The product consists of the People's Insurance Company underwriting

Caution labeling exemplify

（1）Read operating and safety manuals before using lift!

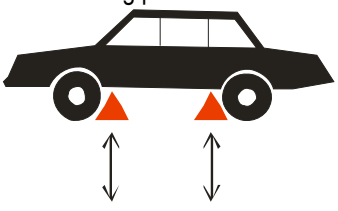
（2）Proper maintenance and inspection is necessary for safe operation!

（3）Don not operate a damaged lift !

（4）Lift can be used by trained operators ONLY!

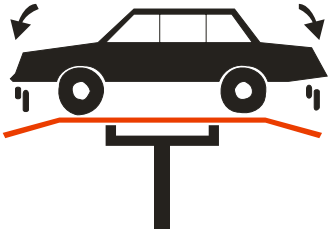
（5）only Authorized personnel can be in the lift area!

（6）use commend lifting points!



（7）use bracket to help disassembly or installation!

（8）Auxiliary adapters would reduce load capacity!



（9）keep area clear!

（10）the central of gravity should be between two arms!

（11）keep the area clean!

（12）do not shake the vehicle!

（13）do not lift single side of vehicle!

（14）keep feet clear when lowering!

（15）When lifting or lowering, don't stand under the lift!

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1 Note

Warning

- This manual is an important part of the product. Please read and understand it thoroughly.
- Keep the manual for future use in inspection and maintenance.
- Do not use the product for any other purposes.
- The manufacturer is not responsible for any damage caused by improper use or uses other than the designed purpose.

Precautions

- Only well-trained personnel can operate the lift. Any changes to the components or use for other purpose without the consent of the manufacturer may cause direct or indirect damage to the product.
- Do not expose the lift to extreme temperature or humidity. Keep it away from heating device, faucet, humidifier or furnace.
- Do not install the lift outdoors or expose it to rain. If it is really necessary to do so, a special order should be made from the manufacturer.
- Keep the lift away from the dust, ammonia, alcohol, thinner and spray adhesive.
- Keep away from the lift when it is in operation.
- Inspection of the lift should be carried out regularly. Do not operate a damaged lift or a lift with broken parts. All the parts are only replaceable with the parts provided by the manufacturer.
- Do not overload the lift. The maximum lifting weight is clearly marked on the nameplate.
- Do not operate the lift when there are personnel in the vehicle.
- Keep the lifting area clear of obstacle, grease, oil, garbage and other substances.
- Use the lifting point recommended by the auto manufacturer. Keep the support in close contact with the vehicle.
- Use appropriate tools and safety protection equipments such as overall and working boots.
- Pay special attention to the safety labels on the control desk.
- Keep hands and other body parts away from the moving parts of a lift in operation.
- Do not remove or override safety protection of the lift.
- Hydraulic oil for the lift is N32 or N46 mechanical oil. Pay attention to the safe data as described in this manual.
- For the sake of technical improvements, Launch (Shanghai) Machinery Co., Ltd reserves the right to change the specifications without prior notice.

2 General Information

2.1 Application

This lift is designed for the purpose of lifting light vehicles under 3.0 tons for vehicle test, service and cleaning.

This machine can also be used as a lifting devise in production lines, for material transportation and work piece assembly.

2.2 Features

1 The lift features advanced design, durability, and compact layout.
2 The installation of base frames in the pits can save space in the workshop.
3 Hydraulic system keeps both platforms level.
4 Mechanical protection device throughout the travel distance.
5 Automatic height limiting device.
6 Automatic lubricating system and oil-less bearings.

2.3 Technical Specifications

Max. Lifting Weight (kg)（lb）	Max. Lifting Height (mm)（ " ）	Lifting Time (sec)	Lowering Time (sec)	Power (kw)	Number of Platforms	Platform Size (mm)（ " ）	Overall Weight (kg)(lb)	Synchronization Precision (mm)（ " ）	Height difference (mm)
3000 (6614)	≤1980 (78)	≤60	≥20	2.2	2	1580~1900×520 (62.2~74.8×20.5)	632 (1393)	＜40 (1.6)	≤8 (0.3)

Electric specifications:

Motor (Optional): 2.2kw voltage: According to customer demand

Voltage options:

Single-phase/3-phase 110v/220v 60Hz

Single-phase/3-phase 220v/380v 50Hz

Noise

Noise emission at workstations < 75dB (A)

Hydraulic System

Max. Working Pressure: 28 MPa, Flow rate: 5-6L/min.

Pneumatic System

Working Pressure: 5 kg/cm2

！Notice: At the bottom position, the max load of the lift is 1.5T.

2.4 Environment requirements

Temperature: 0℃ ~ +40℃

Relative Humidity: ≤80% Temperature ≥30℃

Transportation/Storage Temperature: -25℃～+55℃

Altitude: ≤2000m(78740″)

3 Structure and Working Principle

3.1 Structure

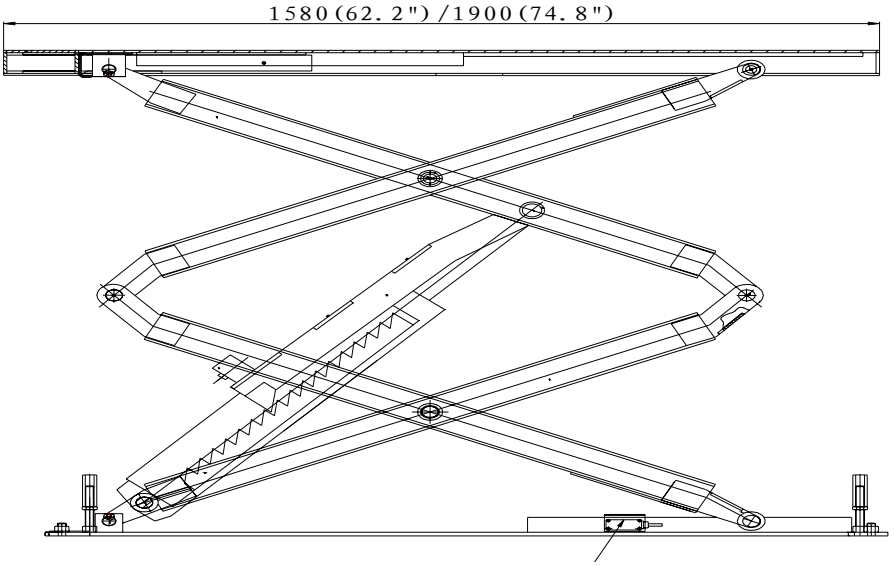


Fig 1

3.2 Electrical Diagram

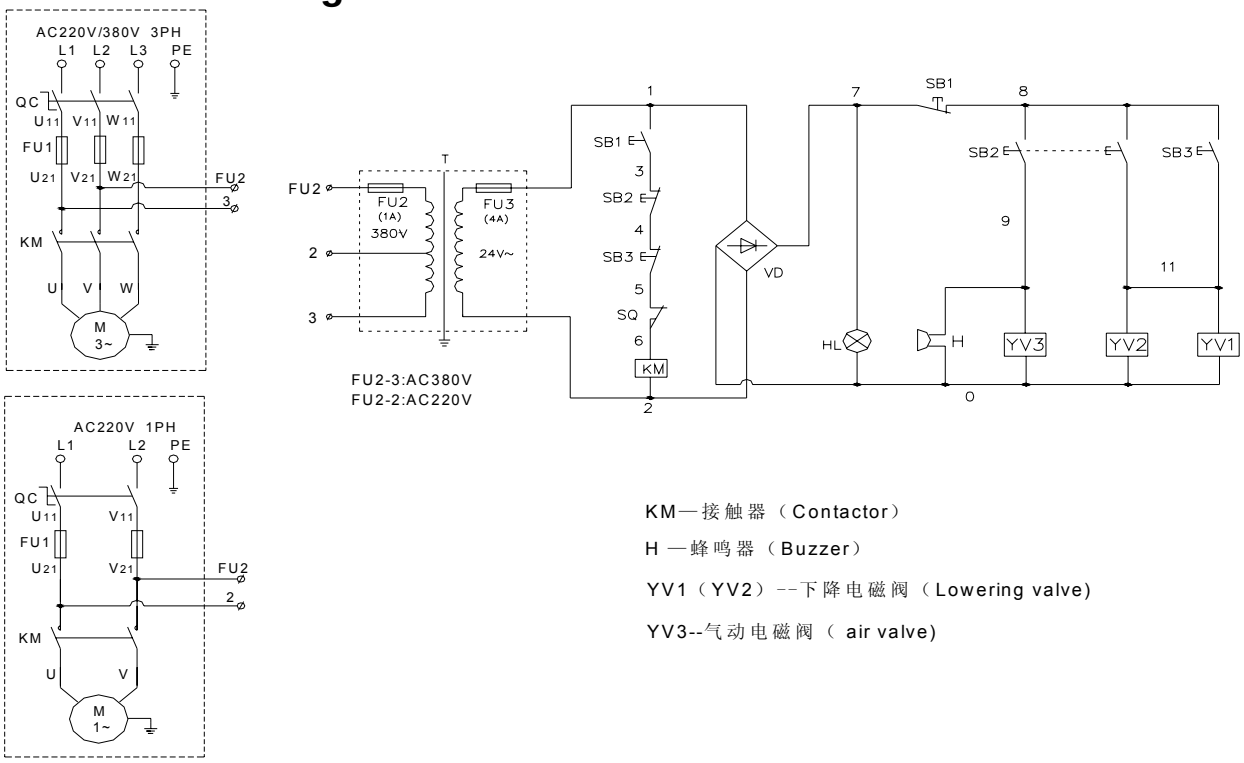


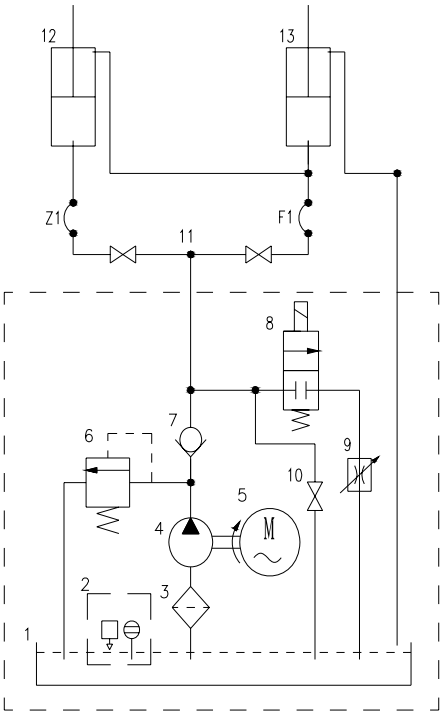
Fig2

When the UP button SB1 is pressed the contactor KM will close. The motor will drive the pump and send oil to the cylinder, which will in turn raise the platform upward. Once the UP button SB1 is released, contactor KM will be open and the power to the motor will be cut off to stop the platform. Keep pushing button SB1; the platform will reach a position so that limit switch SQ1 is triggered. Then SQ will open to stop the motor and the platform.

Release button SB1 when the platform reaches a desired height and press SAFETY LOCK button SB3 to actuate lowering solenoid valve YA1 and the safety ratchet will be engaged by lowering. Before servicing the car, make sure the safety lock is functional.

After service is completed, push the UP button SB1, contactor KM will close. The motor will drive the pump to send oil to the cylinder, which will in turn push the platform upward to release the safety ratchet. Then push Down button SB2, solenoid air valve YA3 will be powered and the air cylinder will push the safety ratchet away from the locking position. And at the same time, lowering solenoid valve YA1 begins to work so that the platform will start to go down.

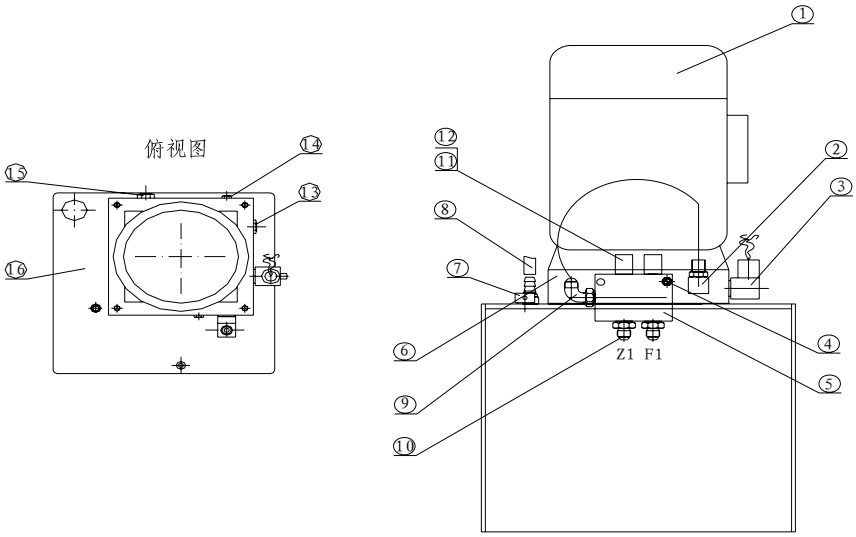
3.3 Hydraulic Diagram



F1、Slave cylinder hydraulic hose
Z1、Master cylinder hydraulic hose
13、Slave cylinder
12、Master cylinder
11、High pressure stop valve
10、Emergency lowering valve(manual control)
9、Lowering speed control valve
8、Lowering solenoid valve
7、Check-valve
6、Relief valve
5、Motor
4、Gear pump
3、Oil filter
2、Oil gauge/ Air blowhole
1、Oil tank

Fig3

3.4 Hydraulic Components in Control Desk



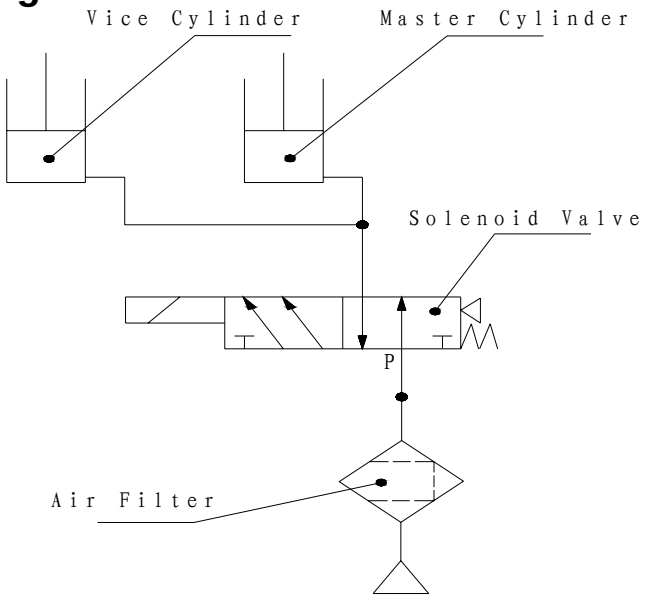
1.Motor 2.Oil inlet 3.Lowering solenoid valve 4.Lowering speed valve 5.Valve block 6.Valve assembly 7.Oil gauge hole 8.Bleeding and returning valve 9.Fitting 10.Straight fitting 11.Nut 12.Valve bar 13.Check valve 14.Emergency lowering valve(Manual) 15.Relief valve(Overflow valve) 16.Oil tank(16L)
Z1 Master cylinder hose F1: Slave cylinder hose

Fig4

Under normal working conditions, the main cycle of the combined valve 5 is open, while the subsidiary cycle is closed. If lifting hydraulic system failure or power outage, need to use the Jack to move the insurance top gear, chocked with object to avoid insurance teeth meshing in the descent, then rotate emergency back-port 10 to lowering the lift. System for lowering speed can be adjusted by adjusting the throttle valve 4. During the adjustment process and adding oil, the operator should be careful. (Fig4)

To fill oil to or bleed air from slave cylinder, open the subsidiary cycle of combined valve 5 and close main cycle, then oil will flow to the lower chamber of slave cylinder through check valve, forcing piston up. If too much oil is added to the slave cylinder, press the DOWN button to discharge oil to ensure the two platforms at same height. After finishing the adjustment, open the main cycle and turn the subsidiary off.

3.5 Pneumatic Diagram



3.6 Operation description

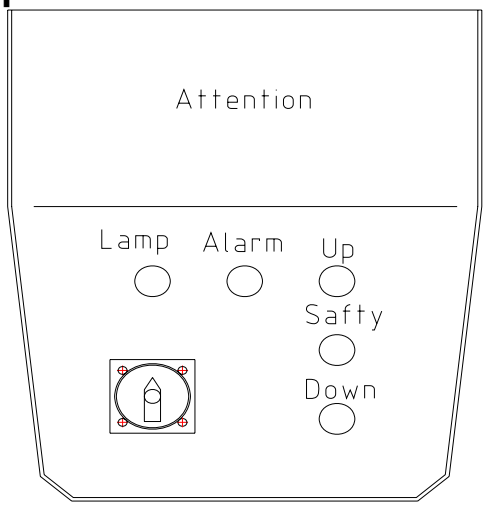


Fig5

4 Installation and commissioning and Unpacking

4.1 Please get the following tools ready for installation:

Tools	Specifications
Level Bar	L=400mm（15.7"）
Chalk Line	10mm（0.4"）
Taper Plunger Chip	
Hammer	1.5 kg(3 lb)
Crescent Wrench	40mm（1.6"）
Open end Wrench Set	11mm-23mm（0.43"-0.9"）
Allen Wrench Set	2mm～12mm
Screwdriver	150mm（5.9"）
Rotary Hammer Drill	20mm（0.8"）
Hard Alloy Drill Bit	Φ17mm（0.7"）
Frame Level（JB3239-83）	L*W*H＝300mm×40mm×300mm (11.8"×0.16"×11.8")

4.2 Unpacking

The lift is delivered in three separate boxes: 2 platforms (with hydraulic hoses) and 1 control desk.

Unpack according to the instructions on the packages. Remove the packing materials and check for damage and loss of components.

To avoid accidents from occurring, keep the packing material away from children. The packing materials need to be disposed of properly if they may contaminate the environment.

5 Equipment installation

5.1 Basic requirements

- The lift can only be installed on concrete floor with a minimal thickness of 180mm（7.1”） and at least 7 days of solidification time.
- The strength of the concrete ground should exceed 3000PSI (2.1kgf/mm2)
- The tolerance of the concrete floor levelness should not exceed 5mm (0.2”). Slight slope can be corrected with shims. Excessive slope on the ground will greatly affect the performance of the lift. In this case, new concrete slab should be made.
- Inspect for possible hindrance such as low ceiling, overhead pipelines in the work area, passageways and escapes. The working area of the lift should be 4m （157.5"）high to give enough space.
- Allow enough space at the front and back of the lift so that operation should not be hindered.
- Power supply: Put the power source in place before installation. All the wiring should be performed by a qualified electrician.

5.2 Installation Procedures

5.2.1 Installation

Refer to the layout plan for the size of the pits (Fig.6, Fig.7). Place the two base frames in the pits as illustrated. Route the oil hoses and cable through the preset pipeline.

- ***Warnings:***
  The depth of the pits should over 180mm (7.1”). The strength of the concrete ground should be great than 3000PSI (2.1kg/mm2) and the tolerance of the concrete floor levelness should not exceed 5mm (0.2”).Place the base frames in the pits with lifting equipment.

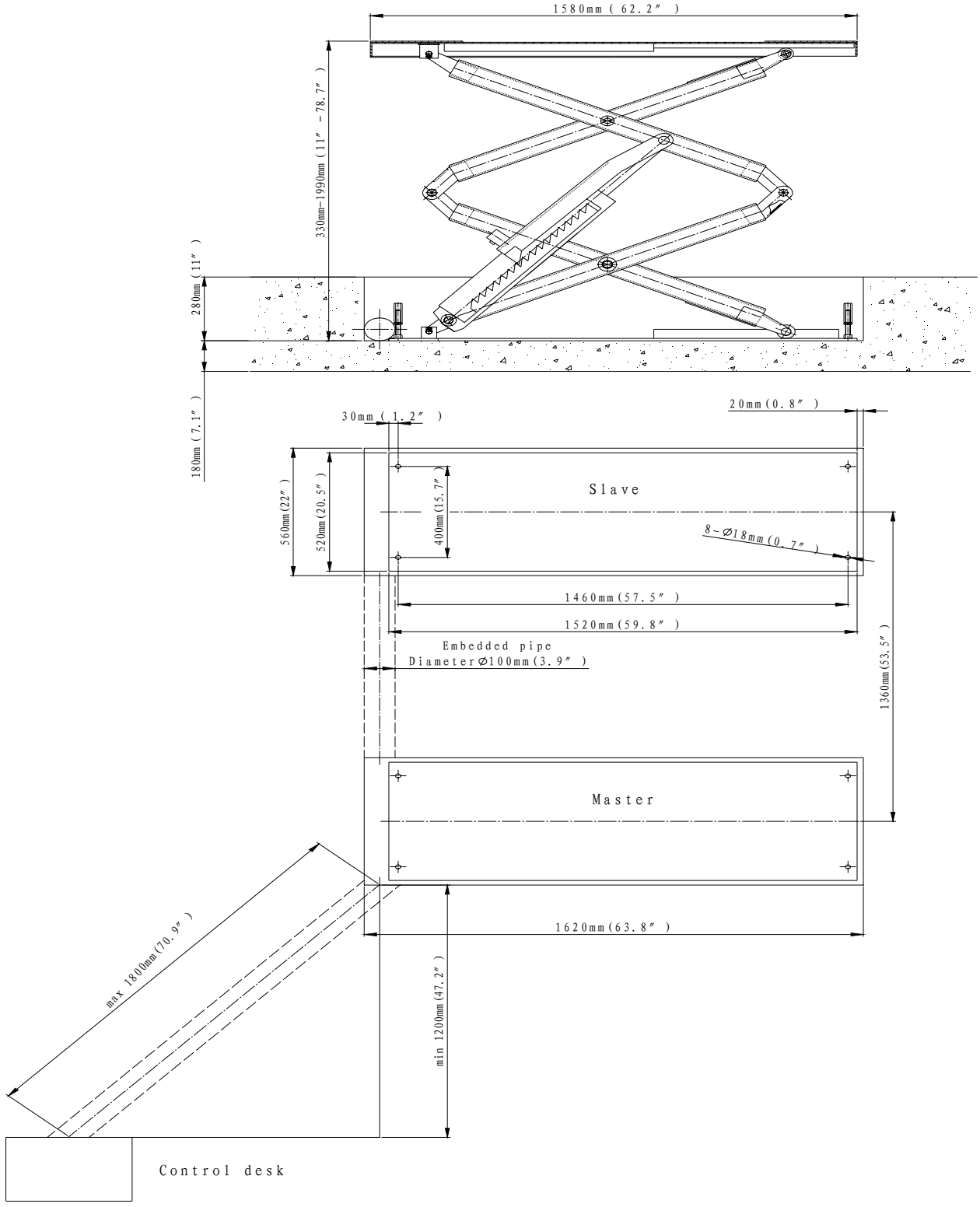


Fig6

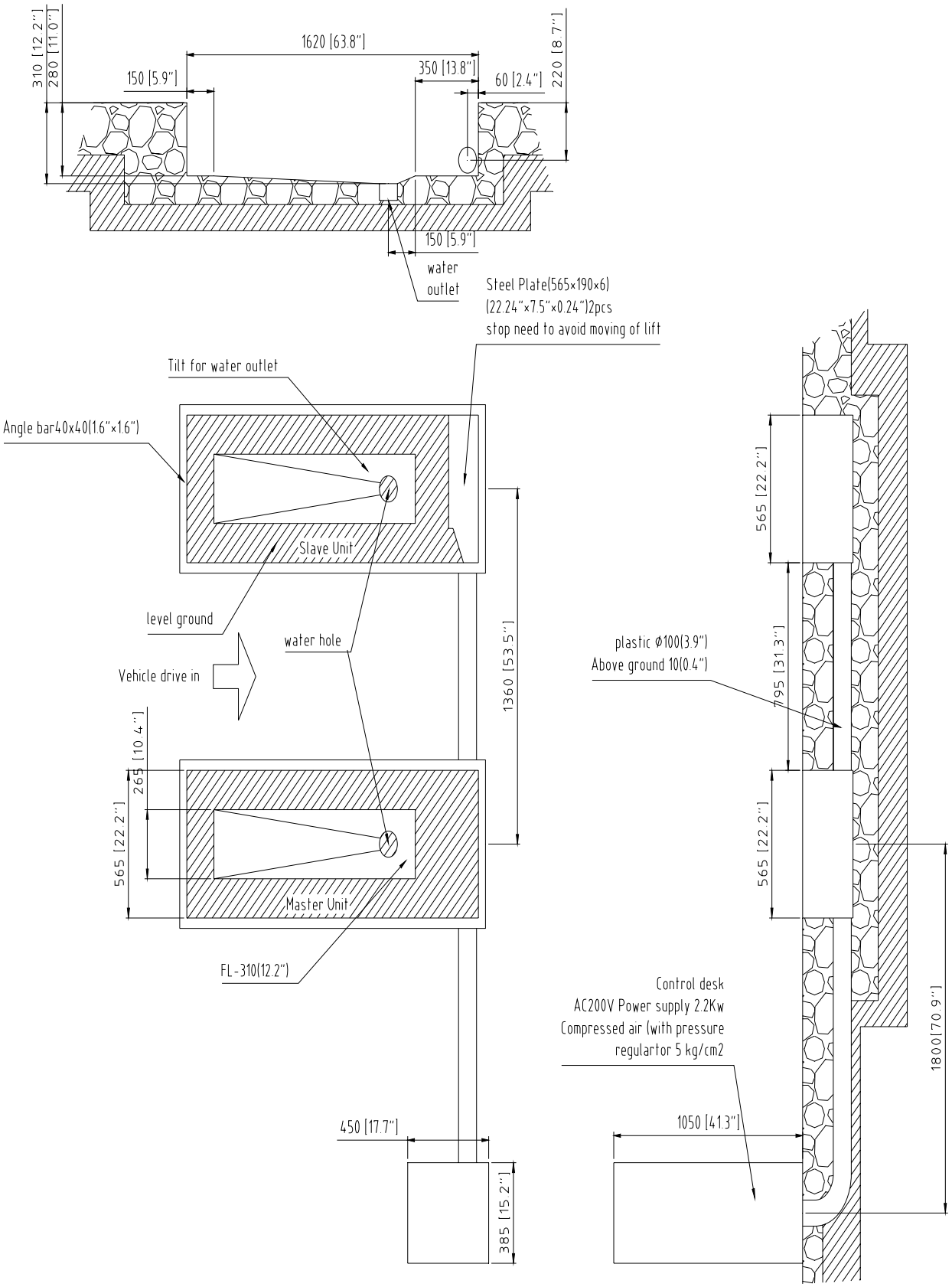

310 [12.2"]
280 [11.0"]
1620 [63.8"]
350 [13.8"]
150 [5.9"]
60 [2.4"]
220 [8.7"]
150 [5.9"]
water outlet
Steel Plate(565×190×6)
(22.24"×7.5"×0.24")2pcs
stop need to avoid moving of lift
Tilt for water outlet
Angle bar40x40(1.6"×1.6")
Slave Unit
level ground
water hole
Vehicle drive in
1360 [53.5"]
265 [10.4"]
565 [22.2"]
Master Unit
FL-310(12.2")
450 [17.7"]
385 [15.2"]
565 [22.2"]
795 [31.3"]
plastic Ø100(3.9")
Above ground 10(0.4")
565 [22.2"]
Control desk
AC200V Power supply 2.2Kw
Compressed air (with pressure
regulartor 5 kg/cm2
1050 [41.3"]
1800[70.9"]

Fig 7

5.2.2 Control Desk Installation

- Place the control desk in place according to the ground layout.
- Open the door at the back of the control desk. Connect power input cable to terminal L1, L2, L3, PE. (Fig.8). Switch on the power and the indicator will light on.
- Fill hydraulic oil N32 or N46 (approximate 20L) into the oil tank (using oil gauge to check the level). Pay special attention to avoid dust and contaminants into the oil.
- After hoses are assembled, press up button to check power system. If motor does not run, or gets abnormal noise, or motor runs but lift does not go up or motor heats up. The power must be cut off and check the wiring connection

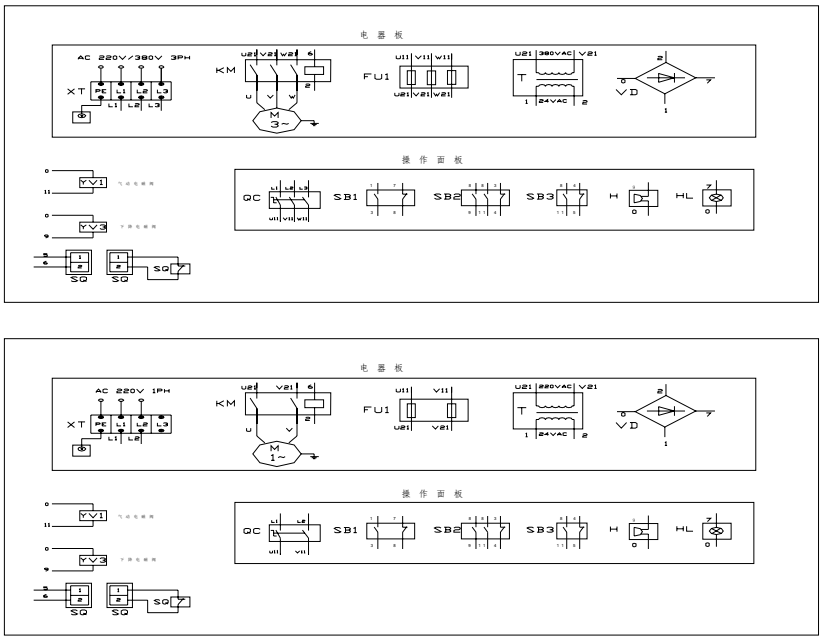


Fig8

⚠Note: High Voltage inside the control desk! Wiring should be performed carefully.：

5.2.3 Hydraulic Hose Connection

- The hydraulic hose connection is illustrated in Fig.9. Connect the hydraulic hose NO1 to valve Z1 inside the control box and tighten the fitting. Check the status of the combined valve. (Main cycle is opened and the subsidiary is closed.)
- Press UP button, raise the host platform to 1.5 m (59') high, press the safety lock button, makes machinery insurance work.
- Connect other hoses according to Fig.9 and fasten all fittings so that no leakage will occur.
- Adjust the height of the 8 support bar under the table, to maintain a minimum height of 330 mm.
- Adjust the levelness of platform by shimming the indention area. The level difference between two platforms ≤5mm（（0.2"）。

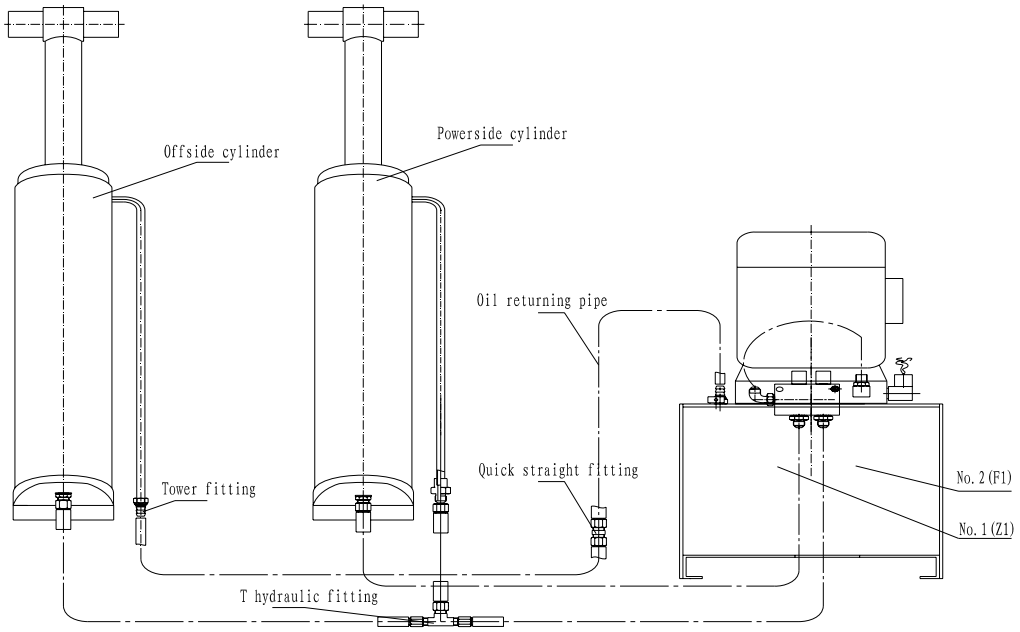


Fig9

5.2.4 Anchoring

- Wrap the oil fittings, cable connections and joints of the lift to prevent dusts from getting in.
- With the help of the holes on the base plate, drill and install the anchor bolts. In the process of drilling, make sure that there is no movement at the base frames. Fasten the base frames of the lift to the pits with 8 M16*120（M0.63"X4.7"） anchor bolts. .(Fig.10)
- Tighten out the nuts to fix the base frames on the pits
- Cautions: To ensure safety and performance, follow the installation procedures step by step.
- Wear safety goggles.
- Use strong alloy drill bit with a diameter of 17mm（0.7"）. Do not use worn-out drill bit.
- Keep the hammer drill upright with the surface of the hole.
- Keep hammer drill going by itself. Do not apply extra pressure.
- The depth of the hole depends on the length of the bolt. It is advisable that the bolts above the base frames should be around 30mm.
- Remove the dust from the holes.
- Tap the bolt into the hole, insert and hit the core until the bolt fully expands
- Tighten out the bolts with torque wrench with a capacity of 80N.M

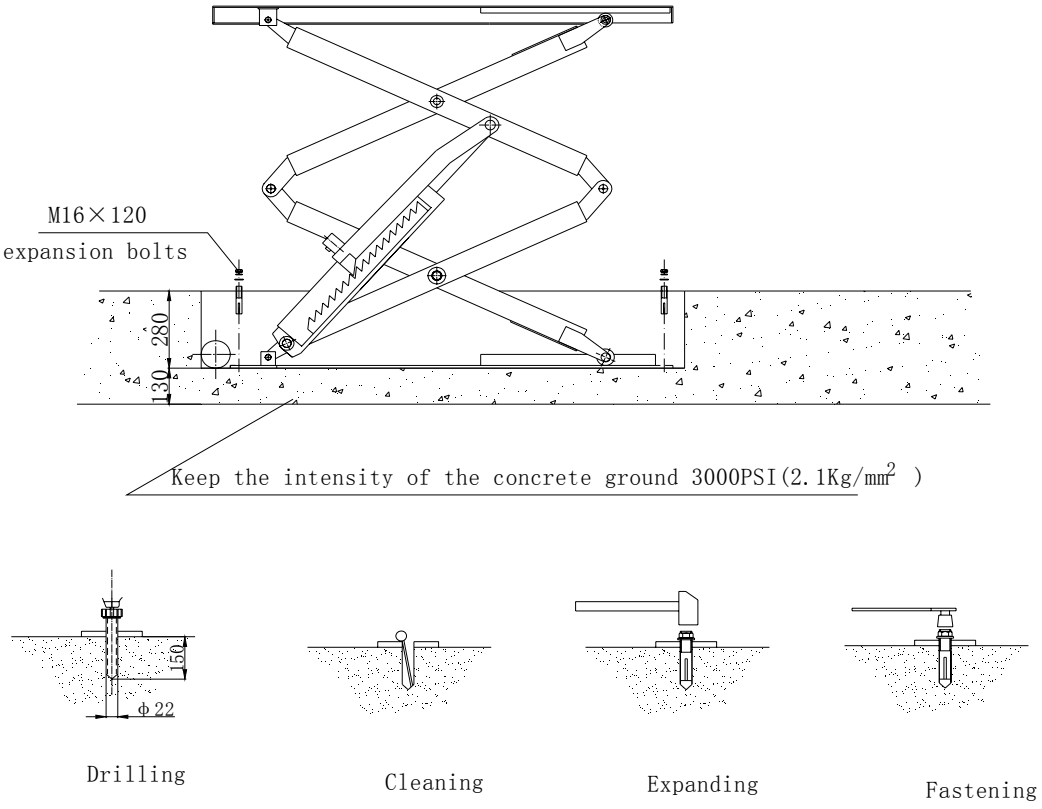


Fig10

5.2.5 Air Hose Connection

- Connect the hoses according to the pneumatic diagram.
- Keep the output pressure of the air source at 5kg/cm2.
- Press down button to check if the air cylinder acts correctly. If not, please check the hose connection.

6 Operation

6.1 Inspection before operation

- Check for the synchronized and steady movement of the platforms.
- Check the sensibility and reliability of safety ratchet.
- Make sure the platforms would automatically stop when they reach the max lifting height
- Check for possible leakage in the cylinder, hoses and fittings。Check for possible air leakage in the solenoid valve, cylinder, pressure regulator valve and fittings.
- Check for any abnormal action and sound in pump and motor.
- Check if the Emergency Stop button works properly.

6.2 Operational Procedures

- Keep speed below 5km/h when driving on the platforms.
- Stop the vehicle when the platforms are between its front and rear wheels.
- Place rubber pads on the platforms where the lifting points will contact and press UP button to lift the vehicle to 200mm~300mm (7.87"～11.8") from the floor.

- Longer wheelbase or large supported countertop, rise the plat to 76mm (3") adjust the stretching table position, place the rubber cushioning, rises again. After finish the task lower the lift to this position, take the stretching table back then lowering again until finished.
- Make sure that the two platforms are leveled and nothing unusual is found.
- Keep pressing UP button until the vehicle rises to the required height.
- Press SAFETY LOCK button to lower the lift and engage the safety ratchet so that the platforms are leveled with one another.
- After the maintenance is done, keep the work area clear and safe before lowering lift. Press UP button for a while, when disengage the safety ratchet, press the DOWN button.

6.3 Safety Precautions

- The hydraulic relief valves are well-adjusted before leaving factory. The manufacturer will not be responsible for any damage caused by unauthorized adjustment.
- Check the safety lock ratchets are engaged before going about any under-car jobs.
- Place rubber pads on the platforms and spread them for maximal support.
- In case of any leakage in the hydraulic system, fix the problem and refill the oil to the proper level.

7 Adjusting

7.1 Preparations

- Move the contact surface of in roller filling in 2# lithium grease, from left to right scrolling surface evenly.
- Add 2# lithium grease at the joints of the machines.
- Check the hydraulic oil inside the hydraulic oil tank is adequate

7.2 Adjustment Procedures

- Press UP button, the platforms begin to raise, release the UP button, the platforms stop moving. Then, press the DOWN button, the platforms lower.
- Check if all the connection bolts are tightly fastened.
- Adjust position of the mounting plate equipped with a limit switch (see arrow to the overall structure is shown in Figure 1), host platforms up to the proper height, limit switch is triggered, pumping station stop working; cutting cylinder oil, platform stop rising and thus play a role in protecting the machine.(The installation of the new machine's travel switch is not fixed, and after the commissioning is completed, the installation personnel are set to limit the height and tighten the limit according to the customer's requirements)
- If there is air in hydraulic system due to new installation, air bleeding performance is needed. The air in the master cylinder can be bled after the platform goes up and down several times. The air in the slave cylinder can be bled by following steps:1) lift Master Platform close to the maximal height; 2) adjust Deputy loop and combination valve until it is turned on; 3) press the UP button to raise the Slave Platform reaches near the maximal height, 4)press the DOWN button to lower Slave Platform to the bottom. Repeat three more times, all the air in the slave cylinder can be bled after the operation.
- Adjust the amount of auxiliary engine oil, to let the platforms stop at appropriate height.
- Turn the combined valve to working status. Adjustment is over.

⚠Notice:

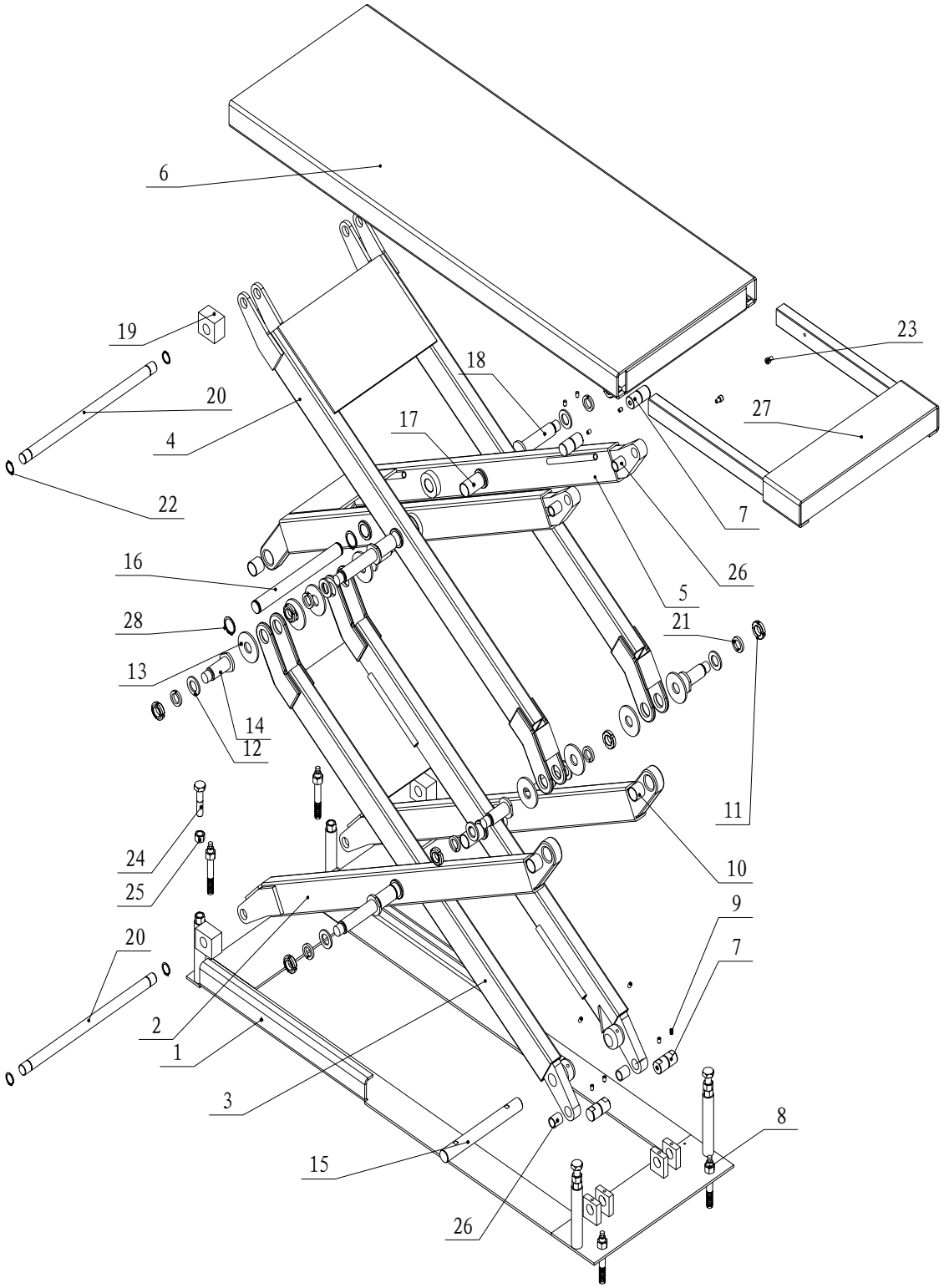
Attention should be paid to the position of oil pipes and hydraulic hose when the platforms move to the minimal height for the first time. Make sure they do not get stuck with platforms moving downwards.

When bleeding the air in the slave cylinder, do not lift Master Platform to the maximal height. Otherwise, the limit switch is triggered, the power will be cut off and Slave Platform can't move.

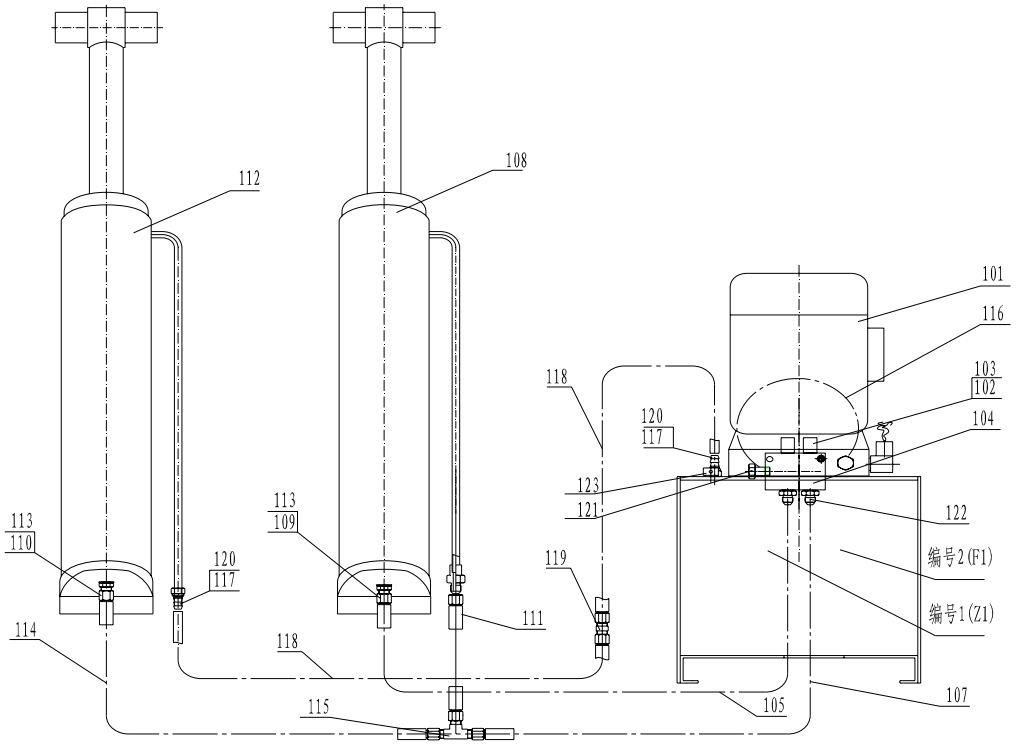
When bleeding the air in the slave cylinder or leveling the two platforms, lift Slave Platform to 1.5m, and then insert cardboard under the safety ratchet near the air cylinder to keep the safety ratchet from becoming effective. Otherwise the Slave Platform can't be lowered even when the DOWN button is pushed. Remove the cardboard after bleeding or leveling

8 Parts List

This parts list is only to be used by maintenance and servicing personnel.
The manufacturer is not responsible in case it is used for any other purposes.
If any parts get damaged, please order from your dealer or Launch Tech.



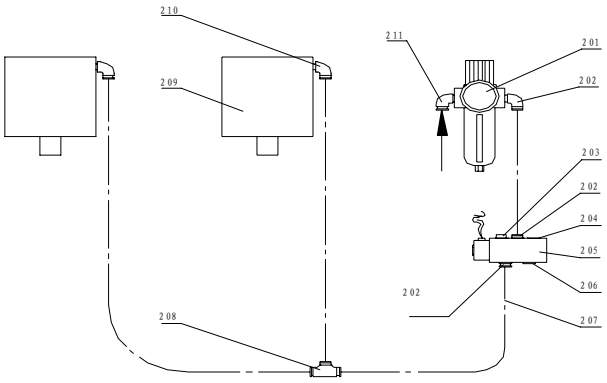
No	ERP Code	Name
1	307041252	Base Frame
2	307041253	Outer Lower Arm
3	307041254	Inner Lower Arm
4	307041255	Outer Higher Arm
5	307041256	Inner Higher Arm
6	307041257	Platform
7	103200840	Joint Axle
8	103010483	Anchor Bolt M16*120
9	103010468	Screw M8*12
10	103260103	Bushing 3028
11	103030135	Nut M24
12	103040170	Flat Washer 24
13	103040162	Flat Washer 30
14	103200844	Terminal Axle 2
15	103200841	Cylinder Axle
16	103200845	Cylinder Pushing Axle
17	103260105	Bushing 3057
18	103200842	Middle Axle
19	104991266	Slide Block
20	103200846	Roller Axle
21	103040163	Spring Washer 24
22	103050035	Returning Ring 25
23	103010455	Screw M8x10
24	103020125	Screw M16x120
25	103030131	Nut M16
26	103260101	Bushing 2028
27	307041258	Extension Platform
28	103050014	Returning Ring 30



Hydraulic Diagram

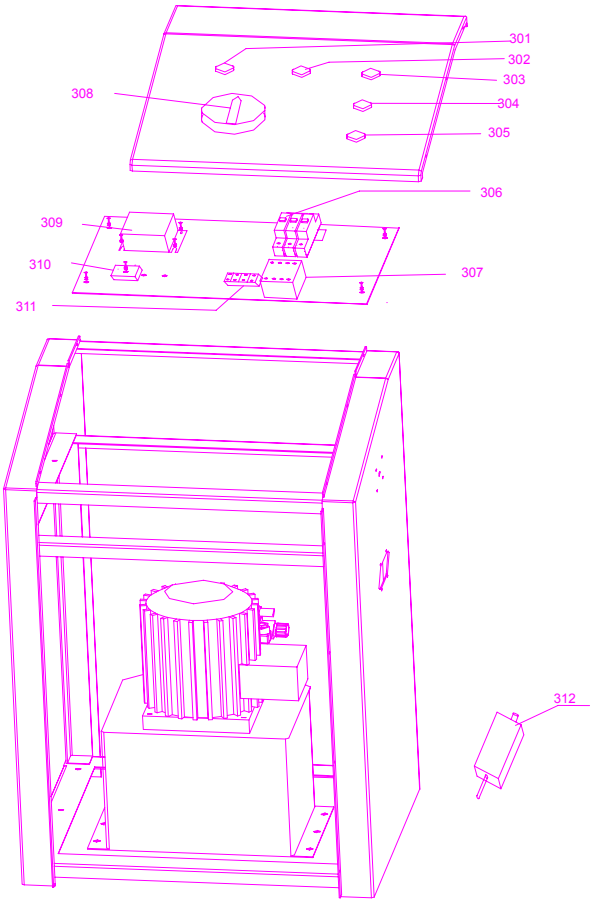
No	ERP Code	Name
101	103990102	Power Pack (380V50Hz3ph)
	103990098	Power Pack (220V50Hz1ph)
	103990100	Power Pack (220V60Hz3ph)
	103990099	Power Pack (220V60Hz1ph)
	103990101	Power Pack (200V60Hz3ph)
102	103202175	Nut M12
103		Valve rod
104		Valve plate
105	104990085	C-style Hydraulic Hose 6II-3500
106		
107	104990090	Hydraulic Hose 6II-3000
108	103260120	Master Cylinder
109	103100161	Burst Protection Valve Assembly
110	103160043	Burst Protection Valve
111	104990084	Hydraulic Hose 6II-350
112	103260119	Slave Cylinder

113	103040158	Seal Gasket 16
114	104990088	Hydraulic Hose 6II-1800
115	103990055	T Fitting
116	103260305	Hydraulic Hose, 0.5m
117	103100189	Tower straight fitting ¢8/M8
118	104990124	Oil Return Hose ¢12
119		
120	103200206	Hose Hoop ¢14
121	103020166	Connecting bolt
122	103100162	Right angle Fitting
123	107021380	Oil Gauge



Pneumatic Diagram

No	ERP Code	Name
201	102160383	Air Pressure Regulator and Filter
202	102990071	Air Connector APL6-02
203	102990066	Muffler
204	103200654	Plug 1/8"
205	103160033	Solenoid Air Valve 4V210-08-DC24V
206	103100073	Plug 1/4"
207	104990092	Air Hose PU0604
208	102160380	T Air Connector APE6
209	103202521	Air Cylinder
210	102990070	Air connector APL6-01
211	103100044	Air connector APL8-02



Electrical Diagram

No	ERP Code	Name
301	102990065	Power indicator AD16-22 DC24V
302	102140018	Buzzer AD16-22M/K DC24V
303	102100084	Button L39A-11/K
304	102100120	Button L39A-11/Y
305	102100148	Button L39A-22/K
306	102150053	Fuse RT18-32
307	102110059	Connector s-p11 AC24V
308	102990109	Power switch LW39B-16（small）
309	102130034	Transfer JCY5-100 220V,380V/27V
310	102270004	Bridge Rectifier KBPC25-10
311	103180018	Connection terminal(4PIN)RTB406-00 800V 32A
312	307041344	Trip switch ME-8112 telescopic with roller

9 Troubleshooting

Symptoms	Reasons	Solutions
The motor does not work.	Check the fuse and limit switch. Voltage is not correct. Electrical wiring is wrong. Motor is broken.	Repair or change the fuse or limit switch. Supply power of correct voltage. Fix the wiring. Change motor.
The motor works, but the platforms do not move, or can only go up slowly.	The motor rotates in the wrong direction. Oil level is too low. Height limit switch is stuck or damaged.	Exchange wiring of motor to change direction. Add oil. Repair or replace the height limit switch.
The motor works, but the platforms can not lift the vehicle.	The voltage to the motor is too low. Pressure of relief valve is not right. The lift is overloaded The hydraulic pump is damaged.	Supply motor with correct voltage. Adjust the pressure of relief valve. Check the weight of the vehicle. Replace the hydraulic pump.
The lift is too slow in lowering.	There is foreign substance in the lowering solenoid valve. Lowering speed valve is turned too low.	Clean the lowering solenoid valve. Turn the lowering speed valve up.
The platforms are not synchronized.	There is air in upper chamber of Master Cylinder or Slave Cylinder. The oil supply can't be cut off because of the leakage of stop valve. Leakage in hydraulic system	Air bleeding performance is needed. The air in the master and slave cylinder can be bled after the platform goes up and down several times. Replace stop valve. Replace the seal or the cylinder.
Safety ratchets cannot be separated from serration.	The air pressure regulating valve is closed or too low. The Solenoid air valve is damaged. The LOCK button is pressed for too long time.	Adjust air pressure to 5kg/cm2 Replace the solenoid air valve. Release the LOCK button immediately after the safety ratchets are fully engaged.

10 Maintenance

10.1 Daily Maintenance

- Keep the lift clean. Make sure power is cut off before cleaning the lift.
- Keep the working area clean. Excessive dust in the work area will shorten the lifespan of the lift.
- Before operation, inspect and keep all the safety devices of lift in order. If any problems are found, adjust, maintain or replace the parts timely.
- Make sure that the pits are kept dry and clean.
- Inspect if there is leakage in the air valve and if it is well-lubricated.

10.2 Monthly Maintenance

- Refasten the anchor bolts.
- Check all the hoses and fittings for possible wearing and leakage. If any leakage is found to be caused by worn sealing parts, replace with parts meeting the specifications.
- Check if the roller slide is well-lubricated with high-quality #2 lithium lubricant.
- Apply #2 lithium lubricants on a monthly basis.

10.3 Biannual Maintenance

- Check all the moving parts for possible wearing, interference and damage.
- Inspect the lubrication of all the rollers. If the roller is dragged along in lifting or lowering, apply lubricant to the roller shaft.
- At the end of the first six months, clean the hydraulic system and replace the hydraulic oil. Replace the hydraulic oil with N32 hydraulic oil in winter and N46 in summer.

10.4 Maintenance for 3 Years or 5000 Times Operations

- Replace the bushings at all joints.
- Replace all seals
- Replace the rollers.

11 Storage and Scrapping

11.1 Storage

When the lift needs to be stored for a long time:

- Unplug from power socket.
- Lubricate all the parts, including all the contact surface of the rollers.
- Bleed oil from tanks.
- Cover the lift with plastic hood.

11.2 Scrapping

When the lift has exceeded its lifespan and can not be used any more, disconnect it from the electrical supply and dispose of as required by the local regulations.

TLT630A Hydraulic Oil Data

#2 Lithium Lubricants

Item	Specifications
Conical degree（1/10mm）	278
Dropping point ℃	185
Erosion（T2 Copper Plate，100 ℃，24h）	No Change
Copper Screening（100℃，22h）%	4
Evaporation（100℃，22h）%	2
Oxidizing Stability （99℃，100 h）	0.2
Non-corrosibility（52℃，48）	Grade 1
Foreign substance（Microscopic method）/（number/cm³） Above 10μm Above 25μm Above 75μm Above 125μm	 Fewer than 5000 Fewer than 3000 Fewer than 500 0
Relative Viscosity（-15℃，10s^{-1} ）,/(Pa·s) Less than	800
Humidity Loss（38℃，1h）(%) More than	≥8

N32 Mechanic Oil (for winter)

Item	Specifications
Moving Viscosity 40℃	28.8～35
Pour /℃	≤-15
Flash point /℃	≥175

N46 Mechanical Oil (for summer)

Item	Specifications
Moving Viscosity 40℃	41.4～50.6
Pour /℃	≤-9
Flash point /℃	≥185