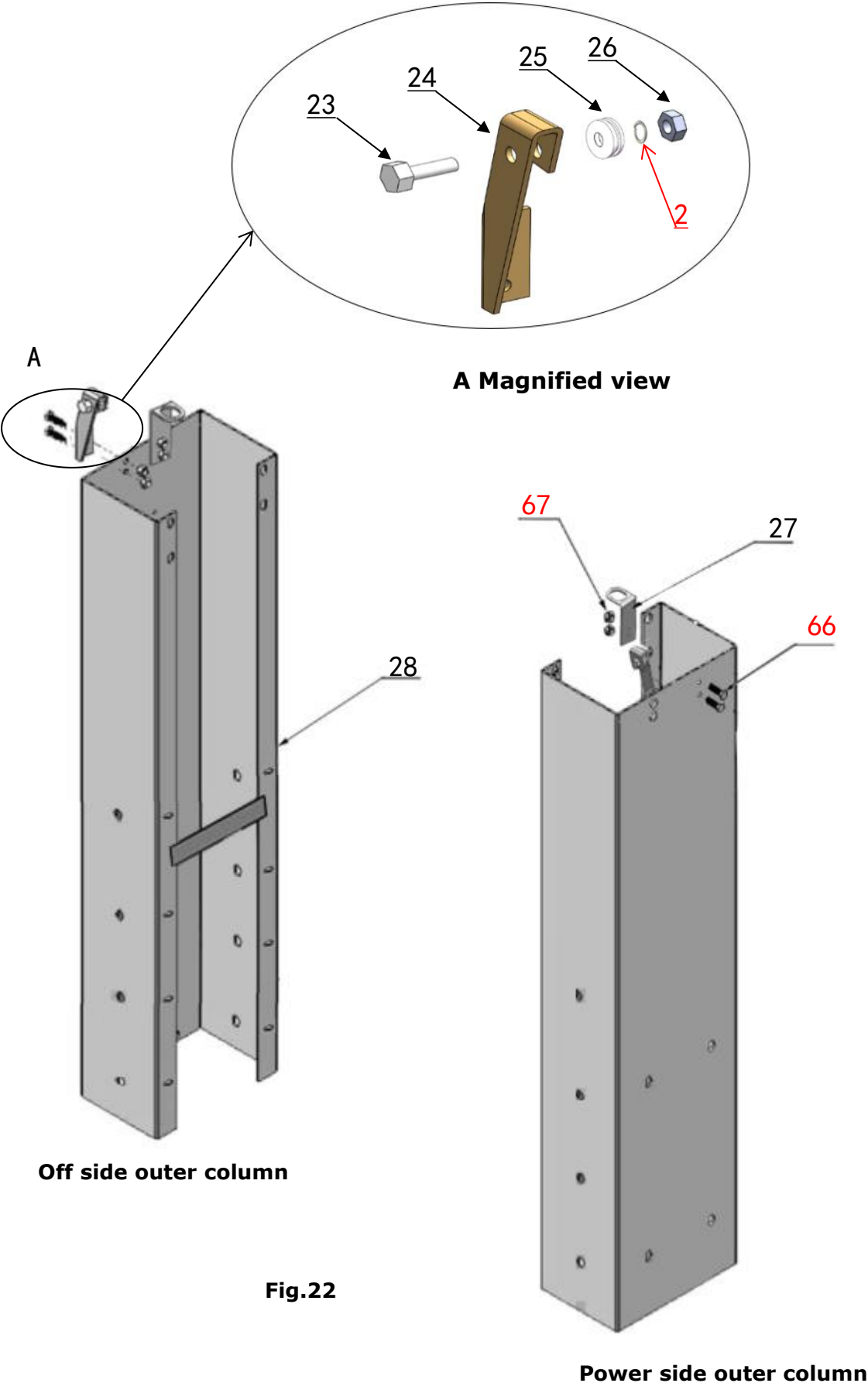


Fig.22

2.1 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", please install in low setting; when the height is more than 168", can install in high setting. (See Fig.23)

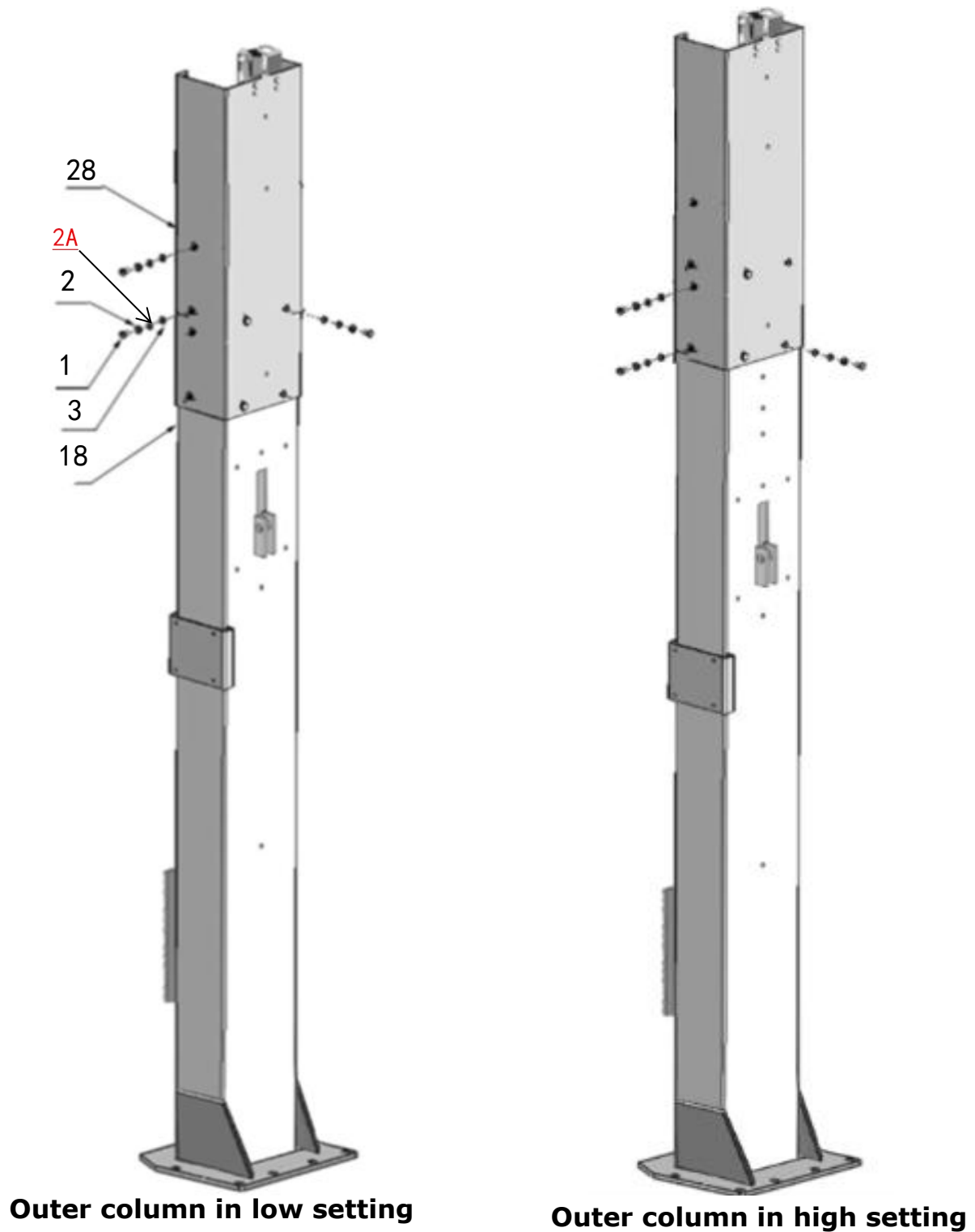
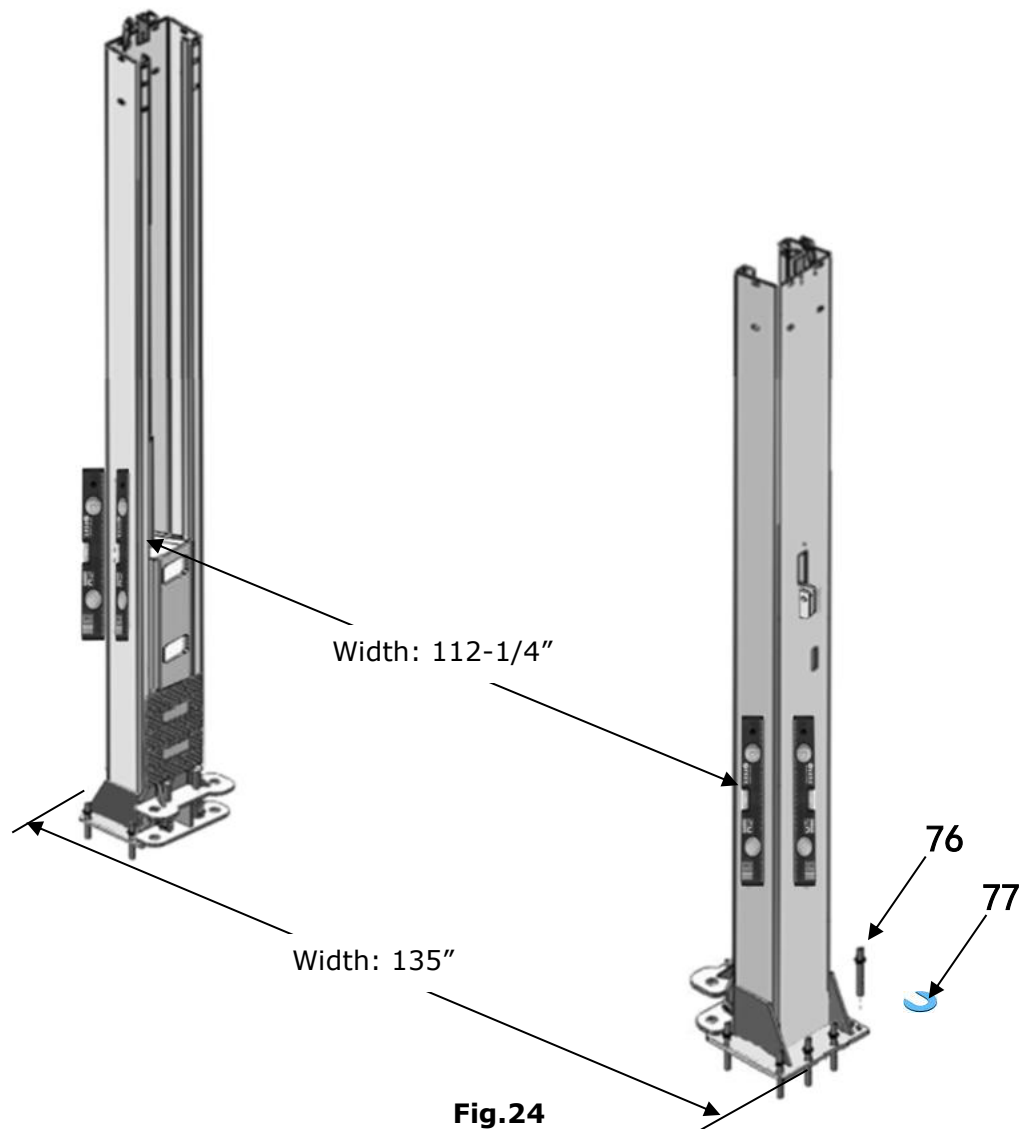


Fig.23

## G. Column plumbness adjustment. (See Fig. 24)

### 1. OHX-10

Erect the columns on installation layout of base plate, install the anchor bolts. Check the columns plumpness with level bar, and adjust with shims if the columns are not vertical. Do not tighten anchor bolts yet.

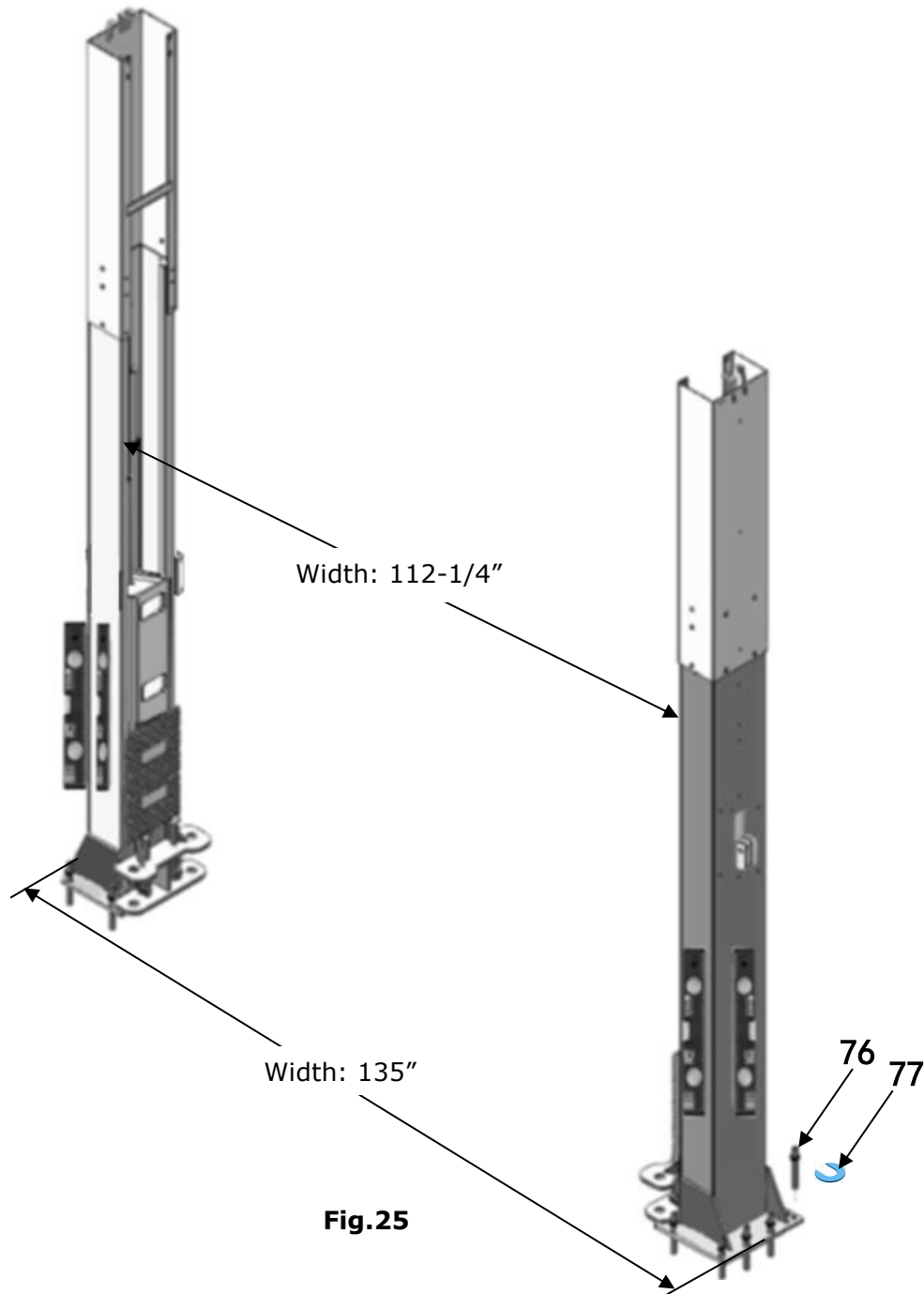


\*Note: The anchor bolt is knocked into the ground at least 3-1/2".

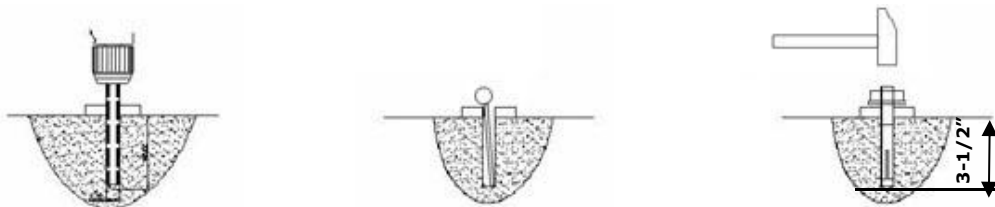


## 2. OHX-10H

Erect the columns on installation layout of base plate, install the anchor bolts. Check the columns plumpness with level bar, and adjust with shims if the columns are not vertical. Do not tighten anchor bolts yet. **(See Fig. 25)**

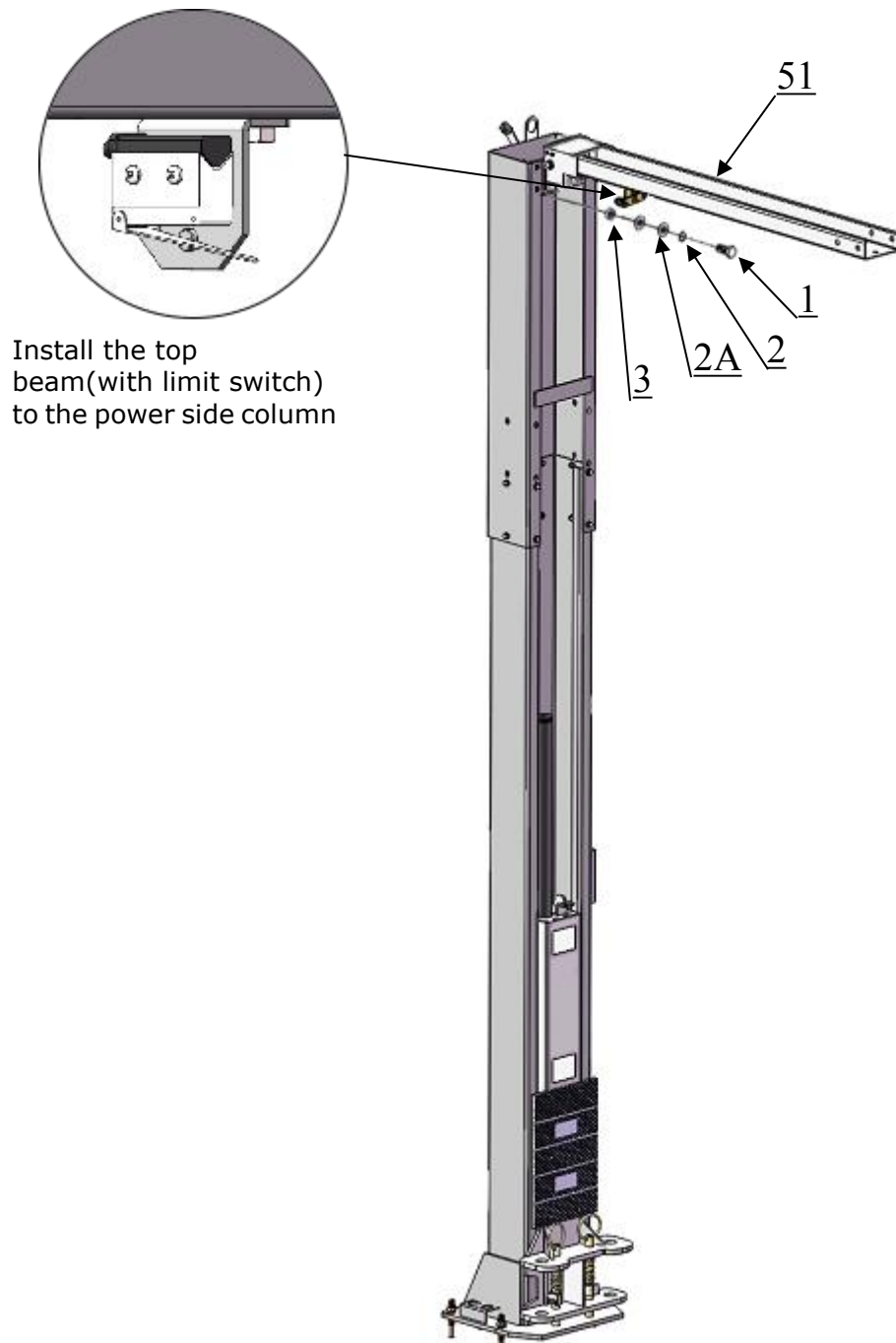


\*Note: The anchor bolt is knocked into the ground at least 3-1/2".



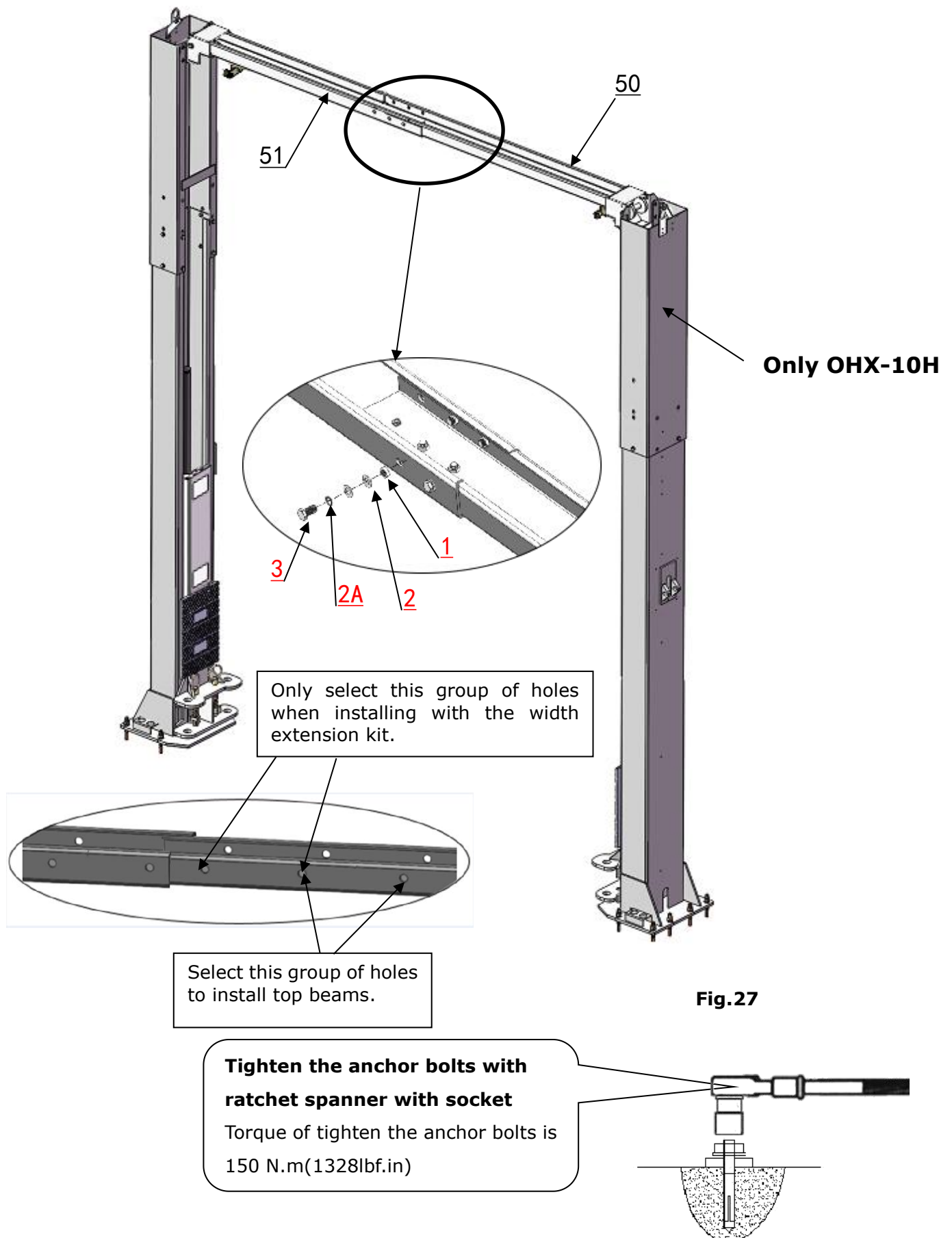
## H. Install top beam (See Fig. 26).

1. Hang the hook of top beam(with limit switch) on the power side outer column, then align the holes and install the bolts.



**Fig.26**

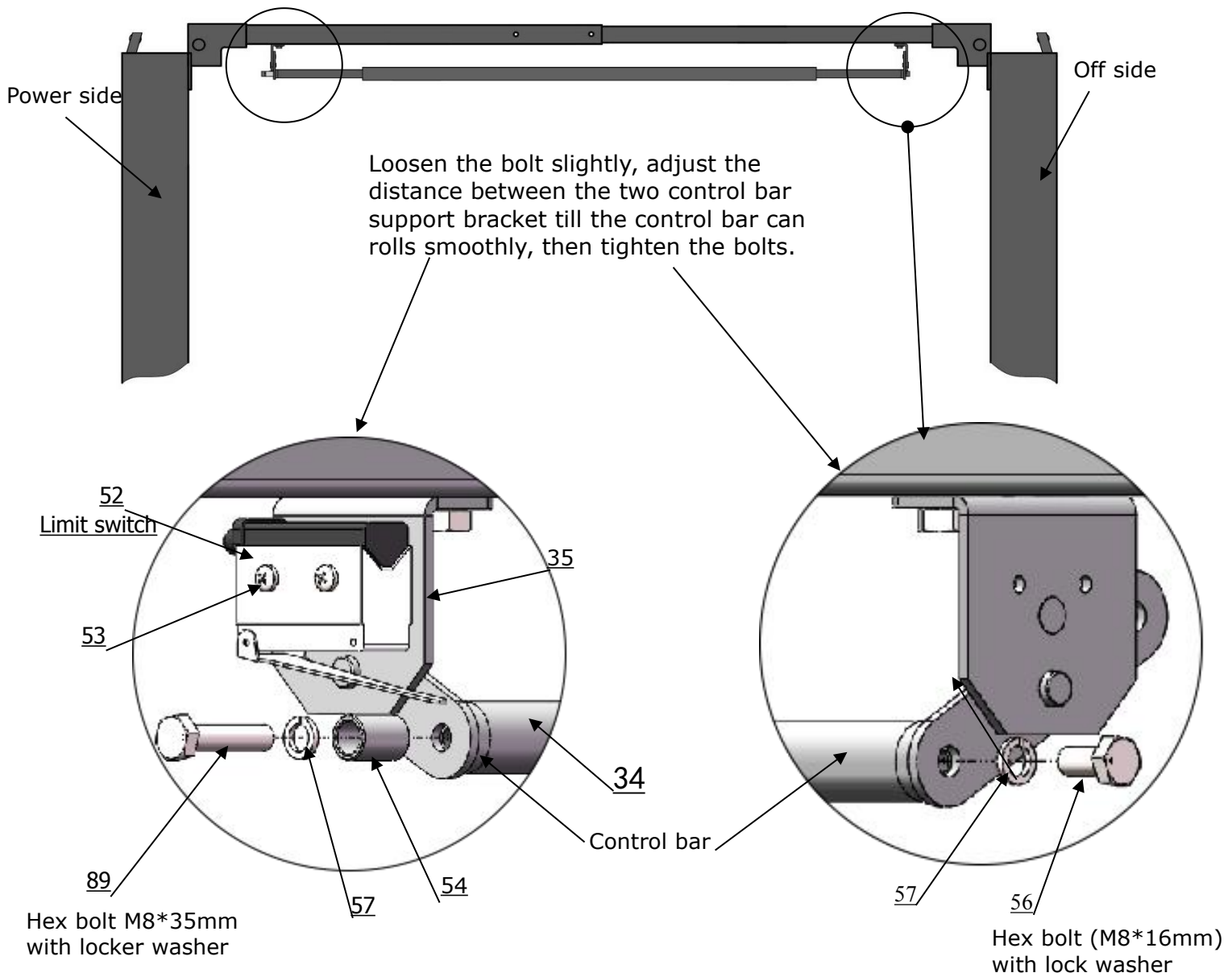
2. After install the other top beam on off side outer column, bolt both top beams and tighten all the bolts. **(See Fig. 27)**





## I. Install the limit switch control bar (See Fig. 28).

Install the limit switch control bar to the support brackets as shown below

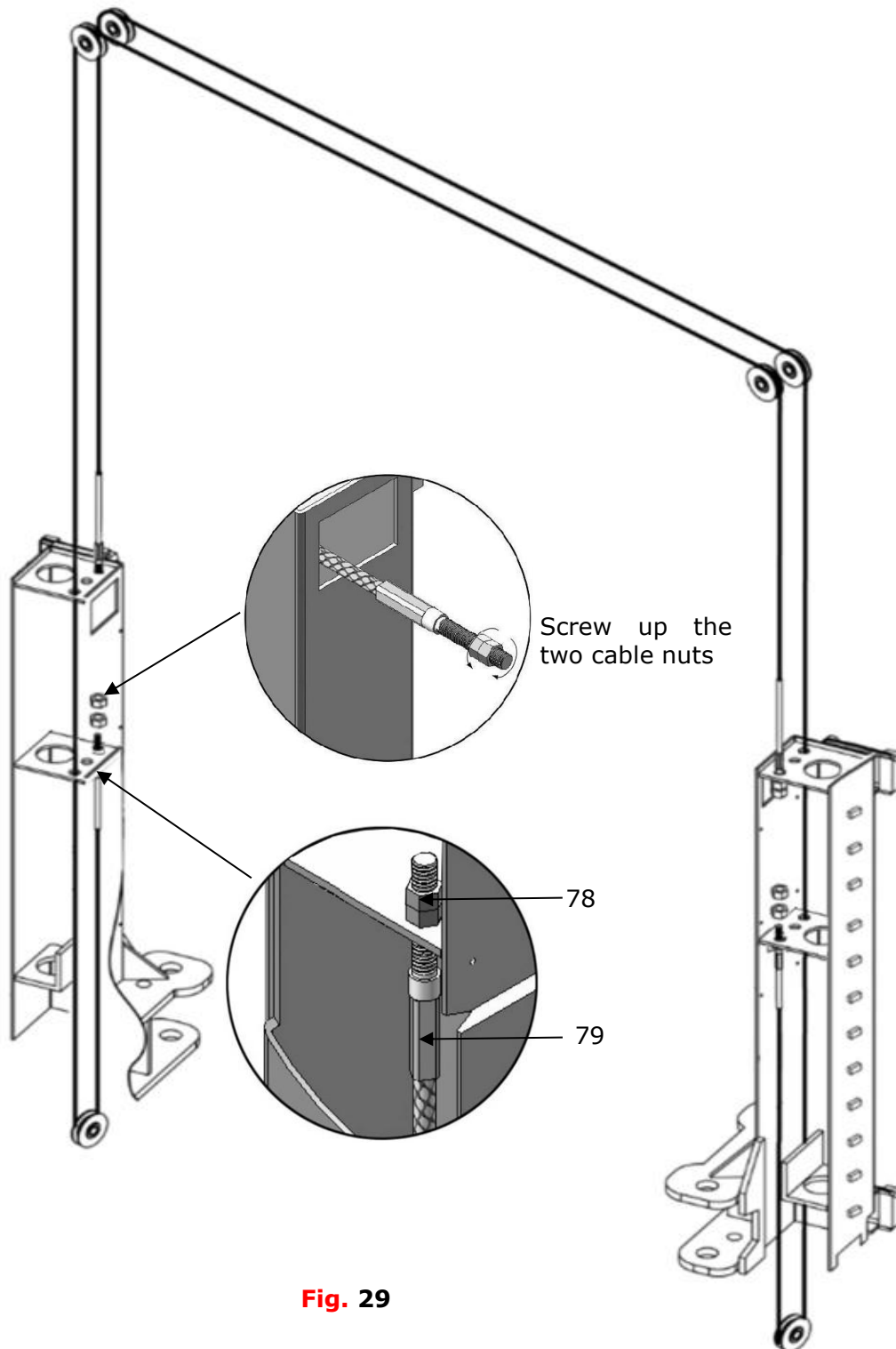


**Fig.28**

**J. Install cables.** Raise up the carriages and lock at the same level of safety lock.

**1. OHX-10 cable connection.**

Pass the cable from the bottom of the carriage to the carriage window, then screw up the 2 cable nuts together. **(See Fig. 29)**

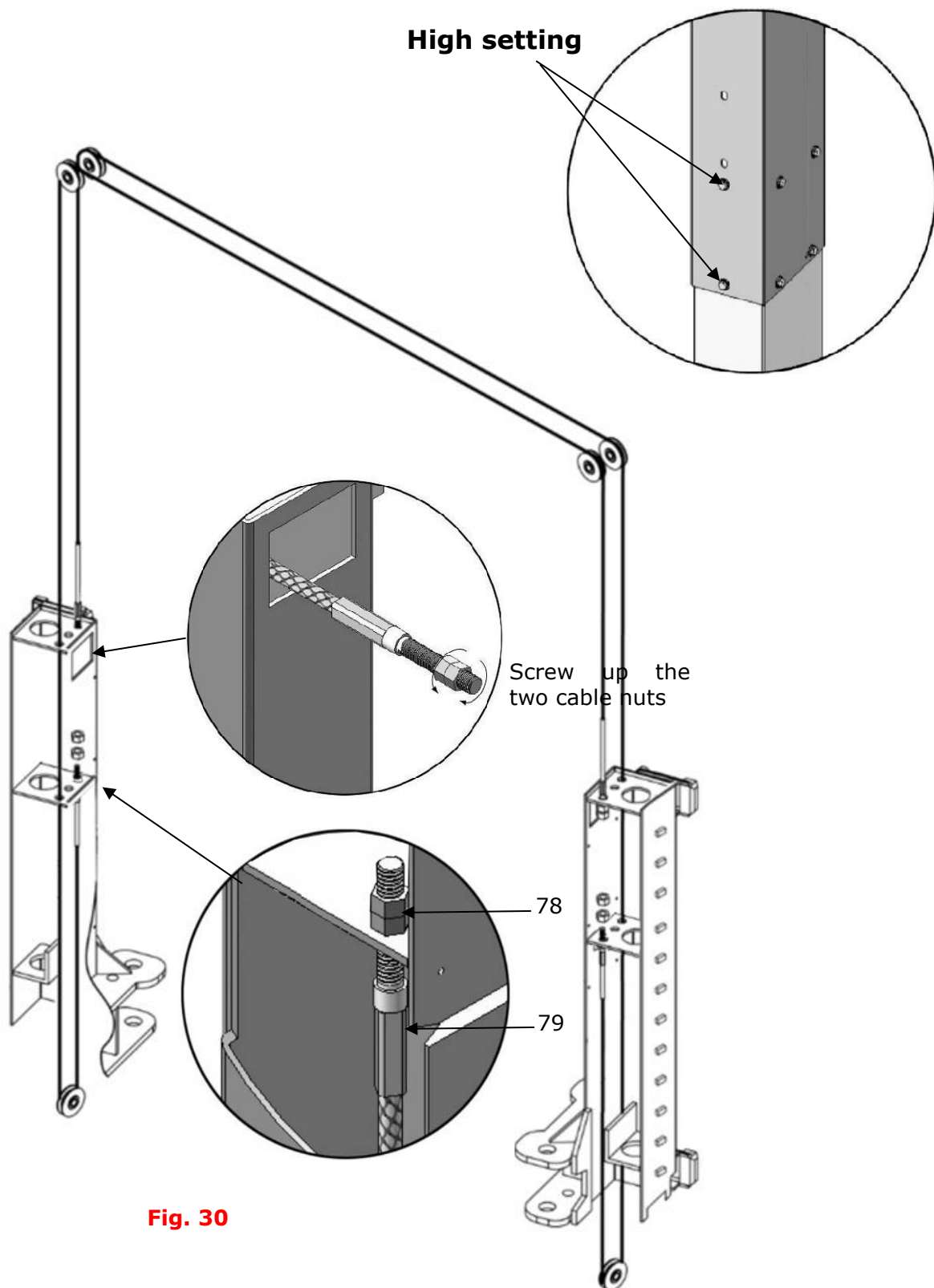


**Fig. 29**

## 2. OHX-10H cable connection.

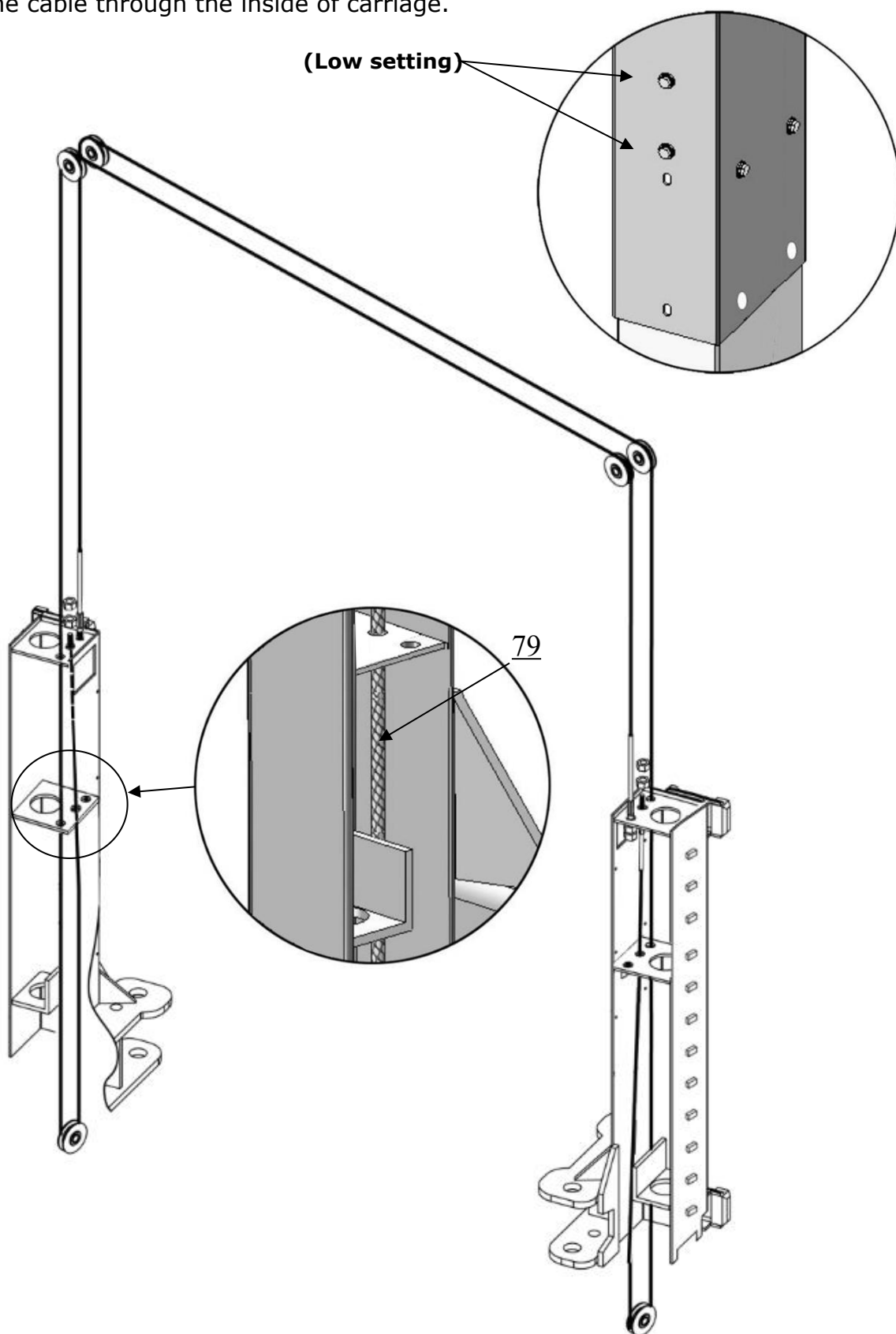
### 2.1 OHX-10H cable connection of high setting(see fig. 30).

Pass the cable from the bottom of the carriage to the carriage window, then screw up the 2 cable nuts together.



## 2.2 OHX-10H cable connection of low setting (See Fig. 31).

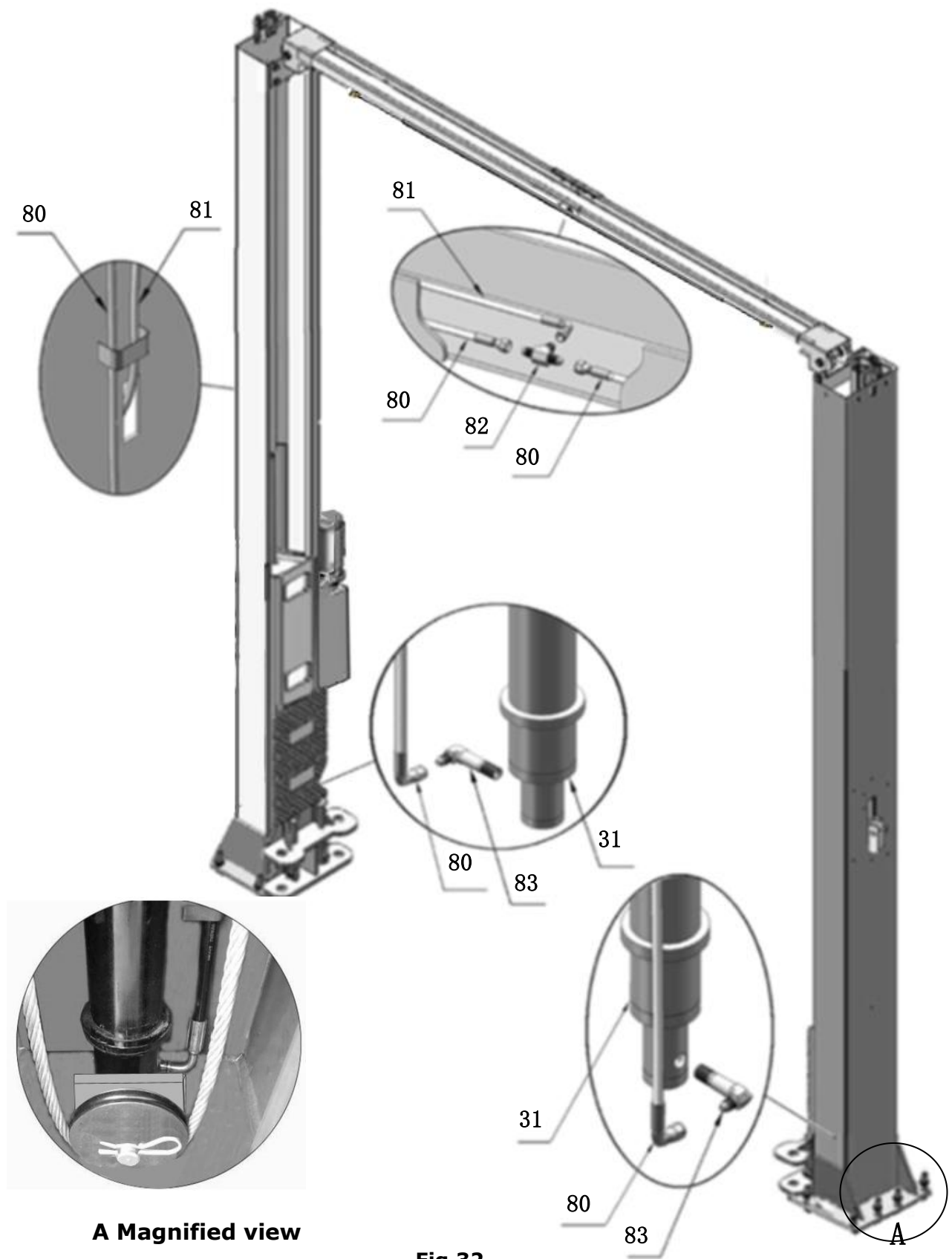
Note: pass the cable through the inside of carriage.



**Fig.31**

**K. Install oil hose assy, tighten all oil hose fittings.**

**1. OHX-10 oil-line connecting diagram(See Fig.32).**



**Fig.32**

## 2. OHX-10H oil-line connecting diagram (See Fig. 33).

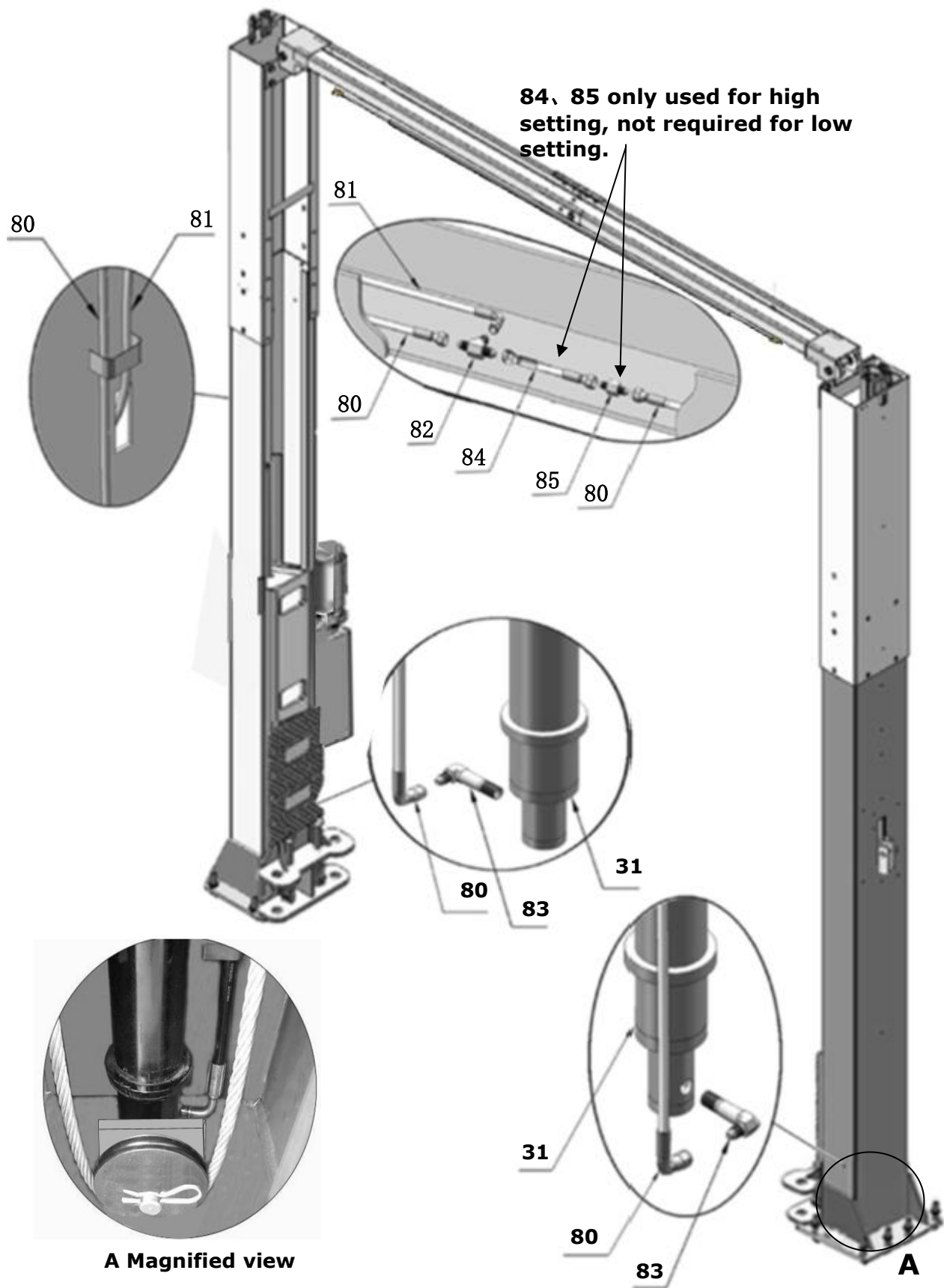
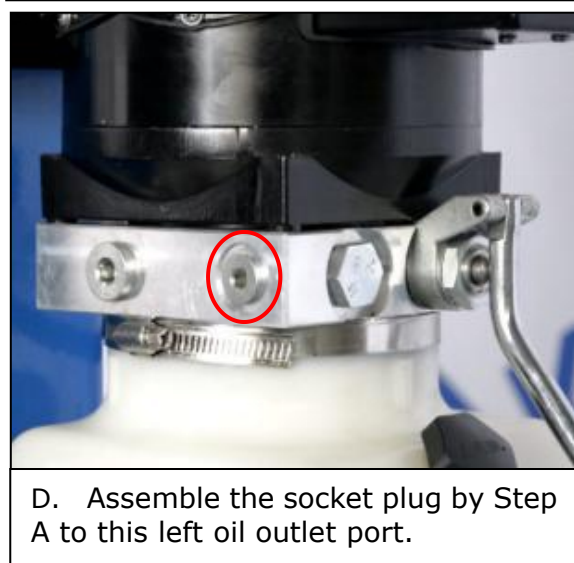
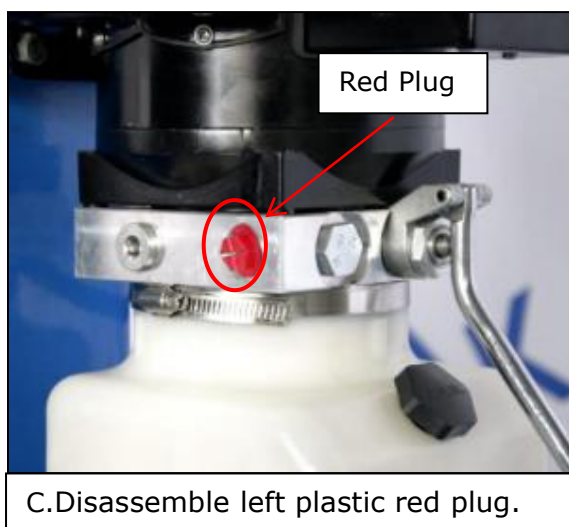
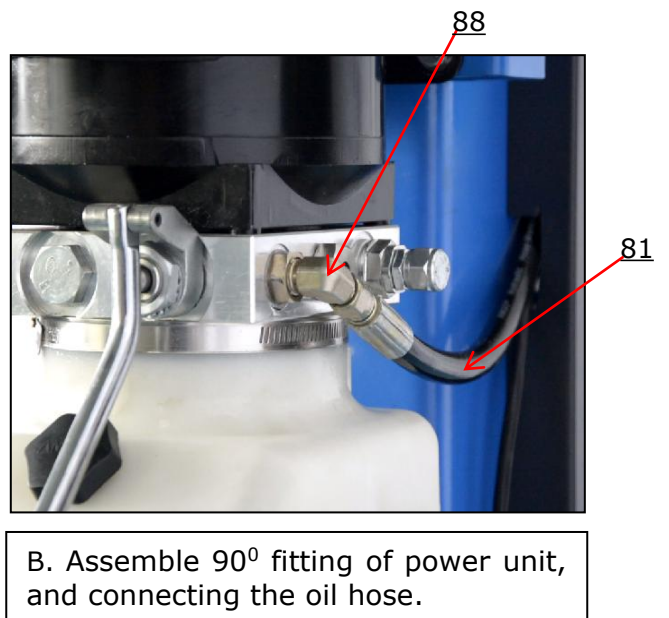
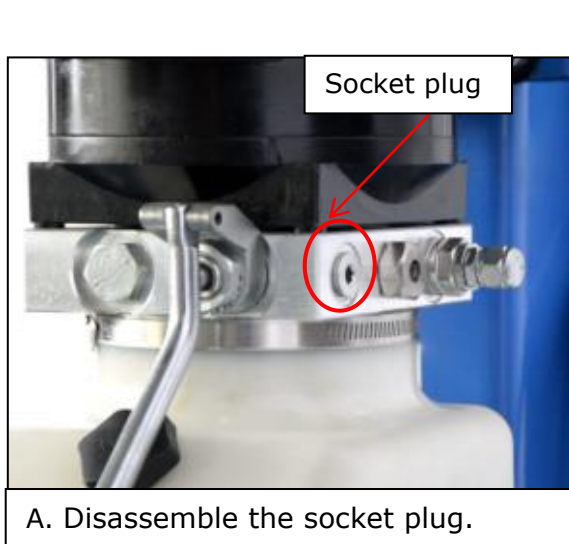
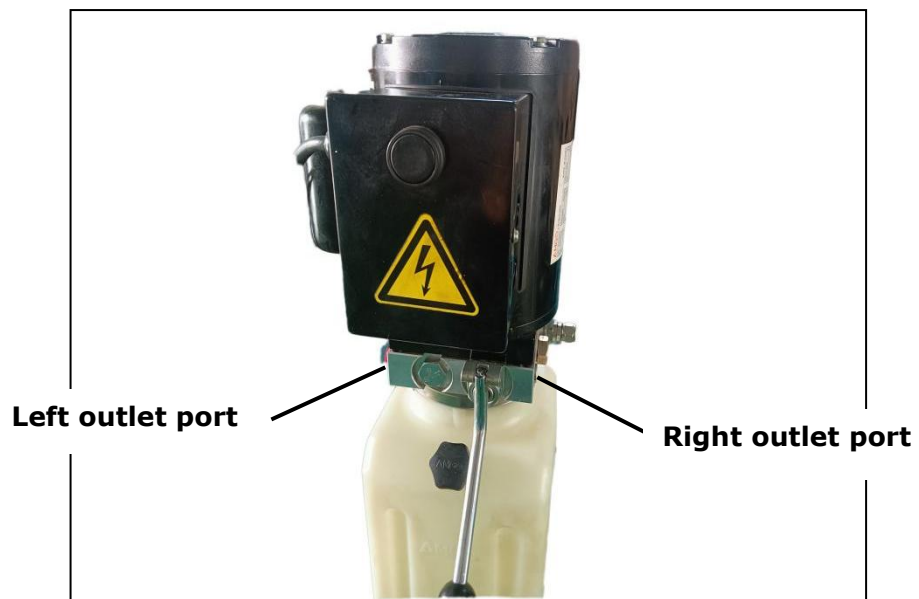


Fig.33

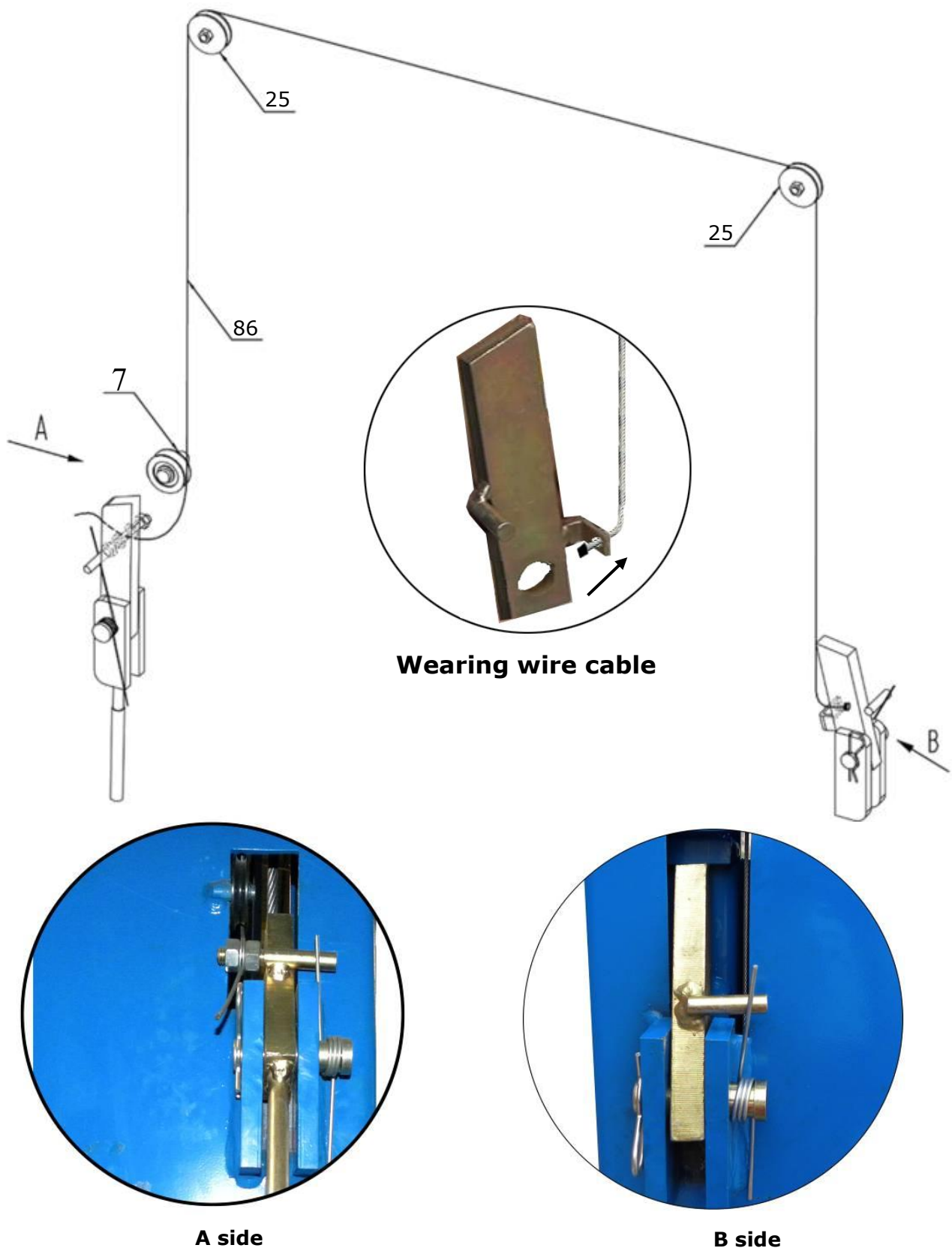
**3. Follow below steps to connect power unit oil hoses. (See Fig. 34)**



**Fig.34**



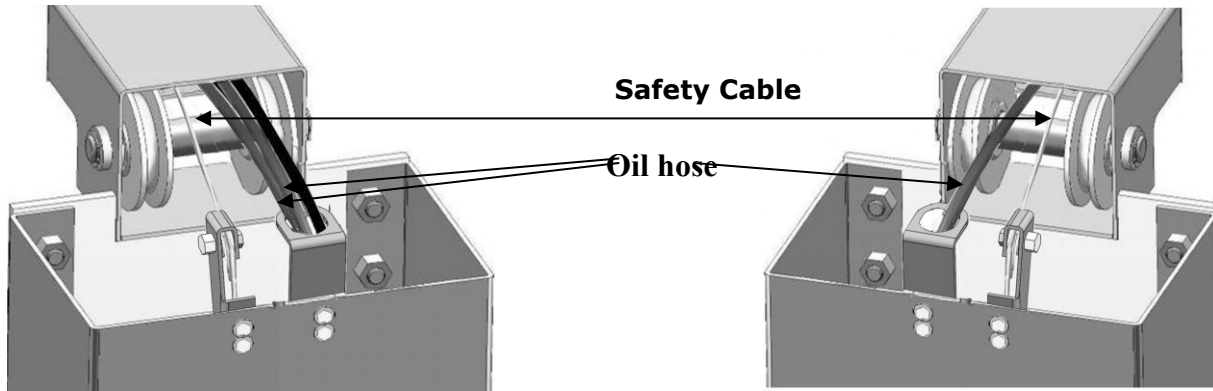
**L. Lock release cable connecting diagram (See Fig. 35)**



**Fig.35**

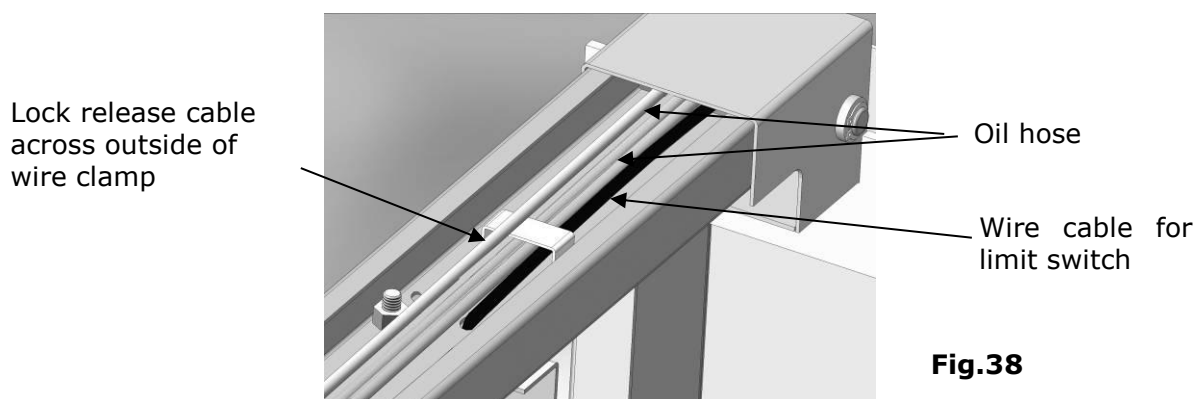


**Note:** Don't cross the oil hose and lock release cable (See Fig. 36, 37 & 38).



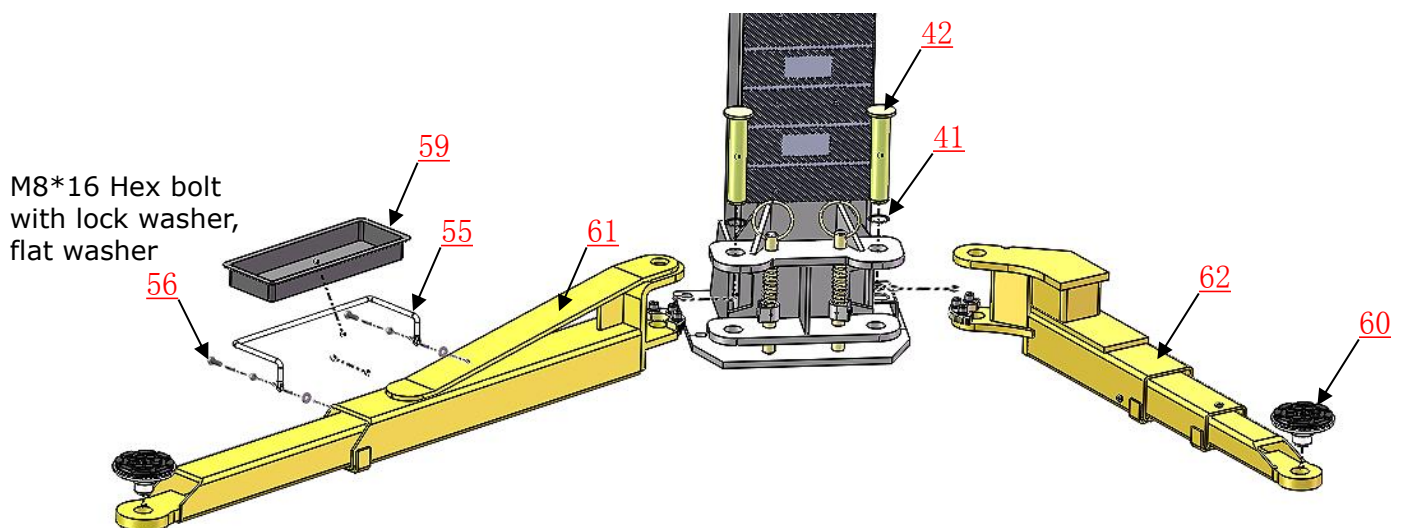
**Power side  
Fig. 36**

**Off side  
Fig. 37**



**Fig.38**

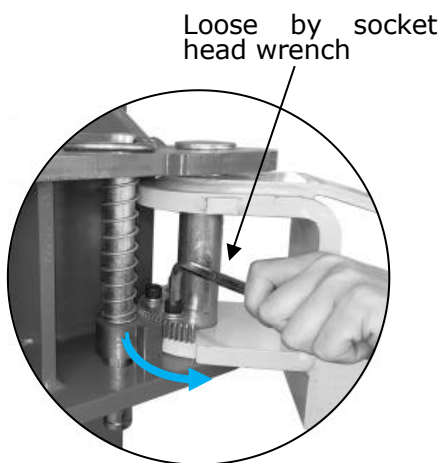
**M.** Install lifting arms according to figure 38, fix the arm pins with springs, and then install toe guards.



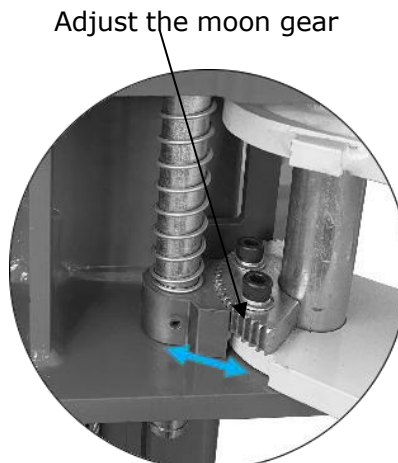
**Fig.39**

## Engagement of moon gear and arm lock:

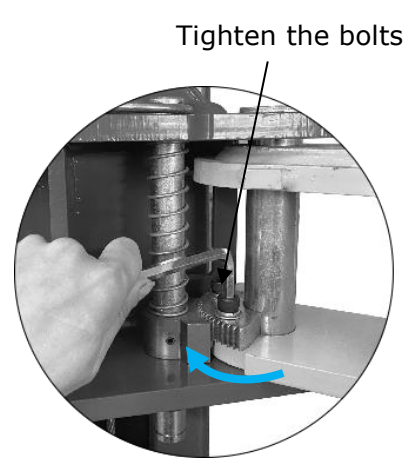
Lower the carriages down to the lowest position, use 8# socket head wrench to loosen the socket bolt (**See Fig. 40**), follow the arrow direction to adjust the moon gear(**See Fig. 41**); tighten the bolts after the moon gear and arm lock are engaged well(**See Fig.42**).



1. Use 8# socket head wrench to loose the socket bolt  
**Fig.40**



2. Follow the arrow direction to adjust the moon gear  
**Fig.41**



3. Tighten the bolts after the moon gear and arm lock are engaged well  
**Fig.42**

**⚠ DANGER** Moon gear must be positioned and adjusted correctly. The lift should not be operated until the gears are fully engaged, and it is important to regularly check and adjust the arm restraint gears on all four arms. Failure to do so can result in vehicle damage, injury, or even death.

## **N. 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#.

## **O. Install electrical system**

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

### **Note:**

**1. Must install limit switch;**

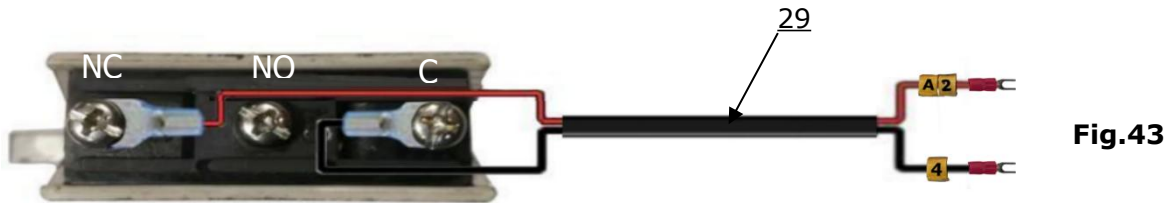
**2. For safety of operators, the power wiring must contact the floor well;**

### **Single phase motor wiring (See Fig. 44)**

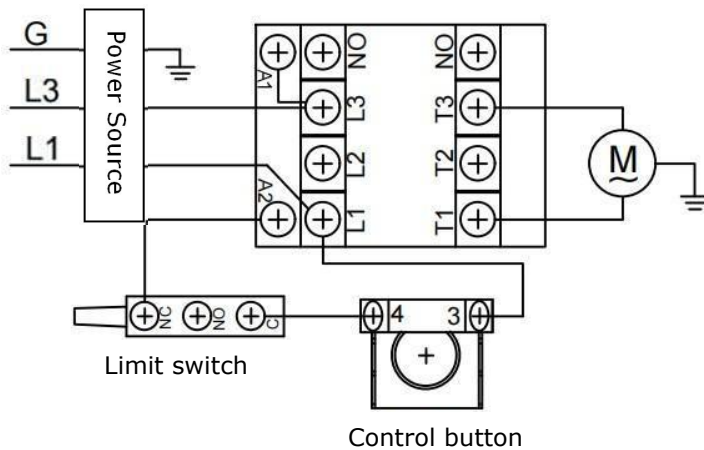
1. Connecting the two power supply lines **L1** , **L3**) to terminals of AC contactor marked **L1**, **L3** respectively.

- Connecting limit switch wire: remove the short wire connecting terminal 4# of control button and A2 of AC contactor firstly (See Fig.45), then according to the wire number of the limit switch, connect them respectively to terminal 4# of control button and A2# of AC contactor. (See Fig. 46)

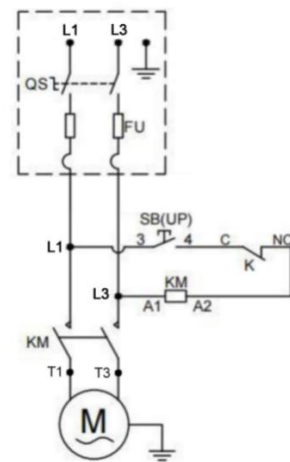
**Internal wiring diagram of limit switch: The cable has been connected.**



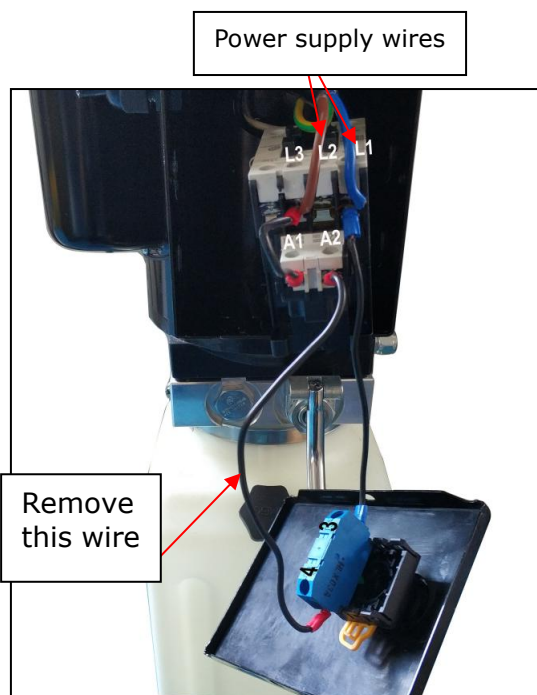
**Motor wiring diagram of single phase power unit**



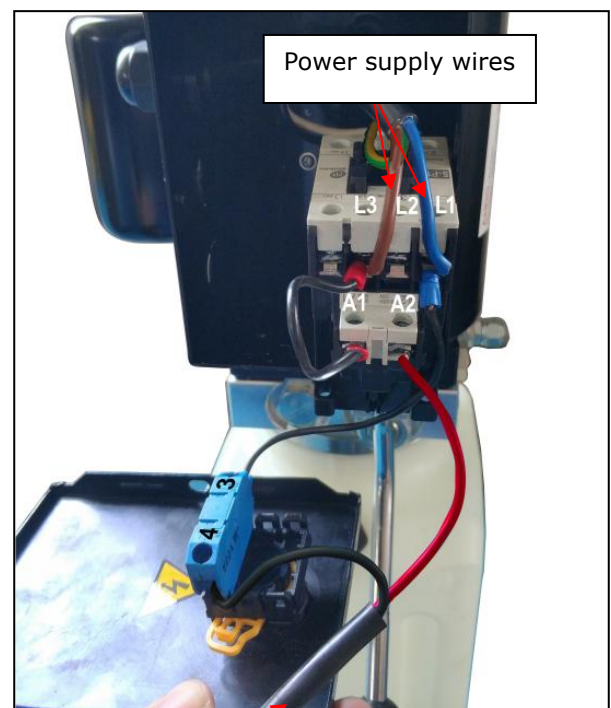
**Circuit diagram**



**Fig. 44**



**Fig. 45**



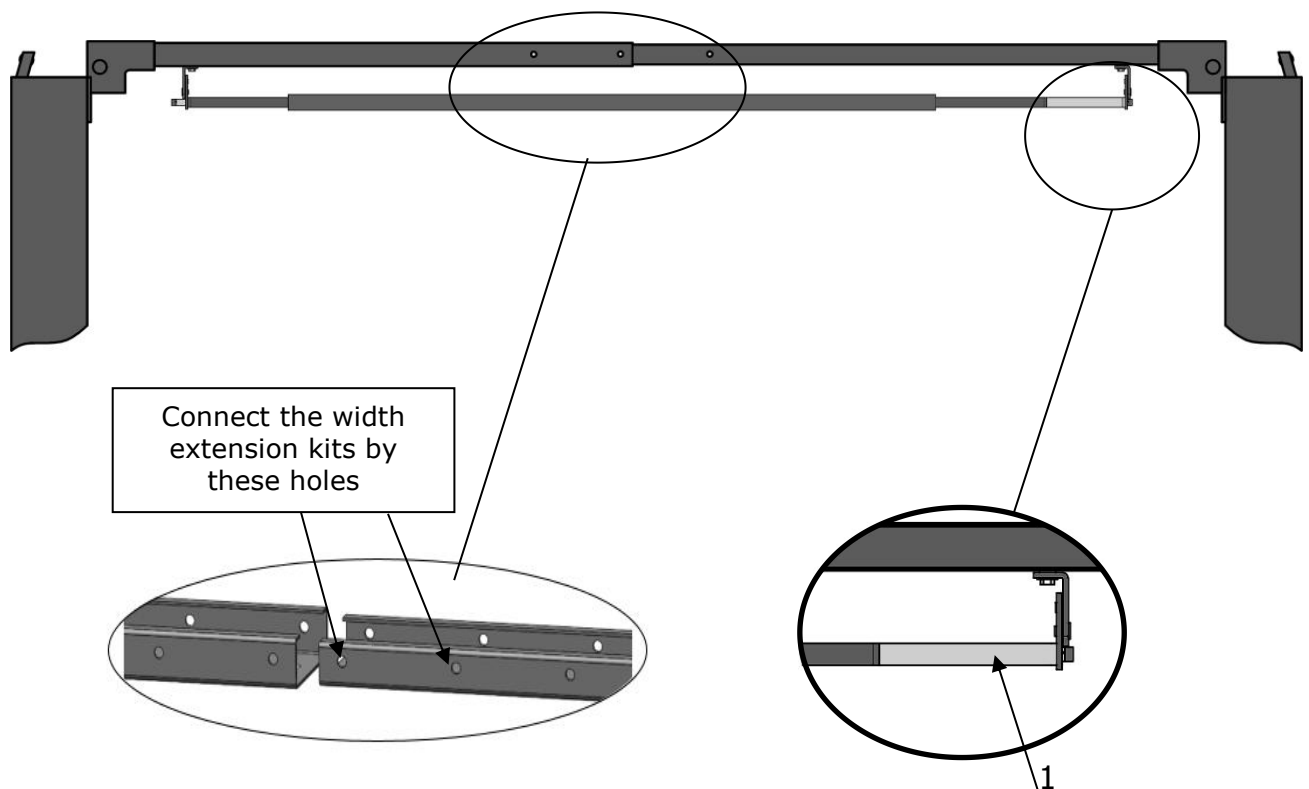
**Fig.46**

**⚠ DANGER** All wiring must be performed by a licensed, certified Electrician. Do not perform any maintenance or installation of the lift without first ensuring that the main power supply has been disconnected from the lift and that it cannot be re-energized until all procedures have been completed.

**⚠ 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.

## **\*Optional width extension kits**

- 1. Install the limit switch control bar and top beam (See Fig. 47).**



**Fig. 47**

## 2. OHX-10 width extension kits installation.

### 2.1 Oil-line connection diagram

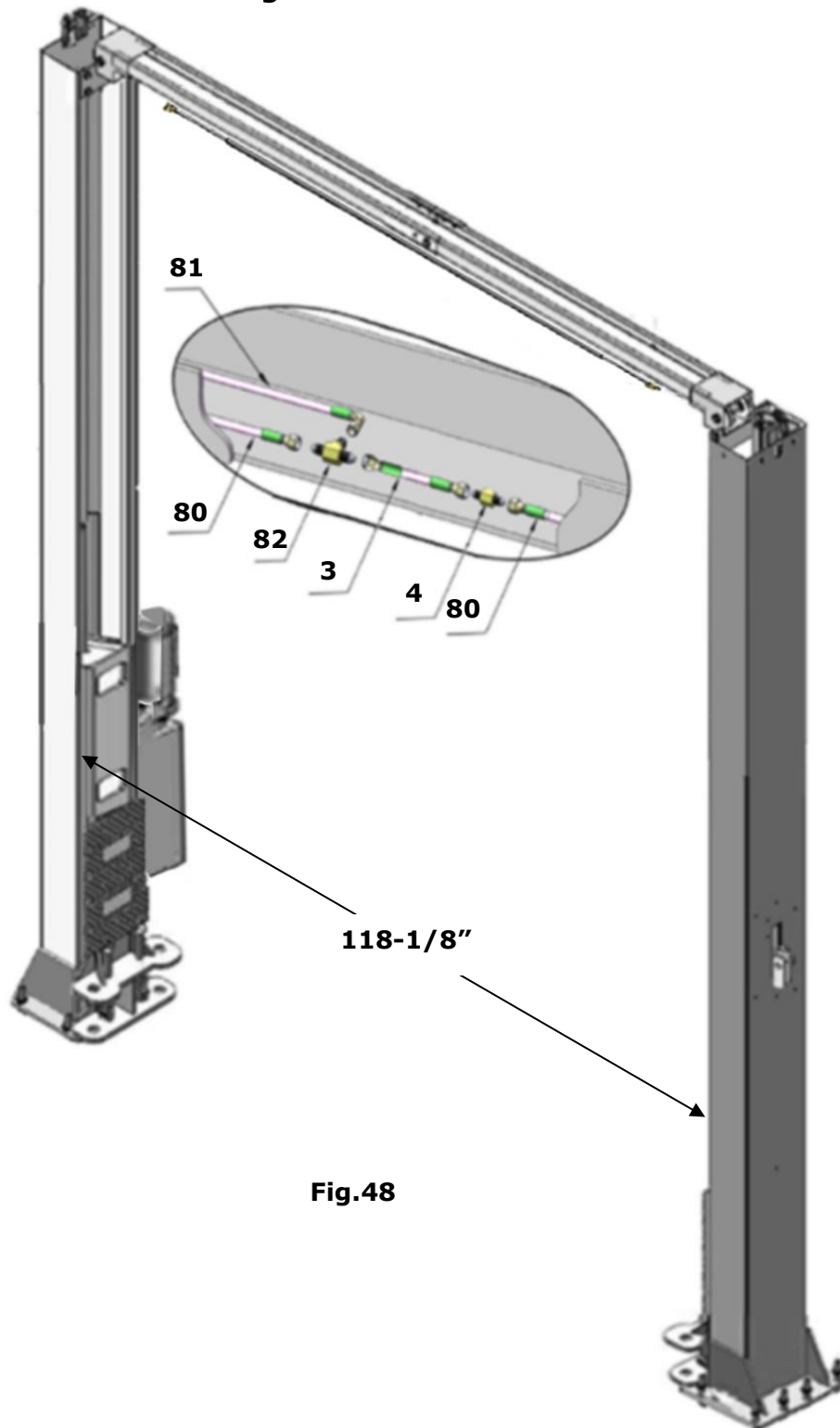
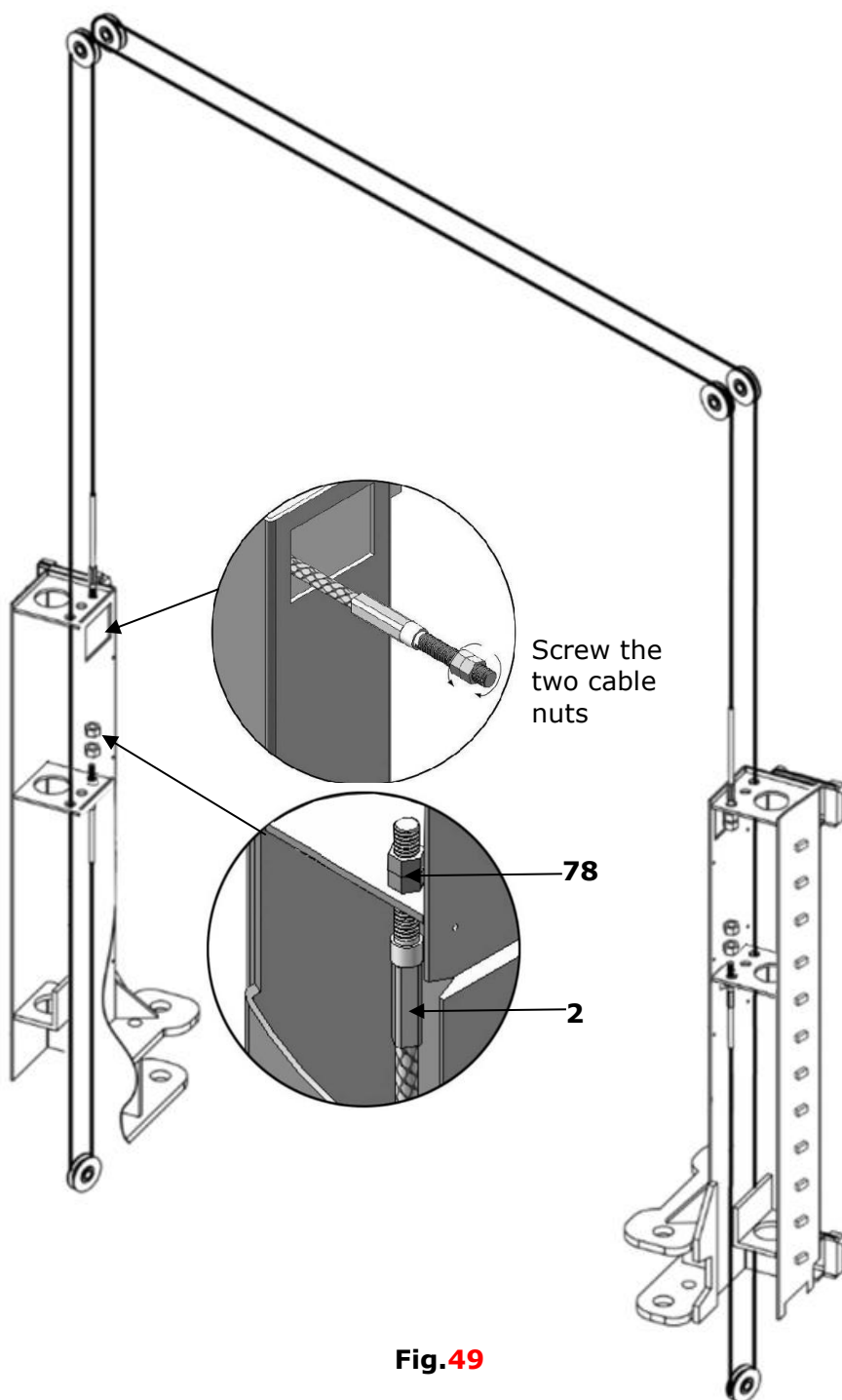


Fig.48

## 2.2 OHX-10 sync cables connection

Pass the cable from the bottom of the carriage to the carriage window, then screw up the 2 cable nuts together. **(See Fig. 49).**

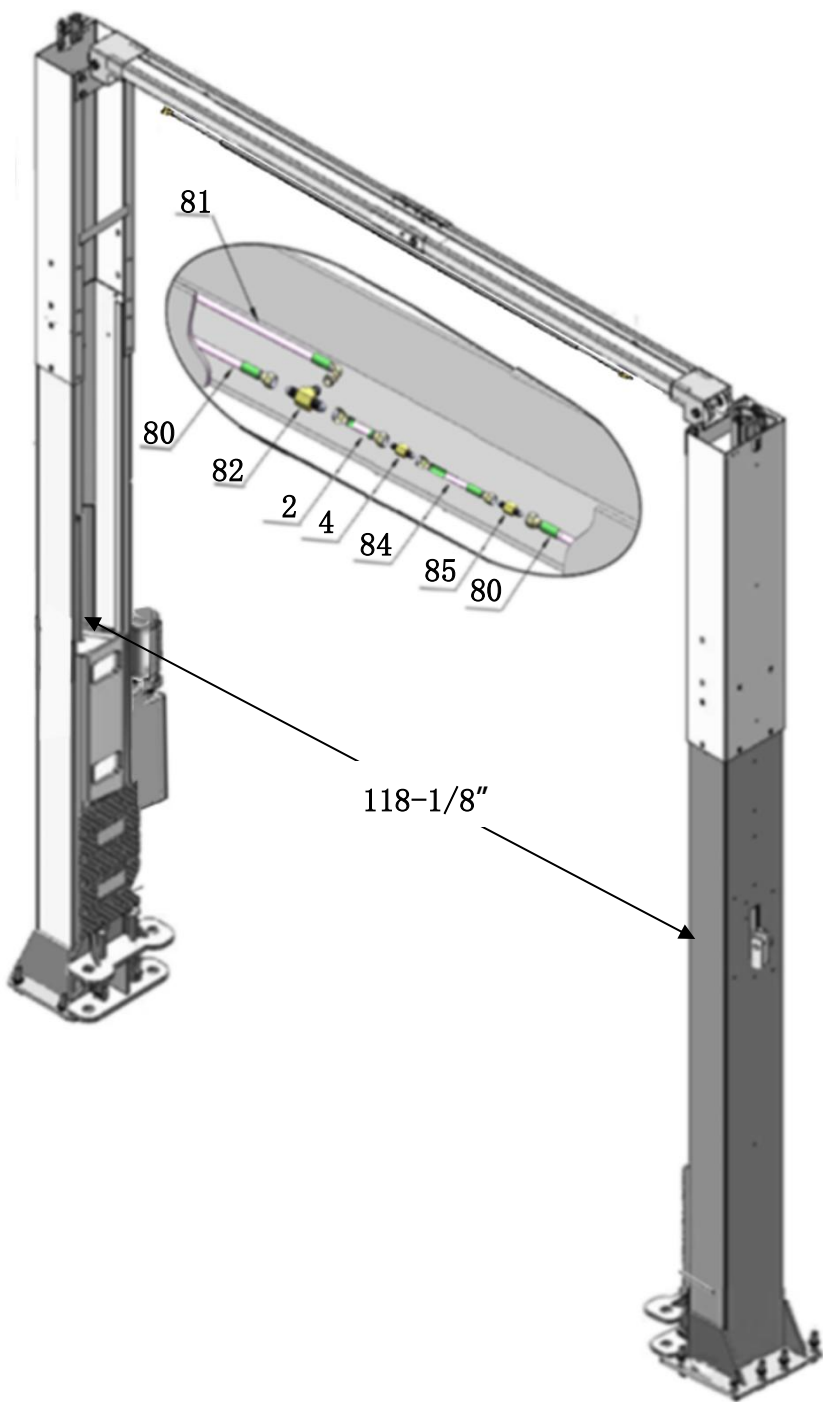


**Fig.49**

### Optional parts list

| Item | Part No.      | Description                                | OHX-10 |
|------|---------------|--|--------|
|      |               |  | QTY.   |
| 1    | 1102022008-01 | Connecting pin of limit switch control bar | 1      |
| 2    | 1002561009    | Sync cable assy. 3/8"x 385 7/16"           | 2      |
| 3    | 1002571011-01 | Oil hose assy. 1/4"x 5 1/2"                | 1      |
| 4    | 10620079      | Straight fitting                           | 1      |

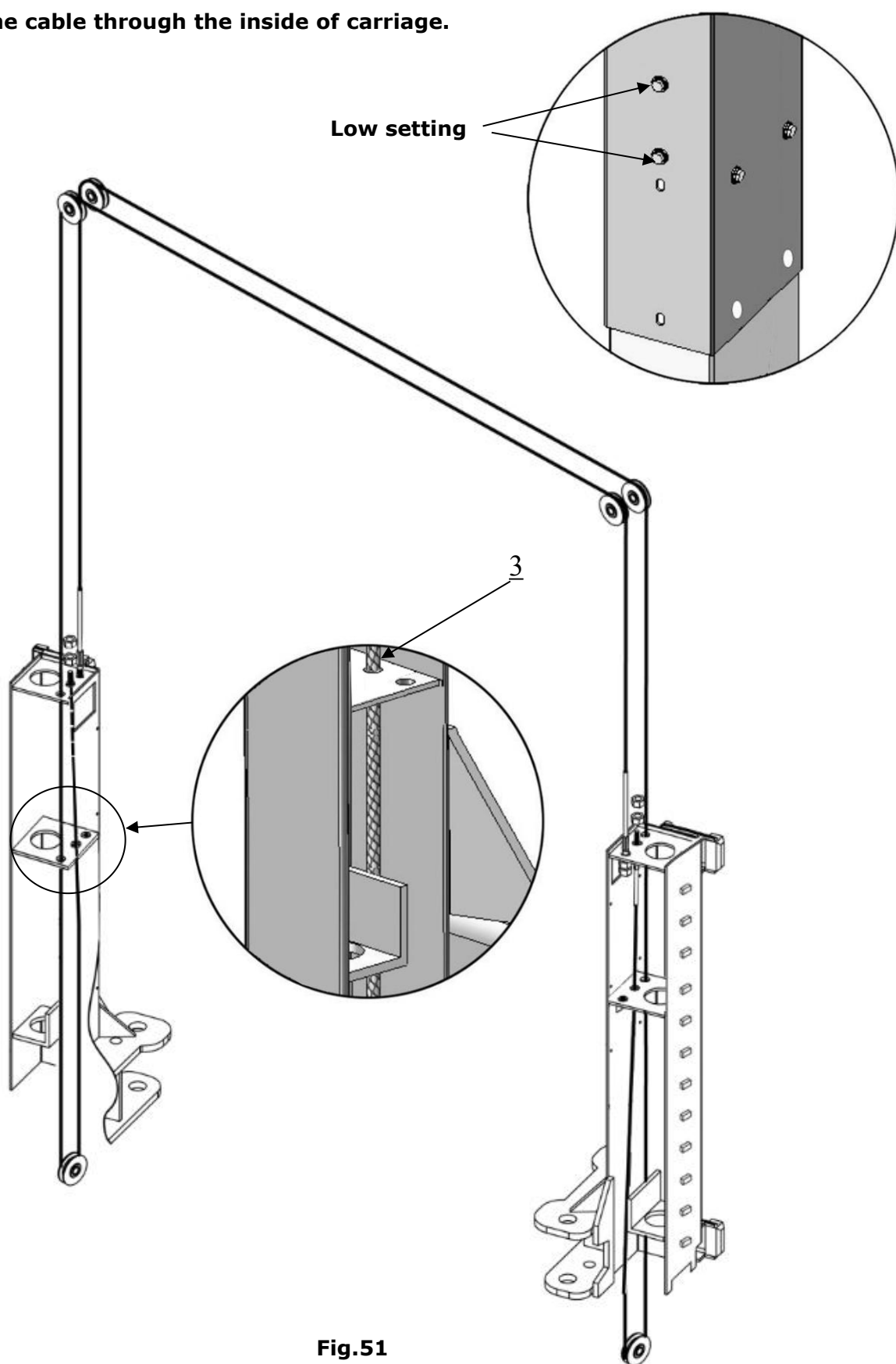
**3. OHX-10H width extension kits installation.**  
**3.1 Oil-line connection diagram**



**Fig.50**

### 3.2 OHX-10H sync cable assy. connection for low setting. (Fig. 51)

**Note:** pass the cable through the inside of carriage.

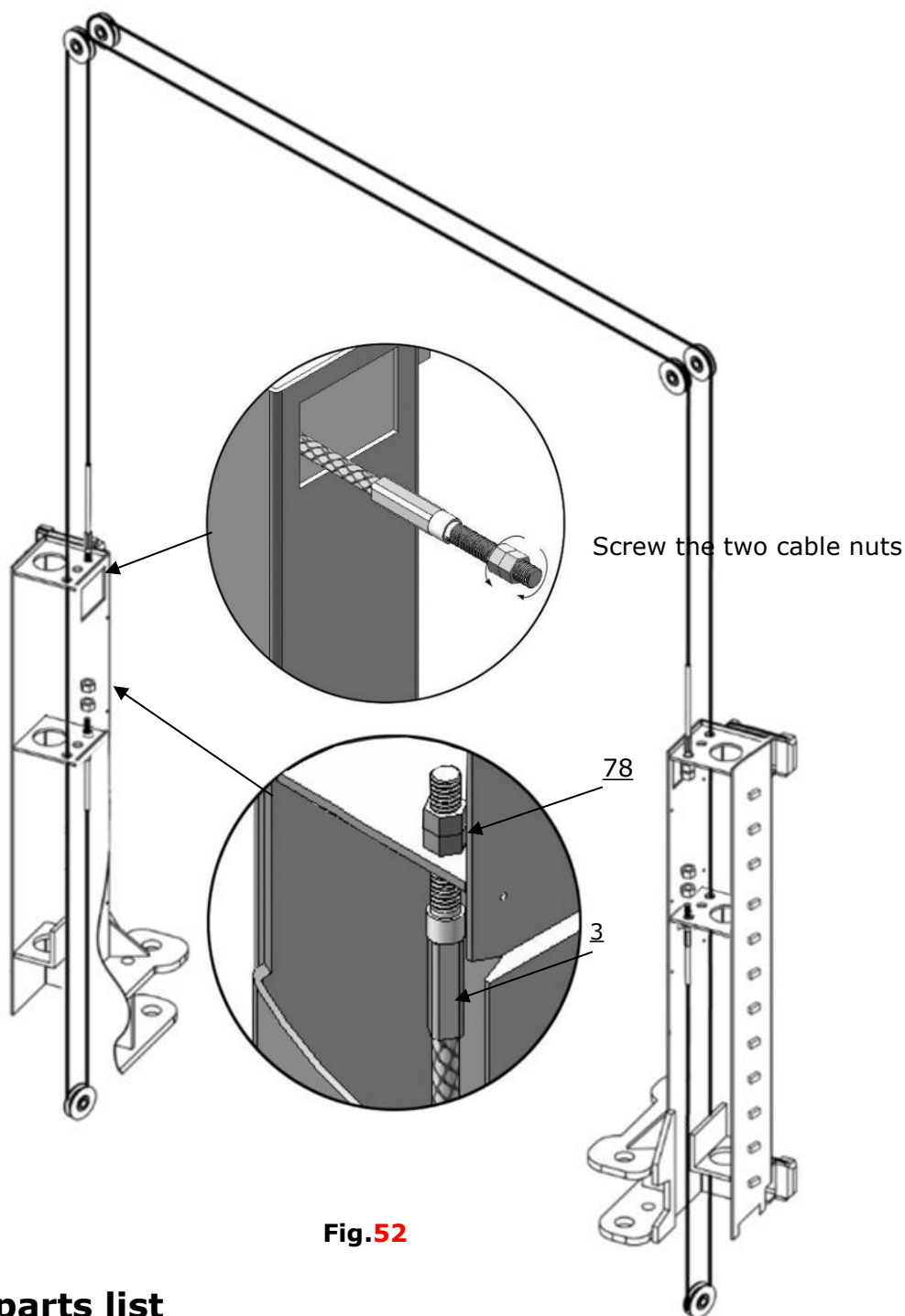


**Fig.51**



### 3.3 OHX-10H sync cable assy. connection for high setting (Fig. 52).

Pass the cable from the bottom of the carriage to the carriage window, then screw up the 2 cable nuts together.



### Optional parts list

| Item | Part No.      | Description                                | OHX-10H |
|------|---------------|--|---------|
|      |               |  | QTY.    |
| 1    | 1102022008-01 | Connecting pin of limit switch control bar | 1       |
| 2    | 1002571011-01 | Oil hose assy. 1/4" x 5 1/2"               | 1       |
| 3    | 1002571012    | Cable 3/8" x 433 1/2"                      | 2       |
| 4    | 10620079      | Straight fitting                           | 1       |

IV. EXPLODED VIEW

OHX-10

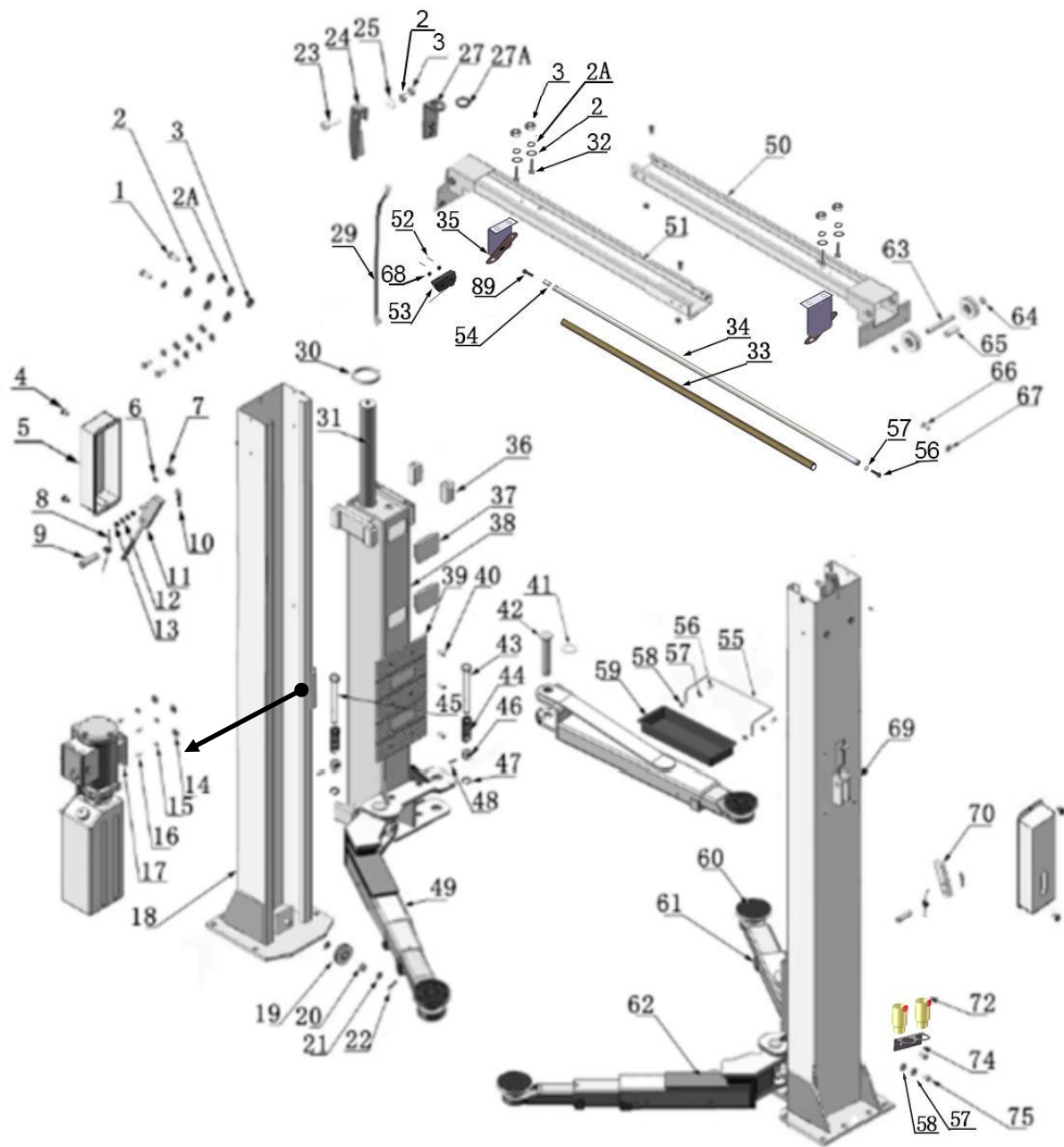
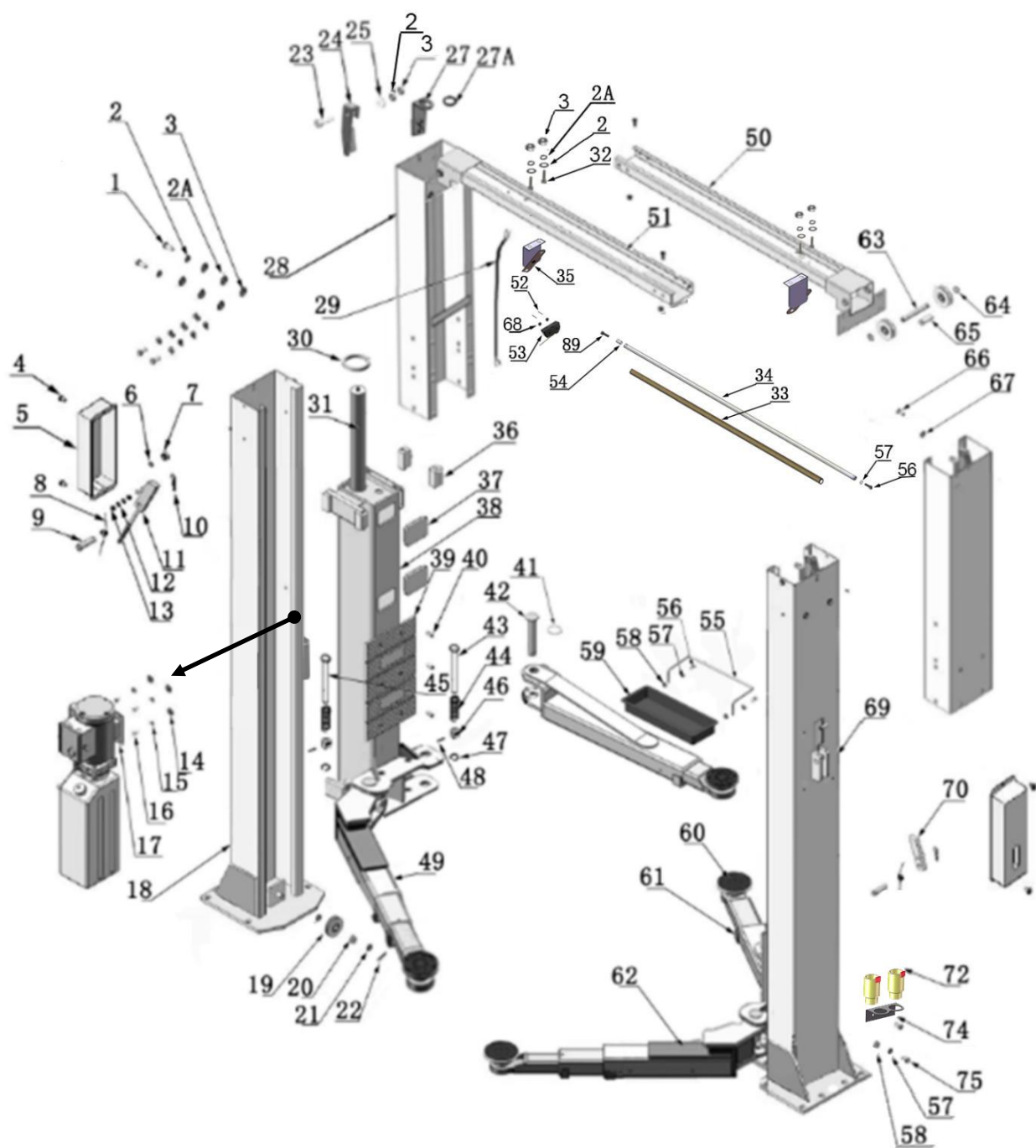


Fig. 53

# OHX-10H



**Fig. 54**

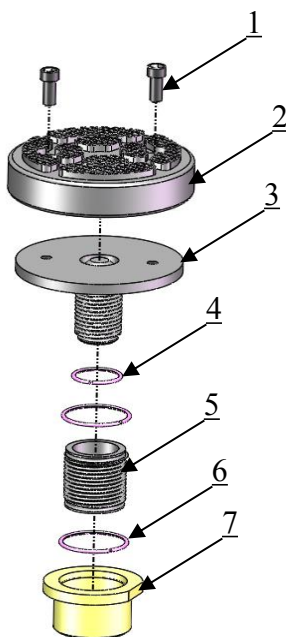
## PARTS LIST FOR OHX-10 and OHX-10H

| Item | Part No.       | Description                          | QTY.   |         |
|------|----------------|--------------------------------------|--------|---------|
|      |                |                                      | OHX-10 | OHX-10H |
| 1    | 10209125       | Hex bolt M10*30                      | 14     | 34      |
| 2    | 10209039       | Lock washer $\phi$ 10                | 18     | 38      |
| 2A   | 10209022       | Flat washer $\phi$ 10                | 32     | 72      |
| 3    | 10209021       | Hex nut M10                          | 18     | 36      |
| 4    | 10209009       | Round head bolt M6*8                 | 4      | 4       |
| 5    | 10209008       | Safety device protective cover       | 2      | 2       |
| 6    | 10209010       | Clip ring ( $\phi$ 10)               | 1      | 1       |
| 7    | 10209049       | Plastic pulley (Black)               | 1      | 1       |
| 8    | 10209007       | Spring                               | 2      | 2       |
| 9    | 11206002       | Safety block pin                     | 2      | 2       |
| 10   | 10209012       | Snap pin $\phi$ 3.2                  | 8      | 8       |
| 11   | 11209013       | Power side safety device             | 1      | 1       |
| 12   | 10206006       | Flat washer $\phi$ 12                | 2      | 2       |
| 13   | 10206023A      | Hex nut M12                          | 2      | 2       |
| 14   | 10209005       | Nylok nut (M8)                       | 4      | 4       |
| 15   | 10209004       | Rubber ring $\phi$ 8*20*3            | 4      | 4       |
| 16   | 1061K050       | Hex bolt M8*30                       | 4      | 4       |
| 17   |                | Manual power unit                    | 1      | 1       |
| 18   | 1102561001A    | Power side column                    | 1      | 1       |
| 19   | 1102011001     | Pulley $\phi$ 80* $\phi$ 22*15       | 6      | 6       |
| 20   | 1002011001     | Bronzed bush $\phi$ 22* $\phi$ 19*14 | 6      | 6       |
| 21   | 10209128       | Flat washer $\phi$ 20                | 8      | 8       |
| 22   | 10209012       | Snap pin $\phi$ 3.2                  | 4      | 4       |
| 23   | 10209046       | Hex bolt M10*35                      | 2      | 2       |
| 24   | 1102561005     | Small pulley bracket                 | 2      | 2       |
| 25   | 10206009       | Plastic pulley (white)               | 2      | 2       |
| 26   | 10420045       | M10 hex nut                          | 8      | 8       |
| 27   | 1102561006     | Oil hose support bracket             | 2      | 2       |
| 27A  | 1061K074       | Protective coil                      | 2      | 2       |
| 28   | 1102561003A    | Outer column                         | 0      | 2       |
| 29   | 1002561002     | Wire                                 | 1      | 0       |
|      | 1002571003     |                                      | 0      | 1       |
| 30   | 10209111       | Cylinder protective grommet          | 2      | 2       |
| 31   | 10217056       | Cylinder $\phi$ 50*1727              | 2      | 0       |
|      | 1002576001     | Cylinder $\phi$ 50*1905              | 0      | 2       |
| 32   | 10206017       | Hex bolt M10*20                      | 4      | 4       |
| 33   | 10206025A      | Foam tube                            | 1      | 1       |
| 34   | 1102072001A-01 | Control bar $\phi$ 22*2400           | 1      | 1       |
| 35   | 1103072003A-01 | Control bar bracket                  | 2      | 2       |

| Item | Part No.       | Description                                  | QTY.   |         |
|------|----------------|--|--------|---------|
|      |                |  | OHX-10 | OHX-10H |
| 36   | 10209015       | Slider block                                 | 16     | 16      |
| 37   | 10209016       | Carriage plastic cover                       | 4      | 4       |
| 38   | 1102563000A-02 | Carriage                                     | 2      | 2       |
| 39   | 10209018       | Protection rubber                            | 2      | 2       |
| 40   | 10209019       | Flat screw M6*16                             | 12     | 12      |
| 41   | 10520023       | Clip ring $\phi 38$                          | 4      | 4       |
| 42   | 11217168-01    | Arm pin                                      | 4      | 4       |
| 43   | 11217046A-01   | Arm lock handle (Left)                       | 2      | 2       |
| 44   | 10206050A      | Spring                                       | 4      | 4       |
| 45   | 11217046-01    | Arm lock handle (Right)                      | 2      | 2       |
| 46   | 10217044-01    | Arm lock                                     | 4      | 4       |
| 47   | 10206032       | Clip ring $\phi 25$                          | 4      | 4       |
| 48   | 10206036       | Elastic pin $\phi 6 \times 40$               | 4      | 4       |
| 49   | 11279013-02    | Front-right arm assy.                        | 1      | 1       |
| 50   | 1102562000B    | Top beam 2                                   | 1      | 1       |
| 51   | 1102562000A    | Top beam 1                                   | 1      | 1       |
| 52   | 1002022001     | Limit switch CZ-7120                         | 1      | 1       |
| 53   | 10420164       | Round head bolt M4*30                        | 2      | 2       |
| 54   | 1102022007     | Connecting bush $\phi 14 \times 2 \times 20$ | 1      | 1       |
| 55   | 11206154       | Rear toe guard                               | 2      | 2       |
| 56   | 10201002       | Hex bolt M8*16                               | 5      | 5       |
| 57   | 10209034       | Lock washer $\phi 8$                         | 10     | 10      |
| 58   | 10209033       | Flat washer $\phi 8$                         | 8      | 8       |
| 59   | 10206156       | Tool tray                                    | 2      | 2       |
| 60   | 1101043008     | Rubber pad assy.                             | 4      | 4       |
| 61   | 11279014       | Rear arm assy.                               | 2      | 2       |
| 62   | 11279012-02    | Front-left arm assy.                         | 1      | 1       |
| 63   | 11279016       | Pulley pin                                   | 2      | 2       |
| 64   | 10206019       | Clip ring $\phi 19$                          | 4      | 4       |
| 65   | 11206022       | Limit bush for pulley shaft                  | 2      | 2       |
| 66   | 10217066       | Hex bolt M6*15                               | 8      | 8       |
| 67   | 10217011       | Hex nut M6                                   | 8      | 8       |
| 68   | 10620095       | Hex nut M4                                   | 2      | 2       |
| 69   | 1102561002A    | Off side column                              | 1      | 1       |
| 70   | 11211013       | Off side safety device                       | 1      | 1       |
| 72   | 1102214016A-01 | Stackable adapter (3")                       | 4      | 4       |
| 74   | 11203035       | Stackable adapter bracket                    | 2      | 2       |

| Item | Part No.      | Description                      | QTY.   |         |
|------|---------------|----------------------------------|--------|---------|
|      |               |                                  | OHX-10 | OHX-10H |
| 75   | 10680003      | Hex bolt M8*12                   | 4      | 4       |
| 76   | 10209059      | Anchor bolt 3/4*5-1/2            | 12     | 12      |
| 77   | 10201090      | Shim(3/64")                      | 10     | 10      |
|      | 10620065      | Shim(5/64")                      | 10     | 10      |
| 78   | 10209066      | Hex Nut M16                      | 4      | 4       |
| 79   | 1002561004    | Sync cable assy. 3/8"x 379 1/2"  | 2      | 0       |
|      | 1002571005    | Sync cable assy. 3/8"x 427 9/16" | 0      | 2       |
| 80   | 1002561005-01 | Oil hose assy. 1/4"x 201 3/8"    | 2      | 0       |
|      | 1002571002-01 | Oil hose assy. 1/4"x 213 9/16"   | 0      | 2       |
| 81   | 1002561001    | Oil hose assy. 1/4"x 163 3/4"    | 1      | 0       |
|      | 1002571001    | Oil hose assy. 1/4"x 176 3/4"    | 0      | 1       |
| 82   | 10211016      | T fitting                        | 1      | 1       |
| 83   | 10211017      | 90° fitting for cylinder         | 2      | 2       |
| 84   | 1002571009-01 | Oil hose assy. 1/4" x 21 11/16"  | 0      | 1       |
| 85   | 10620079      | Straight fitting                 | 0      | 1       |
| 86   | 1002561003    | Lock release cable L= 274 13/16" | 1      | 0       |
|      | 1002571004    | Lock release cable L= 323 13/16  | 0      | 1       |
| 87   | 1102561500    | Parts box                        | 1      | 0       |
|      | 1102571500    |                                  | 0      | 1       |
| 88   | 10209060      | 90° fitting for power unit       | 1      | 1       |
| 89   | 10201122      | Hex bolt M8*35                   | 1      | 1       |
| 90   | 10209149      | Lock washer φ6                   | 8      | 8       |

#### 4.1 Single Screw Rubber Pad Assy. Exploded View (1101043008) :



| Item | Part No.   | Description                | QTY. |
|------|------------|----------------------------|------|
| 1    | 10720061   | Socket Bolt M8*15          | 8    |
| 2    | 10203043   | Double screw rubber Pad    | 4    |
| 3    | 1101043003 | Support frame              | 4    |
| 4    | 10203041   | Snap ring Φ23*Φ28*Φ2.5     | 4    |
| 5    | 1101043006 | Adjusting rod              | 4    |
| 6    | 10203042   | Snap ring Φ36.5*Φ41.5*Φ2.5 | 8    |
| 7    | 1101043004 | Adjusting sleeve           | 4    |

**Fig.55**

#### 4.2 Rear arm assy. (10279014) exploded view

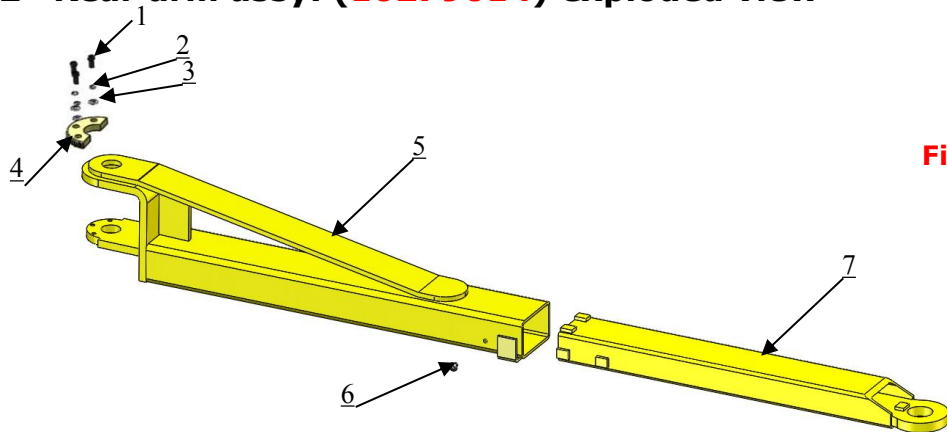


Fig.56

| Item | Part No.    | Description           | QTY. |
|------|-------------|-----------------------|------|
| 1    | 10206048    | Socket bolt M10*30    | 6    |
| 2    | 10209039    | Lock washer $\phi 10$ | 6    |
| 3    | 10209022    | Flat washer $\phi 10$ | 6    |
| 4    | 11206049    | Moon gear             | 2    |
| 5    | 11206192-01 | Outer arm             | 2    |
| 6    | 10201149    | Round head bolt M8*12 | 2    |
| 7    | 11206194-02 | Inner arm             | 2    |

#### 4.3 Front-left arm assy. (11279012-02) exploded view

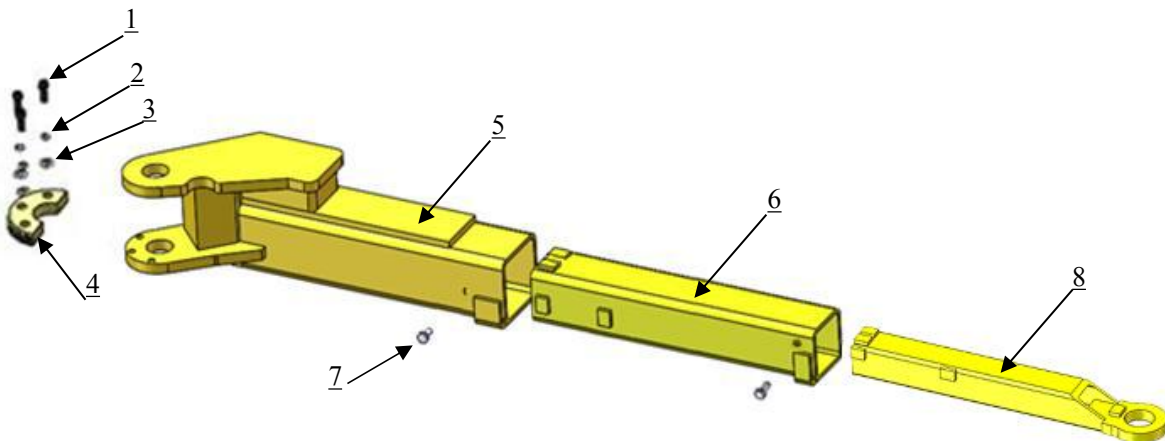
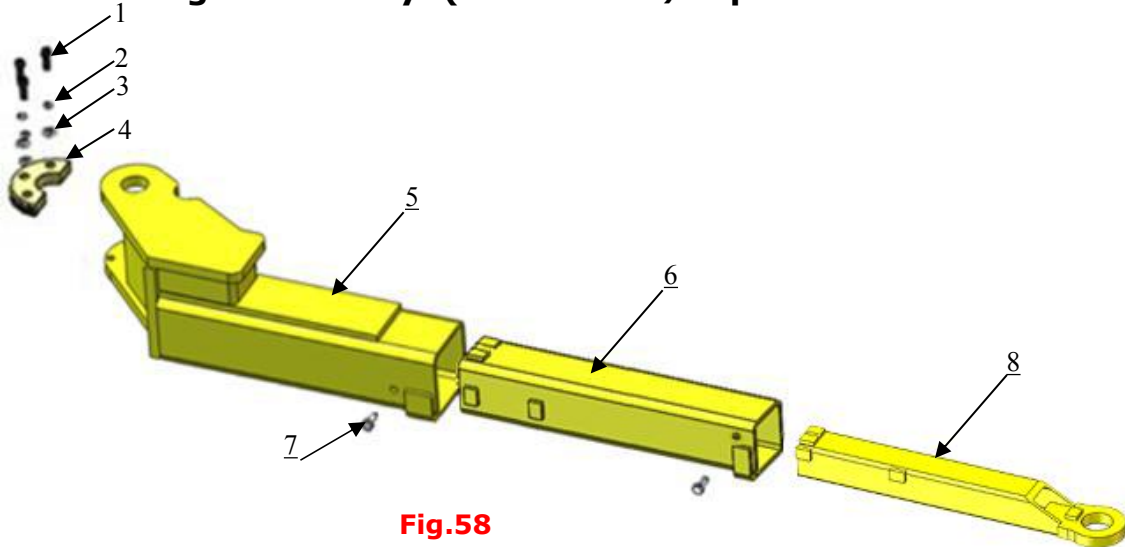


Fig.57

| Item | Part No.     | Description           | QTY. |
|------|--------------|-----------------------|------|
| 1    | 10206048     | Socket bolt M10*30    | 3    |
| 2    | 10209039     | Lock washer $\phi 10$ | 3    |
| 3    | 10209022     | Flat washer $\phi 10$ | 3    |
| 4    | 11206049     | Moon gear             | 1    |
| 5    | 11279005-01  | Outer arm             | 1    |
| 6    | 11206189-01  | Middle arm            | 1    |
| 7    | 10201149     | Round head bolt M8*12 | 2    |
| 8    | 11201049B-02 | Inner arm             | 1    |



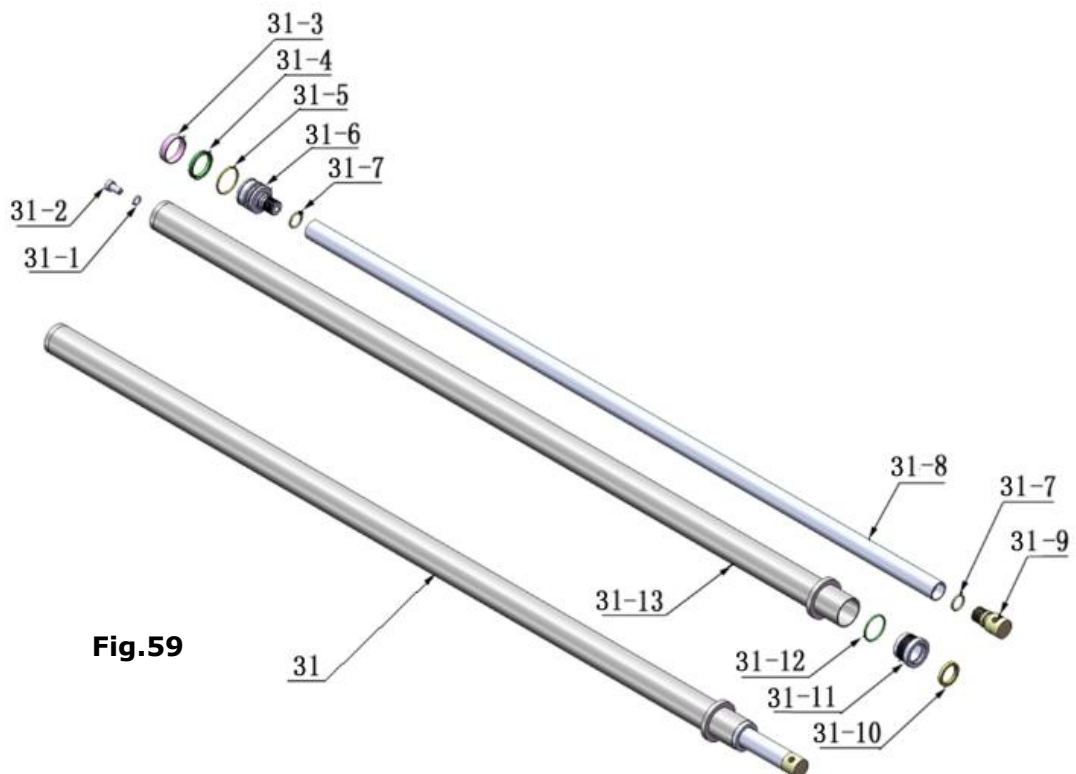
#### 4.4 Front-right arm assy. (11279013-02) exploded view



**Fig.58**

| Item | Part No.     | Description           | QTY. |
|------|--------------|-----------------------|------|
| 1    | 10206048     | Socket bolt M10*30    | 3    |
| 2    | 10209039     | Lock washer $\phi 10$ | 3    |
| 3    | 10209022     | Flat washer $\phi 10$ | 3    |
| 4    | 11206049     | Moon gear             | 1    |
| 5    | 11279006-01  | Outer arm             | 1    |
| 6    | 11206189-01  | Middle arm            | 1    |
| 7    | 10201149     | Round head bolt M8*12 | 2    |
| 8    | 11201049B-02 | Inner arm             | 1    |

#### 4.5 Cylinder (0209014/1002576001) exploded view



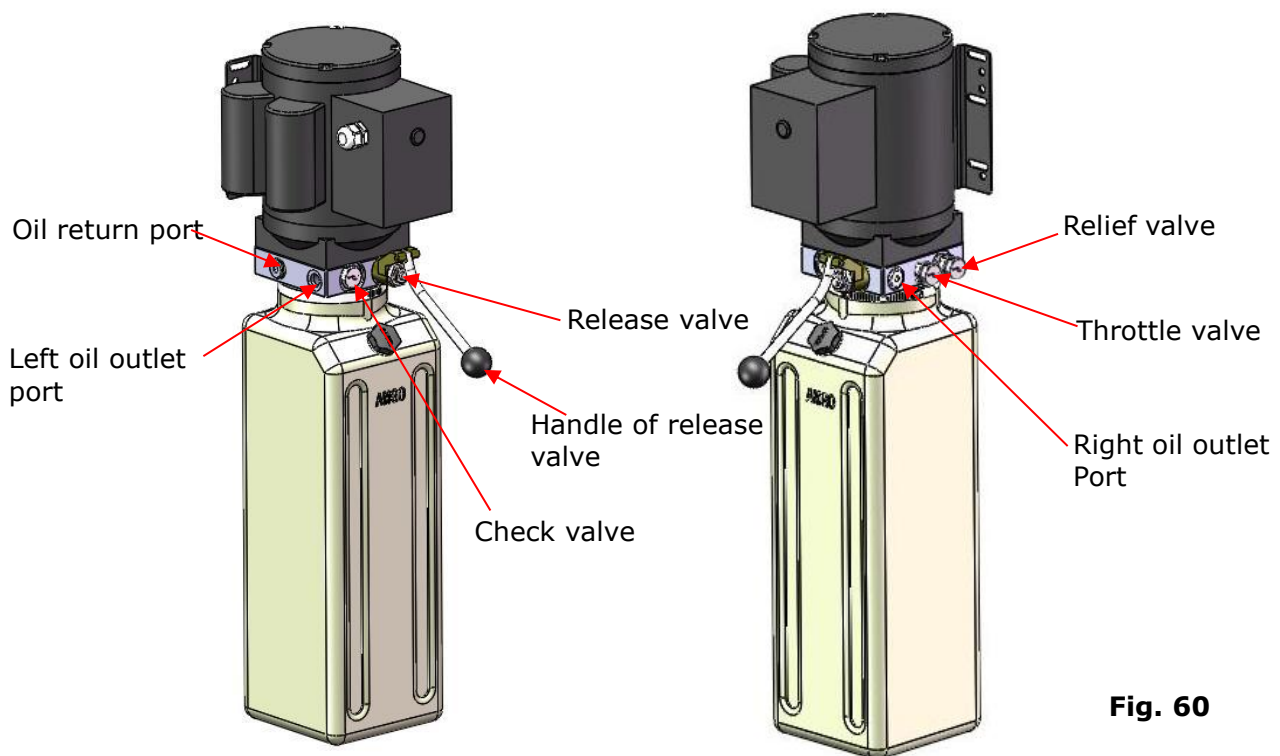
**Fig.59**



## Part list for cylinder

| Item  | Part No.    | Description                 | QTY. |
|-------|-------------|-----------------------------|------|
| 31-1  | 10209069    | O ring                      | 2    |
| 31-2  | 10209070    | Bleeding plug               | 2    |
| 31-3  | 10209071    | Support ring                | 2    |
| 31-4  | 10209072-01 | Y-ring USH                  | 2    |
| 31-5  | 10209073    | O ring                      | 2    |
| 31-6  | 11209074    | Piston                      | 2    |
| 31-7  | 10209075    | O ring                      | 4    |
| 31-8  | 11209076    | Piston rod (OHX-10)         | 2    |
|       | 1102576002  | Piston rod for (OHX-10H)    | 2    |
| 31-9  | 11209077    | Piston rod fitting          | 2    |
| 31-10 | 10209078    | Dust ring                   | 2    |
| 31-11 | 11209079    | Head cap                    | 2    |
| 31-12 | 10209080    | O ring                      | 2    |
| 31-13 | 11209081    | Bore weldment for (OHX-10)  | 2    |
|       | 1102576003  | Bore weldment for (OHX-10H) | 2    |

## 4.6 Illustration of hydraulic valve for hydraulic power unit



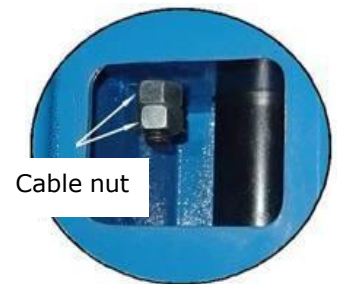
**Fig. 60**

## V. TEST RUN

### 1. Adjustment of sync cables (See Fig. 61)

Use wrench to hold the cable fitting, meanwhile using ratchet spanner to tighten the cable nut until the two cables are in the same tension.

If the two carriages do not be synchronized when lifting and lowering, please screw and tighten the cable nut on the lower side carriage.



**Fig. 61**

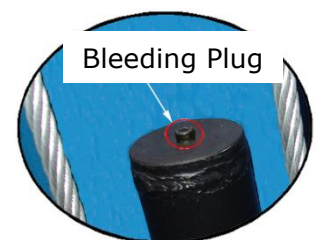
### 2. Adjust lock release cable

Rise the vehicle carriages and lock them at the same height, strain the lock release cable and then release a little, and then tighten the cable nuts. Make sure the safety device can always lock the carriages properly.

At last, install the plastic cover of the safety device.

### 3. Exhaust air from oil cylinder (See Fig. 62)

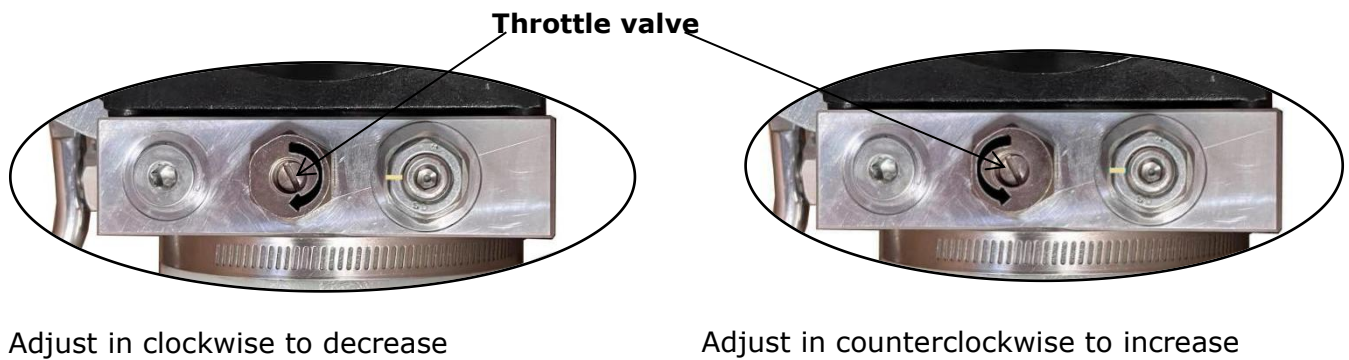
This hydraulic system is designed with a bleeding plug, located at the top of the cylinder, raise the carriages to about 1 meter height and loose the bleeding plug, the air would be bled automatically, then tighten the plug after bleeding air, the lift would work stably and smoothly, otherwise, repeat bleeding air.



**Fig. 62**

### 4. Adjust the lowering speed

You can adjust the lowering speed of the lift if necessary: screw the throttle valve clockwise to decrease the lowering speed, or counterclockwise to increase the lowering speed.



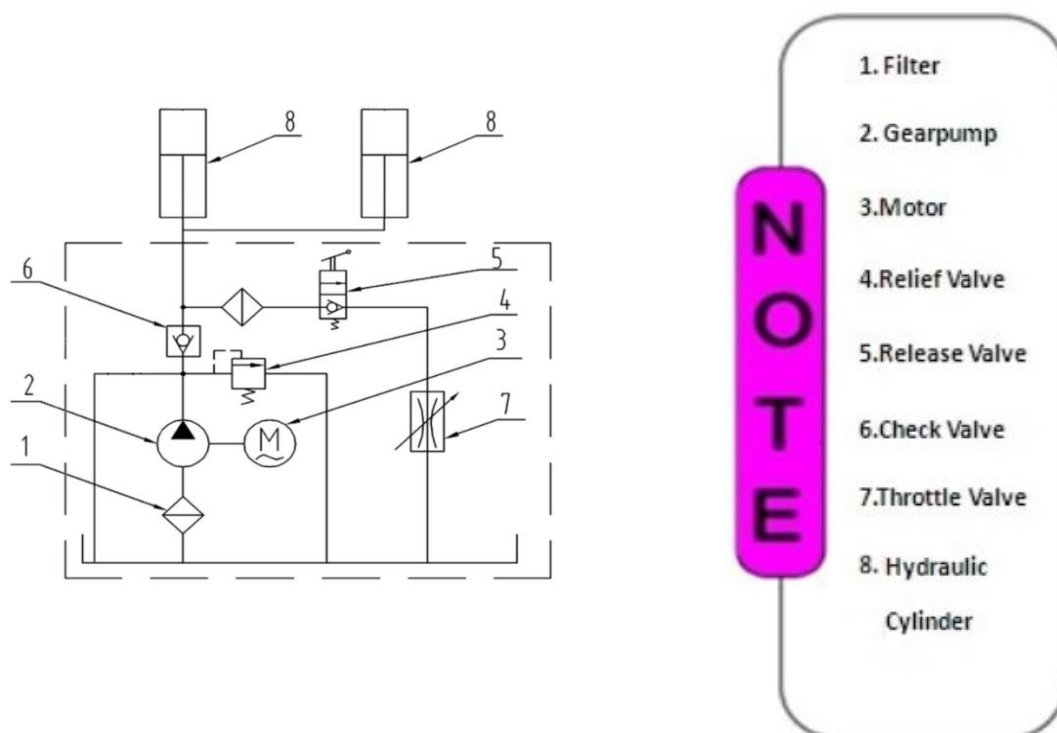
**Fig. 63**

## 5. Test with load

The test should be conducted after the above adjustments have been completed, test running the lift with typical vehicle. Run the lift at low level several times first, ensure that both side safety lock can lock and unlock in synchronization. When there is no other abnormal phenomenon, run the whole process. Repeat the above adjustment if there is any abnormal phenomenon.

**NOTE: It may be vibrated during the first lifting cycles, please lifting it with load for several times, the air would be bled and the vibration would be disappeared automatically.**

## Hydraulic schematic



**Fig.64**

## VI. OPERATION INSTRUCTIONS

**Please read the safety tips vehicle carefully before operating the lift**

### **To lift vehicle**


1. Keep operation site clean;
2. Lower the lifting arm to the shortest position;
3. Retract the lifting arm to the shortest position;
4. Open lifting arms out to the sides;
5. Move the vehicle between columns;
6. Move the lifting 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 **UP** button until the lifting pads contact underside of vehicle totally and recheck lifting points;
8. Continue to raise the lift slowly, ensure the balance of vehicle, lift the vehicle to the desired height, release the **UP** button;
9. Press the release handle on power unit to lower the lift to the safety lock position. The vehicle cannot be repaired unless safety in lock position.

### **To lower vehicle**

1. Clear obstructions around and under the lift and be certain no people are around the lift;
2. Push **UP** button to raise the vehicle slightly, and then unlock the safety device, lower vehicle by pushing release handle on the power unit.
3. Open the lifting arms out to the sides and retract the lifting arm to the shortest position;
4. Drive away the vehicle.

 **WARNING** It is unsafe to work when the lift without locking at safety device after it has been raised. The vehicle may fall, potentially causing damage the vehicle and lift, even causing injury or death to someone nearby.

 **DANGER** When using the lifting points on the chassis recommended by the vehicle manufacturer, be sure to follow the instructions carefully. If you don't, the vehicle can become unstable and fall, which can damage the vehicle and lift, injure or even kill anyone under the vehicle.

## **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 sync 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;
6. Check limit switch and make sure in proper condition;
7. Check the oil level of power unit and ensure is normal;
8. Check the moon gear and arm lock and ensure in proper condition.

### **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.

## VIII.TROUBLE SHOOTING

| TROUBLE                               | CAUSE  | REMEDY  |
|---------------------------------------|--|---|
| Motor does not run                    | <ol style="list-style-type: none"> <li>1. Button does not work</li> <li>2. Wiring connections are not in good condition</li> <li>3. Motor burned out</li> <li>4. AC contactor burned out</li> </ol>  | <ol style="list-style-type: none"> <li>1. Replace button</li> <li>2. Repair all wiring connections</li> <li>3. Repair or replace motor</li> <li>4. Replace AC Contactor</li> </ol>          |
| Motor runs but the lift is not raised | <ol style="list-style-type: none"> <li>1. Motor runs in reverse rotation</li> <li>2. Gear pump out of operation</li> <li>3. Release valve in damage</li> <li>4. Relief valve or check valve in damage</li> <li>5. Low oil level</li> </ol> | <ol style="list-style-type: none"> <li>1. Reverse two power wire</li> <li>2. Repair or replace</li> <li>3. Repair or replace</li> <li>4. Repair or replace</li> <li>5. Fill tank</li> </ol> |
| Lift does not stay up                 | <ol style="list-style-type: none"> <li>1. Release valve out of work</li> <li>2. Relief valve or check valve leakage</li> <li>3. Cylinder or fittings leaks</li> </ol>  | Repair or replace   |
| Lift raises slowly                    | <ol style="list-style-type: none"> <li>1. Oil line is jammed</li> <li>2. Motor running on low voltage</li> <li>3. Oil mixed with air</li> <li>4. Gear Pump leaks</li> <li>5. Overload lifting</li> </ol>                                   | <ol style="list-style-type: none"> <li>1. Clean the oil line</li> <li>2. Check Electrical System</li> <li>3. Fill tank</li> <li>4. Replace Pump</li> <li>5. Check load</li> </ol>           |
| Lift cannot lower                     | <ol style="list-style-type: none"> <li>1. Safety device are in activated</li> <li>2. Release valve in damage</li> <li>3. Safety cable broken</li> <li>4. Oil system is jammed</li> </ol>   | <ol style="list-style-type: none"> <li>1. Release the safeties</li> <li>2. Repair or replace</li> <li>3. Replace</li> <li>4. Clean the oil system</li> </ol>                                |

## **IX. CAR LIFT SAFETY TIPS**

Put these 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 the parts of original equipment to repair.
2. Do not overload the lift. 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. You can not lift a car with people inside. When the lift is working, the customer or other people should not be around the machine.
5. Keep the place around the lift clear of obstacles, lubricants, grease, garbage and other debris for a long time.
6. Before driving the car into the lift, put the lifting arm and rubber pad in the proper position to ensure barrier-free space. Do not hit or run over the lift arm and rubber pad of the lift, otherwise it will cause damage to the lift machine or the car.
7. Rise the lift to the required height for operation. Note, if you are working under a car, raise the lift high enough and make sure the safety device has locked.
8. Note, removing (or installing) parts from a car can cause a sudden shift of gravity that is unstable for the raised car. Reference to the car manufacturer's service manual as a recommended procedure when removing parts from the car.
9. Before lower the lift, make sure that the tool tray, tool rack, etc. are removed from under the car. Open the lock before lowering the lift.
10. Before removing the car from the lift, put the lifting arm and rubber pad in place to open an unobstructed exit.

## **X. 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>