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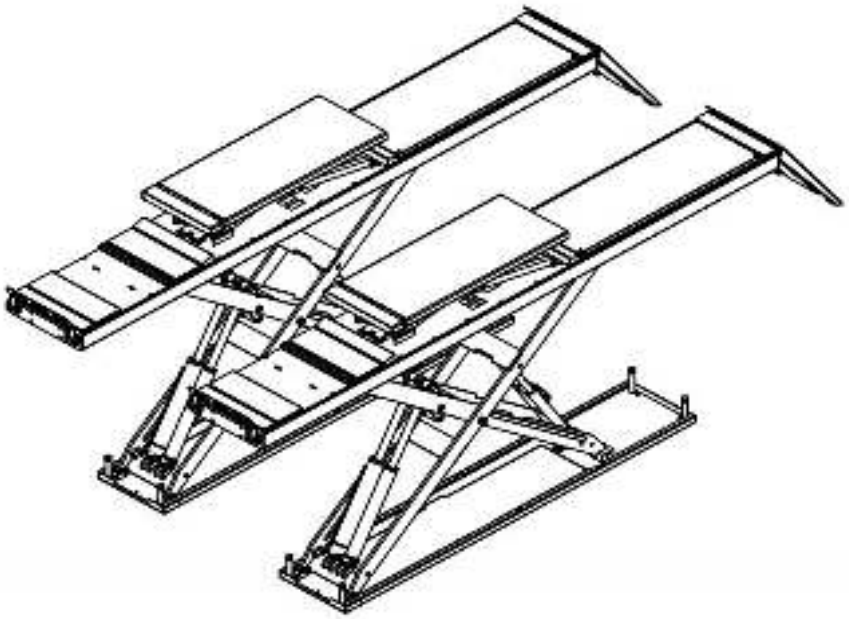
SCISSOR LIFT
Low Profile Double Alignment Scissor Lift
(Electric leveling）
Lifting Capacity 4000KGS
Model:LG8800S

User's manual

Original Instruction (English revision)



Please read this entire manual carefully and completely before installation or operation of the lift.

Foreword

Notes on the operating instructions

The present ORIGINAL OPERATING IN STRUCTIONS are designed to provide sufficient instruction for the safe operation of the product. The information is provided clearly and concisely. The chapters are arranged by letter and the pages are numbered continuously.

Our product are subject to ongoing development. Our company reserves the right to alter the design, equipment and technical features of the system. No guarantee of particular features of the product should therefore be assumed from the present operating instructions.

Safety notices and text mark-ups

Safety instructions and important explanations are indicated by the following graphics:

Indicates an extremely hazardous situation. Failure to comply with this instruction will result in severe irreparable injury and even death.

Indicates an extremely hazardous situation. Failure to comply with this instruction may result in severe irreparable injury and even death.

Indicates a hazardous situation. Failure to comply with this instruction may result in slight to medium injury.

Indicates a material hazard. Failure to comply with this instruction may result in material damage.

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1. Important safety instructions

1.1 Important notices

We will offer one-year's quality warranty for the whole machine， during which any quality problem will be properly solved to the user's satisfaction. However, we will not take any responsibility for whatever bad consequence resulted from improper installation and operation, overload running or unqualified ground condition.
This lift is especially fit for tire service or other quick service around vehicles. Users must always bear in mind that this LG8800S is specially designed for lifting cars or other vehicles, so never use it for any other purposes. Otherwise, as well as our sales agency, will not bear any responsibility for accidents or damages of the lift.
Make sure to pay careful attention to the label of the lifting capacity attached on the lift and never try to lift cars with its weight beyond.
Read this manual carefully before operating the machine so as to avoid economic loss or personnel casualty incurred by wrong operation.
Without our professional advice, users are not permitted to make any modification to the control unit or whatever mechanical unit.

1.2 Qualified personnel

1.2.1 Only these qualified staff, who have been properly trained, can operate the lift.
1.2.2 Electrical connection must be done by a competent electrician.
1.2.3 People who are not concerned are not allowed in the lifting area.

1.3 Danger notices

1.3.1 Only used for indoor installation. The installation environment should not be excessively humid. It is forbidden to install on the asphalt floor. The thickness of the concrete must meet the requirements.
1.3.2 Before operating the lift, please read and understand the instructions for safe operation.
1.3.3 If the lift is not customized for special customer requirements, it will not be used outdoors.
1.3.4 Keep your hands and feet away from the moving parts of the lift. When the machine is lowered, move your hands and feet away to avoid being crushed.
1.3.5 Only professionally trained personnel can operate and use the lift.
1.3.6 Operators are not allowed to wear bulky clothes to avoid being caught by moving parts during the lifting process of the machine.
1.3.7 The surrounding area of the lift must be kept clean, and no debris can be piled up to avoid accidents. 1.3.8 The lift is designed to lift the vehicle as a whole, not part of it; you must not try to lift a vehicle that exceeds the rated lifting weight.
1.3.9 When working under the vehicle, make sure that the safety lock of the lift is in the engaged state.
1.3.10 The lifting pad of the lift must be placed at the position recommended by the vehicle manufacturer, and then slowly lift the vehicle to make sure that it is stable and does not tilt, tip, or fall off before lifting it to the desired height.
1.3.11 Check the parts for damage at any time, check the synchronization of the machine and the flexibility of the moving parts, and pay attention to regular maintenance. Once abnormal conditions are found, stop using it immediately and contact the dealer.
1.3.12 After the operation, please lower the machine to the lowest level and turn off the power.
1.3.13 Without the permission of the manufacturer, the parts of the lift shall not be changed.
1.3.14 If the lift is going to be left unused for a long time, users are required to:

a. Disconnect the power source;
b. Empty the oil tank;
c. Lubricate the moving parts with hydraulic oil.

Attention: The lift is a high-risk product. Improper installation or operation, or unauthorized modification of mechanical parts may cause injury or even death. Read the manual carefully and work in strict accordance with the requirements! The safety warnings and instructions in this manual cannot cover all possible situations. The operator must have sufficient safety knowledge.

1.4 Warnings sign (Read and understand all safety warnings before operation)

All safety warning labels are clearly depicted on the lift to ensure that the operator is aware of and avoids the dangers of using the lift in an incorrect manner. The labels must be kept clean and they have to be replaced if detached or damaged. Please read carefully the meaning of each label and memorize them for future operation.

1.5 Label Layout

Safety Labels

Electrical label

Oil information

Warning signs

1.6 Control panel layout drawings

UP SWITCH

DOWN SWITCH

LOCK SWITCH

EMERGENCY STOP SWITCH

SELECTOR SWITCH

1.7 Safety Labels

1.8 Sound Level

The sound emitted from the lift should not exceed 75DB. For the sake of your health, we suggest putting a noise detector in your working area.

1.9 Reminder of potential security risks

1.9.1 Voltage Damage to the electrical insulation and defects in other parts may cause high voltage hazards on accessible electrical components.

Safety measures: use only the original power cord or use the power cord that has passed the test; replace the wire with damaged insulation; do not open the electric control unit.

1.9.2 Injury and crushing hazard If the lifted vehicle is too heavy, the incorrect way to get on the vehicle, or the removal of heavier objects, may cause the lifted vehicle to fall or tip over.

Safety measures: use the lift platform in accordance with the regulations; learn to understand all the content in 1.4. pay attention to understand the operation precautions.

1.10 Training

Only properly trained people are allowed to operate the lift. We are quite willing to provide professional training for the users when necessary.

2. Packing, Transport and Storage

Packing, lifting, handling, and transportation personnel must have relevant experience and read this operation manual, and have a correct understanding of the lift.

2.1 Storage and transportation

2.1.1 Store indoors at a temperature of -10° C to +40° C, away from direct sunlight.

2.1.2 Because the weight of the machine is large and the packaging base is narrow, stacking will have certain risks. Generally, it is not recommended to stack for storage and transportation. If stacking is unavoidable, some reasonable precautions should be taken as far as possible:

-The stack height does not exceed 2 meters.

-Do not stack them in a single row. It is recommended to stack them in pairs, so that the base is large and stable. After the stacking is completed, it needs to be fixed with ropes or other suitable methods.

-On trucks, containers and trains, up to two layers are stacked, and they need to be secured with ropes to prevent slipping.

2.2 Open the packing

2.2.1 Before shipping the lift, make sure that the lift is not damaged during transportation and that the accessories listed on the packing list are complete.

2.2.2 Before opening the package, take some measures to avoid hurting people (keep a safe distance from the machine before opening the package tie) or the machine (make sure that no accessories fall from the package after opening the package).

2.2.3 Pay special attention to the pump station, control panel and cylinder.

2.2.4 The operator can use a forklift to carry out indoor lifting and transportation, pay attention to the forklift position marked on the outer packaging. It is forbidden to use lifting ropes for lifting and transportation.

3. Overview of the lift

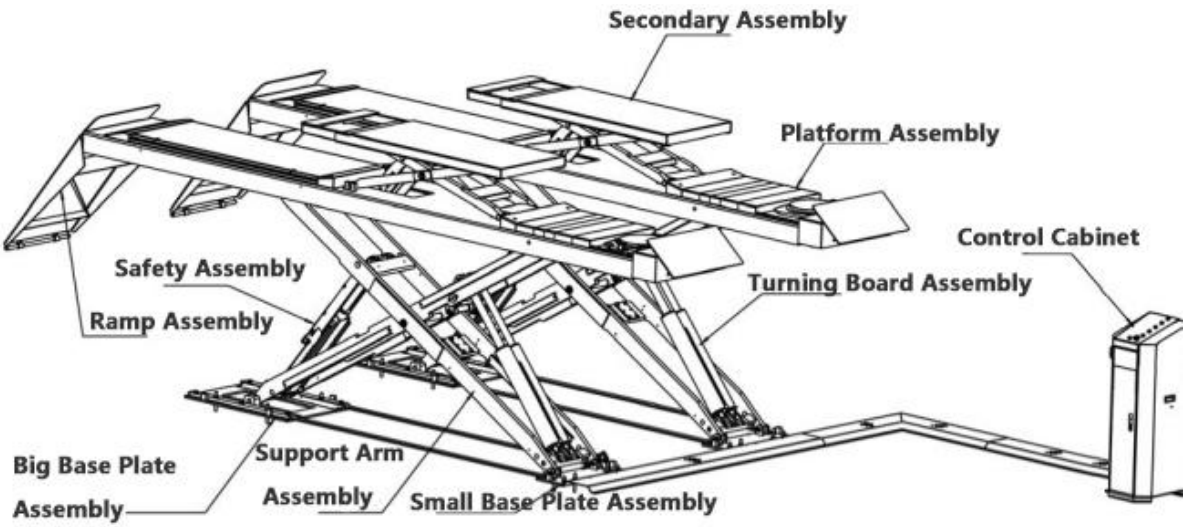
3.1 General descriptions

This scissor lift is a surface-mounted lift. The lift is composed of platform, X shape frame, base plate, oil cylinder, and power unit. When the power unit is connected to the power supply, the gear pump works, the hydraulic oil pushes the piston rod of the cylinder up, and drives the X shape frame to raise the platform as a whole, so as to achieve the purpose of lifting. During the lifting process, the safety device has been working to ensure the safety of the vehicle during the lifting process. This machine is equipped with 24V safety electric control system, 24V limit switch, descending safety alarm device, maximum limit, pneumatic safety lock, explosion-proof valve and other safety devices, which fully consider the personal safety of the operator.

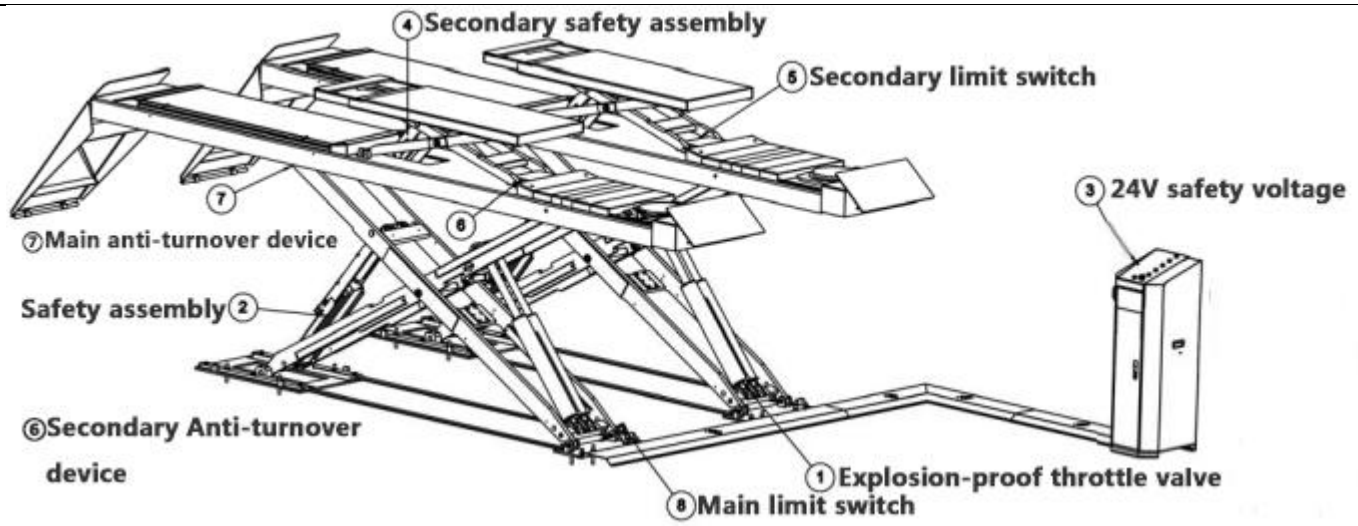
3.2 Technical data.

Lifting Capacity	4000KG
Lifting Height	1850mm
Min Height	200mm
Full Rise Time under rated load	≤70s
Full Descent Time under rated load	≤60s
System pressure	20MPa
Air pressure	6-8 bar
Secondary lifting weight	2500KG
Secondary lifting height	450mm
Oil volume	18L
Gross weight:	2320KG

3.3 Construction of the lift



3.4 Introduction to Safety Structure



4. Installation instructions

4.1 Preparation before installation

4.1.1 Installation space preparation

Refer to 3.4 Dimensional Drawing. The lift must be at least 1 meter away from other fixed objects (such as walls). There must be enough space to ensure that the vehicle can drive up and down the lifting platform.

4.1.2 Foundation electrical preparation

The user needs to do the following work before installing the lift:

1. Consult the manufacturer's customer service or authorized dealers about the construction of the foundation;

2. Read the relevant information in the nameplate of the machine and the operation manual, arrange the installation position circuit cable (electrical connection protection is required), and ensure that the voltage of the machine is consistent with the power supply voltage; the requirements for the power supply line of the installation site are: three-phase power The power core wire is at least 2.5mm2, and the single-phase power core wire is at least 4.0mm2.

Note: The electrical connection must be operated by professionals

4.1.3 Foundation preparation for installation (see appendix 1: foundation plan)

Concrete type C20/25, the minimum thickness is 150mm, the strength is above 3000psi, and the flatness error is less than 0.5%. The newly poured concrete needs to be cured for more than 20 days.

4.1.4 Installation of equipment and tools

Name	Specification	Quantity
Hand drill	D16 and D18 drill bits	1
Open-end wrench	D17-19	2
adjustable wrench	Greater than D30	1
Phillips screwdriver	PH2	1
Quick wrench extension rod	REB - 310	1

Socket wrench	D24	1
Spirit level	Accuracy 1mm	1
hammer	10 lb	1
Forklift	Load 2500KG	1
Sling	Load 1000KG	2
Sling	Load 2000KG	2
Torque wrench	MD400	1

4.1.5 Check the parts list

NO.	Name	Specification	Quantity
1	Lifting platform		2
2	Expansion bolt	M16*120	16
3	Control cabinet	3 KW	1
4	Main ramp		2
5	Ground tubing buckle groove (L=530)		1
6	Middle buckle groove of ground tubing (L=1000)		2
7	Oil pipe connection cover 1 (L=900)		2
8	Oil pipe connection cover 2 (L=1000)		1
9	Cross recessed pan head tapping screws	ST4.8*35	24
10	Plastic expansion tube	M10*40	24
11	Cross recessed pan head screws	M6*12	4
12	Hex nuts	M6	4
13	Flat pad	M6	4

4.2 Precautions during installation

The oil pipes and wires must be properly connected to prevent oil leakage from the oil pipes and loose wires.

All bolts must be tightened.

Do not place any vehicles during trial operation.

4.3 Description of main installation steps

Step 1: Open the package and move the lift to the installation site.

Use a forklift and two slings to lift the lifting platform to the mechanical safety lock position, remove the screws that fix the platform base and the packaging base, and then move the lifting platform to On the pre-prepared installation foundation.

Note 1: Avoid scratching the paint surface of the platform and the tubing during unpacking.

Note 2: Before lifting, protect the oil pipe and air pipe to avoid crushing.

Note 3: During the lifting process, auxiliary personnel should assist in stabilizing the lifting platform. Irrelevant personnel should not stay in the installation area.

Step 2: Connect the hydraulic tubing.

Connect the tubing according to the tubing connection diagram. Pay attention to ensure the cleanliness of the oil circuit to prevent pollutants from entering the hydraulic system. (This step is very critical, be sure to read the tubing connection diagram before operation)

Step 3: Connect the air pipe.

Connect the air pipe according to the pneumatic piping diagram. Attention should be paid to ensure the cleanliness of the air path to prevent pollutants from entering the pneumatic system. The external air source is provided by the user, and the air source pressure is 6-8 bar.

Step 4: Connect the electrical system.

The electrical connection must be operated by a professional electrician. Refer to the electrical connection diagram to connect the electrical limit switch and the power cord.

(If the configuration is 3-phase power, if you press the up button, the motor will reverse and the lifting platform will not rise, you need to exchange the U and V terminals of the power cord in the control cabinet)

Step 5: Inject hydraulic oil;

Only fresh and clean hydraulic oil is allowed, 46# hydraulic oil is recommended. Usually 22L of hydraulic oil is required. After first injecting 18L of hydraulic oil, after running the main engine and slave for several cycles, inject the remaining 4L of hydraulic oil.

Note: Before adding hydraulic oil, lower the lift to the lowest level. Do not fill the oil tank completely. The amount of hydraulic oil is sufficient to raise the lifting platform to the highest level. It is recommended to replace the hydraulic oil 6 months after the first use, and then replace it once a year.

Step 6: Leveling.

Before leveling operation, check whether the hydraulic and electrical connections are accurate.

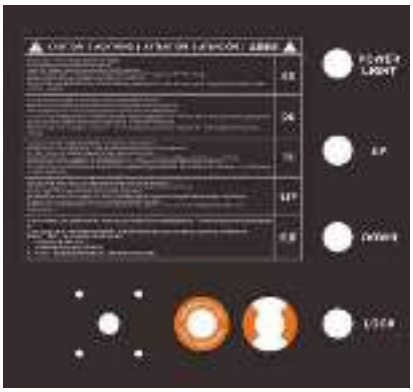
Before leveling operation, refer to 5.4 operation instructions, and after familiarizing each function button on the operation panel, turn the SA1 knob to leveling mode.

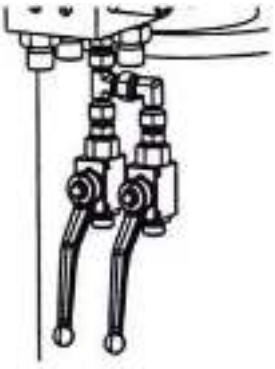
Note: When performing leveling operations, do not connect the height limit switch line first, otherwise the lifting platform cannot be raised to the highest level. Through the tubing connection diagram or trial lifting operation, the operator needs to be familiar with which leveling valve controls which lifting platform.

Leveling the main platform

The hydraulic valve shown in the figure below is in the control cabinet and can be seen by opening the cabinet door.

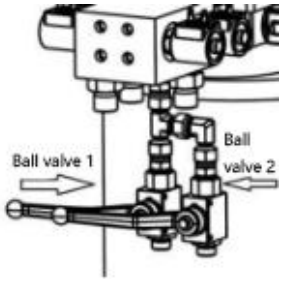
1) Turn on the power switch and set the selector switch SA2 (large shear/small shear) in the control panel to the large shear mode, and the selector switch SA1 (leveling/work) to leveling mode, open the leveling ball valve, and the ball valve handle is as follows: Figure location.





2) Press the up button to raise the two platforms of the machine to the highest point. Repeat this action two or three times. Note that when the shear platform is approaching the highest point, press the up button to rise to the highest point, then press the down lock button to lock the mechanical safety, and then press the down I button to descend. When it reaches the second down position, press the down II button to increase The shearing platform is lowered to the bottom position. This step may take some time because there is air in the cylinder and there is no load on the platform.

3) As described in step 2, after repeating two or three times, lower the two platforms to the bottom and close the leveling ball valve. The handle position is as shown in the figure below.



4) Set the selector switch SA1 (leveling/work) to work mode, and press the up button to confirm whether the two platforms are working synchronously (under normal circumstances, this step cannot make the platforms work synchronously).

5) If it is not synchronized, one platform will be lifted quickly and the other platform will be lifted slowly. Open the leveling ball valve (ball valve 1 or ball valve 2) corresponding to the slower-rising platform, adjust the work/leveling button SA1 to leveling mode, jog the up button, and close the ball valve when it rises to the same height on the other platform.

6) Set the SA1 (leveling/work) button to work mode, and press the up button to check the synchronization of the platform.

7) If it is not synchronized, repeat steps 4 to 6 until the two platforms are lifted simultaneously.

Leveling the Secondary platform

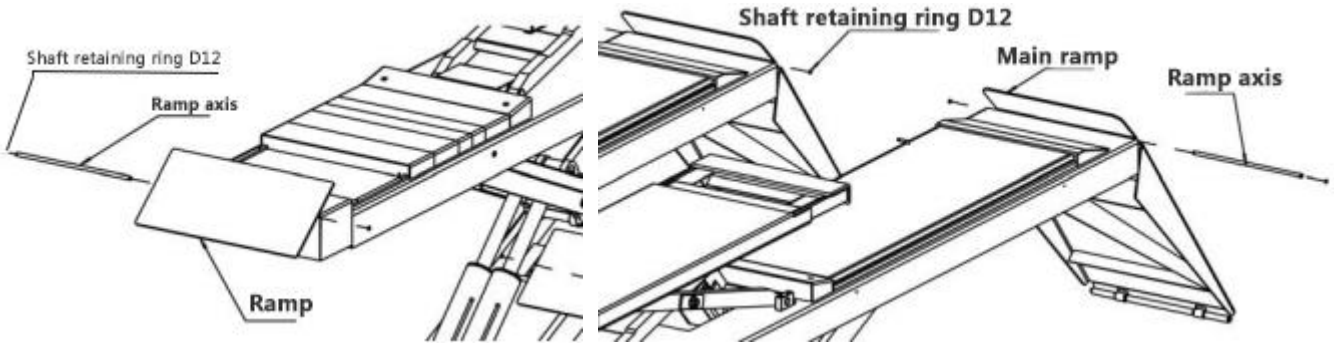
1) The selector switch SA2 (large platform/small platform) on the control panel is set to the "small platform" mode, and the "small platform" can be raised and lowered at this time.

2) The selector switch SA1 (leveling/work) in the cabinet is adjusted to the "leveling" mode. At this time, you

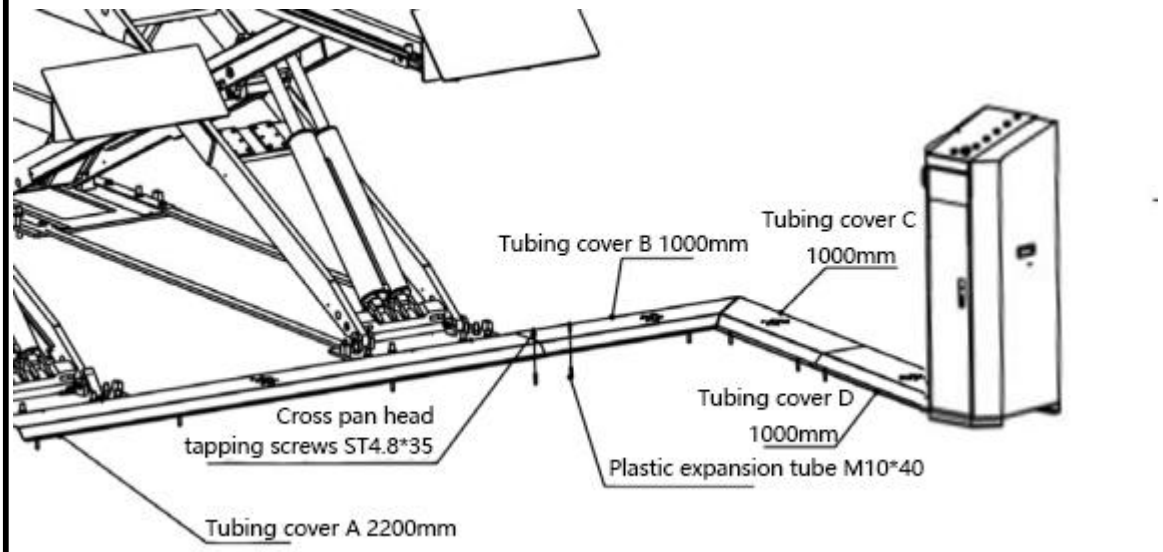
can press the "up" or "down I" button to individually adjust the "small platform" sub-platform until it is in line with the main platforms are at the same height.

3) After leveling, set the selector switch SA1 (leveling/work) to "work" mode.

Step 7: Install the main ramp and the Secondary ramp.



Step 8: Install the tubing cover.



4.4 Check list after installation

NO.	Acceptance items	Yes	No
1	Tightening torque of expansion bolts 60-80N•		
2	Ascent speed ≥20mm/s;		

3	Rated load, average noise ≤75db;		
4	The measured grounding resistance value is not more than 4Ω;		
5	The height difference between the two platforms after leveling is ≤5mm;		
6	Rated load and two platforms insurance are synchronized and reliable;		
7	Whether the button stops when the hand is		
8	Whether the limit switch is sensitive and		
9	The grounding wire has been connected to the designated position of the control box;		
10	No jitter when the load rises and falls;		
11	No abnormal noise in the load;		
12	There is no oil leakage in the load oil pipe		
13	There is no air leakage in the trachea and trachea joints;		
14	Check whether the fixing bolts, nuts and circlips are loose;		
15	Lifting height 1850mm;		
16	Product warnings, labels, logos and nameplates are complete and clearly visible.		

5. Operation instructions

5.1 Description of operation precautions

5.1.1 Check all oil pipe connections to ensure that no oil leaks before starting work.

5.1.2 It cannot be used if there is a problem with the safety device.

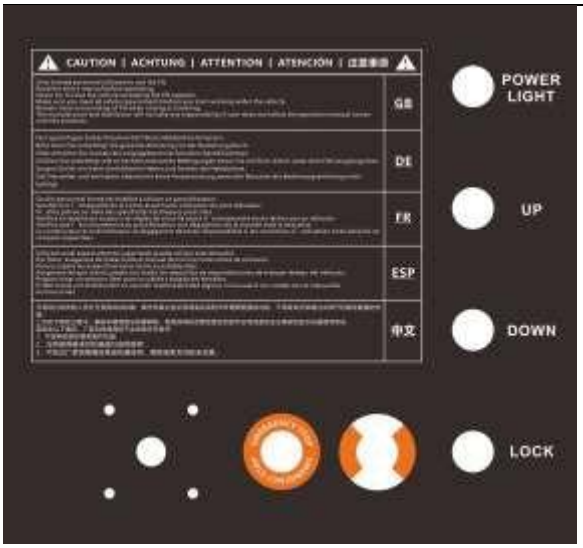
5.1.3 Check whether the center of gravity of the lifted vehicle is in the middle of the lifting platform. If not, adjust the center of gravity before lifting.

5.1.4 During the lifting process, the operator and other related personnel should stand in a safe area.

5.1.5 When the platform is raised to the required height, the operator should turn off the power when leaving the control cabinet to avoid wrong operation by other personnel.

5.1.6 Make sure that the safety lock has been locked in place before proceeding under the vehicle. Make sure that no person is under the car before lifting.

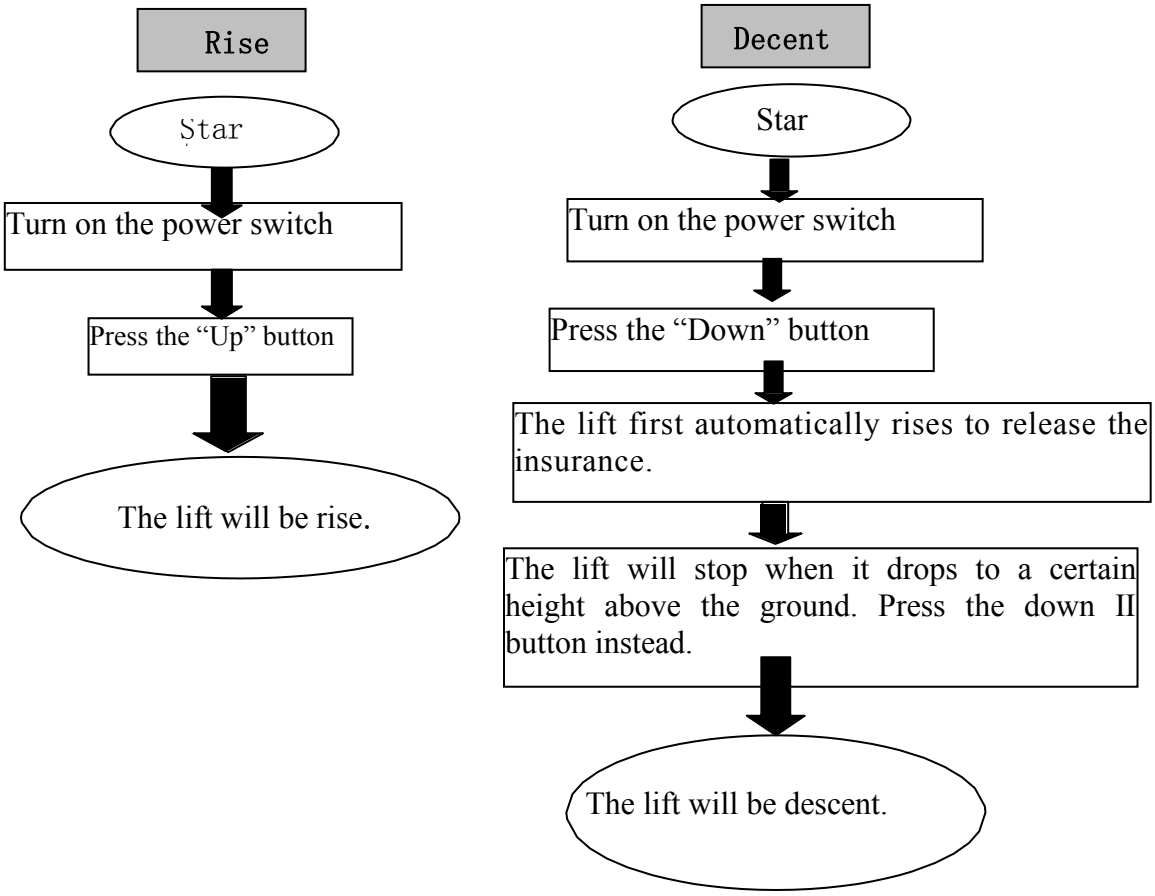
5.2 Operation control panel description



POS.	Name	Function
FA	buzzer	Drop warning
SB1	Up button	Control the ascent
SB4	Lock button	Locking mechanical insurance
SB2	Down I button	Control the descending
SB3	Down II button	Control the descending
SB	Emergency stop switch	Cut off the control power in an emergency
HL	Power Indicator	Show whether the power is on
QS	switch	Power on/off
SA1	switch	Select work/leveling mode
SA2	switch	Choose to use main platform/secondary platform

The work/leveling selection switch is in the control cabinet, and you can see it when you open the cabinet door. In normal working state, the knob points to work.

5.3 Operation flow chart



5.4 Operation step description

To avoid personal injury and property damage, only trained personnel are allowed to operate the lift. After reading the operating instructions, run the lift for several strokes to become familiar with the control system of the lift. It is forbidden to lift only one end or corner of the vehicle, and the lift can only be used to lift the vehicle after it is fastened and stable.

Use the main platform to lift the vehicle. The vehicle can be lifted only when it is parked on the lift platform.

1. Park the lifted vehicle on two platforms to ensure that the vehicle is parked in the correct position, stable and not slipping.

2. Turn the selector switch in the control cabinet to "work" mode.

3. Press the "up" button to slightly raise the lifting platform, and check the stability of the vehicle on the platform again.

4. When the platform is raised to the required height, press the ‘drop lock’ button to lock the mechanical safety lock in place. Turn off the power and check the stability of the vehicle again before maintenance.

Drop the secondary platform

Before descending, check the surrounding area of the lifted vehicle to ensure that there are no people and obstacles.

1. Turn on the power switch

2. Press the ‘down I’ button, and the platform will stop descending when it reaches a safe distance (about 600mm) from the ground.

3. Press the ‘Down II’ button until the platform drops to the lowest point, at which time the machine will emit a descending buzzer warning.

Use the secondary lift trolley to lift the vehicle.
1. Turn the selector switch on the control panel to the ‘small cut’ mode.

2. Place the rubber pad under the lifting point under the vehicle. When it is necessary to use the platform extension plate of the secondary lifting trolley, press the "up" button to slightly raise the secondary lifting platform until it is higher than the shear lifting platform, and then pull out the platform extension plate.

3. Press the ‘up’ button, and when the scissor lifting platform is about to approach the chassis of the vehicle, check again whether the rubber pad under the vehicle is directly below the lifting point of the vehicle.

4. Continue to press the ‘up’ button to the desired height.

The secondary lift platform descends

Note: In the case of using the extension plate of the secondary lift platform, press the 'down I' button until the vehicle tires steadily fall on the main platform and stop pressing the 'down I' button.

1. Turn the selector switch on the control panel to the 'the secondary lift ' mode.

2. Press the 'lower I' button to lower the secondary lift platform.

6. Trouble Shooting

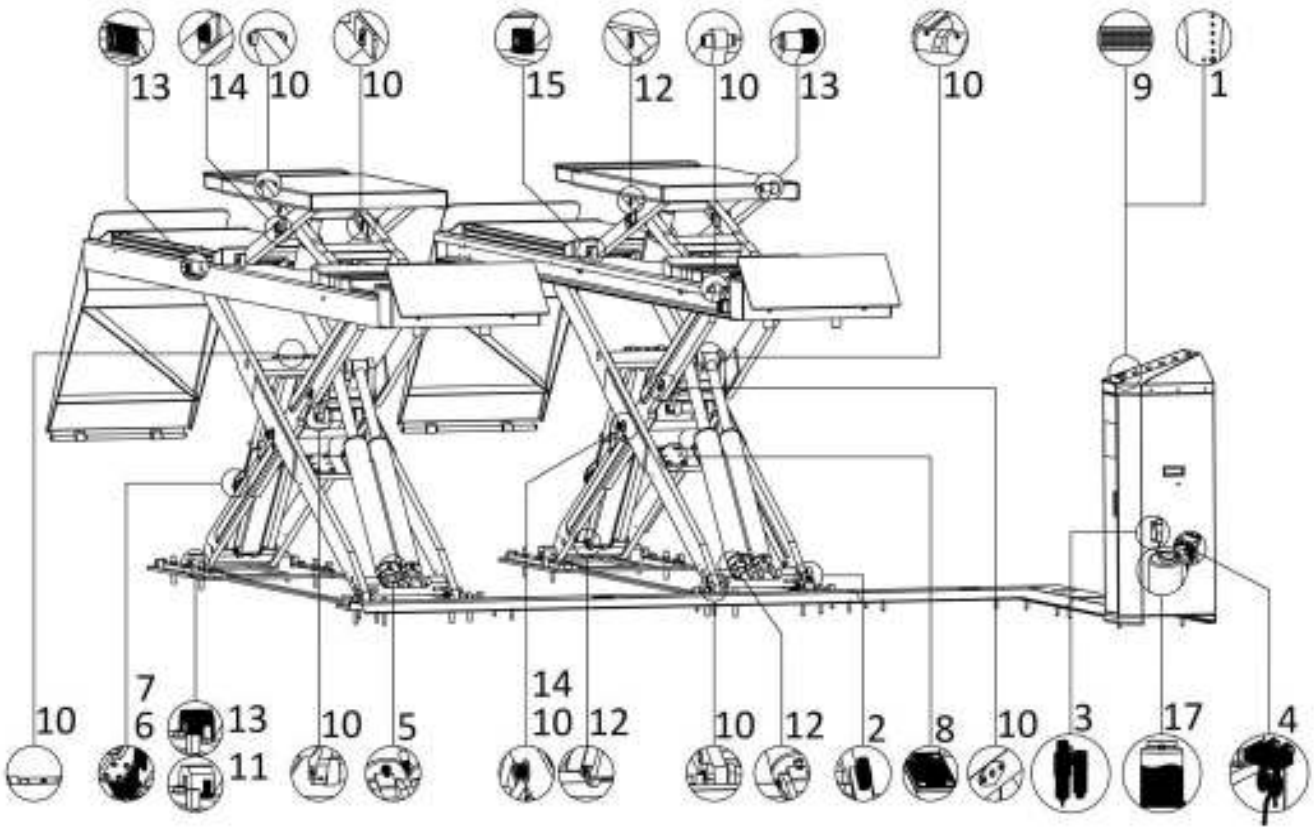
ATTENTION: If the trouble could not be fixed by yourself, please do not hesitate to contact us for help. We will offer our service at the earliest time we can. By the way, your troubles will be judged and solved much faster if you could provide us more details or pictures of the trouble.

TROUBLES	CAUSE	SOLUTION
Motor does not run and will not raise.	The wire connection is loose.	Check and make a good connection.
	The motor is burnt	Replace it.
	The limit switch is damaged or the wire connection is loose.	Connect it or adjust or replace the limit switch.
Motor runs but will not raise.	The motor run reversely.	Check the wire connection.
	Overflow valve is loose or jammed.	Clean or adjust it.
	The gear pump is damaged.	Replace it.
	Oil level is too low.	Add oil.
	The oil hose became loose or dropped off.	Tighten it.
	The cushion valve became loose or jammed.	Clean or adjusts it.
Platforms go down slowly after being raised.	The oil hose leaks.	Check or replace it.
	The oil cylinder is not tightened.	Replace the seal.
	The single valve leaks.	Clean or replace it.

	The overflow valve leaks.	Clean or replace it.
	Manual unloading valve or electromagnetic unloading valve is defective	Clean or replace it.
Raising too slow.	The oil filter is jammed.	Clean or replace it.
	Oil level is too low.	Add oil.
	The overflow valve is not adjusted to the right position.	Adjust it.
	The hydraulic oil is too hot (above 45°).	Change the oil.
	The seal of the cylinder is abraded.	Replace the seal.
Lowering too slow.	The throttle valve jammed.	Clean or replace.
	The hydraulic oil is dirty.	Change the oil.
	The anti-surge valve jammed.	Clean it.
	The oil hose jammed.	Replace it.

7. Maintenance

Easy and low-cost routine maintenance can ensure the lift work normally and safely. Following are requirements for routine maintenance. You may choose the frequency of routine maintenance by consulting your lift's working conditions and time.It is recommended to use No. 1 lithium grease for lubrication.



NO.	Overhaul items	Method	Cycle time
1	Control button	Check whether the function of the control button is correct, click the button, hand press to work, and hand off to stop working.	Everyday
2	Limit switch	Press the up button to check and make sure that the lifting platform stops ascending after reaching the highest lifting height.	Everyday
3	Pneumatic filter	Listen and check the filter to make sure there is no air leak. Check to make sure that the water level is below the highest level and the oil level is above the lowest level.	Everyday
4	Hydraulic valve block and valve	Check and make sure that there is no leakage before use.	Everyday
5	Hydraulic tubing and joints	Check and make sure that there is no leakage before use.	Everyday
6	Pneumatic tubing and joints	Check and make sure that there is no leakage before use.	Everyday
7	Mechanical safety lock	Press the lock and rise buttons to check whether the mechanical locks on both sides can be locked and unlocked simultaneously.	Everyday
8	Start turntable pad	Check and add lubricating oil to ensure smooth operation.	Once a month
9	Terminals	Open the control cabinet, check the wiring terminals, and find that the loose terminals should be tightened.	Once every three months
10	Joint axis	Oil cup injection lubricant.	Once every three months
11	Expansion bolt	The torque is checked, and the torque is not less than 80n.m for the bolt of M18; the torque is not less than 60n.m for the bolt of M16.	Once every three months
12	Self-locking nuts	The torque is inspected with a torque wrench, and the torque should not be less than 330n.m.	Once every three months
13	Scissor holder	The torque is inspected with a torque wrench, and the torque should be not less than 55n.m.	Once every three months
14	Platform synchronization	Check the synchronization of the lifting and drop to ensure that the lifting is synchronized and then put into use.	Everyday
15	Hydraulic oil	It is recommended that the hydraulic oil is replaced 6 months after the initial investment, and it will be replaced once a year. Check the cleanliness of hydraulic oil, if the hydraulic oil is black or impurities in the oil barrel, it will be replaced immediately.	Every year

16	Whole lift	End or load runs to raise a lift, and the lift should be smooth and smooth, no abnormal sound. Check the synchronization of two platforms. Ensure that the two platforms are synchronized.	Once every three months

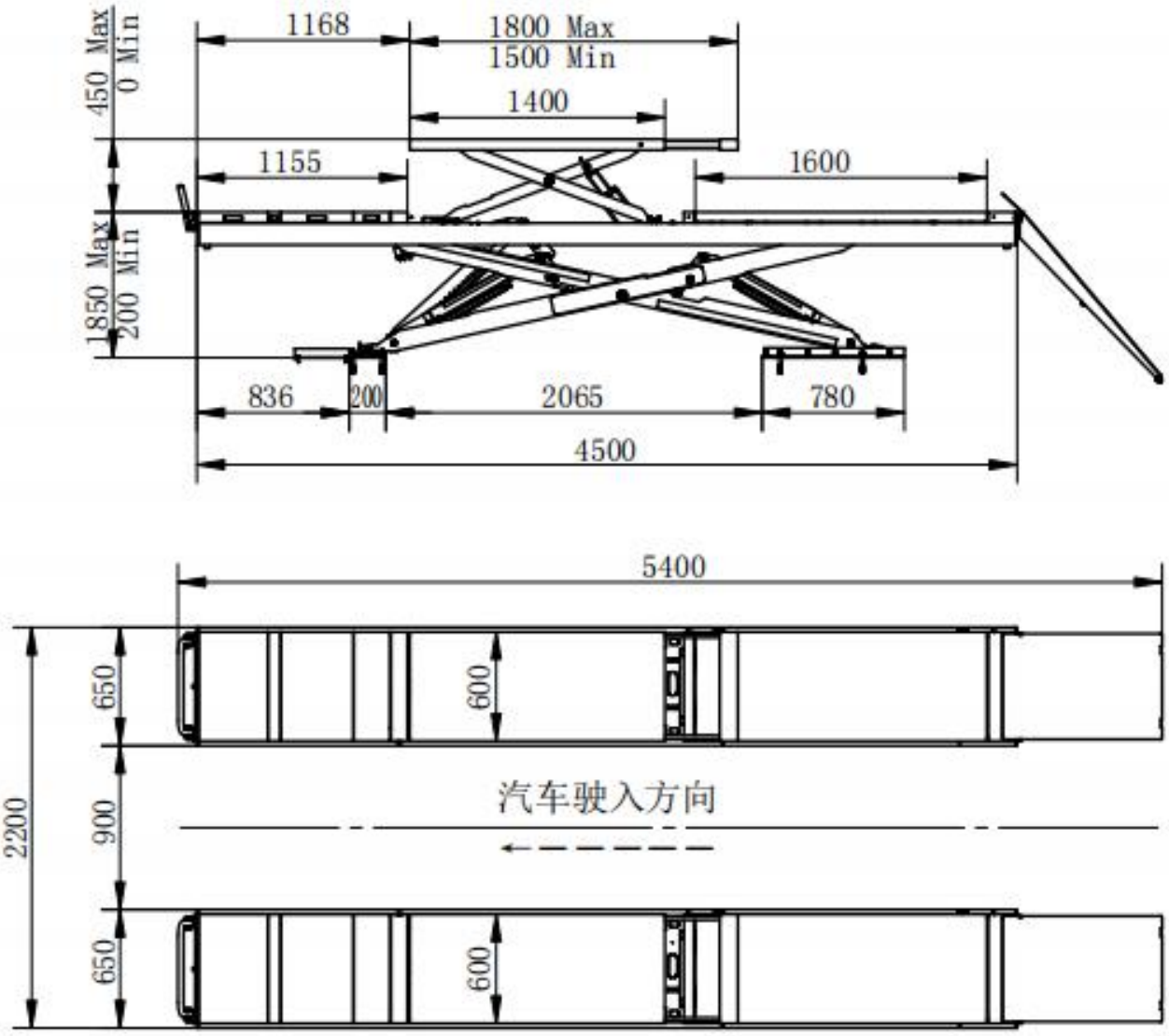
Reminder: Strictly follow the requirements of the machine to extend the service year of the machine, and it is advantageous for the machine to be normal working, and to a large extent to avoid accidents.

8. ANNEX

Annex 1. Floor plan

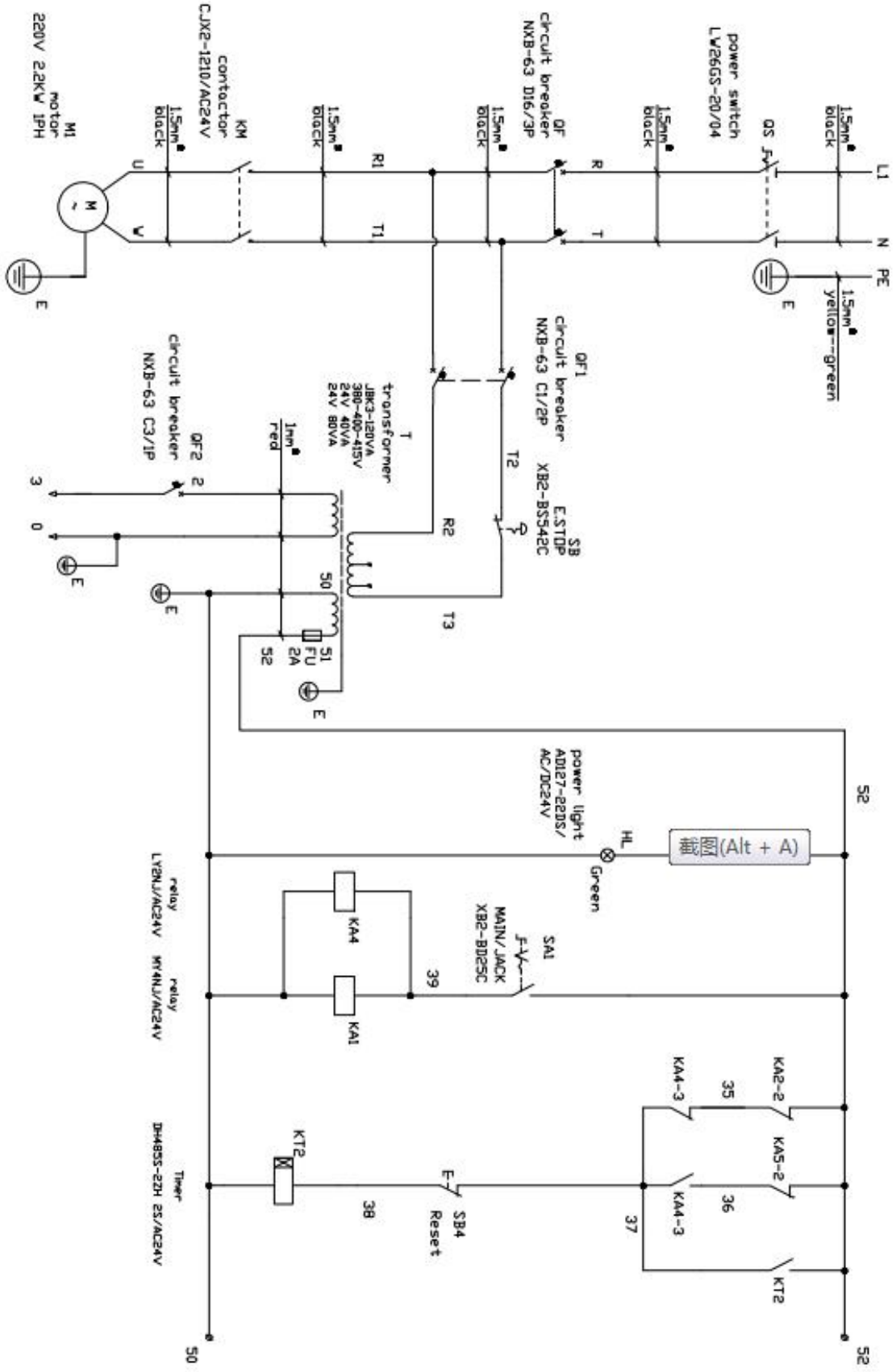
Skills requirement:

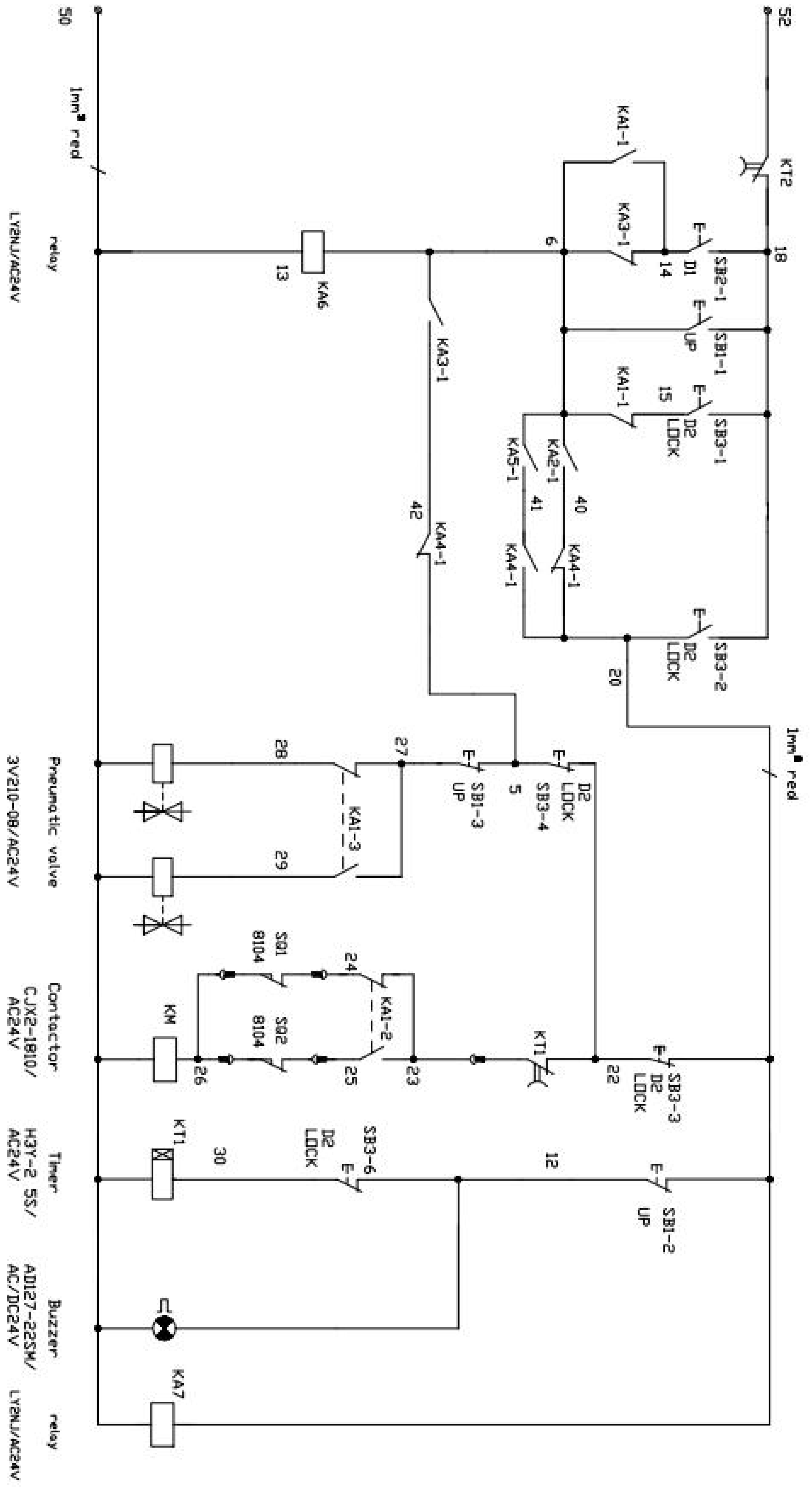
1. Concrete type C20/C25, drying period is 20 days;
2. Clear the inner surface of the foundation pit, and the thickness of the concrete at the bottom of the pit ⩾ 150mm;
3. The horizontal accuracy in the two foundation pits is less than or equal to 5mm;
4. Pre-embedded angle iron L40 edging around the pit;
5. If the installation site unconditionally connects the drainage pipe to the sewer, a puddle should be made.

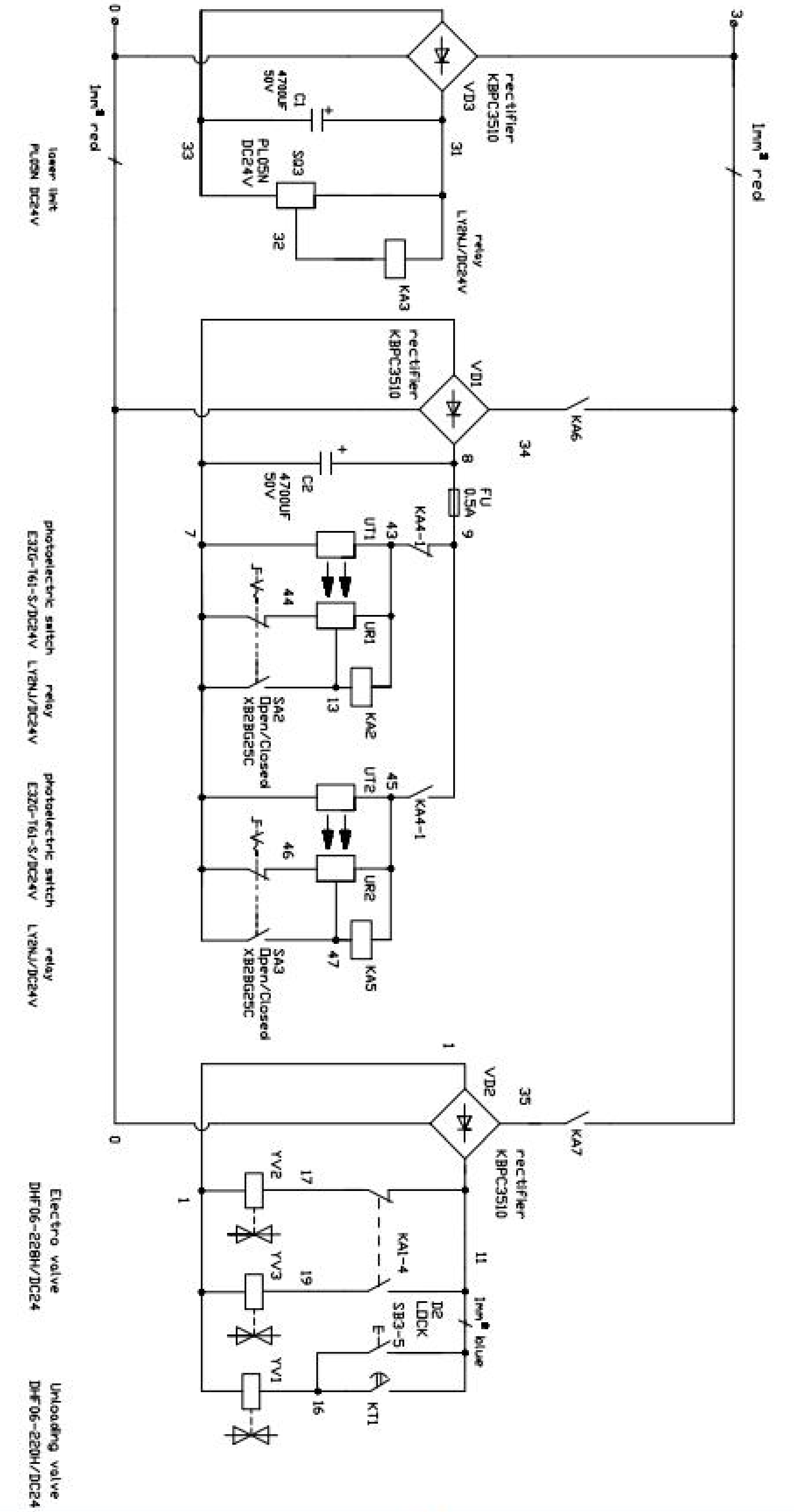


Annex 2. Electrical schematic diagram and component list

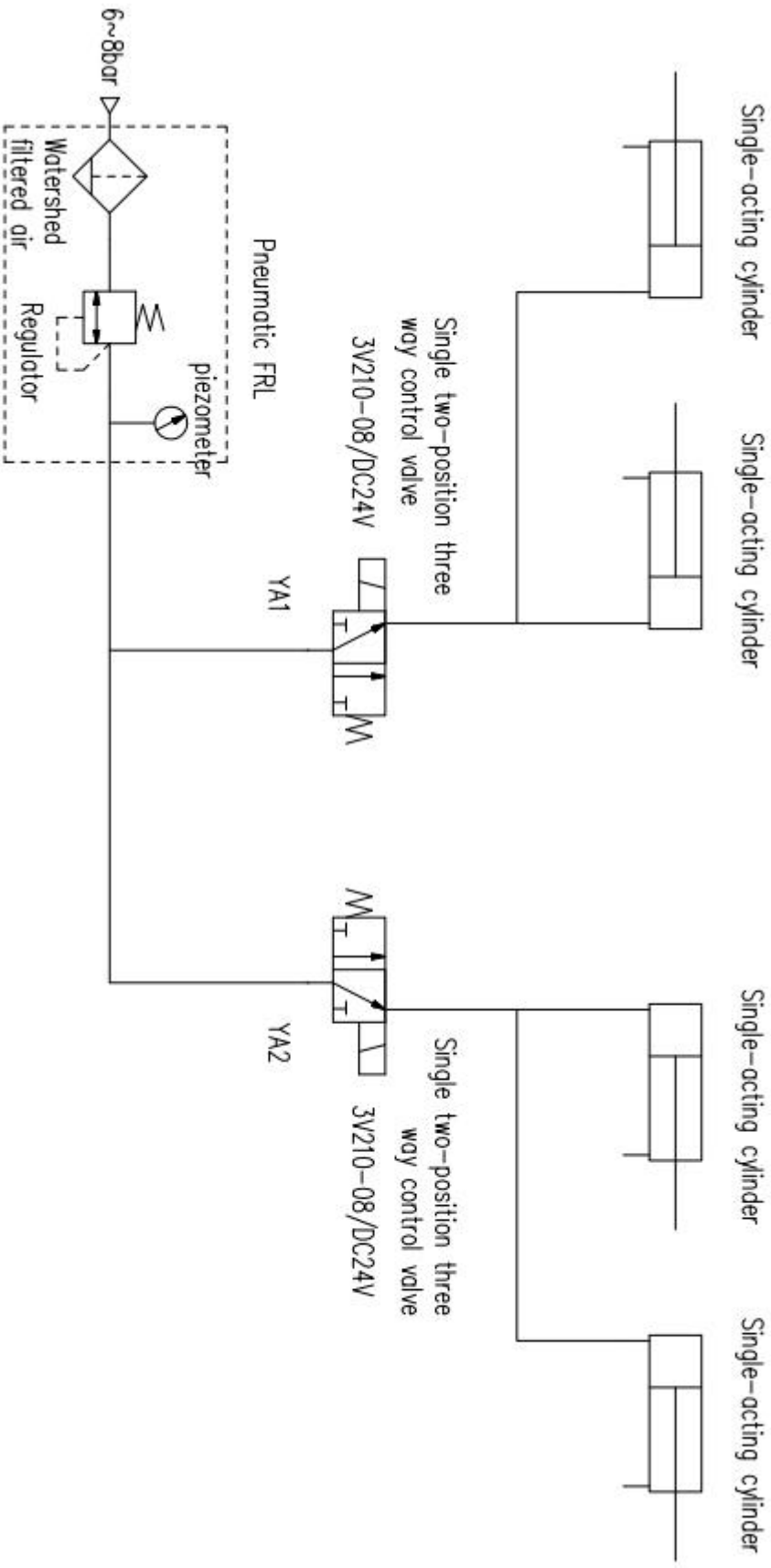
1. Single phase



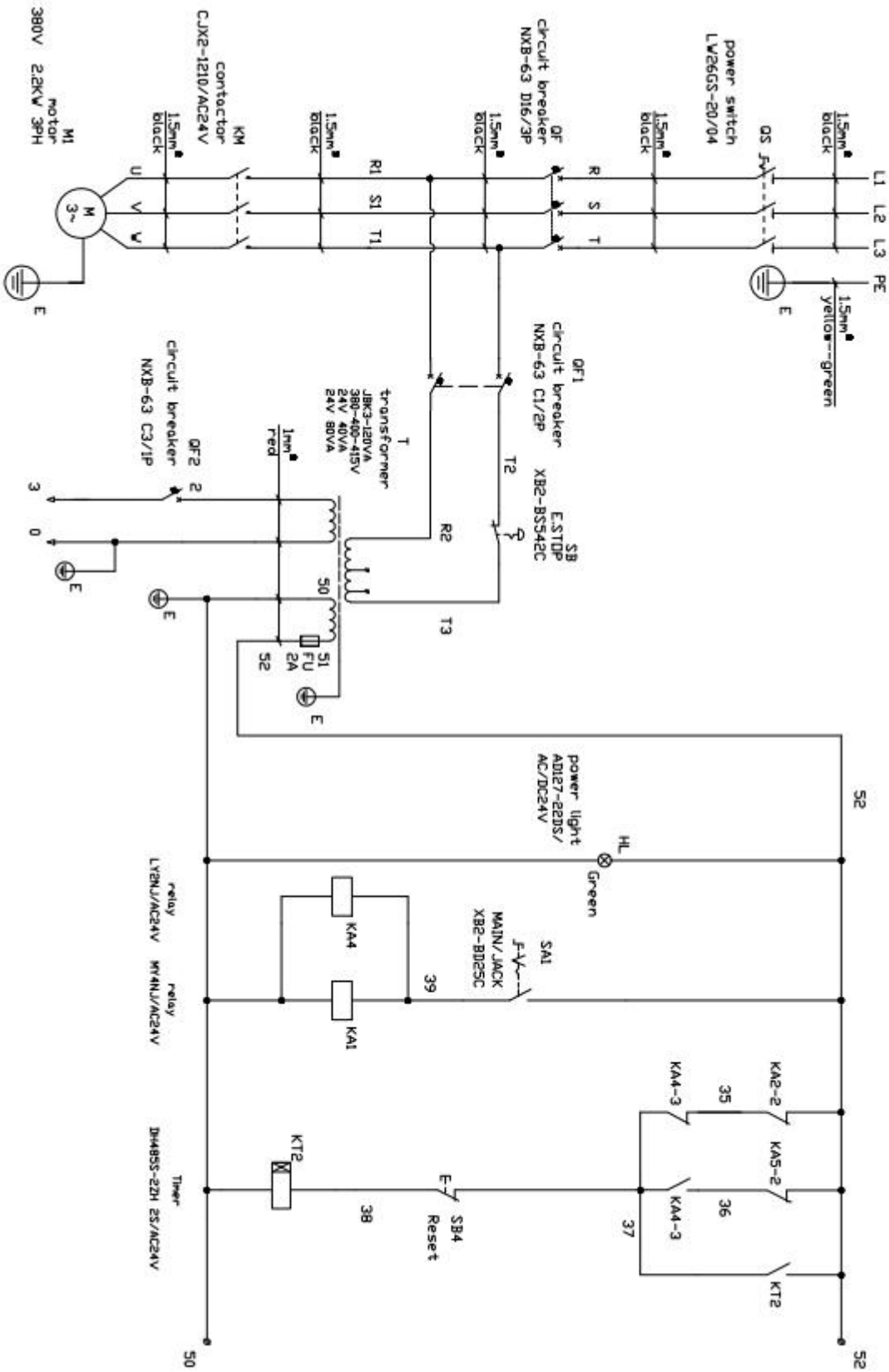

50
52
1mm² red
relay
LY2NJ/AC24V
KA6
KT2
KA1-1
KA3-1
SB2-1
D1
SB1-1
UP
SB3-1
D2
LOCK
KA2-1
KA5-1
KA4-1
SB3-2
SB3-4
SB1-3
KA1-3
Pneumatic valve
3V210-08/AC24V
SQ1
SQ2
8104
KA1-2
KT1
SB3-3
KM
Contactor
CJX2-1810/
AC24V
SB3-6
SB1-2
Timer
H3Y-2 5S/
AC24V
Buzzer
AD127-22SM/
AC/DC24V
KA7

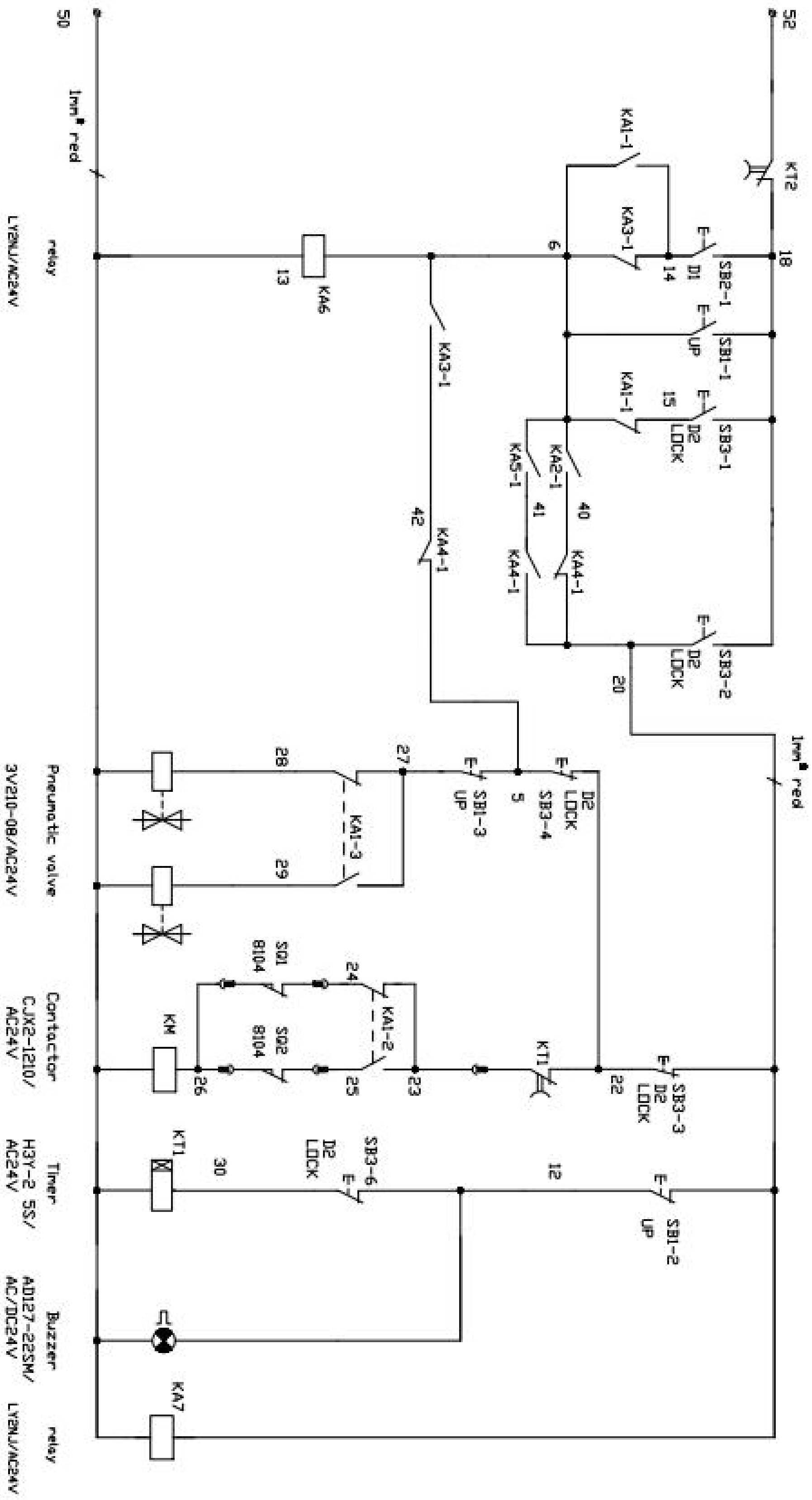

rectifier
KBPC3510
VD3
C1
4700UF
50V
SQ3
PL05N
DC24V
relay
LY2NJ/DC24V
KA3
1mm² red
laser limit
PL05N DC24V
VD1
KA6
C2
4700UF
50V
FU
0.5A
KA4-1
UT1
UR1
KA2
SA2
Open/Closed
XB2BG25C
photoelectric switch
E3ZG-T61-S/DC24V
UT2
UR2
KA5
SA3
VD2
KA7
YV2
YV3
YV1
KA1-4
D2
LOCK
SB3-5
1mm² blue
KT1
Electro valve
DHF06-228H/DC24
Unloading valve
DHF06-220H/DC24

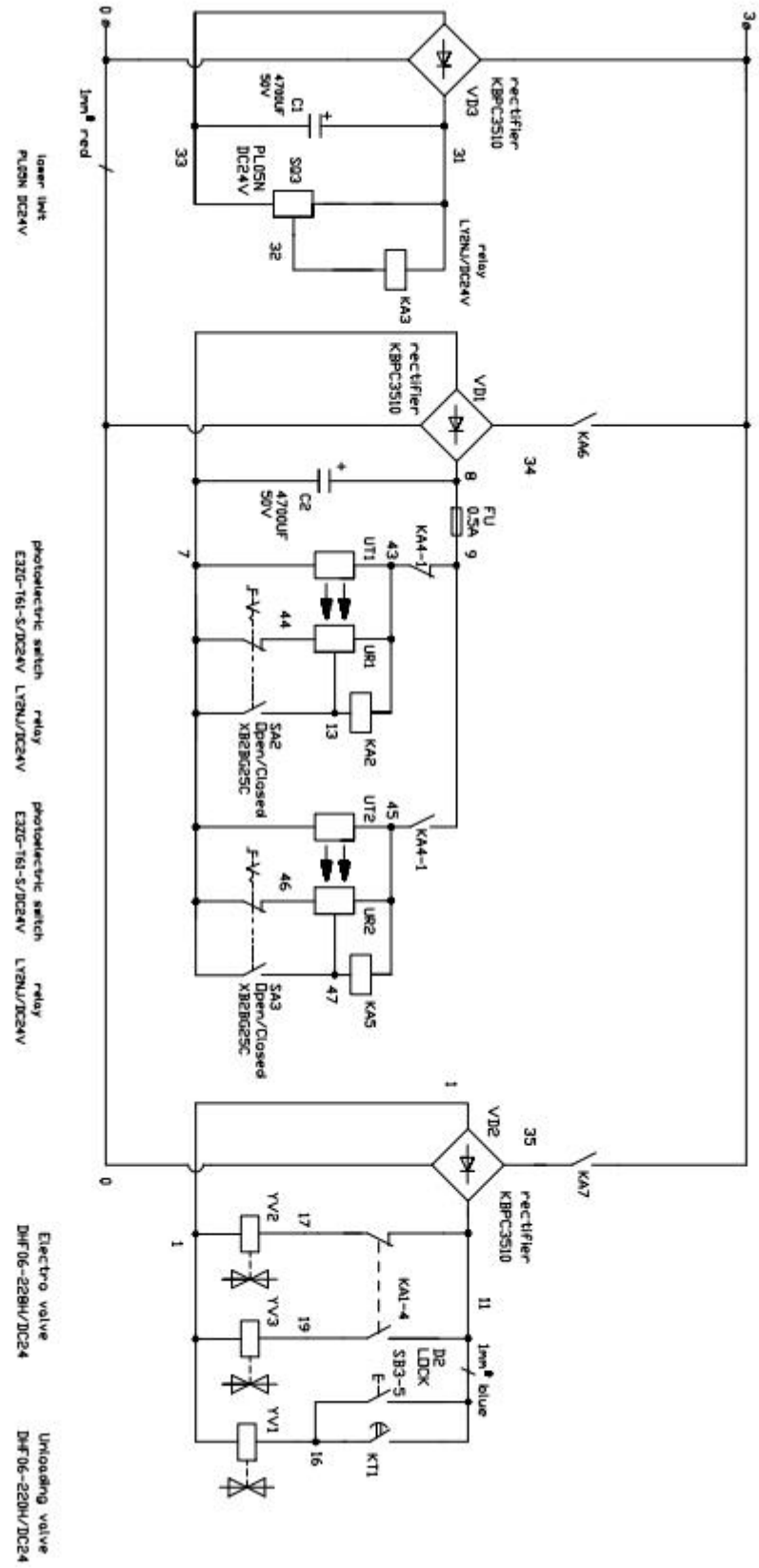
Pneumatic schematic diagram.



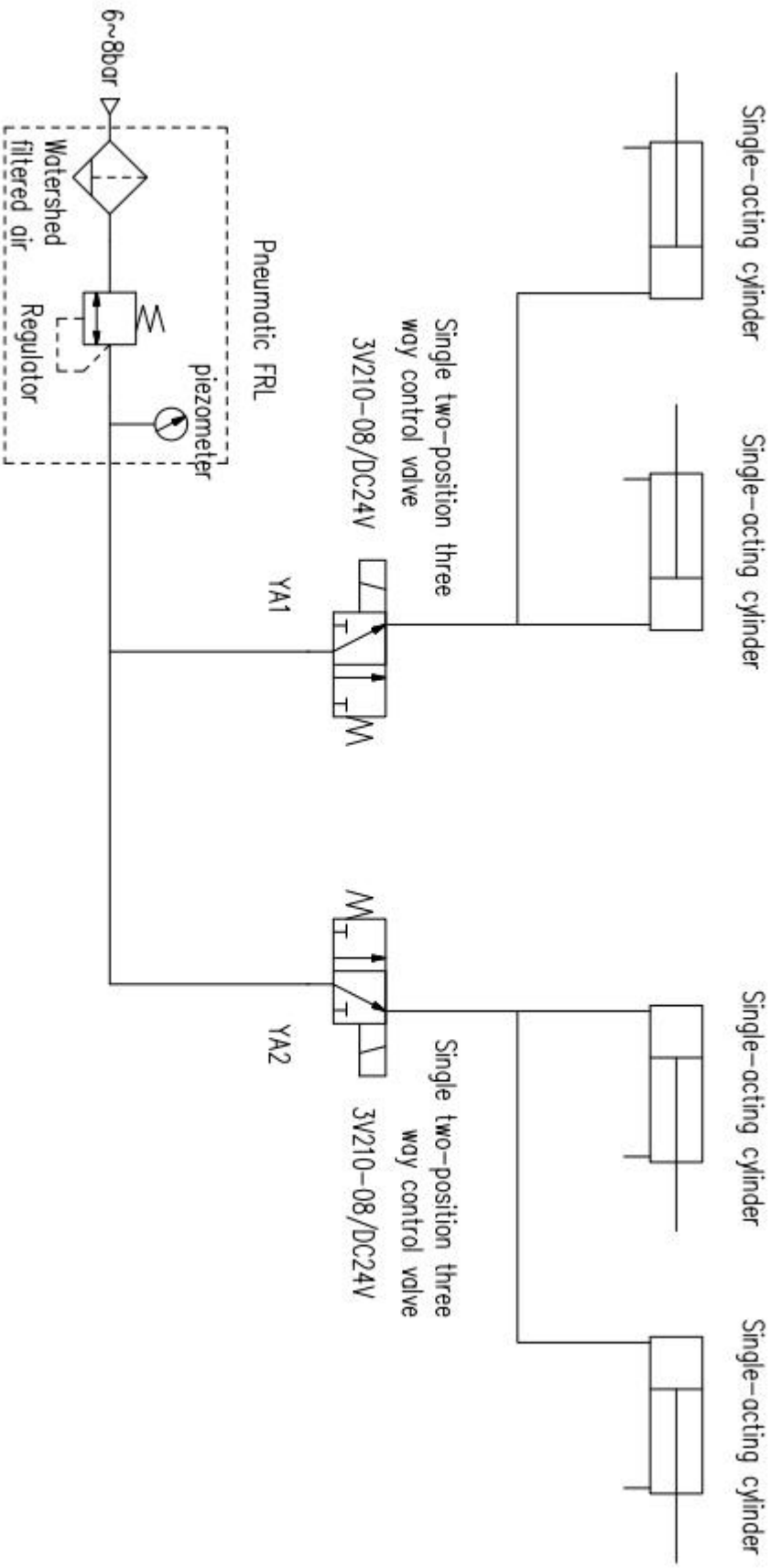
THREE PHASE：

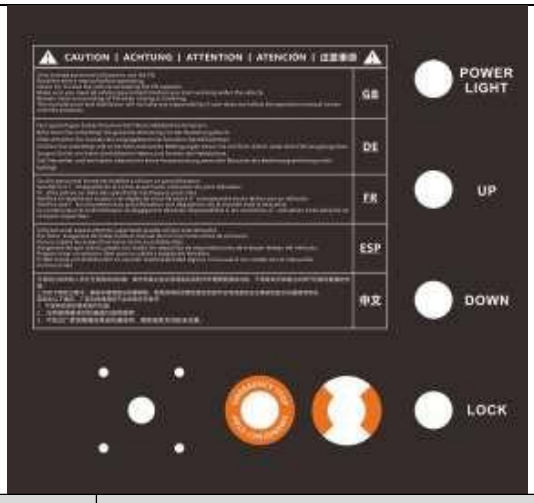

M1
motor
380V 2.2KW 3PH
KM
contactor
CJX2-1210/AC24V
QF
circuit breaker
NXB-63 D16/3P
QS
power switch
LW26GS-20/04
L1 L2 L3 PE
1.5mm
black
yellow--green
U V W
R1 S1 T1
R S T
QF1
circuit breaker
NXB-63 C1/2P
QF2
circuit breaker
NXB-63 C3/1P
T
transformer
JBK3-120VA
380-400-415V
24V 40VA
24V 80VA
1mm
red
T2 T3
R2
SB
E.STOP
XB2-BS542C
50
51
FU
2A
52
power light
AD16-22DS/
AC/DC24V
HL
Green
SA1
MAIN/JACK
XB2-BD25C
39
KA4
KA1
relay
LY2NJ/AC24V
MY4NJ/AC24V
KA4-3
KA2-2
KA5-2
35
36
37
KT2
Timer
DH48S-2ZH 25/AC24V
38
SB4
Reset
0
3


50
52
1mm² red
KT2
KA1-1
KA3-1
SB2-1
D1
14
18
6
KA6
13
relay
LY2NJ/AC24V
KA3-1
SB1-1
UP
KA1-1
15
SB3-1
D2
LOCK
KA2-1
KA5-1
40
41
42
KA4-1
SB3-2
D2
LOCK
20
1mm² red
28
27
KA1-3
29
SB1-3
UP
5
SB3-4
D2
LOCK
Pneumatic valve
3V210-08/AC24V
24
SQ1
8104
KA1-2
SQ2
8104
KM
26
25
23
KT1
22
SB3-3
D2
LOCK
Contactor
CJX2-1210/
AC24V
KT1
30
SB3-6
D2
LOCK
12
SB1-2
UP
Timer
H3Y-2 5S/
AC24V
Buzzer
AD127-22SM/
AC/DC24V
KA7
relay
LY2NJ/AC24V


rectifier KBPC3510
VD3
C1 4700UF 50V
PL05N DC24V
S03
relay LY2NJ/DC24V
KA3
rectifier KBPC3510
VD1
KM6
C2 4700UF 50V
FU 0.5A
KA4-1
UT1
UR1
KA2
SA2 Open/Closed XB2BG25C
UT2
KA4-1
UR2
KA5
SA3 Open/Closed XB2BG25C
VD2
rectifier KBPC3510
KA7
YV2
YV3
YV1
KA1-4
SB3-5
D2 LOCK
KT1
1mm² red
1mm² blue
inner unit PL05N DC24V
photoelectric switch E3ZG-T61-S/DC24V
relay LY2NJ/DC24V
photoelectric switch E3ZG-T61-S/DC24V
relay LY2NJ/DC24V
Electro valve DHF06-228H/DC24
Unloading valve DHF06-220H/DC24

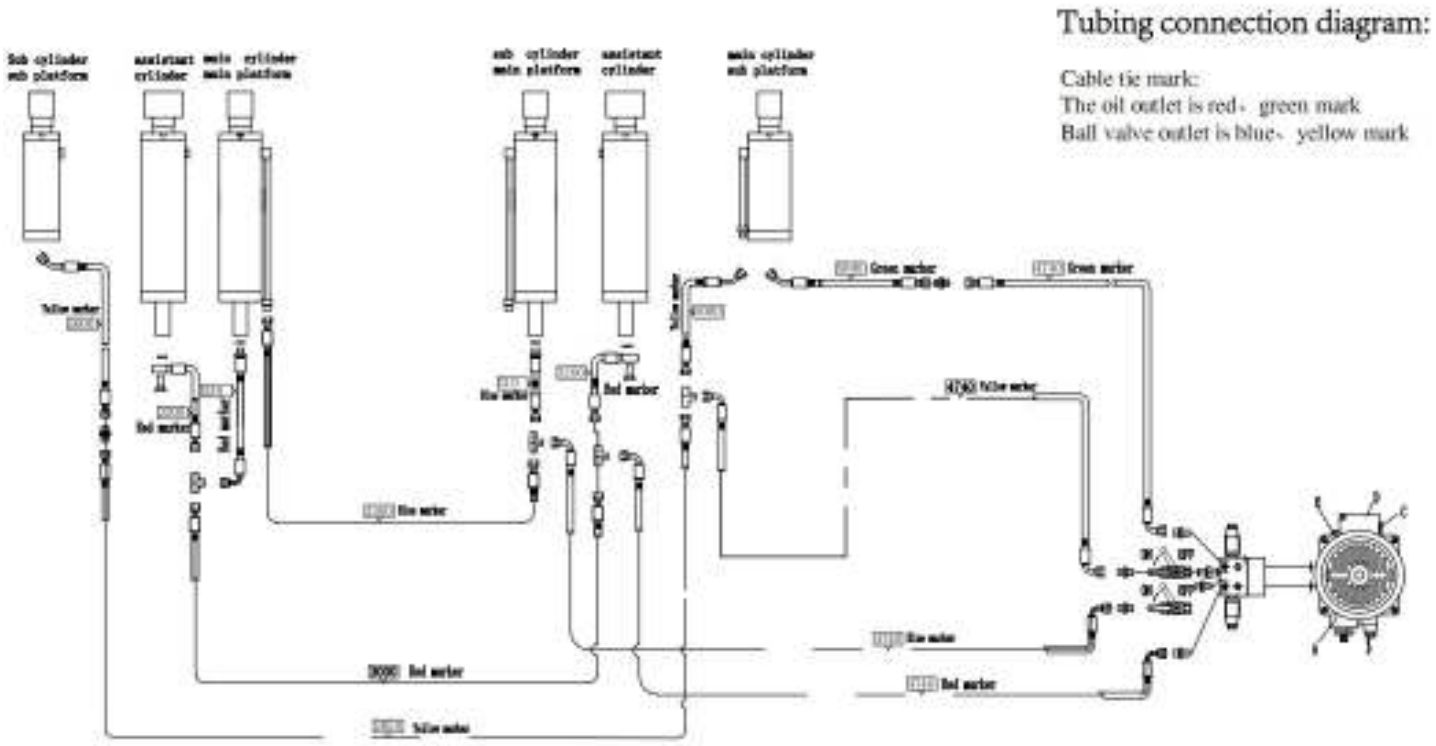
Pneumatic schematic diagram.



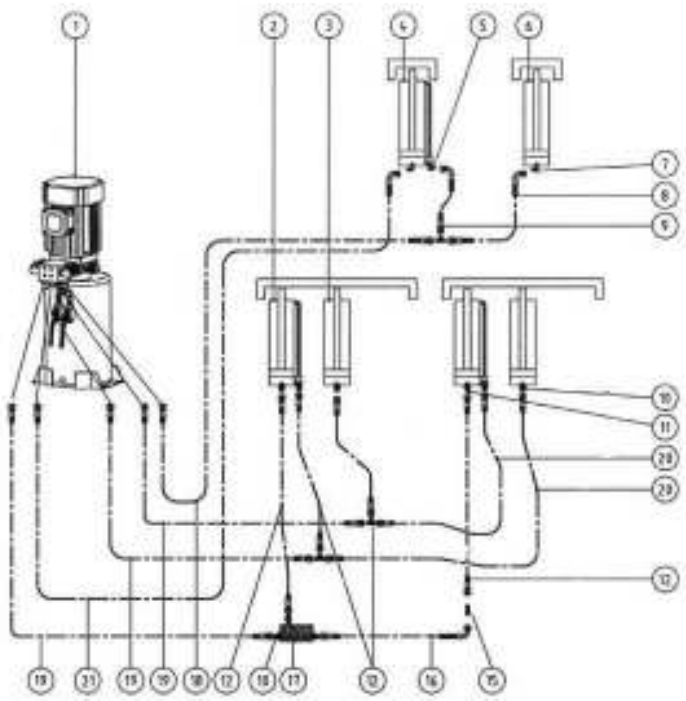


No.	Name	Specification	Qty
T	transformer	JBK3(JBK5)－100VA 380V－	1
M	Aluminum motor	380V－3.5KW Aluminum －3PH－	1
SQ1	Limit switch	D4MC－5020	1
SQ2	Limit switch	TZ8108	1
SQ3	Proximity switch	PL05－N Red/1.8M	1
SA1	Selection switch (2	AR22PR－220B	1
SA2	Selection switch (2	AR22PR－211B	1
QS	Combination Switch	LW26GS－20/04	1
SB1,SB	Button	AR22F0R－20－W	2
SB3,SB	Button	AR22F0R－31－W	2
SB	emergency button	XB2BS542C	1
	Ground terminal block	4 位	1
	Terminals	VK－5N(UK－5N)	18
	Baffle	LT－2.5	2
KA2;KA	Relay	HH54P－L/DC24V（MY4NJ)	2
KA1	Relay	HH54P－L/AC24V(MY4NJ)	1
	Relay Block	PYF－14A－E	3
	Relay foot buckle		6
KT	Integrated time relay	ZYS11－A(AC24V 5S)	1
QF	breaker	DZ47－63C16/3P	1
QF1	breaker	DZ47－63C1/1P	1
QF2	breaker	DZ47－63C6/1P	1
KM	AC contactor	CJX2－1810/AC24V	1
C	capacitance	4700UF/50V	1
VD	Bridge rectifier	KBPC5A－35A	1
HL	Indicator light	AD17－22G－AC24 Green	1
FA	Flash buzzer	AD17－22SM/DC24	1
SA	Rocker switch (optional)		4
	LED light (optional)	AC24－15W－16cm Spiral + three	4

Annex 3. Hydraulic schematic diagram and component list

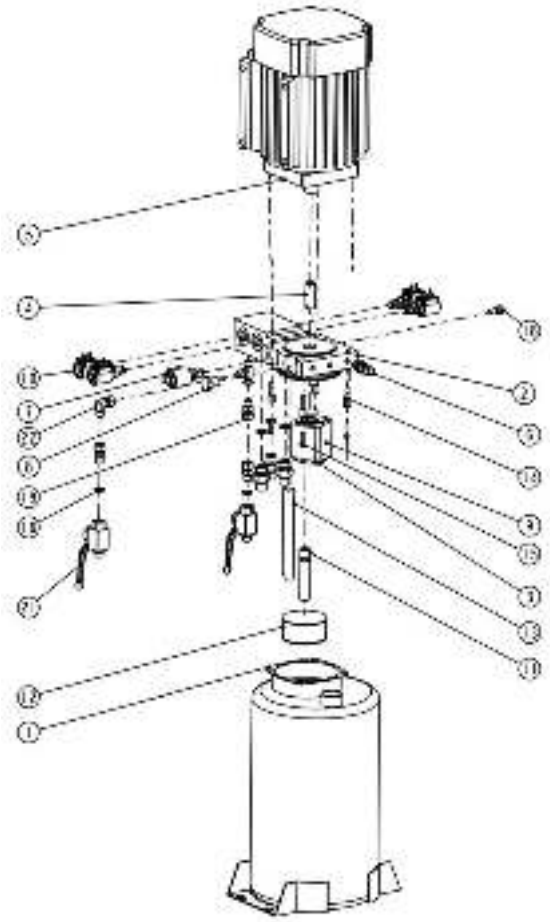


1. Oil drum
2. Suction filter
3. Gear pump
4. Coupling
5. AC motor
6. Combination valve block
7. Cushion valve
8. Overflow valve
9. Check valve
10. Electromagnetic unloading valve
11. Flow control valve
12. Air breathing apparatus
13. Leveling solenoid valve
14. Four-way joint
15. High-pressure two-way ball valve



No.	Name	Specification	Qty
1	6604V2.WF Pumping Station	380V-3Ph-50HZ-3.5KW domestic	1
2	Big shear main cylinder		2
3	Big shear auxiliary cylinder		4
4	Small shear main cylinder		1
5	Right Angle Connector		1
6	Small shear auxiliary cylinder		1
7	Right Angle Connector		2
8	ϕ6R1AT rubber tubing	ϕ6R1AT steel wire tube, L=5000mm, one end is straight	2
9	ϕ6R1AT rubber tubing	ϕ6R1AT steel wire pipe, L=3200mm, one end is straight through, one end is single bend	2
10	Pipe joint B		8
11	Throttle through valve		4
12	Rubber tubing	Φ6 steel wire pipe, L=320mm, straight through at both ends	4
13	Straight joint	G1/4-G1/4 inner cone	2
14	Rubber tubing	Φ6 steel wire pipe, L=2850mm, both ends are straight through	1
15	Tee connector	6603B-A9-B7	4
16	Rubber tubing (diameter ϕ6)	Φ6 rubber tube, L=3000mm, one end is straight through, one end is single bend	1
17	Four-way joint (after galvanizing)	6604B-A29	1
18	ϕ6R1AT rubber tubing	ϕ6R1AT steel wire tube, L=3300mm, straight through at both ends	1

19	Rubber tubing (diameter ϕ6)	Φ6 steel wire pipe, L=4740mm, one end is straight through, one end is single bend	3
20	Rubber tubing	Φ6 steel wire tube, L=310mm, both ends are straight through	2
21	ϕ6R1AT rubber tubing	ϕ6R1AT steel wire pipe, L=5000mm, one end is straight through, one end is single bend	1
22	Rubber tubing	Φ6 rubber tube, L=4740mm, one end is straight through, one end is single bend	1



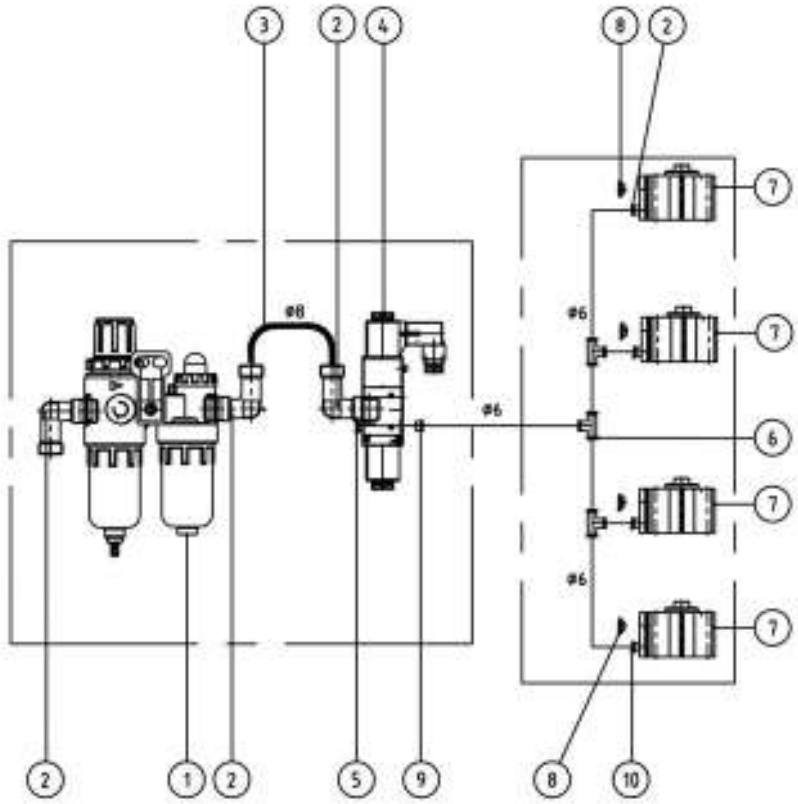
No.	Name	Specification	Qty
1	18L iron oil drum	18L	1
2	Combination valve block	6603GN-E	1
3	Gear pump components	CBK - F225/CBK - 2.5F	1
4	Coupling (spline connection sleeve)	YL - A	1
5	Motor	380V - 3.0KW - 50HZ - 2P - 3PH	1
6	Relief valve	EYF - C	1
7	Electromagnetic unloading valve	DHF06 - 220H/DC24	1
8	Check valve	DYF-C	1

9	Shock valve	HZYF - C1	1
10	Leveling solenoid valve	DHF06 - 228H/DC24	4
11	Suction pipe	XYGN - L293 nylon 66, total length	1
12	Suction filter	YG - C	1
13	Oil return pipe	YH-D	1
14	Oil drum mounting screws	M6*30, mounting screw for oil drum	4
15	Hexagon flange bolts	M5*10	4
16	Combination washer	M14	6
17	Straight joint	G1/4-G1/4 inner cone	3
18	Throttle valve	-	1
19	Three-way connector	6604 - TM14X1.5MT	3
20	End adjustable to straight-through	6604-BJMSC-G1/4	1
21	Two-way high pressure ball valve	GE2G1/4111AB	2
22	Adjustable end right angle connector	EW-G1/4SR-G1/4 I60	1

Sealing ring

No.	Name	Specification	Qty	category
1	Y-shaped sealing ring	B7 - 90*75*9	2	Main cylinder
2	Y-shaped sealing ring	BS50*60*6	2	Main cylinder
3	Dust ring	DHS50（50*58*6）	1	Main cylinder
1	Y-shaped sealing ring	B7 - 75*60*9	1	Secondary cylinder
2	Dust ring	DHS45（45*53*6）	1	Secondary cylinder
1	Y-shaped sealing ring	B7 - 100*85*9	2	Jack cylinder
2	Y-shaped sealing ring	BS60*70*6	2	Jack cylinder
3	Dust ring	DHS60（60*68*6）	1	Jack cylinder
1	Y-shaped sealing ring	B7 - 80*65*9	1	Jack Secondary cylinder
2	Dust ring	DHS45（45*53*6）	1	Jack Secondary cylinder

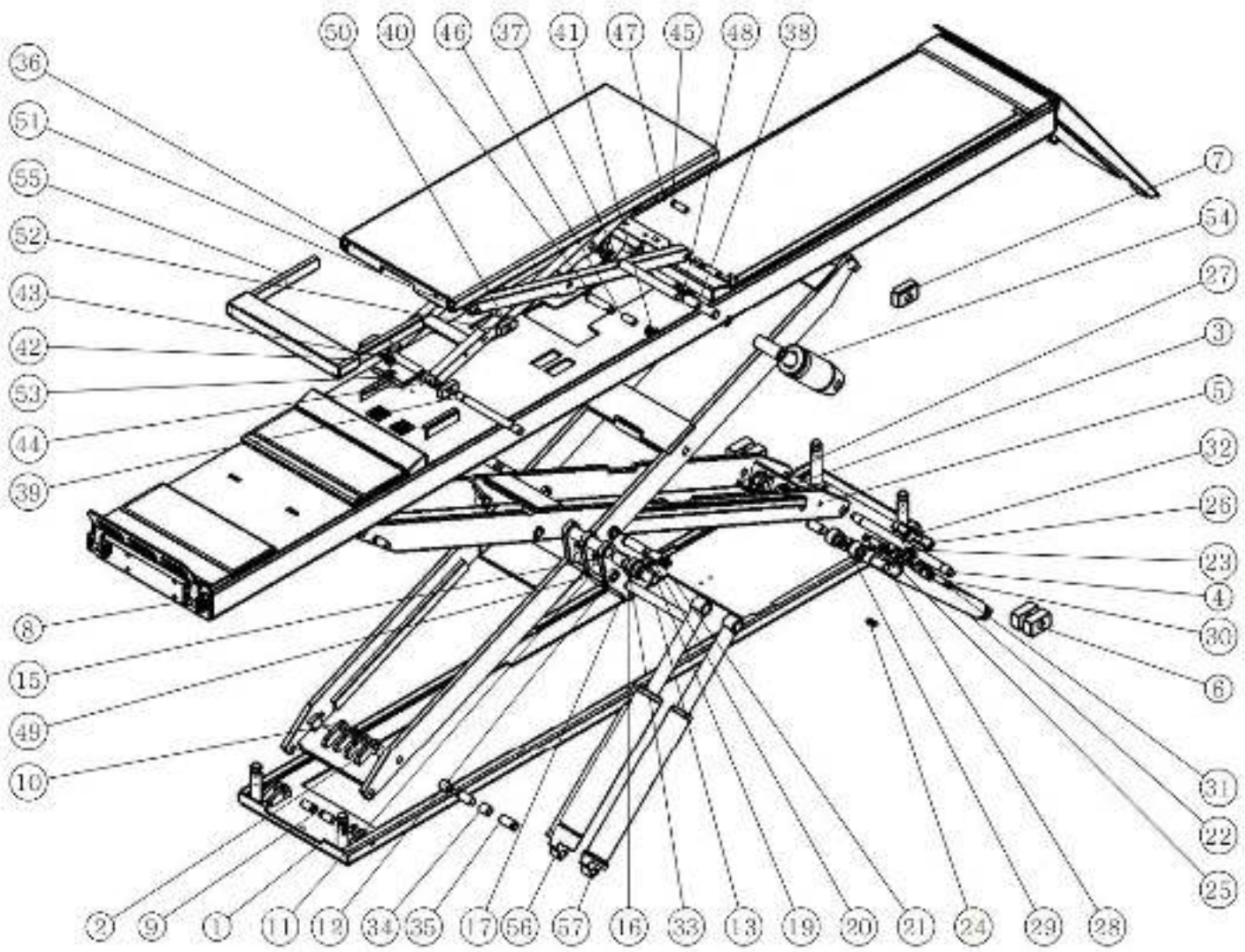
Annex 4. Pneumatic schematic diagram and component list



No.	Name	Specification	Qty
1	AFC Duplex	AFC2000	1
2	Quick twist elbow pipe joint	KLL8 - 02	3
3	trachea	DE8	1
4	Pneumatic solenoid valve	3V210 - 08DC24V	1
5	Silencer	SLM02 R1/4 (M12)	1
6	Quick twist three-way air pipe joint	KLE - 6	3
7	Cylinder	CQ2B32*30D Double acting	4
8	Silencer	ShortSLM01 R1/8 (M8)	4
9	Quick-twist straight vent pipe joint	KLC6 - 02	1
10	Quick-twist straight vent pipe joint	KLC6 - 01	4

Annex 5. Mechanical explosion diagram and component list attachment

Main lift

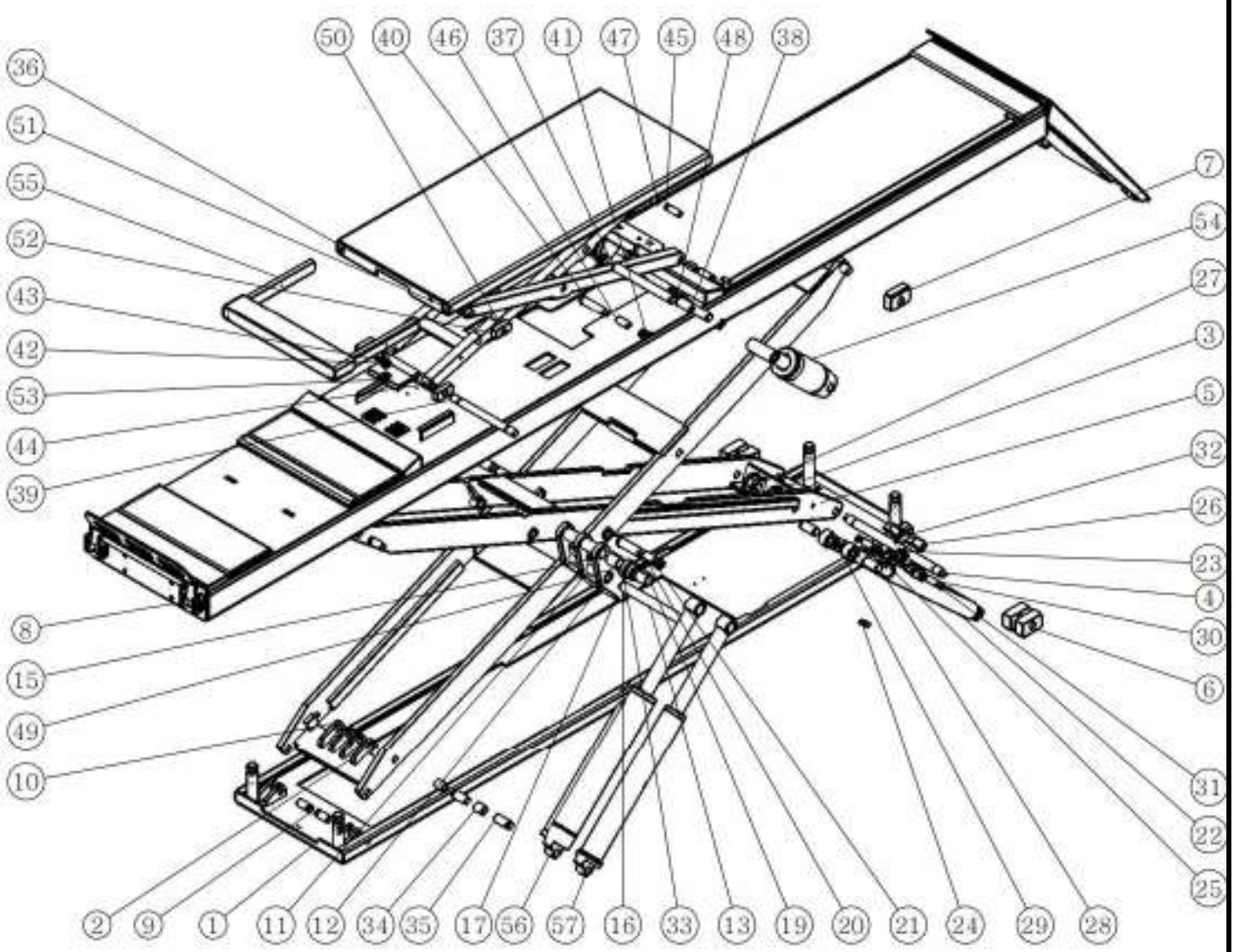


No.	Drawing	Name	Quantity	Remakes
1	ON-7804B-A1-B1-C0	Base assembly	1	
2	ON-7804B-A2-B0-C0B	Outer arm welding (6 cylinders)	1	
3	ON-7804B-A3-B0-C0B	Welding of the support arm in the main	1	
4	ON-7804B-A0-B0-C8	Lower slide fixed shaft	1	
5	ON-7804B-A0-B0-C7	Lower slide spacer	1	
6	ON-7804-A0-B0-C6	(Plate type) lower slider	4	
7	ON-7804-A0-B0-C21	Slider	2	
8	ON-7804B-A6-B0	Platform assembly	1	
9	ON-7804B-A0-B0-C15	Lower shaft of outer support arm	4	
10	GB/T 79	Hexagon socket head set screw M8*12	12	
11	7140-01000	Power arm welding	1	

12	SF-2Y-3245	Oil-free bushing of booster arm	2	
13	ON-7804B-A0-B0-C14	Booster arm shaft	1	
14	GB/T 894.2	Circlip for shaft 32	2	
15	ON-7804B-A0-B0-C10	Booster arm upper shaft	1	
16	ON-7804B-A0-B0-C11	Bottom shaft of booster arm	1	
17	ON-7804B-A0-B0-C25	Booster wheel	2	
18	SF-2Y-3072	Oil-free bushing of booster wheel	2	
19	ON-7804B-A0-B0-C16	Bottom axis	2	
20	SF-2Y-3053	Oil-free bushing of inner arm bottom	2	
21	GB/T 6172.2	Self-locking nut M24	2	
22	ON-7804B-A11-B0B	Lock storage welding body	1	
23	SSA16-15	Miniature cylinder (automatic reset)	1	
24	GB/T 818	Cross recessed pan head screw M5*12	4	
25	ON-7804B-A11-B3-C0B	Safety tooth welding body	2	
26	ON-7804B-A11-B4-C0B	Safety hook welded body	1	
27	ON-7804B-A0-B0-C26	Insurance lower shaft	2	
28	ON-7804B-A0-B0-C27	Insurance on the shaft	2	
29	GB/T 894.2	Circlip for shaft 30	6	
30	ON-7804-A11-B0-C4	Cylinder fixed shaft	2	
31	GB/T 894.2	Shaft retaining ring 20	4	
32		Tension spring	1	
33	ON-7804B-A5-B0-C4	Booster arm spacer	2	
34	SF-2Y-2840	Oil-free bushing of lower cylinder head	2	
35	ON-7804-A0-B0-C12	Outer arm cylinder shaft	2	
36	ON-7804-A7-00	Secondary outer arm welding	1	
37	ON-7804B-A0-B0-C19	Sub-shear cylinder upper shaft	1	
38	GB/T 894.2	Circlip for shaft 25	2	
39	ON-7804-A7-B0-C10	Lower shaft of shear arm in sub-stage	1	
40	ON-7804B-A0-B0-C18	Shear arm axis 4	2	
41	GB/T 6172.2	Self-locking nut M20	2	
42	SSA-20-15	Small cylinder (automatic reset)	1	
43	GB/T 70.1	Hexagon socket head screw M4*20	2	
44	GB/T 79	Hexagon socket set screw M8*8	2	
45	ON-7804B-A0-B0-C20	Scissor connecting shaft	4	
46	SF-2Y-2056	Oil-free bushing of inner arm	2	
47	SF-2Y-2040	Oil-free bushing of sub-inner arm	4	
48	ON-7804-A0-B0-C20	Lower shaft of sub-shear cylinder	1	
49	SF-2Y-4052	Upper cylinder head oil-free bushing	2	
50	ON-7804B-A8-00	Secondary inner arm welding (50)	1	
51	ON-7804B-A9-B0-C0B	Sub-table welding (60)	1	
52	ON-7804-A0-B0-C7	Sub-stage shear arm slider (plate type)	4	

53	ON-7804B-A7-B1-C0B	Sub-scissors activity insurance welding	1	
54		Sub-scissor main cylinder	1	
55	ON-7804B-A10-B0-C0B	Welding of drawing plate of sub-station	1	
56		Main shear main cylinder	1	
57		Main shear and auxiliary cylinder	1	

Secondary Lift



No.	Drawing number/code	Name	Quantity	Remakes
1	ON-7804B-A1-B1-C0	Base assembly	1	
2	ON-7804B-A2-B0-C0B	Outer arm welding (6 cylinders)	1	
3	ON-7804B-A3-B0-C0B	Welding of the support arm in the main	1	
4	ON-7804B-A0-B0-C8	Lower slide fixed shaft	1	
5	ON-7804B-A0-B0-C7	Lower slide spacer	1	
6	ON-7804-A0-B0-C6	(Plate type) lower slider	4	

7	ON-7804-A0-B0-C21	Slider	2	
8	ON-7804B-A6-B0	Platform assembly	1	
9	ON-7804B-A0-B0-C15	Lower shaft of outer arm	4	
10	GB/T 79	Hexagon socket head set screw M8*12	12	
11	7140-01000	Power arm welding	1	
12	SF-2Y-3245	Oil-free bushing of booster arm	2	
13	ON-7804B-A0-B0-C14	Booster arm shaft	1	
14	GB/T 894.2	Circlip for shaft 32	2	
15	ON-7804B-A0-B0-C10	Booster arm upper shaft	1	
16	ON-7804B-A0-B0-C11	Bottom shaft of booster arm	1	
17	ON-7804B-A0-B0-C25	Booster wheel	2	
18	SF-2Y-3072	Oil-free bushing of booster wheel	2	
19	ON-7804B-A0-B0-C16	Bottom axis	2	
20	SF-2Y-3053	Oil-free bushing of inner arm bottom shaft	2	
21	GB/T 6172.2	Self-locking nut M24	2	
22	ON-7804B-A11-B0B	Lock storage welding body	1	
23	SSA16-15	Miniature cylinder (automatic reset)	1	
24	GB/T 818	Cross recessed pan head screw M5*12	4	
25	ON-7804B-A11-B3-C0B	Safety tooth welding body	2	
26	ON-7804B-A11-B4-C0B	Safety hook welded body	1	
27	ON-7804B-A0-B0-C26	Insurance lower shaft	2	
28	ON-7804B-A0-B0-C27	Insurance on the shaft	2	
29	GB/T 894.2	Circlip for shaft 30	6	
30	ON-7804-A11-B0-C4	Cylinder fixed shaft	2	
31	GB/T 894.2	Shaft retaining ring 20	4	
32		Tension spring	1	
33	ON-7804B-A5-B0-C4	Booster arm spacer	2	
34	SF-2Y-2840	Oil-free bushing of lower cylinder head	2	
35	ON-7804-A0-B0-C12	Outer arm cylinder shaft	2	
36	ON-7804-A7-00	Secondary outer arm welding	1	
37	ON-7804B-A0-B0-C19	Sub-shear cylinder upper shaft	1	
38	GB/T 894.2	Circlip for shaft 25	2	
39	ON-7804-A7-B0-C10	Lower shaft of shear arm in sub-stage	1	
40	ON-7804B-A0-B0-C18	Shear arm axis 4	2	
41	GB/T 6172.2	Self-locking nut M20	2	
42	SSA-20-15	Small cylinder (automatic reset)	1	
43	GB/T 70.1	Hexagon socket head screw M4*20	2	
44	GB/T 79	Hexagon socket set screw M8*8	2	
45	ON-7804B-A0-B0-C20	Scissor connecting shaft	4	
46	SF-2Y-2056	Oil-free bushing of inner arm	2	
47	SF-2Y-2040	Oil-free bushing of sub-inner arm	4	

48	ON-7804-A0-B0-C20	Lower shaft of sub-shear cylinder	1	
49	SF-2Y-4052	Upper cylinder head oil-free bushing	2	
50	ON-7804B-A8-00	Secondary inner arm welding (50)	1	
51	ON-7804B-A9-B0-C0B	Sub-table welding (60)	1	
52	ON-7804-A0-B0-C7	Sub-stage shear arm slider (plate type)	4	
53	ON-7804B-A7-B1-C0B	Sub-scissors activity insurance welding	1	
54		Sub-scissor auxiliary cylinder	1	
55	ON-7804B-A10-B0-C0B	Welding of drawing plate of sub-station (60)	1	
56		Main shear main cylinder	1	
57		Main shear and auxiliary cylinder	1	

Annex6.Other instructions and standard requirements

Relief valve adjustment
Don’t adjust the relief adjustment if no information about it and not trained. Please open the cover of the screw head and loose the screw to adjust the pressure. After adjustment, tighten the screw and add the cover on it . Before starting to use the lift, please inspect the safety device. Check if the safety gear act well. Check the pipe and control box.
Setting
Pressure relief valves shall be adjusted to act at a pressure which is not more than 10% above that produced when operating with the rated load. So, when the system working with rated load, the pressure is not more than 110% of the rated pressure. To adjust the relief valve, first to connect a pressure meter, then use tools to open the nut and use tools to adjust the screw to set the limit pressure.
Lighting
Keep enough lighting strength in order to use the lift safe. Please provide the 200Lux on site and no additional risk. Don’t use this lift outdoor. Wind, lightning, rain will cause hazard.
Level ground
This lift must stand on a level ground except any slope. Please check the level of the lift

before using it to lift.

Electrical supply protection

Before using the machine, a breaker or same function device will fit to protect the circuit. When the main power circuit overcurrent, the device can cut the circuit even if the fault current higher than rated current. Please contact your local vendor to get the information about the related information.

The electrical power supply wire shall not less than $2mm^2$. Breaker rated current shall not more than 10A.

Lockout/Tagout

Before repair the machine or open the electrical box or hydraulic system, pneumatic system, **Lockout/Tagout process** shall be performed.

Dismantling and disposal

ENVIRONMENTAL DAMAGE.

Only appropriately trained personnel may dismantle and dispose of the unit.

Dismantling

To dismantle the this product, proceed as follows:

ELECTRICAL HAZARD!

When carrying out any decommissioning and dismantling work on the unit, switch off all power supply connections, ensure they cannot be switched on unintentionally and verify that they have been disconnected. Earth and short-circuit them, and cover or otherwise isolate any neighbouring live parts. Failure to do so may lead to serious injuries or death.

HIGH PRESSURE HAZARD.

When carrying out any unit decommissioning and dismantling work, close off and empty

all the connection pipes until the pressure is the same as the ambient air pressure. Failure to do so may lead to injury.

Make sure that the hydraulic circuit has been switched off.

Close all hydraulic shut-off valves.

Disconnect all connections, making sure at the same time, that no operating materials escape, such as oil, refrigerant and water-glycol mixture.

Loosen the connection to the base.

PERSONAL INJURY!

Secure the unit against slipping.

The unit is ready for transporting.

It is important that all transport information is observed .

Disposal

A specialist company with the appropriate competence must dispose of the unit and individual components. This technical services department must ensure that:

– the components are separated according to material types
– that the operating materials are sorted and separated according to their properties.

ENVIRONMENTAL DAMAGE.

Dispose of all components and operating materials (such as oil, refrigerant and water-glycol mixture) separately according to material and in line with local laws and environmental regulations.

Noise declaration

Sound power level: LWA<85dB Accompanied uncertainly K=4 dB This measurement made in according with EN ISO 3746:2010 Applied operating conditions are: All the motor is running with normal operation speed. “The figure quoted are emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this can’t be used reliably to determine weather or nor further precautions are required. Factors that influence the actual level of exposure of the workforce include the characteristics of the working room, the other source of noise etc. i.e. the number of the machines and other adjacent processes. Also the permissible exposure level can vary from country to country. This information, however, will enable the user of the machine to make a better evaluation of the hazard and risk.”
Adjustment of wire rope After debugging, ensure that the platform deviation is greater than 50 mm
Debugging of Anti-falling valve The descent speed should be set according to the regulations After the explosion-proof valve is installed, it can be tested before use
If the automobile exhaust is discharged for a long time, it may cause poisoning. If you use it in a relatively small space, you need to pay attention to other risks brought by the environment. This risk does not arise from this equipment.