

## **2 Post Overhead Lift Installation & Operation & Maintenance Instructions**

2 Post Overhead Lift  
Single (1) Point Manual Release  
Lifting Capacity 6804KG/15000 lbs

# **USER MANUAL**

### **Important Note**

- 1. This equipment can not be installed, operated or repaired without reading instructions.**
- 2. Electricity must be hooked up by certified electrician.**
- 3. Do not use this equipment beyond its rated capacity.**

## 2 Post Overhead Lift Installation & Operation & Maintenance Instructions

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## 1 - Equipment Description

### 1.1 Description

This 2 Post Floor Plate Lift is an advanced car&truck maintenance equipment, mainly used for automotive's repair and maintenance.

### 1.2 Technical Specifications

Lift Capacity	6804kg / 15000lbs
Overall Height	4200mm/165.15"
Overall Width	3840mm / 151.81"
Maximum Lifting Height W/O Truck Adaptor	1860mm / 73.23"
Minimum Height	120mm / 4.72"
Lifting Time	55s
Outside Column to Outside Column Width	3620mm / 142.51"
Inside Column Width	3200mm / 125.98"
Drive Through	2800mm/110.23"
Column Thickness of Steel	6mm / 0.236"
Carriage Thickness of Steel	6mm / 0.236"
Arms Thickness of Steel	8mm / 0.314"
Cable Diameter	8.2mm / 0.323"
Voltage	220v
Power	3.0kw / 4hp
Breaker	30A
Hydraulic Fluid Requirment	3-5 Gallons AW32/AW46
Equipment Weight	1100kg / 2425lbs

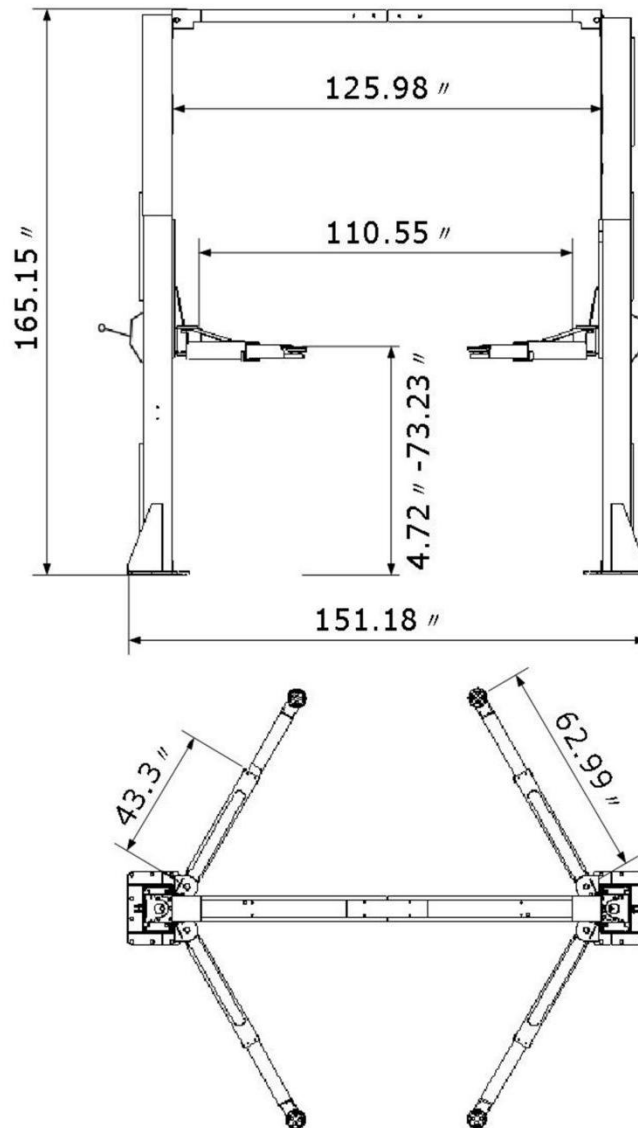


Fig 1 Dimensions

## 2 - Installation

This 2 Post Overhead Lift is the most common equipment for repairing cars. Its installation is not only related to the maintenance efficiency but also to personal safety of the maintenance technicians. Therefore, the installation must be completed by certified installers according to the User Manual, and in accordance with installation regulations. Recommend to use manufacturer supplied anchor bolts.

### 2.1 Preparation

#### 2.1.1 Foundation

The lift must be installed on a level concrete foundation with a minimum concrete thickness of 6" (7.87" is recommended) and a strength of 3000 psi or more. The newly poured concrete needs to be dried thoroughly before installation. (Fig 2).

**\*Warning\*: The size and concrete parameters of the foundation are the minimum strength and foundation depth parameters of the installation. The user needs to adjust the thickness and floor space of the foundation according to the maximum weight. It can also be done at the dealer's suggestion.**

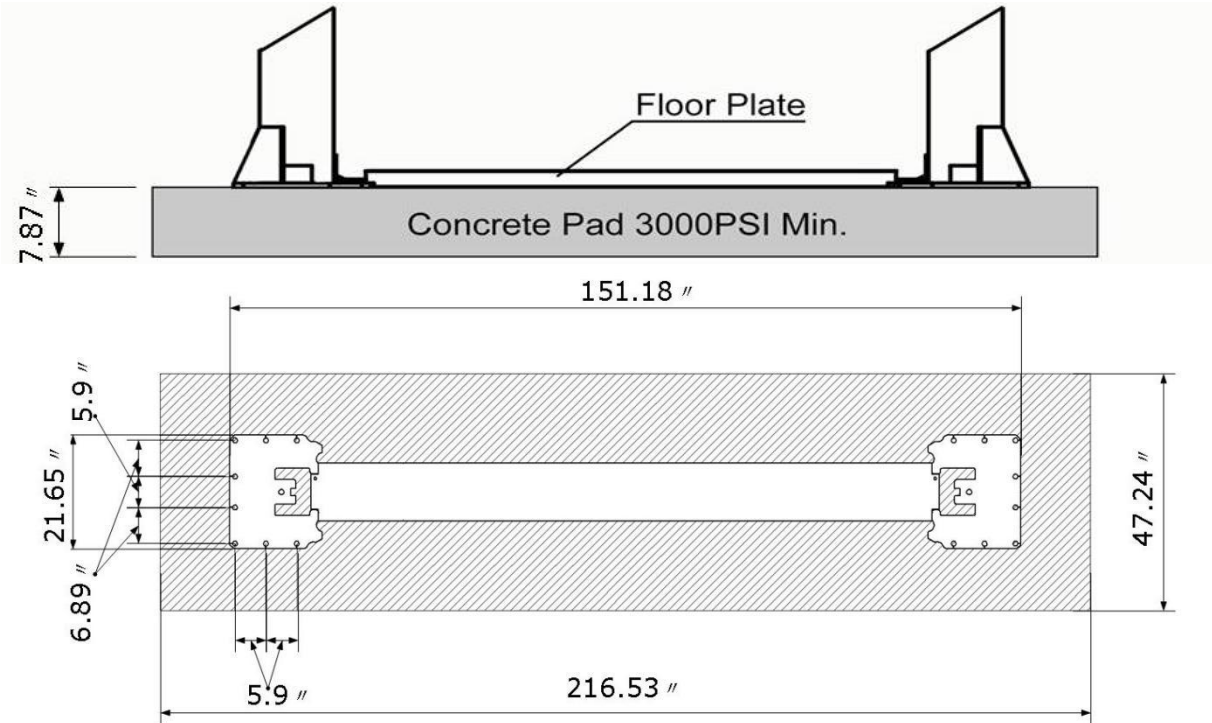


Fig 2 Foundation Requirement

### 2.1.2 Tools Required

Hammer, Socket Wrench Set, Hex Wrench Set, Adjustable Wrench, Screwdriver, Measuring Tape(16'+), Long-Nose Plier, Circlip Pliers, Electric Rotary Hammer, Drill(3/4"/20mm), Safety Glasses, Work Gloves, Safety Helmet, Forklift/Crane or something similar.

## 2.2 Equipment Installation

### 2.2.1 Assemble Columns

Assemble main column & extension column, and then stand up the 2 columns (the column with the power unit base plate is the main column and the other one is the vice column)

(Fig 3)

**Note: Don't drill anchor bolts holes or install anchor bolts now.**

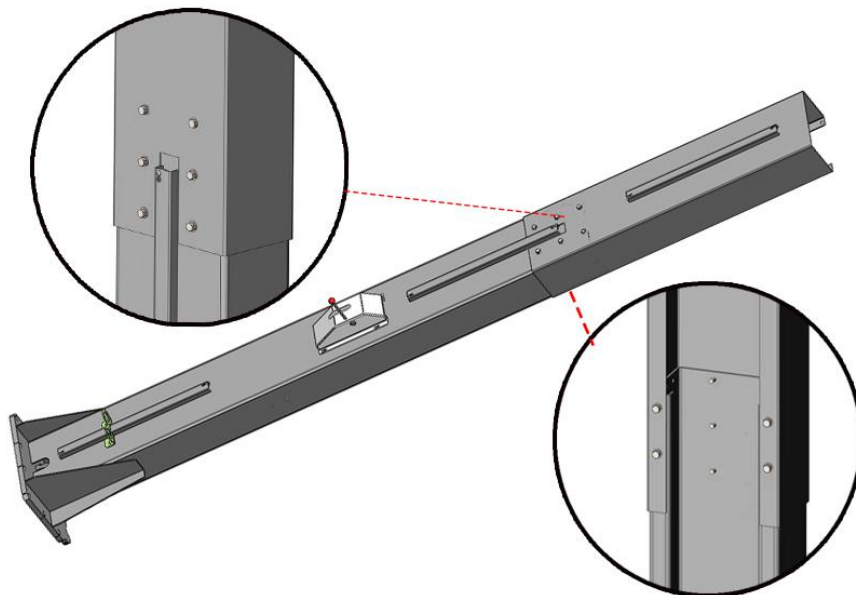


Fig 3 Assemble Columns

### 2.2.2 Assemble overhead top beam (Fig 4)

NOTE: The bolts run from inside of the column and then fasten the nuts from outside of the column.

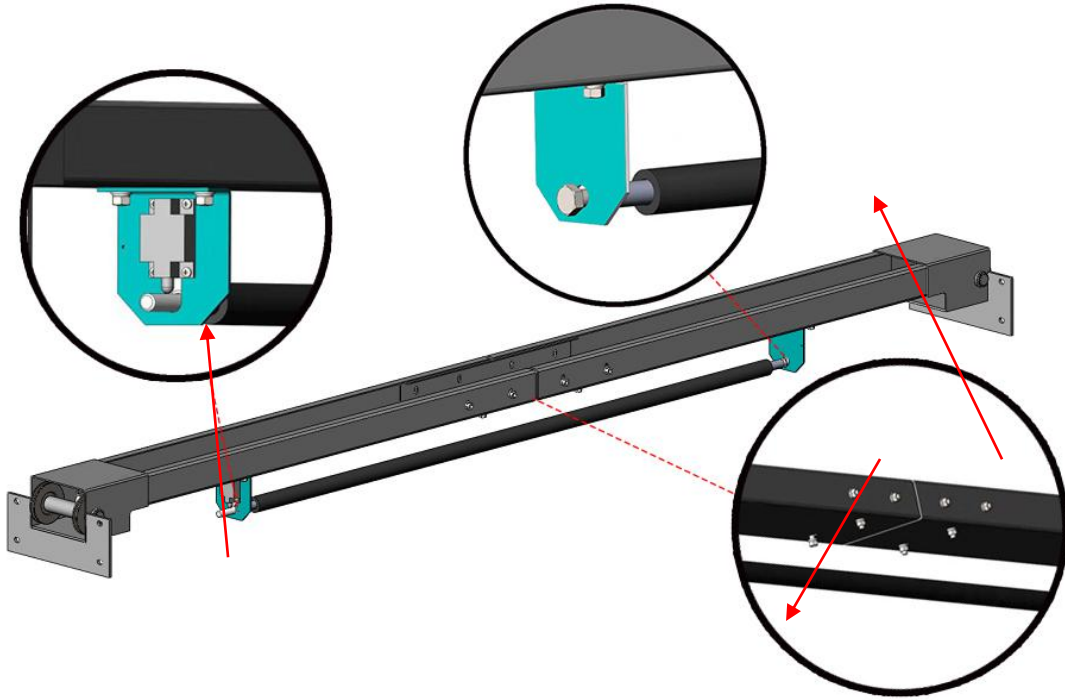


Fig 4 Assemble overhead top beam

### 2.2.3 Position Columns

Check if the columns are vertical to the ground with level, insert thin shims (come with package) to adjust when necessary. (Fig 5)

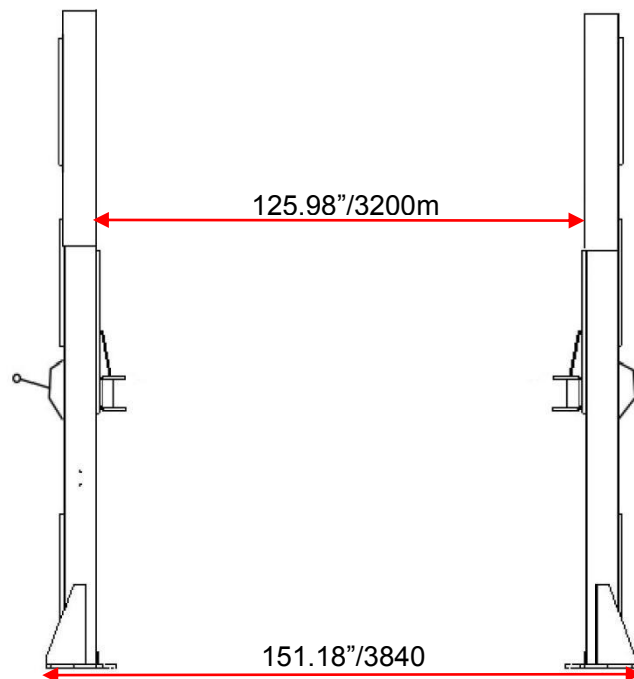


Fig 5 Position Columns

#### 2.2.4 Install overhead top beam

Assemble the overhead beam on the ground shows as 2.2.2, and then install it as below pic.(Fig 6 )

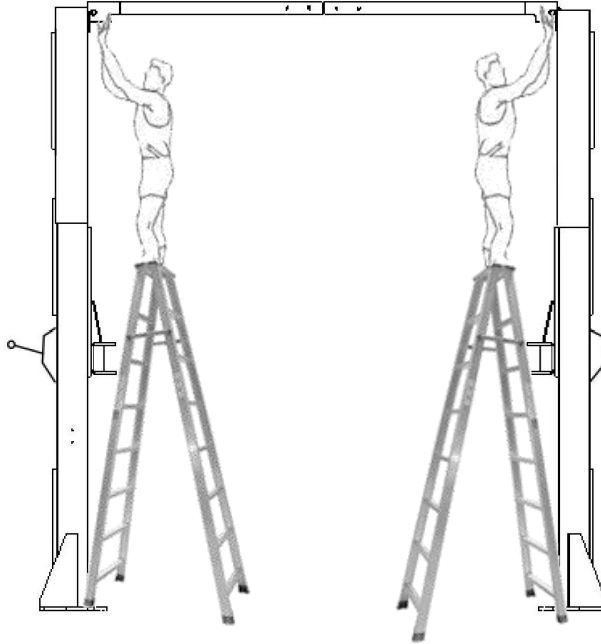


Fig 6 Install overhead top beam

#### 2.2.5 Adjust Carriage

Raise the carriage to the 1st locking position located at the bottom of the column(Fig 7).

**Note: You can hear “click” once locked (the 1st locking position is about 11.8” from the ground)**

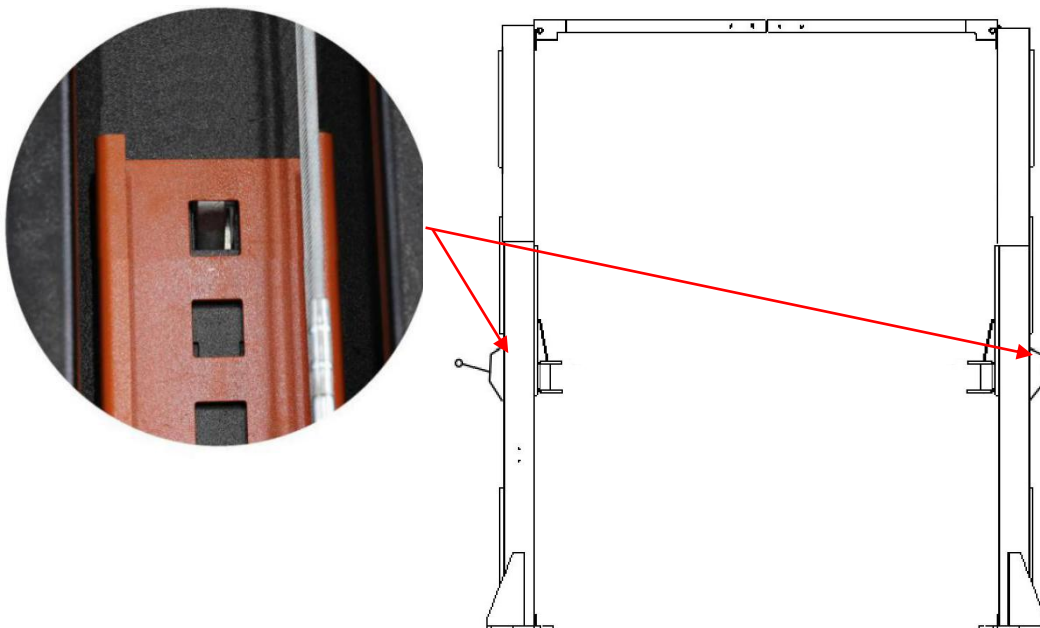


Fig 7 Carriage Position

### 2.2.6 Install Cables (2 Cables in total)

Red & Blue color in this Fig are showing how to route the 2 cables (Fig 8)

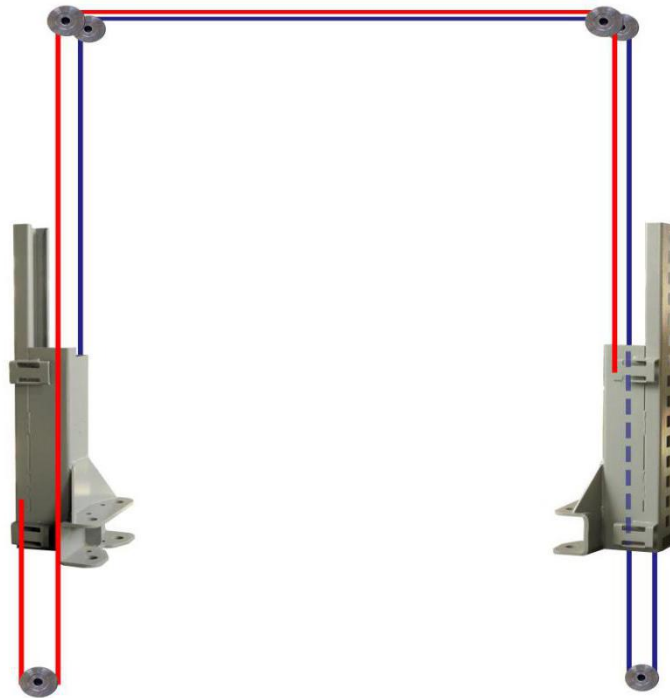


Fig 8 Cable Routing Diagram

### 2.2.7 Install Hydraulic Hose (2 Hose in total)

Connect the longer hose in between the 2 cylinders, connect the short hose in between the cylinder and the power unit. Please hand tighten to avoid thread damage, then use hand wrench to fasten completely. (Fig 9)



Fig 9 Hydraulic Hose Diagram

### 2.2.8 Install Safety Lock Release Cable

1. The safety lock has been pre-installed.



2. Install safety lock release cable to connect the safety lock on the main column and vice column. (Fig 10)

3. Install safety lock cover.

**NOTE:** Press the single point lock release lever on the main column to check if this lever can release the mechanisms in both columns at the same time. Adjust the safety lock release cable adjustment screw if necessary until the lever can release the mechanisms in both columns at the same time.

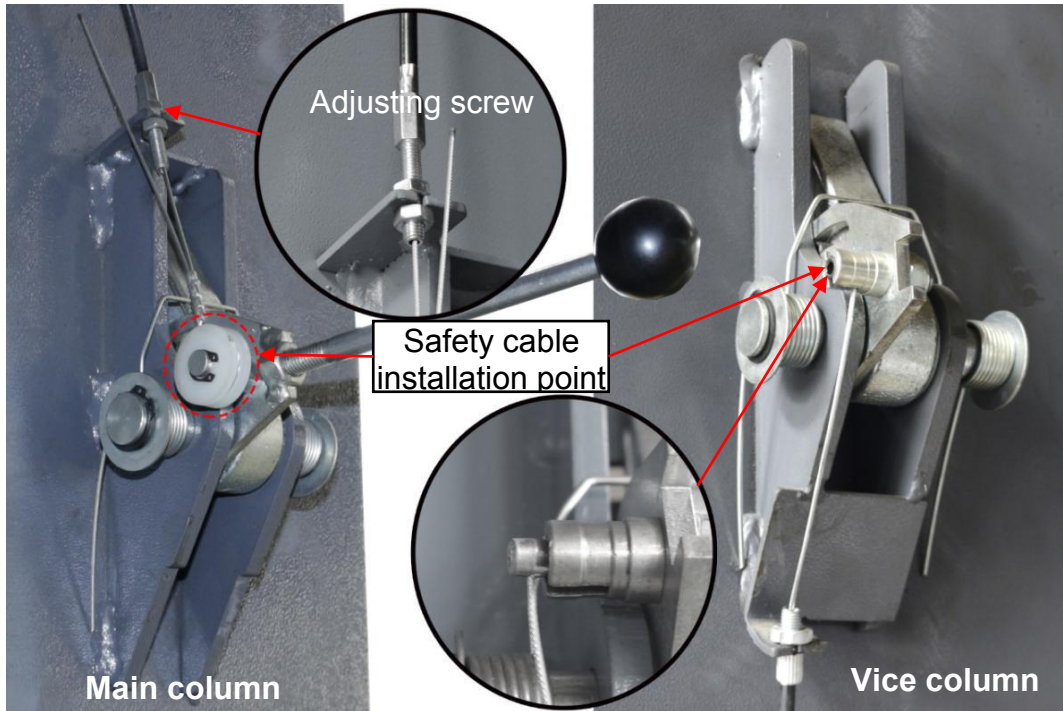


Fig 10 Safety lock release cable installation diagram

### 2.2.9 Install Power Unit

Install power unit & Motor mounting plate on the main column with M8 screws (Fig 11).



Fig 11 Power Unit Installation Diagram

### 2.2.10 Safety Lock Release Cable & Hose & Top Limiter Switch Wire Protection cover.

1. Safety Lock Release Cable & Hose & Top Limiter Switch Wire Position (Fig 12)

**NOTE:**Don't cross safety lock release cable & Hose & Top Limiter Switch Wire

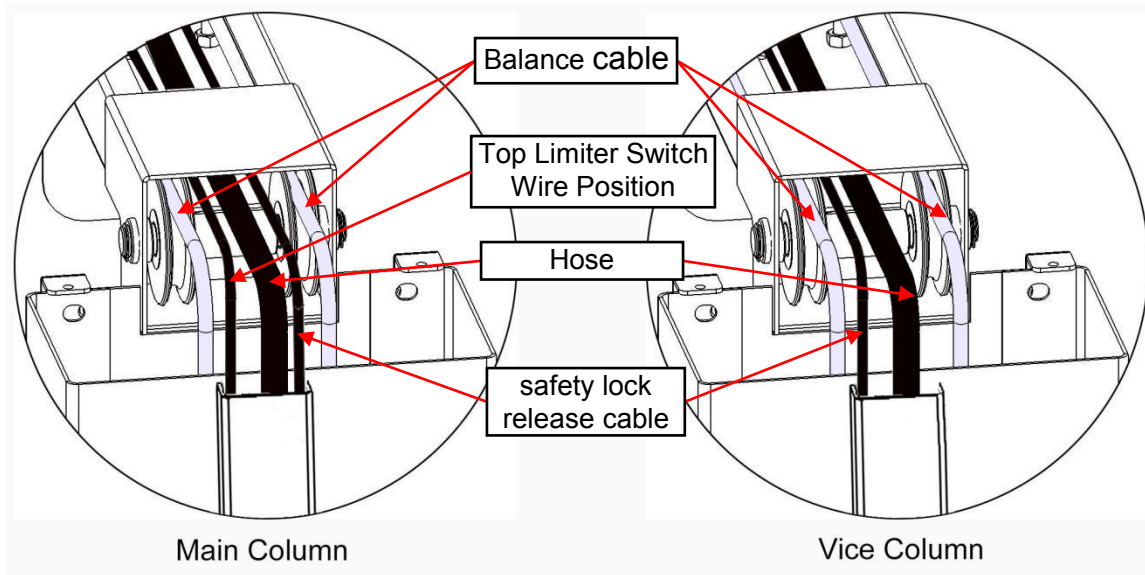


Fig 12 Safety Lock Release Cable & Hose & Top Limiter Switch Wire Position

2.Install protection cover (Fig 13)

**NOTE:** The protection cover on the extension column for safety lock release cable & hose & top limiter switch has already welded on, and you only need to install the Protection cover on the main column.

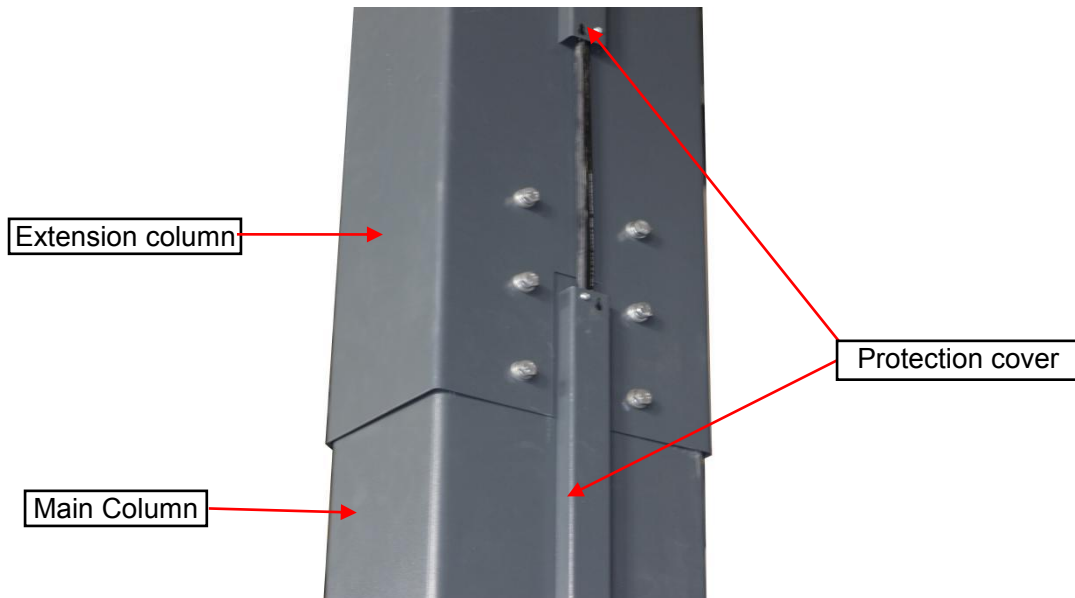


FIG 13 protection cover

3.Install truck adapters holder (Fig 14)



Fig 14 Place of the truck adapters

#### 2.2.11 Install Anchor Bolts (Fig 15)

1. Adjust the distance between 2 columns as required dimensions (Fig 1).
  2. Adjust the opening direction of the two columns in a straight line (visible).
  3. Install Anchor Bolts (Suggest to use 3/4"/20mm" Drill)
- Note: Don't Fasten/Tighten Nuts now in case any adjustment needed.**
4. Adjust the verticality of the columns (visible) and use U-shape washer (come with package) if necessary.
  5. Tighten anchor bolts nuts in diagonal order (Foot Pounds of Torque: 90+, suggest to use hand wrench to tighten nuts.)

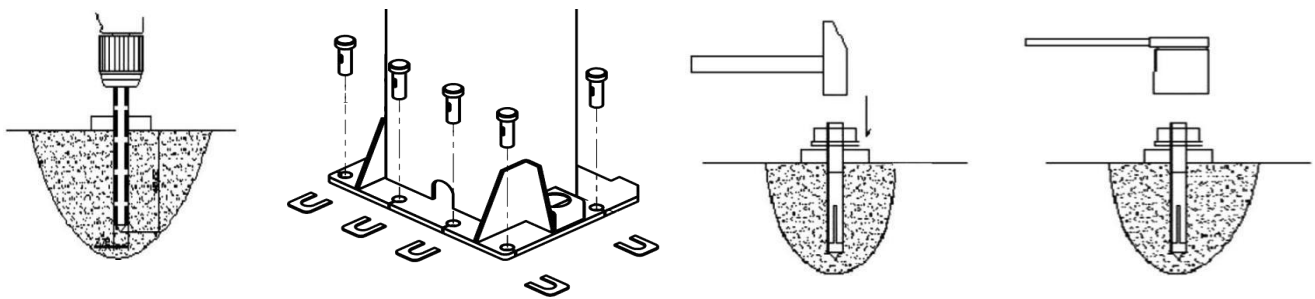


Fig 15 Anchor Bolts Installation Diagram

### 2.2.12 Install Arms and Pulling Rod

Install arms and pulling rod (Fig 16 and Fig 17).

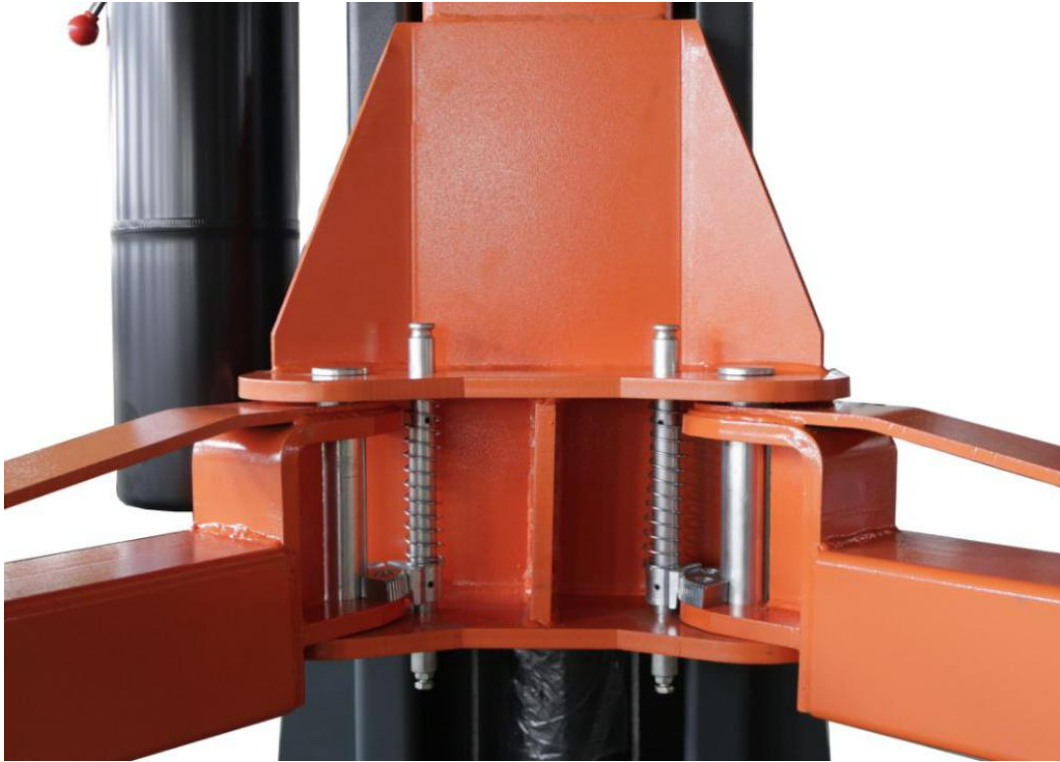


Fig 16 Arm Installation Diagram

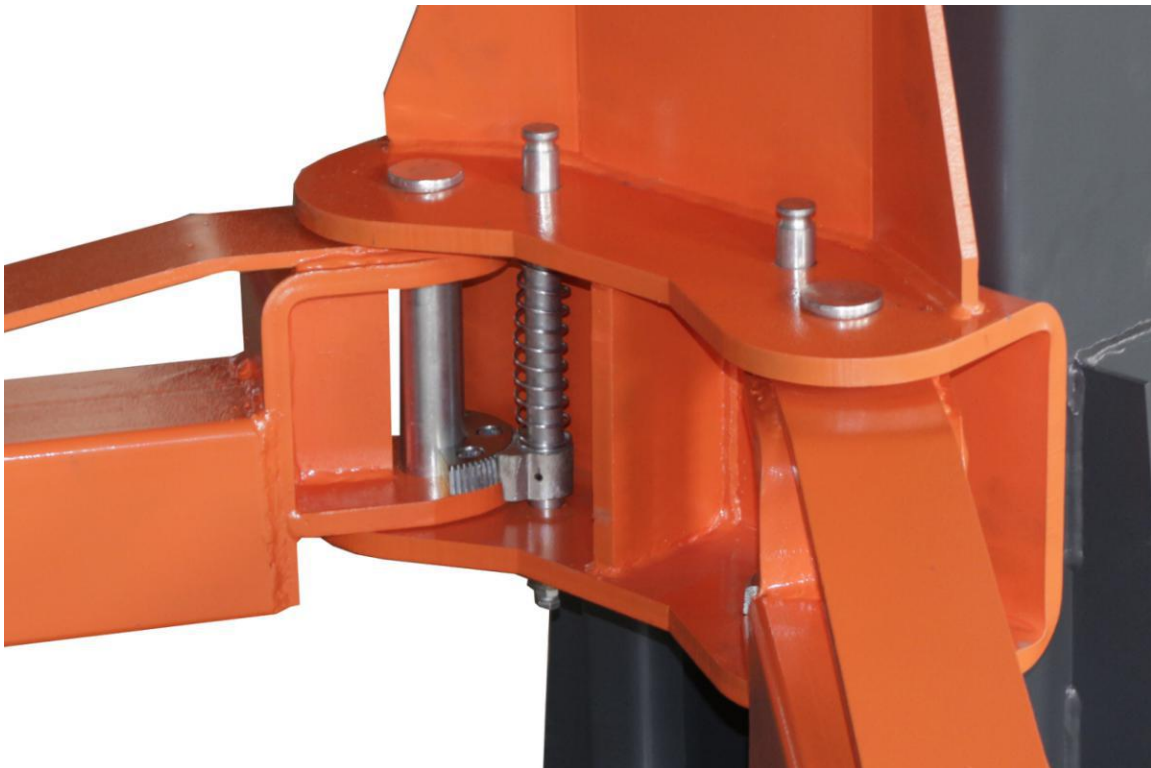


Fig 17 Pulling Rod Installation Diagram

### 3 - Check Before Start



### 3.1 Mechanical Installation Check

1. Check anchor bolts, nuts, fittings and etc have been installed properly.
2. Check if all moving parts move freely.
3. Make sure inside of the columns is clean and no other objects.
4. Supply grease between slide blocks and columns, cables and pulleys.
5. Check if the arm lock is locked while raising processing, and adjust lock if necessary.

Note: Loose the screw to adjust when necessary(Fig 17).

### 3.2 Electrical Hook Up Check

Make sure all wiring are same as below circuit diagram (Fig 18).

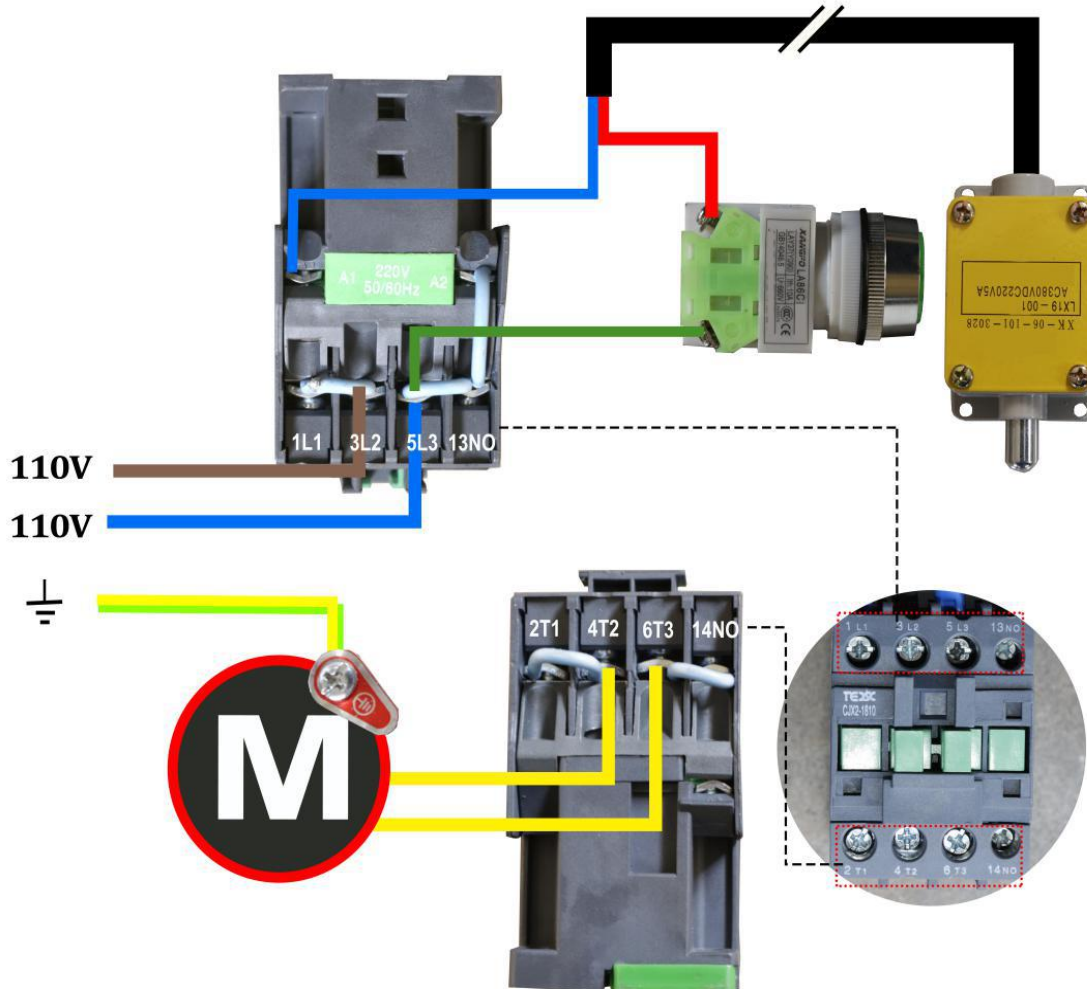


Fig 18 Power Unit Wiring Diagram (Voltage: 220V)

**Attention:** electrical system connection must be done by licensed electrician .

**Warning:** When installing the power cord for the first time, remove the test cable(short wire) from the motor and replace it with a cable(wire) less than #12 gauge.The time interval between motor starts is at least more than 2 seconds.Otherwise the motor or AC contactor may be burnt out.

suggest to use min 30A breaker (not higher than the wire load).

### 3.3 Hydraulic System Testing

1. Add about 2.5 gallons of hydraulic oil to the hydraulic fluid reservoir, AW32 during winter time(cold weather), and AW46 during summer time(hot weather).
2. Make sure there is no oil leak.
3. Repeatedly raise and lower the lift to bleed trapped air from the cylinders.

#### 4. Power unit testing (Fig 19)

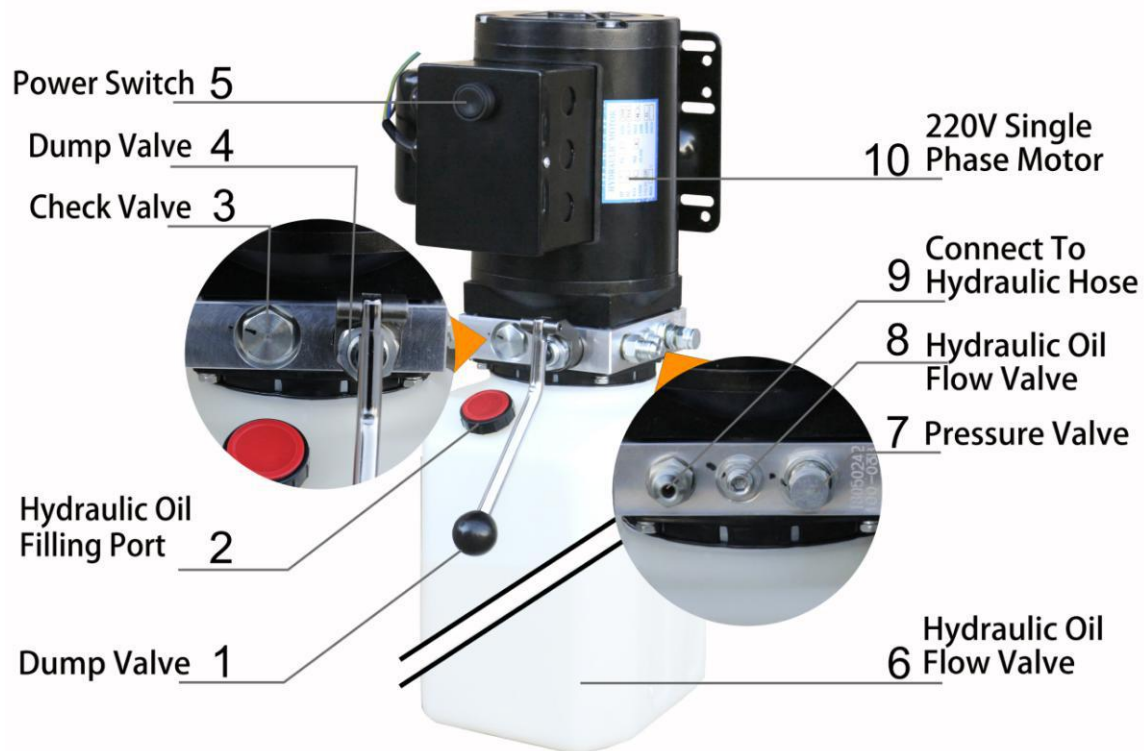


Fig 19 Power Unit Diagram

#### **\*\*Important Information\*\***

7 Pressure Valve: Clockwise adjustment increases pressure to make the power unit to have more power, counterclockwise adjustment decreases pressure to make the power unit to have less power.

8 Hydraulic oil Flow Valve: Clockwise adjustment to speed up, counterclockwise adjustment to slow down.

#### **3.4 Load Test**

Before testing, check anchor bolts to make sure they are completely tightened, and also make sure 2 carriage on both sides are at the same level (height difference should be less than 10mm/0.39"). Adjust the cable nut on the shorter carriage to make sure 2 carriage height at the same level and the 2 cables are similar tension.

### **4 - Operation and Use**

#### **4.1 Operation**

Place the lifting arm at the support point specified by the vehicle and adjust the rubber tray to the same height.

Check the position of the rubber tray under the vehicle chassis before each single raising or when vehicle is lowered to the ground and need to raise again.

#### **4.2 Raising/Lifting**

Press the power switch until the vehicle reaches desired height. When the vehicle is raised, the safety lock automatically engaged.

During raising/lifting, check whether the arm lock has been locked, it can be visually checked when it is raised to a certain height (stop and check).

**\* Danger\* : Unlocked arms can cause vehicle fall off from the lift.**

### 4.3 Stopping

After raising to desired height, press the lower lever and the lift will automatically lower to a safe position, the safety lock will be engaged and the lift will be locked.

### 4.4 Lowering

The safety lock must be released before lowering.

1. Press the power switch to raise the car by approximately 30mm/1.2".
2. Pull down to unlock the handle.
3. Press the lower lever to start lowering process, the arm lock will be automatically released and allow the arm rotating when the vehicle is completely lowered to the ground.

## 5 - Safety

Please read this manual carefully as it contains important safety information that the operators need to know.

**\*WARNING\*: The design and construction of this lift is only suitable for lifting whole vehicle. All other uses are unauthorized, this lift CAN NOT be used to: wash vehicles, build lifting platforms, lifting personnel, use as cargo lifts and use as lifting partial of the vehicles.**

### 5.1 Important Reminder: Personal and Equipment Safety

1. During vehicle lifting process, operators should be at a safe position/area.
2. Turn off the vehicle engine and manual brake on.
3. Load vehicle correctly (Fig 20).
4. The vehicle CAN NOT exceed the rated lifting capacity and required size.

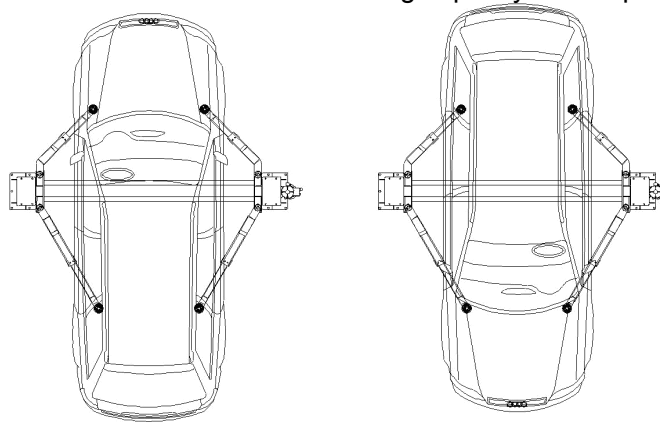


Fig 20 correct way to load vehicle

### 5.2 Vehicle Position

Once the vehicle is raised, vehicle CAN NOT be moved backwards or forwards as it may cause falling.

**\*WARNING\*: Do not attempt to move the vehicle while it is parked on the lift.**

### 5.3 Risk of Vehicle Falling Off From The Lift

Note that when positioning the vehicle on the lift, incorrect center of gravity of the vehicle can cause the vehicle falling off from the lift (Fig 21).

**Important Note: Make sure that the front and rear of the vehicle need to be balanced and the cables on both sides also need to be balanced. Do not board/step on the vehicle or the lift when the lift is raised.**

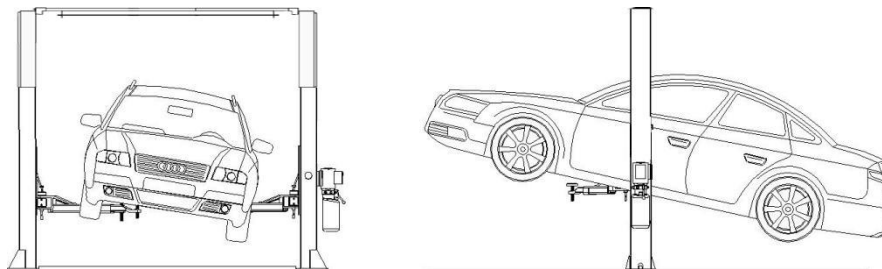


Fig 21 Risk of vehicle falling off

Below actions may cause the vehicle fall off from the lift (Fig 22)

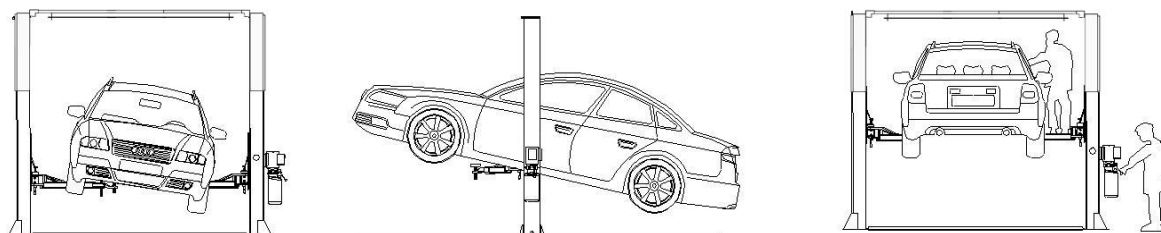


Fig 22 DO NOT do

## 6 - Maintenance

### 6.1 Every Month

#### Hydraulic System

1. Check hydraulic oil level, fill hydraulic oil if necessary.
2. Check the pump, hose and cylinder and see if there is hydraulic oil leaking.

### 6.2 Every 3 Month

#### Safety Maintenance

1. Check the condition of the safety lock and the wear of the stop block.
2. Check the anchor bolts, tighten nuts if necessary.
3. Check if any nuts are loose, tighten nuts if necessary.
4. Check if the arm locking system is working properly.
5. Lubricate/grease all moving parts.
6. Check the tension of the balance cables and check if there is any broken.
7. Check if the 2 carriage on both sides are at the same level.

### 6.3 Every 6 Month

#### Hydraulic Pump

1. Check the condition and aging of the hydraulic fluid. Unqualified hydraulic fluid is the main reason to cause valve failure and reduces the life of the gear pump.
2. Check the noise variation of the motor and gear pump while normal operating.

### 6.4 Every 12 Month

1. Visually inspect all structural and mechanical parts to make sure there is no abnormalities have occurred.
2. Check and see if there is anything wrong with the motor, wiring, top limiter switch and circuit breaker.

### 6.5 Regular Lubrication

Use high quality grease to regularly lubricate all moving parts of this lift.



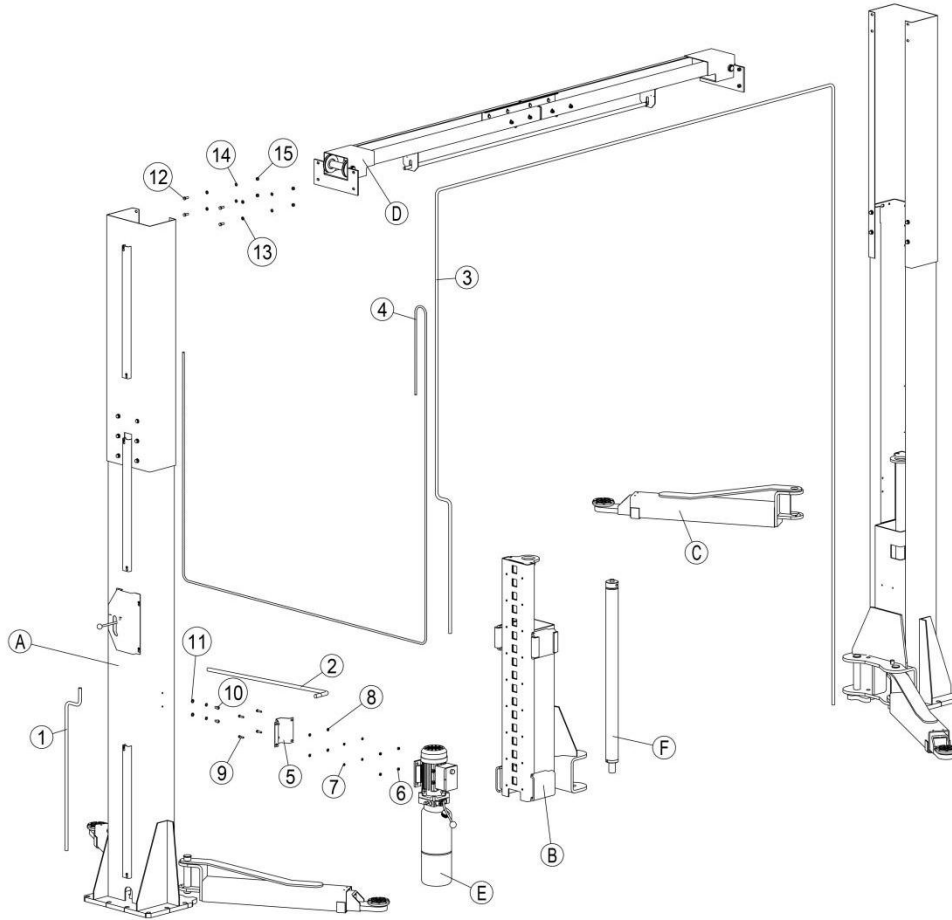
## 7 - Troubleshooting Guide

### Troubleshooting Guide

Malfunction	Possible reason	Solution
The motor does not work	<ol style="list-style-type: none"> <li>1.Check the air switch.</li> <li>2.Check if the voltage is correct.</li> <li>3.The motor burned.</li> <li>4.Start switch burned.</li> <li>5.Top limiter switch burned.</li> <li>6.AC contactor burned.</li> </ol>	<ol style="list-style-type: none"> <li>1. Turn off or replace the air switch.</li> <li>2. User correct power supply.</li> <li>3. Replace the motor.</li> <li>4. Replace the start switch.</li> <li>5. Replace the top limiter switch.</li> <li>6. Replace the AC contactor.</li> </ol>
The motor works but can't lift	<ol style="list-style-type: none"> <li>1.Pressure valve pressure is too small.</li> <li>2.Pump station takes in air.</li> <li>3.Hydraulic oil suction hose is detached or broken.</li> <li>4.Insufficient hydraulic oil</li> </ol>	<ol style="list-style-type: none"> <li>1.Counterclockwise adjust the pressure valve (fine adjustment).</li> <li>2.Unscrew check valve on the power unit, and then start the motor until hydraulic oil flows out from the check valve, then tighten the check valve.</li> <li>3. Install/replace the suction hose.</li> <li>4. Fill more hydraulic oil.</li> </ol>
Does not lowering	<ol style="list-style-type: none"> <li>1.Safety lock engaged</li> <li>2.Other object inside the columns stops the carriage.</li> <li>3.The flow valve needs to be adjusted.</li> </ol>	<ol style="list-style-type: none"> <li>1.Slightly raise the device and then pull the safety lock release cable.</li> <li>2.Check and remove the objects.</li> <li>3.Counterclockwise adjust the flow valve(fine adjustment).</li> </ol>
Self-Lowering	<ol style="list-style-type: none"> <li>1.Dump valve failure.</li> <li>2.Hydraulic oil leaks.</li> <li>3.The valve body of the power unit has holes.</li> </ol>	<ol style="list-style-type: none"> <li>1 Replace the dump valve.</li> <li>2.Check and repair.</li> <li>3.Replace the valve body.</li> </ol>
Raise without load, but doesn't raise with load	<ol style="list-style-type: none"> <li>1.The voltage is too low.</li> <li>2. Objects in the dump valve.</li> <li>3.The pressure valve pressure is too small.</li> <li>4.Overload.</li> </ol>	<ol style="list-style-type: none"> <li>1. Install the voltage stabilizer.</li> <li>2. Remove objects from the dump valve.</li> <li>3. Increase pressure properly (fine adjust the pressure valve).</li> <li>4. This operation is prohibited.</li> </ol>
Lifting is not leveled	<ol style="list-style-type: none"> <li>1.The cables are not balanced.</li> </ol>	<ol style="list-style-type: none"> <li>1. Balance cables by adjusting the cables' length.</li> </ol>
Loud motor noise	<ol style="list-style-type: none"> <li>1.After raising to the highest point, the motor is still working and the top limiter switch is disabled.</li> <li>2.Hydraulic oil pollution.</li> <li>3.Overload.</li> </ol>	<ol style="list-style-type: none"> <li>1.Replace the top limiter switch.</li> <li>2.Replace the hydraulic oil.</li> <li>3.This operation is prohibited.</li> </ol>

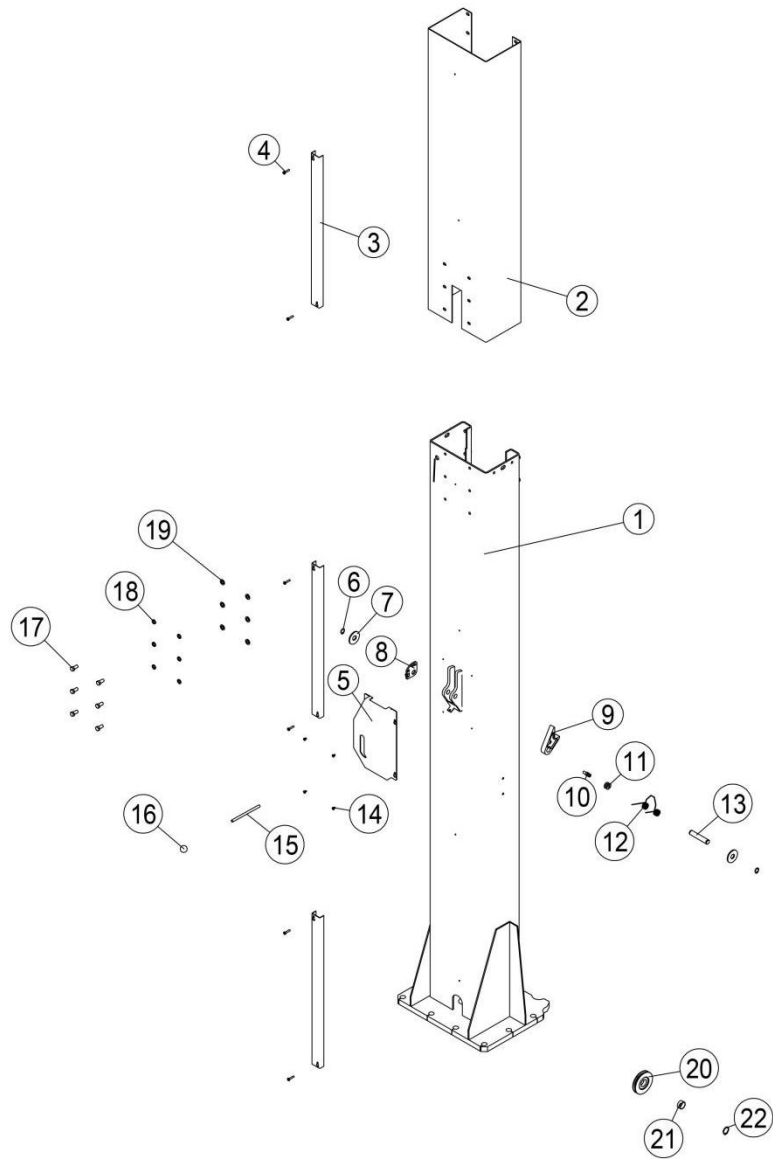
## 8 - Structure and Parts List

### 8.1 Equipment Assembling Diagram



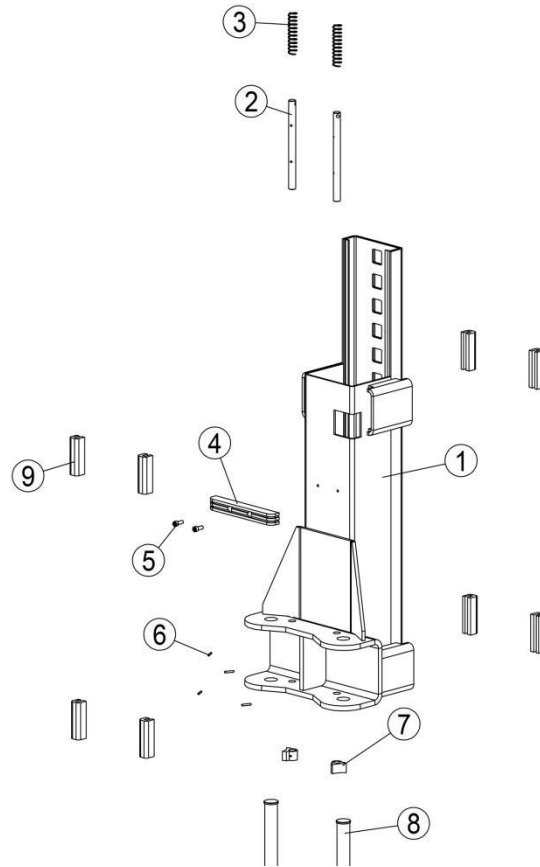
No.	Part#	Name	Qty
A	001-A	Column assembly	2
B	001-B	Carriage assembly	2
C	001-C	Arm	4
D	001-D	Over head Beam assembly	1
E	001-E	motor	1
F	001-F	Oil cylinder	2
1		Tubing 1	1
2		Tubing 2	1
3		Tubing 3	1
4		Cable	2
5	YL-LM6300-00-01	Motor backpack	1
6	M8	nut	4
7	Φ8	trampoline	4
8	Φ8	Flat washer	4
9	M8X30	Outer hexagonal bolt	4
10	M10X12	Socket head bolt	2
11	Φ10	Flat washer	2
12	M10X30	Outer hexagonal bolt	8
13	Φ10	Flat washer	8
14	Φ10	trampoline	8
15	M10	nut	8

## 8.2 Column



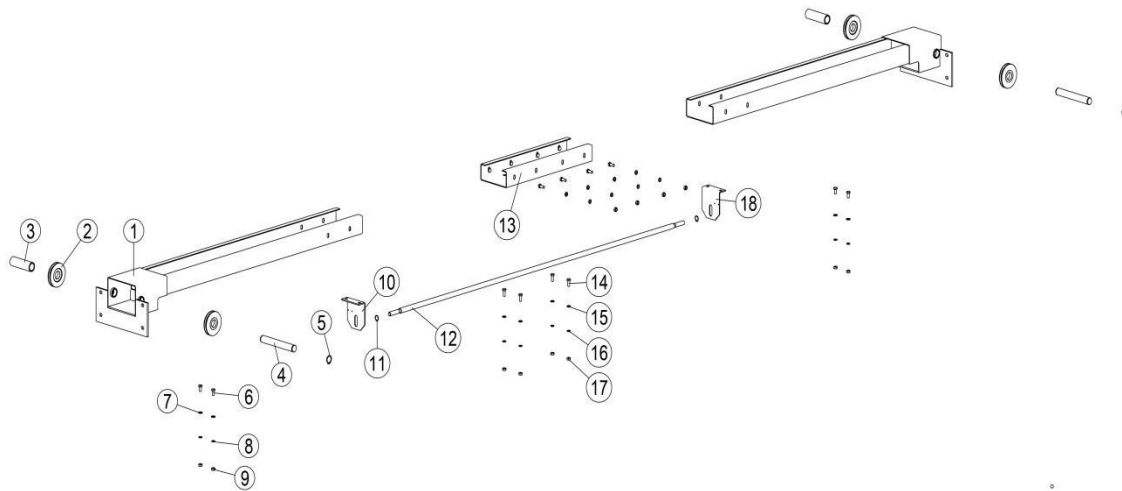
No.	Part#	Name	Qty	No.	Part#	Name	Qty
1	YL-LM6300-01-01-00	Column welding	1	12		spring	1
2	YL-LM6300-01-02	The second Column	1	13	YL-LM6300-01-09	The lock shaft	1
3	YL-LM6300-01-03	Tubing buckle groove	3	14	M6X8	Half round head bolt	4
4	M6X30	Half round head bolt	6	15	YL-LM6300-01-10	Unlock moving rod	1
5	YL-LM6300-01-04	The lock cover	1	16	YL-LM6300-01-11	Unlock the swing ball	1
6	Φ10	circlip	1	17	M12X20	Outer hexagonal bolt	4
7	Φ20	Flat washer	2	18	Φ12	Spring washers	4
8	YL-LM6300-01-05	Unlock the plate	1	19	Φ12	Flat mat	4
9	YL-LM6300-01-06	Lock block	1	20	YL-LM6300-01-12	Wire rope wheel	2
10	YL-LM6300-01-07	Unlock the shaft	1	21	SF-3020	Without oil bearing	2
11	YL-LM6300-01-08	Unlock the wheel	1	22	Φ30	circlip	2

### 8.3 Carriages



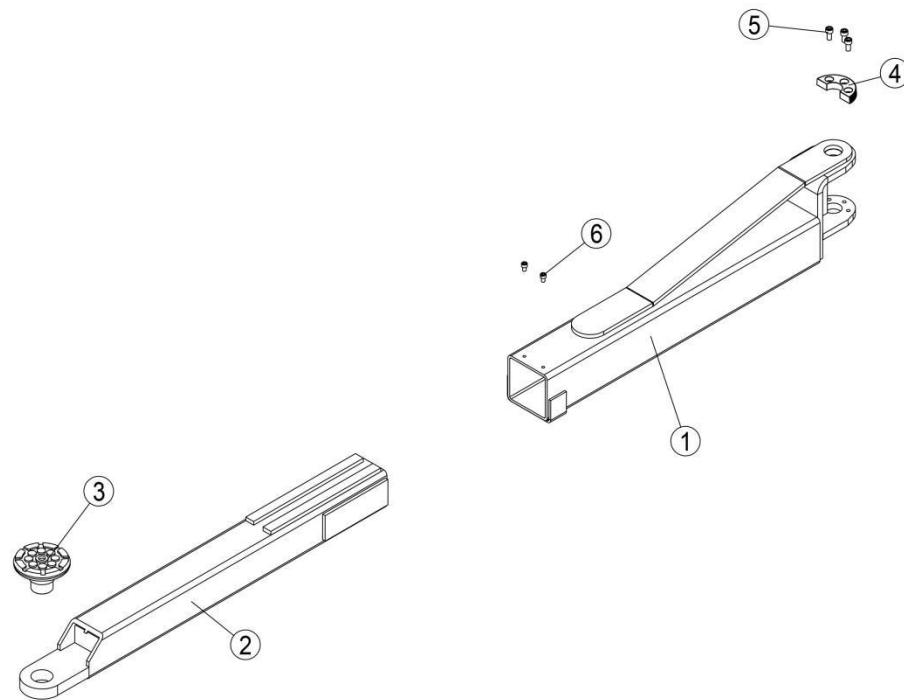
No.	Part#	Name	Qty
1	YL-DBS63-03-00	Carriage	1
2	YL-DBS63-00-16	Unlock Rod	2
3	YL-DBS63-00-17	Compression Spring	2
4	YL-DBS63-00-18	Door Guard	1
5	M8X25	Countersunk Head Bolt	2
6	Φ5X45	Cylindrical Pin	4
7	YL-DBS63-00-19	Arm Lock Teeth	2
8	YL-DBS63-00-20	Arm Shaft	2
9	YL-DBS63-00-21	Slider Block	8

## 8.4 Over head beam



No.	Part#	Name	Qty
1	YL-LM6300-04-01-00	Beam welding	2
2	YL-LM6300-04-02	Wire rope wheel	4
3	YL-LM6300-04-03	Wire rope wheel spacer	2
4	YL-LM6300-04-04	Wire rope wheel shaft	2
5	Φ30	circlip	4
6	M10X25	Outer hexagonal bolt	4
7	Φ10	Spring washers	4
8	Φ10	Flat washer	4
9	M10	nut	4
10	YL-LM6300-04-05	Left limit board	1
11	Φ20	circlip	1
12	YL-LM6300-04-06-00	Beam limit lever	1
13	YL-LM6300-04-07	Beam connection	1
14	M10X25	Outer hexagonal bolt	12
15	Φ10	Spring washers	12
16	Φ10	Flat washer	12
17	M10	nut	12
18	YL-LM6300-04-08	The right limit board	1

## 8.5 2-stage arm



No.	Part#	Name	Qty
1	DBLM-06-01-00	Inner arm of two stage arms	1
2	DBLM-06-02-00	Outer arm of two stage arms	1
3	DBLM-00-30	Rubber pads	1
4	DBLM-00-25	Moon gear	1
5	IH001020	Inside hex bolt M10X23	3
6	IH000820	Inside hex bolt M8X12	2