TW S3-19

Short Platform Scissor Lift, Low Profile
Lifting Capacity 3000KG

twinbusch.de

Installation, Operation and Parts Manual

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

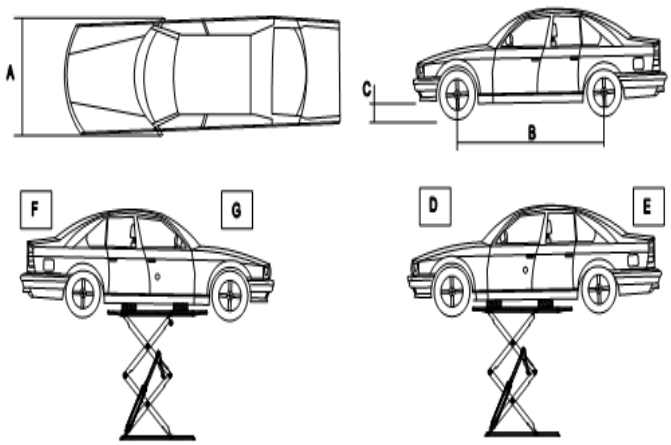
Twin Busch GmbH | Amperestraße 1 | D-64625 Bensheim
Tel.: +49 (0) 6251-70585-0 | Fax: +49 (0) 6251-70585-29 | info@twinbusch.de

INDEX

Safety Regulations

- Please read the complete Manual before working on the lift.
- Only Qualified trained personnel are allowed to use the lift.
- The lift is only to be used for the purpose of lifting vehicles of a specified weight. (check ID plate)
- The lifting area is to be kept clean and free from objects at all times.
- No unauthorized personnel are allowed in the working area.
- Always make sure car doors are closed before lifting.
- Never climb on the lift.
- While lifting always stop to check the vehicle has not moved, and is secured.
- Always refer to manufactures recommended lifting points.
- Be sure that the safety locks are activated before working on the vehicle
- Never remove heavy parts from the vehicle when working on the lift this could cause the vehicle to tip.
- When the lift is not in use turn off the main switch to avoid tampering.
- Check the moving parts, cables and safety devices daily. Lubricate when necessary.
- Avoid excessive moisture around the lift this will reduce the lifetime of moving parts and fixtures.
- Under no circumstances should the electrical system be exposed to damp wet conditions, protect at all times.
- Always wear protective clothing, steel cap shoe's etc.
- Avoid loose clothing, jewellery, long hair. Danger of entanglement.
- All service and maintenance work on the lift must be carried out by a qualified technician.
- Maintenance on the electrical system must be carried out by a qualified electrician.
- Disposal of all materials and oil should be done in an environment friendly manor.

Weight displacement

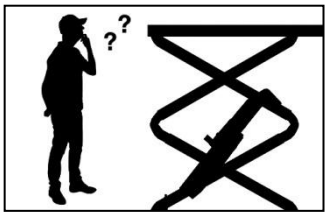


Model	A (mm)	B (mm)	C (mm)	D (T)	E (T)	F (T)	G (T)
TW S3-19	1900	2000	110	1.8	1.2	1.2	1.8

Warning signs

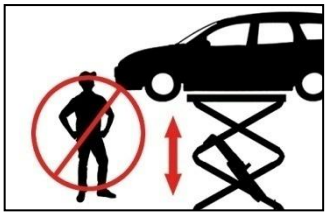
All warnings should be clearly visible on the lift, to make sure that the user takes care using the machine. The warnings must be kept clean and be replaced if they are damaged or missing. Please read the signs carefully and memorize their importance for future operations a.

Read the manual before use

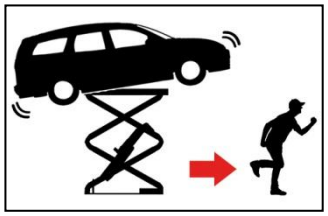


Only trained personnel should use the lift

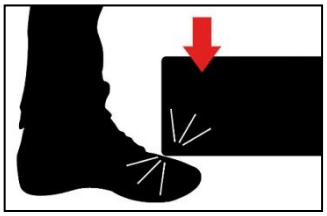
Repairs and service only through authorized personel, never tamper with the safety devices



No unauthorized persons under the lift when in use



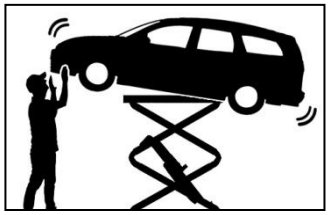
Always leave escape routs clear



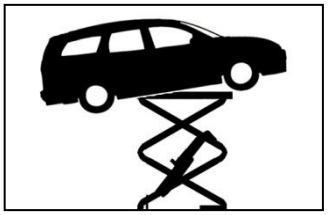
Please take care not to trap your feet

Danger of crushing when letting down

Never use only one side oft he lift

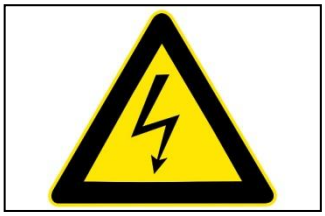


Avoid shaking



Vehicles should be evenly balanced

No obstcles under the lift



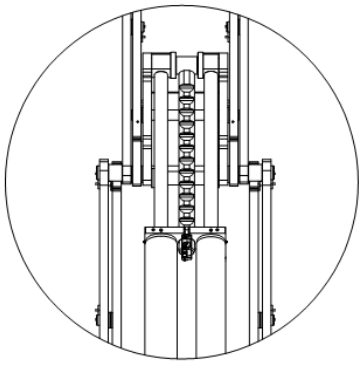
High voltage

OVERVIEW OF THE LIFT

2.1 General description

This low profile full rise scissor lift is the perfect addition for your workshop needs. With the powerful four cylinder system it can cope with all the necessary tasks in the workshop. In the lowest position 110mm, it is also suitable for the modern low vehicles. The fixable extension ramps can also be used as a lifting platform with a load capacity of 3 tones ideal for longer vehicles. The 24V working voltage of control box and limit switch, alarming buzzer, pneumatic safety lock, anti-surge valves, etc are all part of the safety system designed for your personal security.

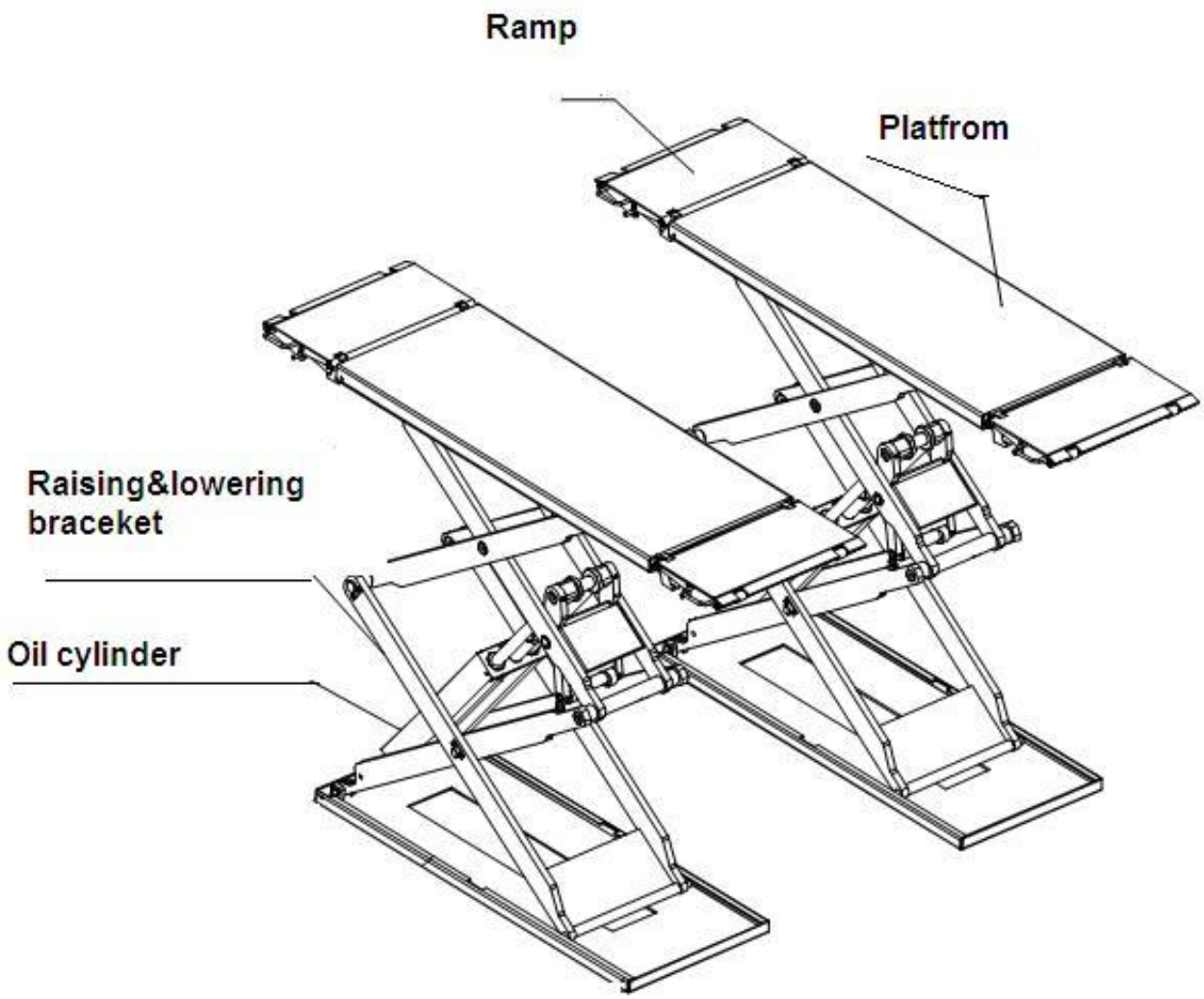
Safety mechanism:



2.2 Technical data

Model	Lifting capacity	Lifting time	Lifting height	Electrical requirement
TW S3-19	3000KG	45 Sec	1870mm	400V, Three Phrase

2.3 **Construction of the lift**



INSTALLATION INSTRUCTIONS

3.1 Preparations before installation

3.1.1 Tools and equipment needed

√ Electrical drill

√ Open wrenches

√ Screw drivers

3.1.2 Parts list（Packing list）

Unpack the lift and check if any parts are missing. Do not hesitate to contact us if any parts are missing, if you do not contact us and insist on installing with missing parts, Twinbusch as well as our dealers will not bear any responsibility for this and will charge for any parts subsequently demanded by the buyer.

3.1.3 Ground conditions

The lift should be fixed on a smooth and solid concrete ground with strength of more than 3000psi, tolerance of flatness not more than 5mm and minimum thickness of 200mm. In addition, new concrete ground must undergo approximately than 28days' cure and reinforcement.

Other requirements:

The surrounding ground must be suitable for the load, for example, no sand soils, etc ..

A concrete reinforcement is not necessary for the lift in proper usage.

If in doubt, the foundation should always be determined/ tested by a structural engineer.

In case of frost:

In cases of freezing a concrete of exposure class XF4 must be used.

Thus, the following minimum requirements of the concrete in frost situations:

Exposure class XF4

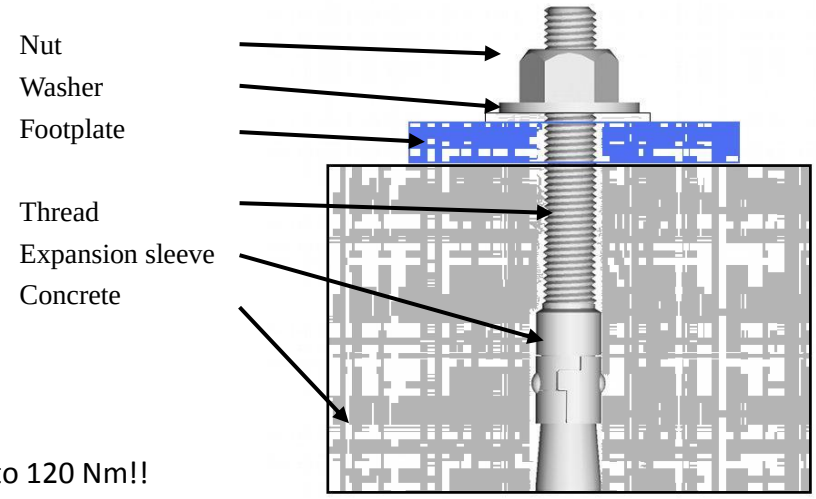
Maximum w / c: 0.45

Minimum compressive strength: C30 / 37 (instead of C20 / 25)

Minimum cement content 340 kg / m³

Minimum air content: 4.0%

It must however be noted that the lift is not for use outdoors, the main control unit corresponds to IP54, but other electrical, parts Motors and limit switches are designed to a maximum of IP44.



Stud bolts should be tightened to 120 Nm!!

3.2 Precautions for installation

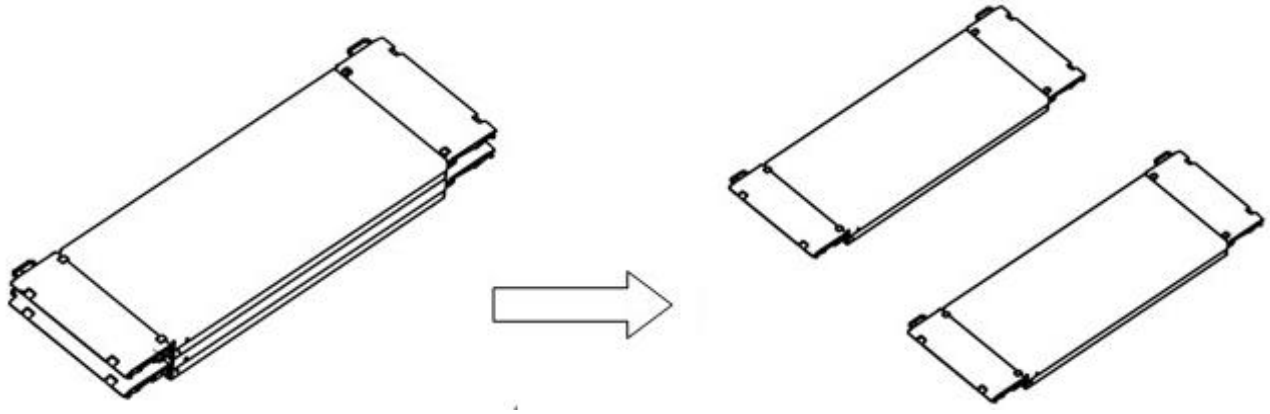
3.2.2 Oil hoses must be firmly connected in order to avoid leakage.

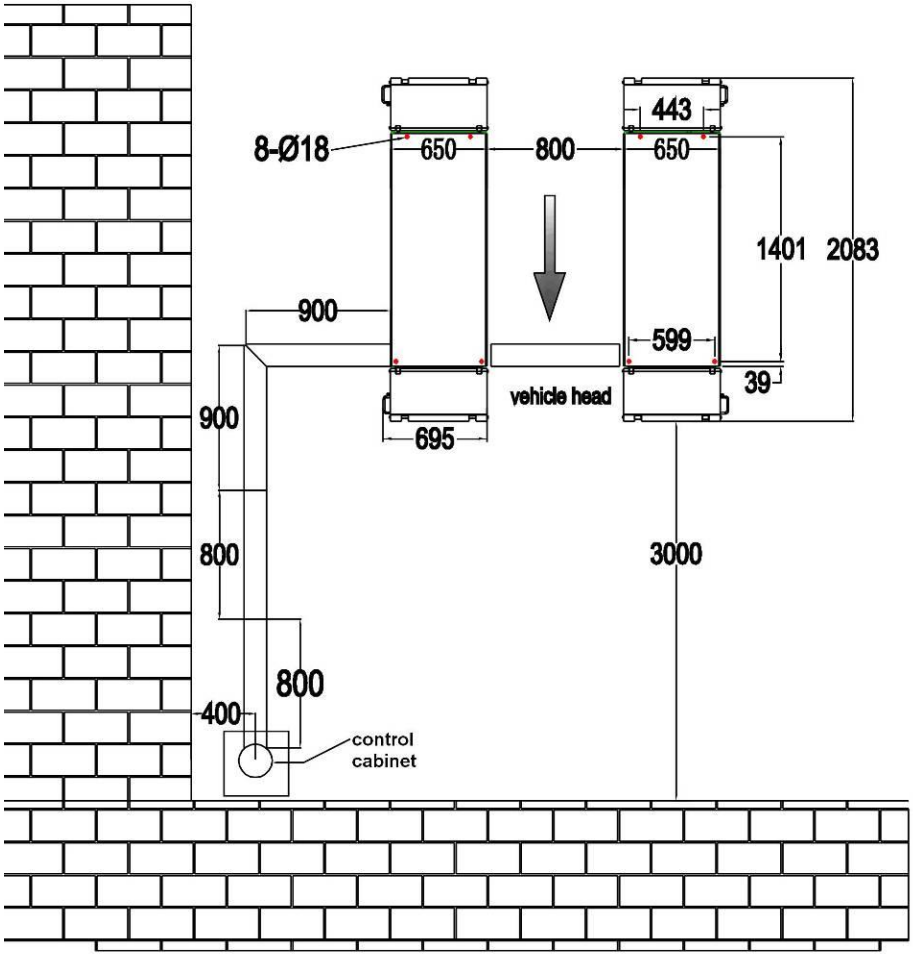
3.2.3 All bolts should be correctly tightened.

3.2.4 Do not use a vehicle for the trial running (first test).

3.3 Installation

Step1: Remove the packaging and place the lift as shown.





Step2: Connecting the oil hoses

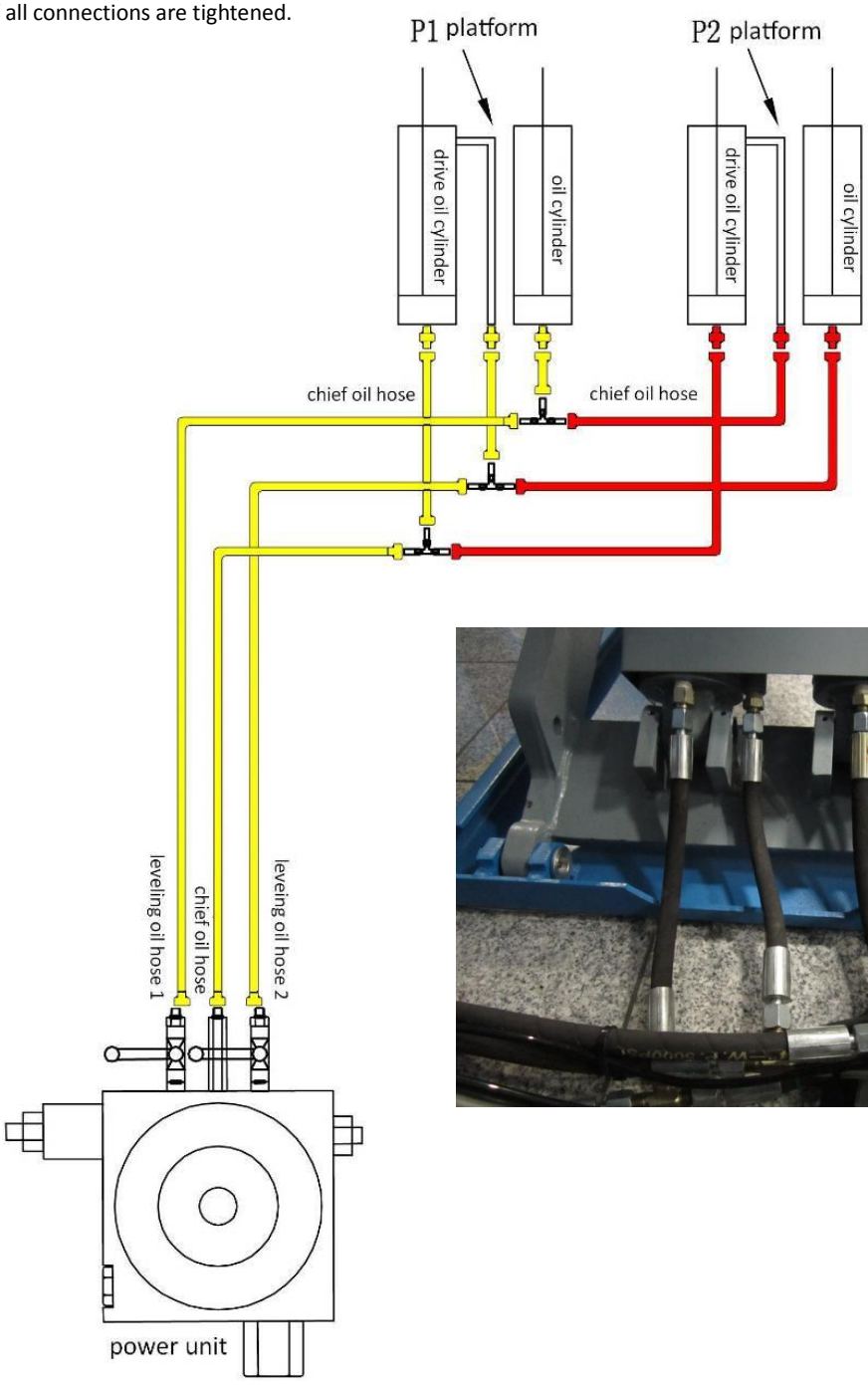
(This step is extremely important, please refer to the diagram for oil hose connection and understand the following instructions before proceeding)

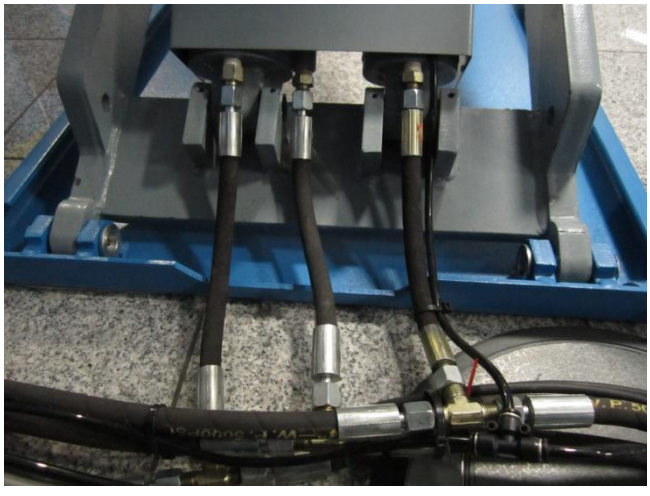
1. make sure all hydraulic hose connections are clean.

2. It has to be distinguish where the main oil hose has to be connected please use the diagram below as a connection guide.

3. It is very important that the hydraulic system is connected correctly, as can be seen in the diagram care has to be taken to connect the main and slave cylinders in the right order.

4. Check if all connections are tightened.

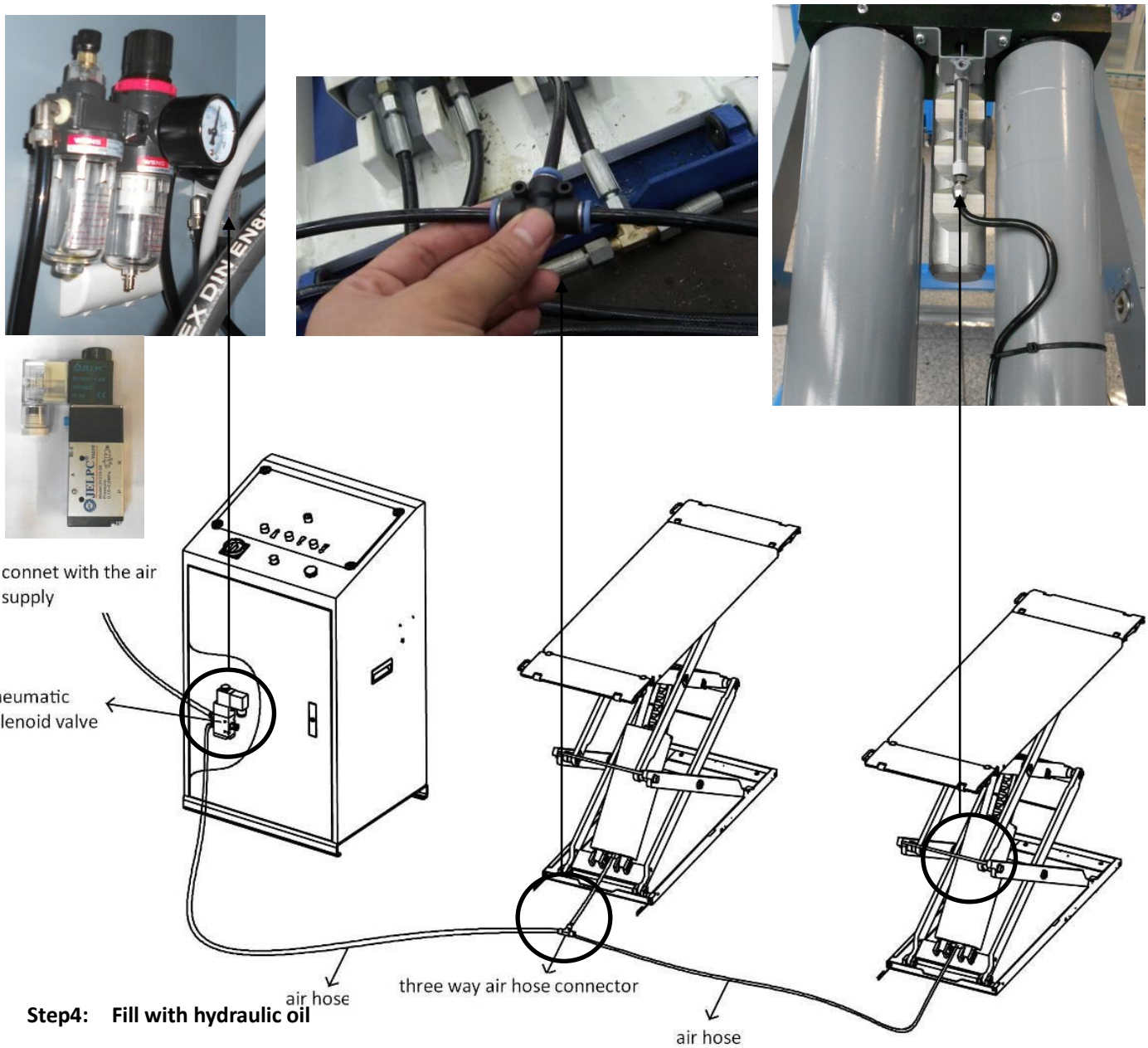




Step3: Connect the air system

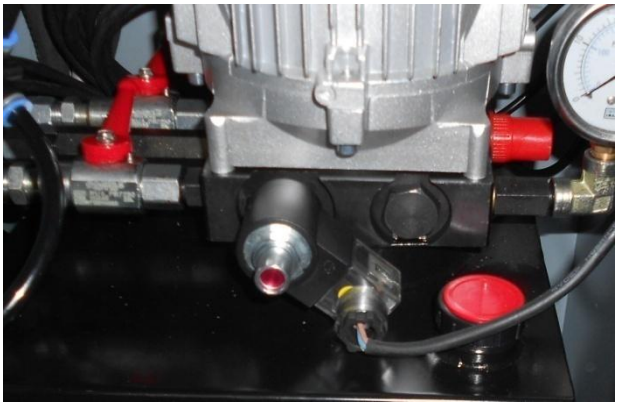
Connect the compressed air supply to the air inlet of the air valve.

Attention： Pressure of the air supply should be 4-6 Bar (0.6-0.8kg/cm^{2,}



Step4: Fill with hydraulic oil

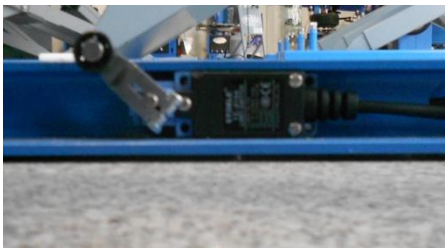
Fill the oil tank with 15 liters of hydraulic oil. Level can be checked using the dip stick attached to the lid



Synchronizing and Bleeding the Hydraulic system TWS3-18U- 19

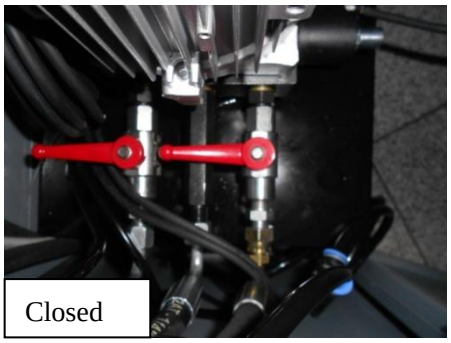
Bleeding the system

1. Connect the main unit to the power supply and turn on the power, green indicator light is on!
2. Remove (if already fitted) both limit switches from the base frame. (To allow full extension)
3. Press the "UP" button until both platforms reaches the highest position, then press the "Down" button until both platforms are completely down, repeat this process for 1-2 times to until
the hydraulic system is then completely bled.
4. Reinstall the two limit switches on the base frame.



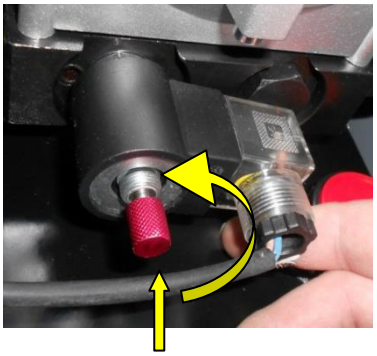
Synchronizing the Platforms

5. Press the “UP“- button and raise the platforms to about half way up,
6. Lower the platforms to the next possible safety catch by pressing the “Down1” button.
7. Both platforms should be at the same level (this can be controlled by opening and closing the Ball valves and pressing UP to raise just one platform.


Closed


Open

8. As soon as the platforms have roughly the same level, raise about 20 cm and open the manual release button. This must be pressed in and turned left to open.



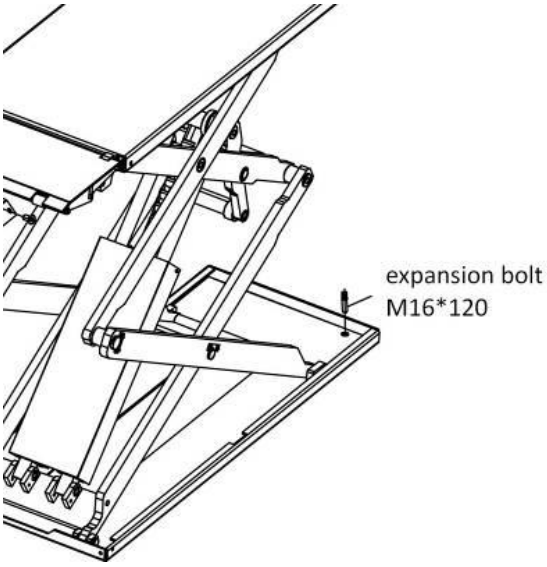
When opened the platforms will drop to the next safety catch, then close the valve and shortly open the two ball valves to release the pressure. These steps must be repeated to achieve the perfect level.

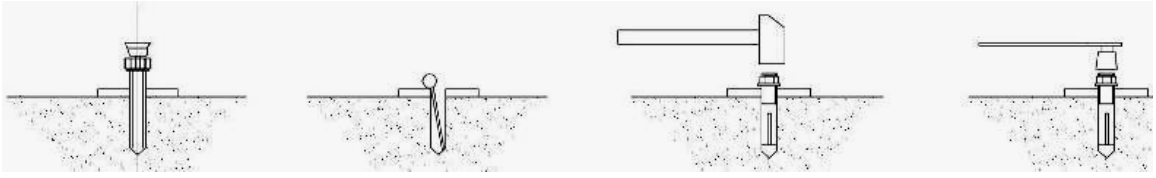
After the perfect level is achieved remember to close all valves and ball valves!!

Step7: Expansion bolts.

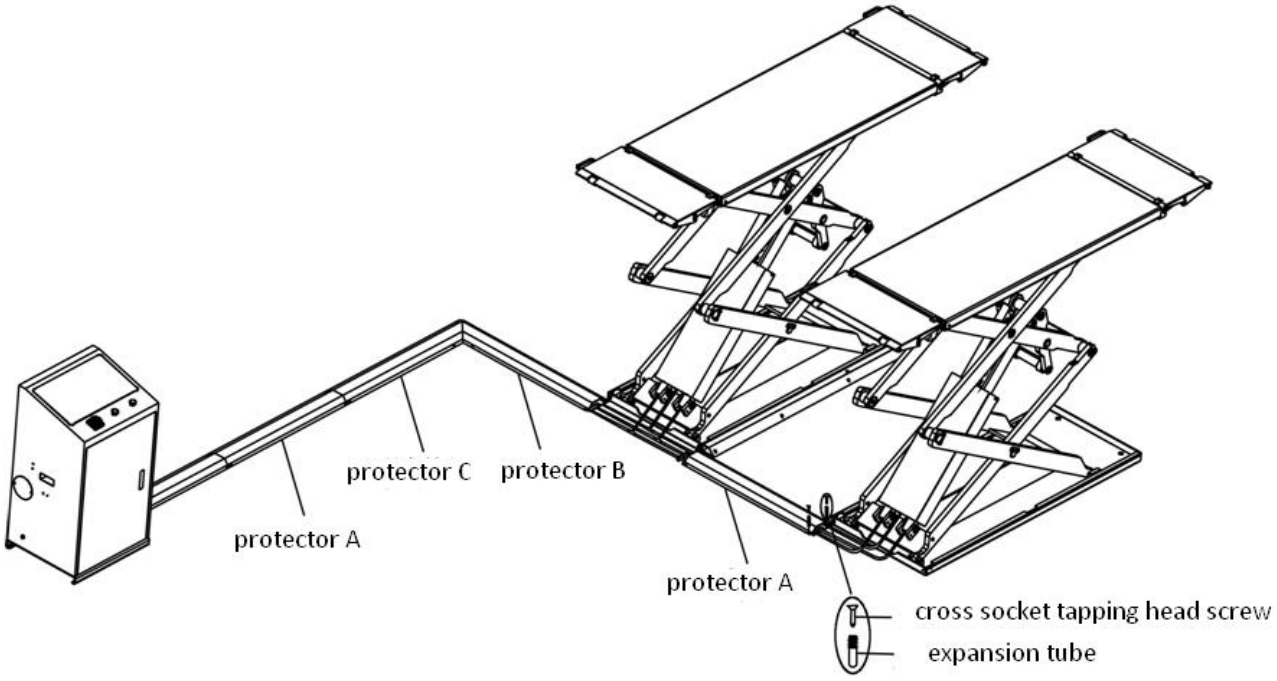
1. Drill the holes for the expansion bolts using 16mm drill. Make sure to drill vertically.

2. Remove all the debris and dust in the holes and hammer the bolts in, then tighten to 120Nm





Step8: Install the oil hose protection covers.

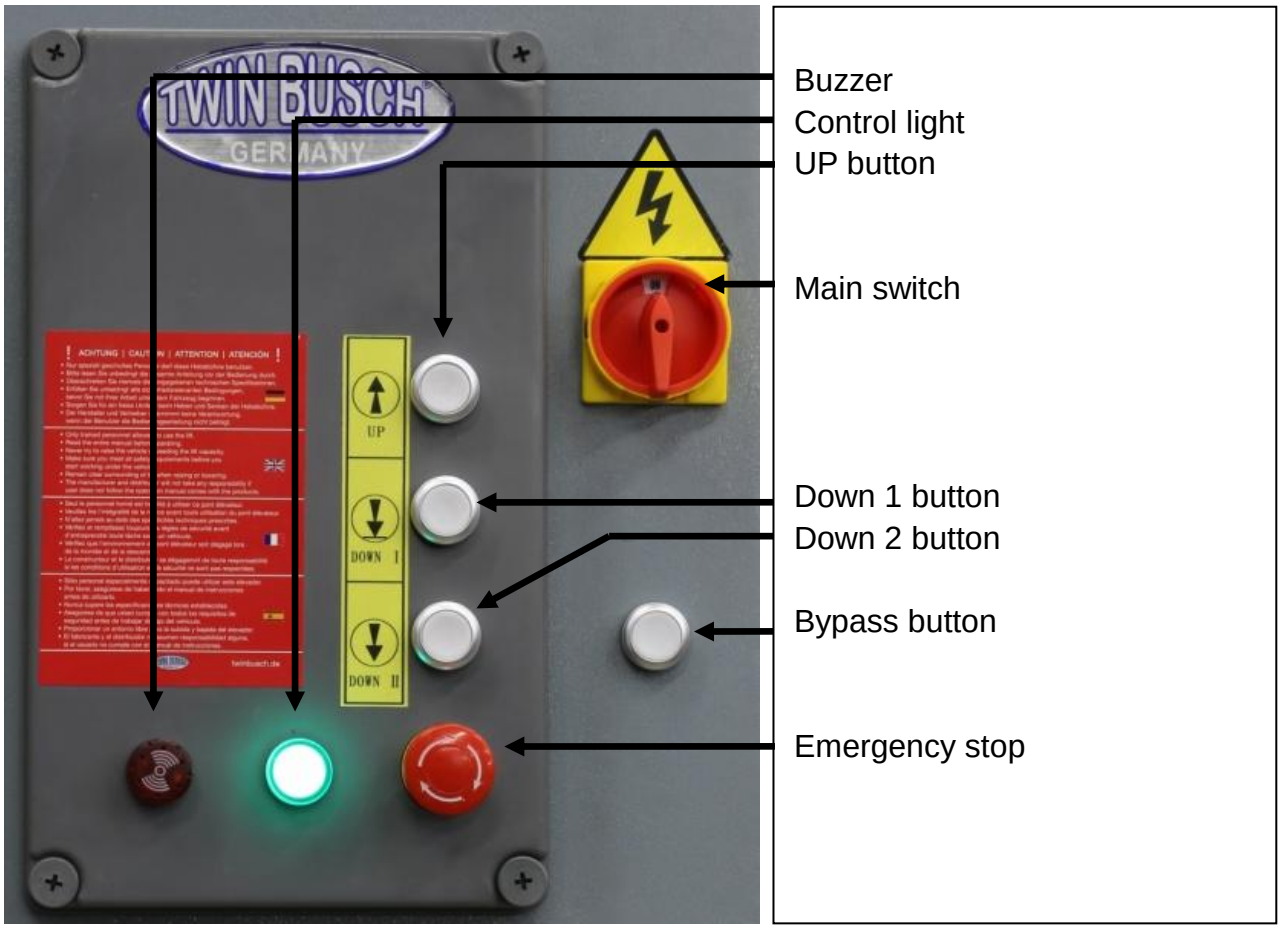


Precautions before usage

S/N	Check items	YES	NO
1	Are the two platforms adjusted with the same level?		
2	Make sure all connections are tight and there are no leakages.		
3	All the safety devices should be working and secure.		
4	All electrical connections are correct.		

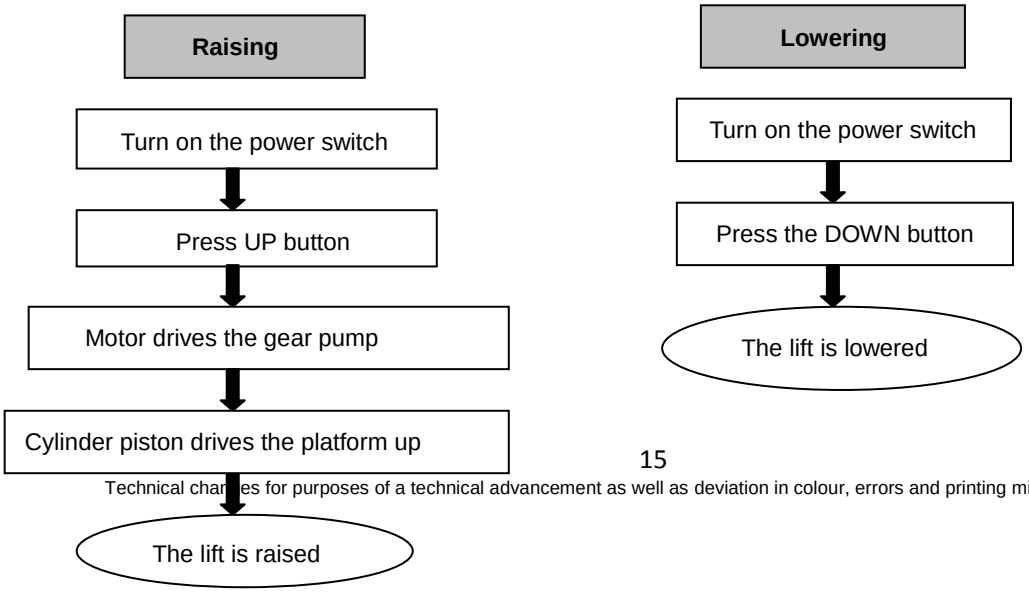
OPERATION INSTRUCTIONS

4.2 Descriptions of control box



After switching on the main power a green light should be seen to show that the unit has power.
The down 1 button will stop at about 30 cm from the floor the down 2 button must then be used to let the lift completely down.
When using the bypass button combined with down 1 simultaneously, the lift will go down without first raising to unlock the safety catch.

4.3 Flow chart for operation



4.4 Operation instructions

Raise the lift

1. Make sure that you have read and understood the operation manual before operation.

2. Drive and park the vehicle midway between two platforms.

3. Place the four rubber pads under the prop-points of the vehicle and ensure the weight is evenly displaced.

4. Press the UP button on the control box until rubber pads have touched the prop-points of vehicle.

5. As soon as the vehicle is raised stop and check that all is secure.

6. Having raised the vehicle to the required height, turn off the power “Emergency stop” button. Check once again the stability of the vehicle before performing maintenance or repair work,

Lower the lift

1. Switch on.

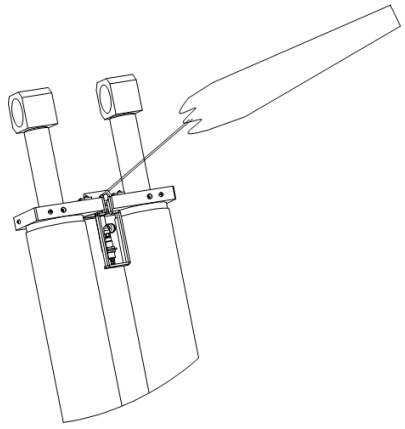
2. Press the DOWN I button to lower the lift. The lift will stop lowering at approx. 500mm, this is a safety precaution! The Down II must then be pressed to lower completely.

3. Drive the vehicle away.

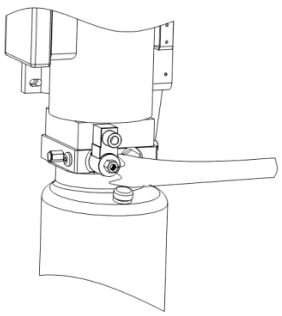
4.5 Emergency lowering in case of power cut

Pneumatic lock is not engaged

1. Pull up the safety teeth with steel rope to release the safety lock.

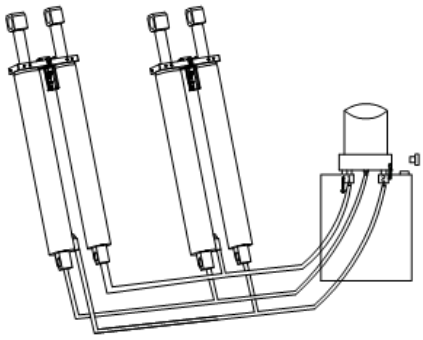


2. Screw loose the core of the solenoid unloading valve fixed on the hydraulic block.

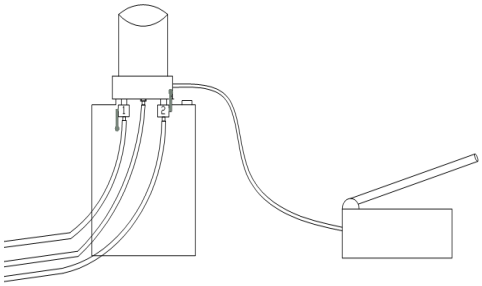


Pneumatic safety lock is engaged.

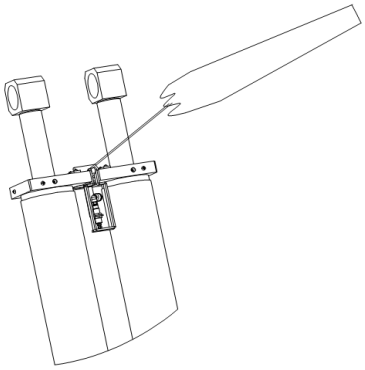
1. Take down the removable plug from the hydraulic block.



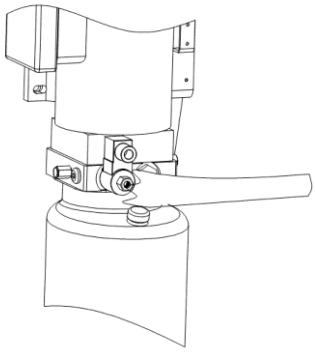
2. Connect the optional hand pump to hydraulic block at the point where the removable plug used to be fitted.



3. Press the handle of the optional hand pump to raise the platform to have the safety teeth unlocked. Then, pull up the safety teeth with steel rope to release the safety lock.



4. Screw loose the core of solenoid unloading valve fixed on the hydraulic block.



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.

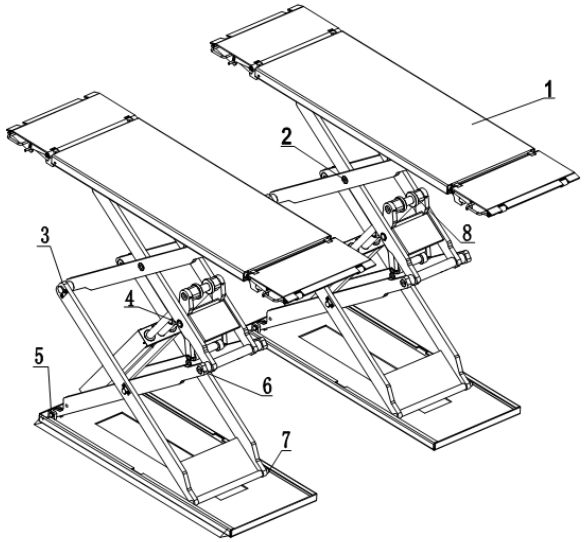
TROUBLES	CAUSE	SOLUTION
Motor does not run and will not raise	The wire connection is loose.	Check and make a good connection.
	The motor is burnt	Replace it.
	The limit switch is damaged or the wire connection is loose.	Connect it or adjust or replace the limit switch.
Motor runs but will not raise	The 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.
	Electrical unloading valve leaks.	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.

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.

The following parts need to be lubricated.

S/N	DESC
1	Platform slider
2	Joint shaft C
3	Joint shaft B
4	Driving rotor shaft
5	Rotor shaft of base plate
6	Joint shaft D
7	Base plate slider
8	Rotor shaft



6.1. Daily checking items before operation

The user must perform daily check. Daily check of safety system is very important – the discovery of device failure before action could save your time and prevent you from great loss, injury or casualty.

·Check whether oil hose well connected. No leakage is allowed.

·Check the electric connections .Make sure all connections are in good condition.

·Check whether the expansion bolts well anchored.

·Check if safety teeth and safety block matched well or not.

6.2. Weekly checking items

·Check the flexibility of moving parts.

·Check the working conditions of safety parts.

·Check the amount of oil left in the oil tank. Oil is enough if the carriage can be raised to highest position. Otherwise, oil is insufficient.

·Check whether the expansion bolts well anchored.

6.3. Monthly checking items

·Check whether the expansion bolts well anchored.

·Check the tightness of the hydraulic system and screw firm the joints if it leaks.

·Check the lubrication and abrasion circumstance of moving parts.

6.4. Yearly checking items

·Empty the oil tank and check the quality of hydraulic oil.

·Wash and clean the oil filter.

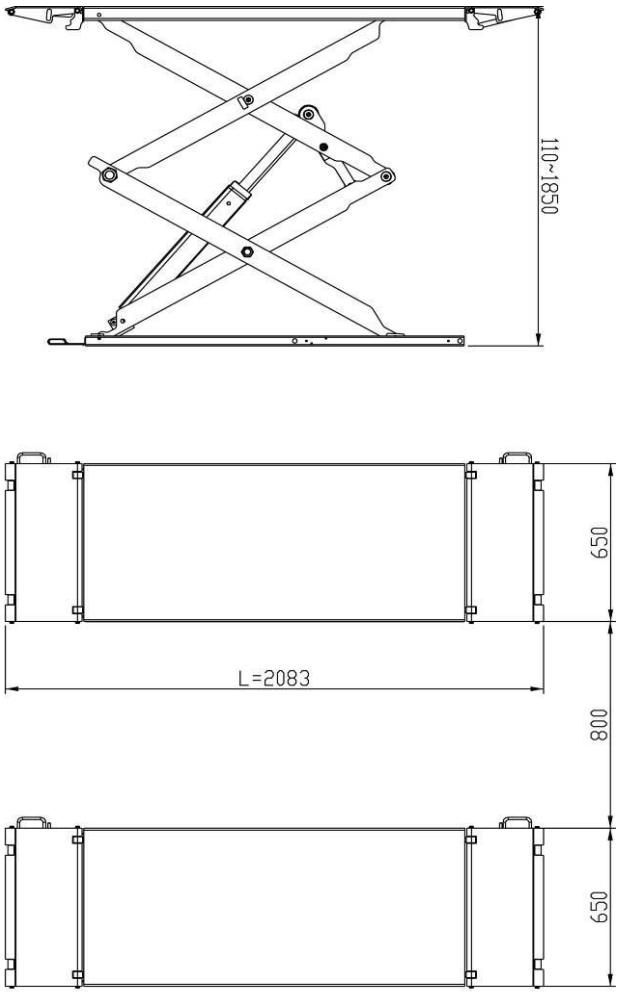
If users strictly follow the above maintenance requirements, the lift will keep in a good working condition and meanwhile accidents could be avoided to a large extent.

ANNEX

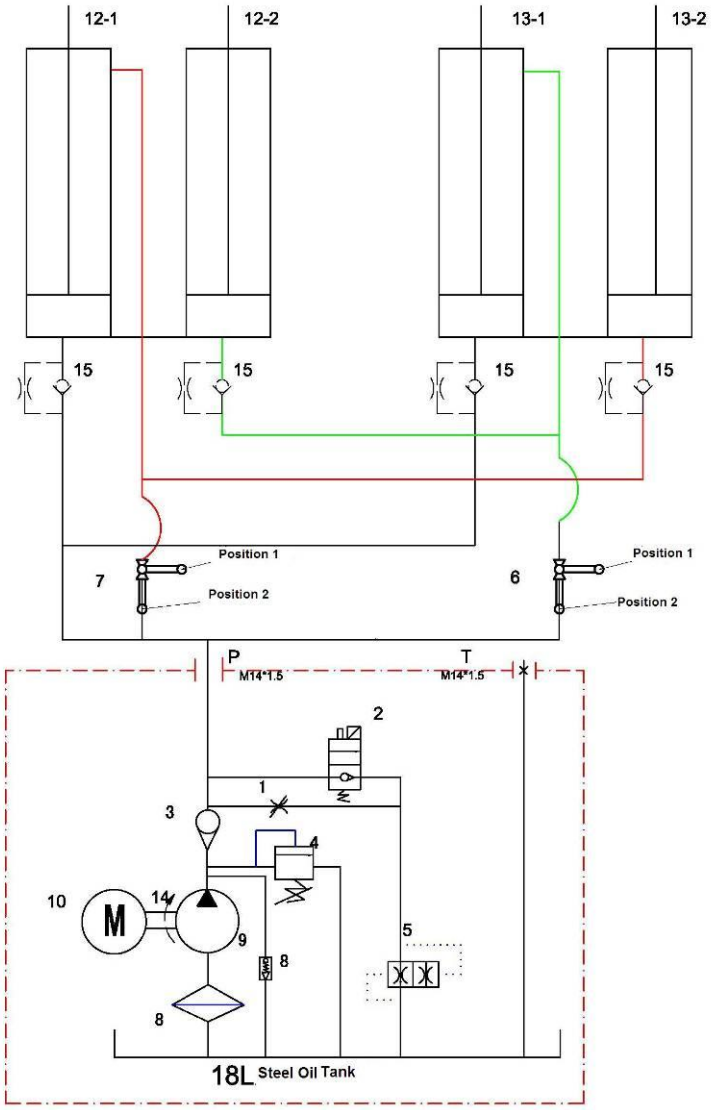
Annex 1, Packing List of the whole lift

S/N	Name	Drawing#/Size	Material#	Description	Qty	Note
1	Low-profile scissor lift	FL-8801		Assembly	1	A pack
2	Proection cover A	FL-8801-A9		Q235A	3	
3	Proection cover B	FL-8801-A10		Q235A	1	
4	Proection cover C	FL-8801-A11		Q235A	1	
5	Oil hose fixer	FL-8801-A1-B7		Zinc-plating	3	
6	Expansion bolt	M16*160		Standard	8	
7	Cross socket cap head tapping screw	ST4.8*34		Standard	20	A pack
8	Control cabinet	FL-8802-A10		Assembly	1	
9	Plastic expansion tube	M10*40		Standard	20	
10	Rubber pad	FL-8801-A14		Rubber	4	

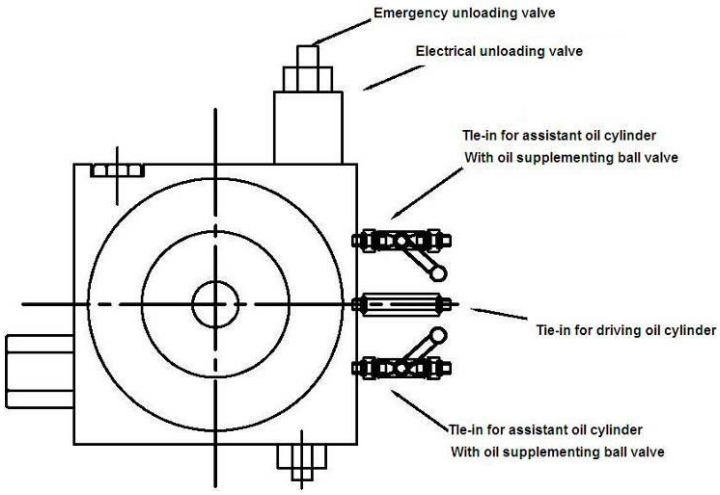
Annex2, Overall diagram



Annex 3, Hydraulic working system

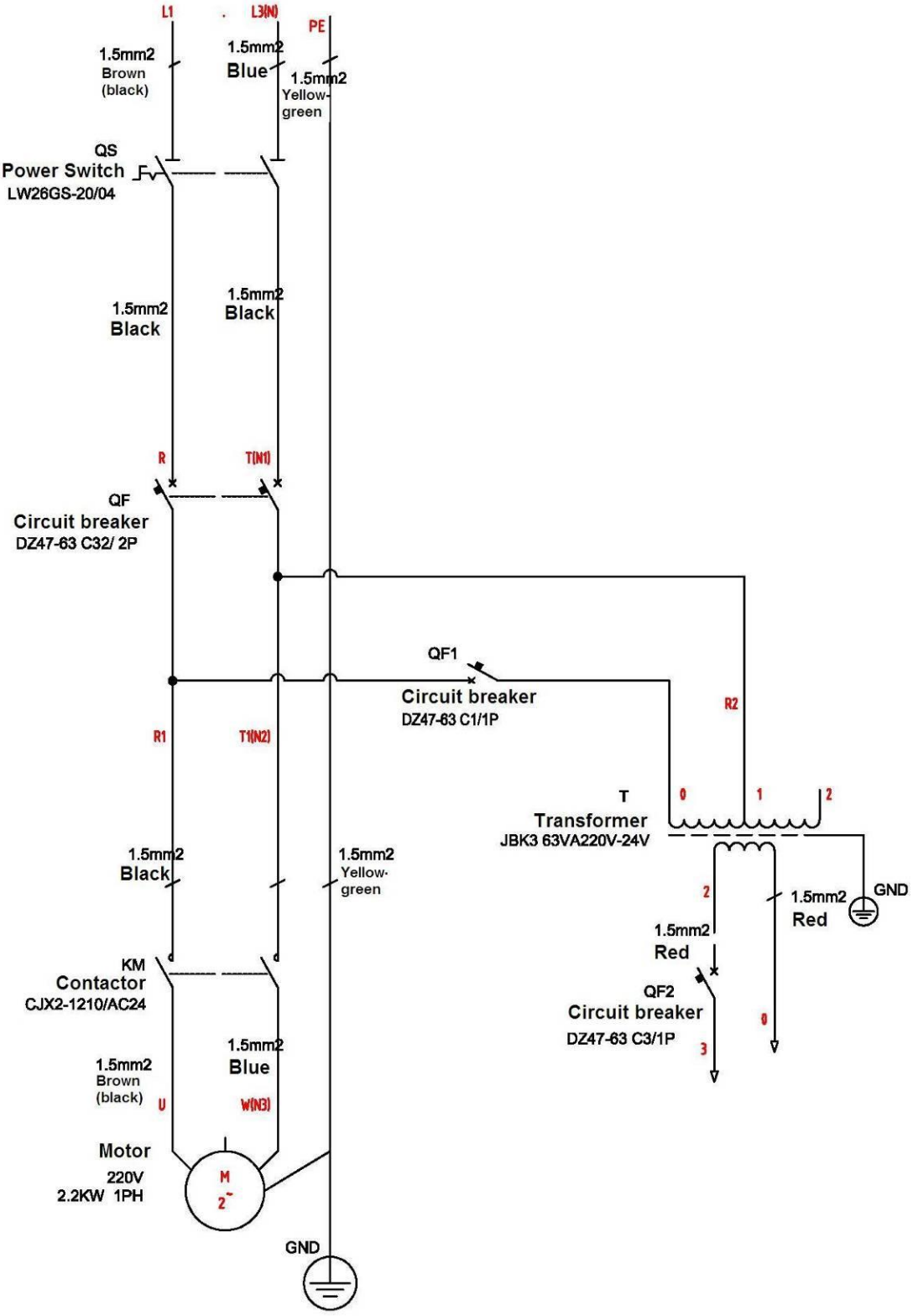


1 .Emergent unloading valve
2. Electrical unloading valve
3. One-way valve
4. Overflow valve
5. Lowering throttle valve
6. Oil supplementing ball valve
7. Oil supplementing ball valve
8. Cushion valve
9. Gear pump
10. Oil pump motor
11. Oil filter
12. Driving cylinder
13. Assistant cylinder
14.Coupling
15. Anti-surge valve

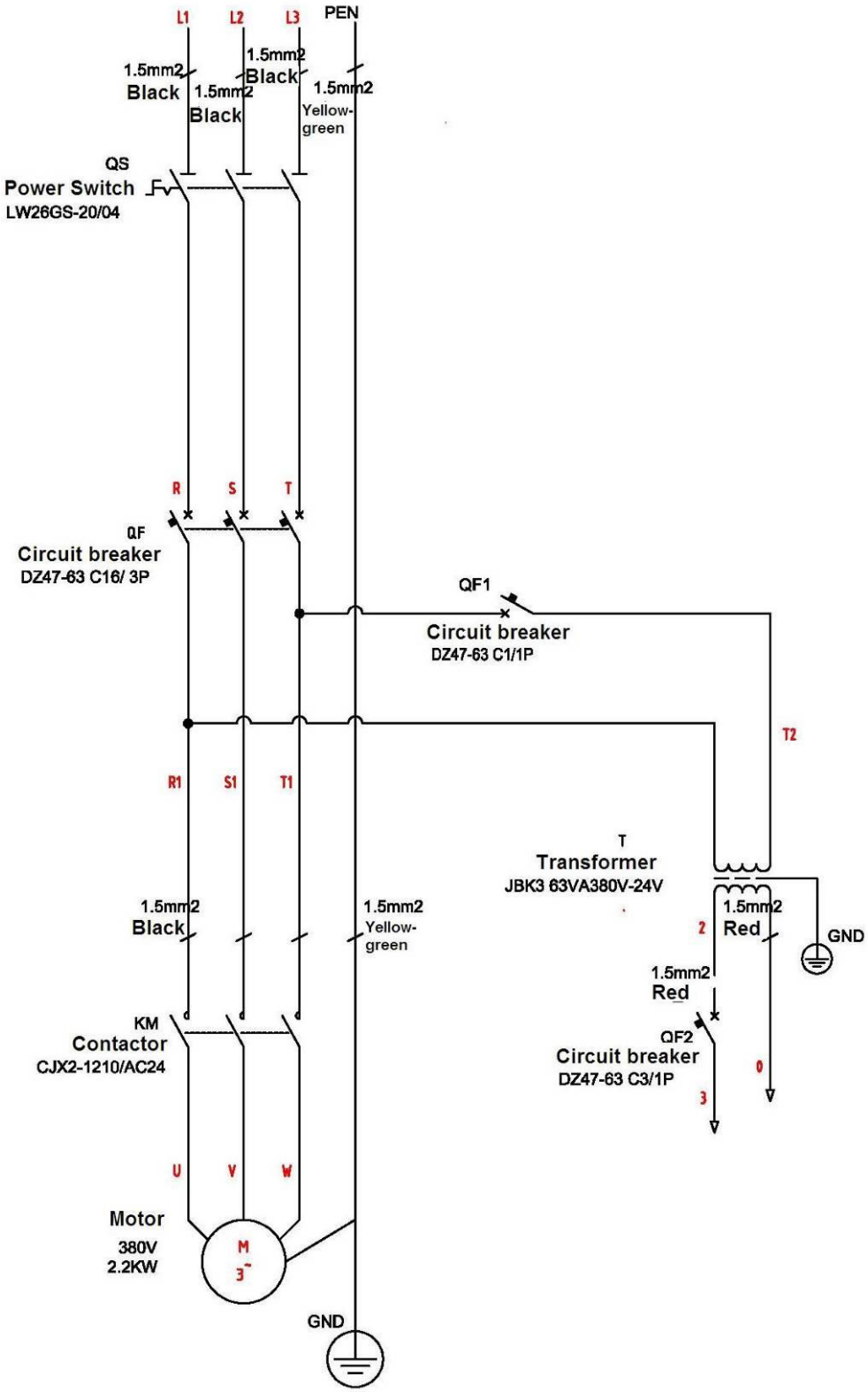


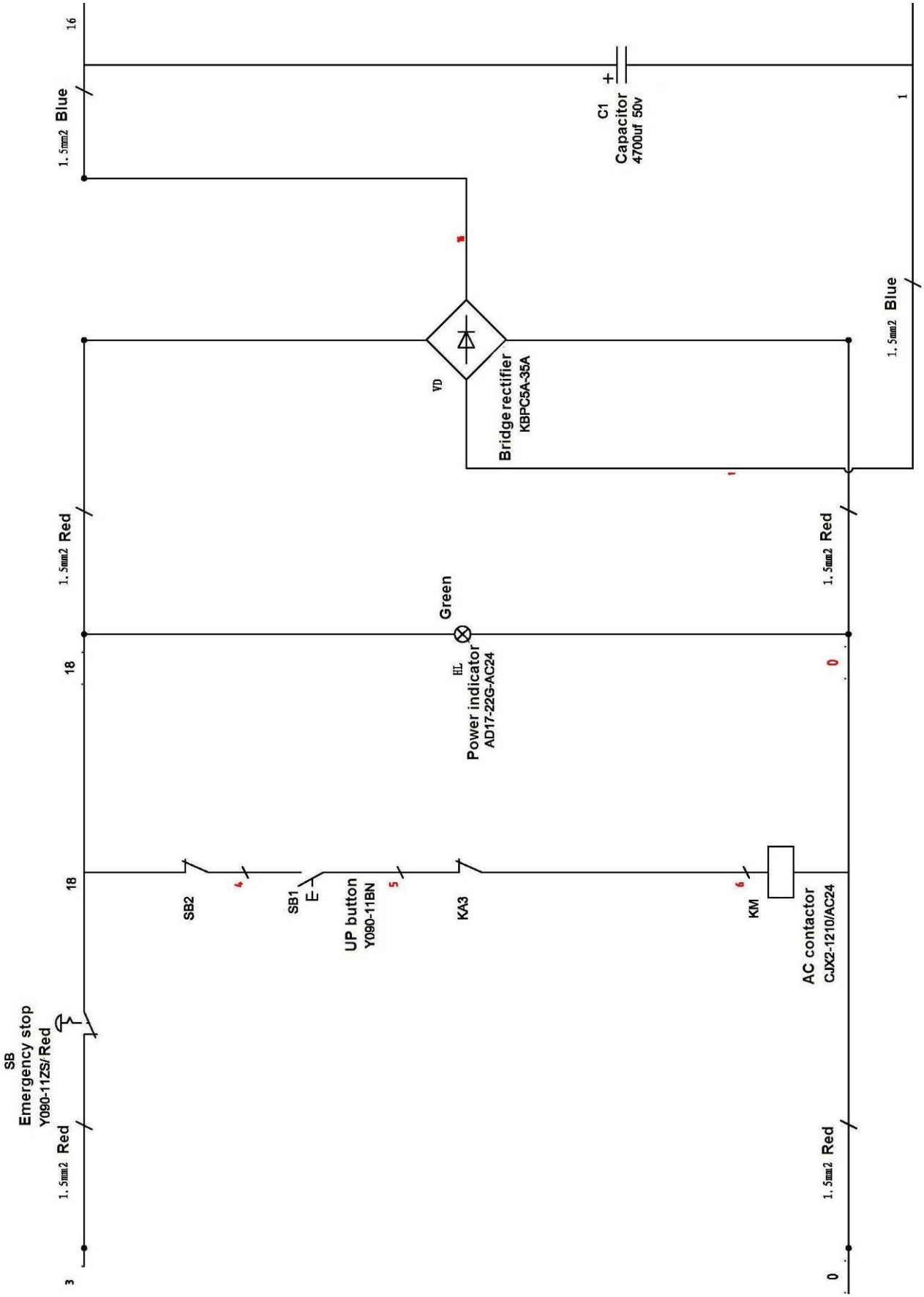
Annex4, Wiring diagram

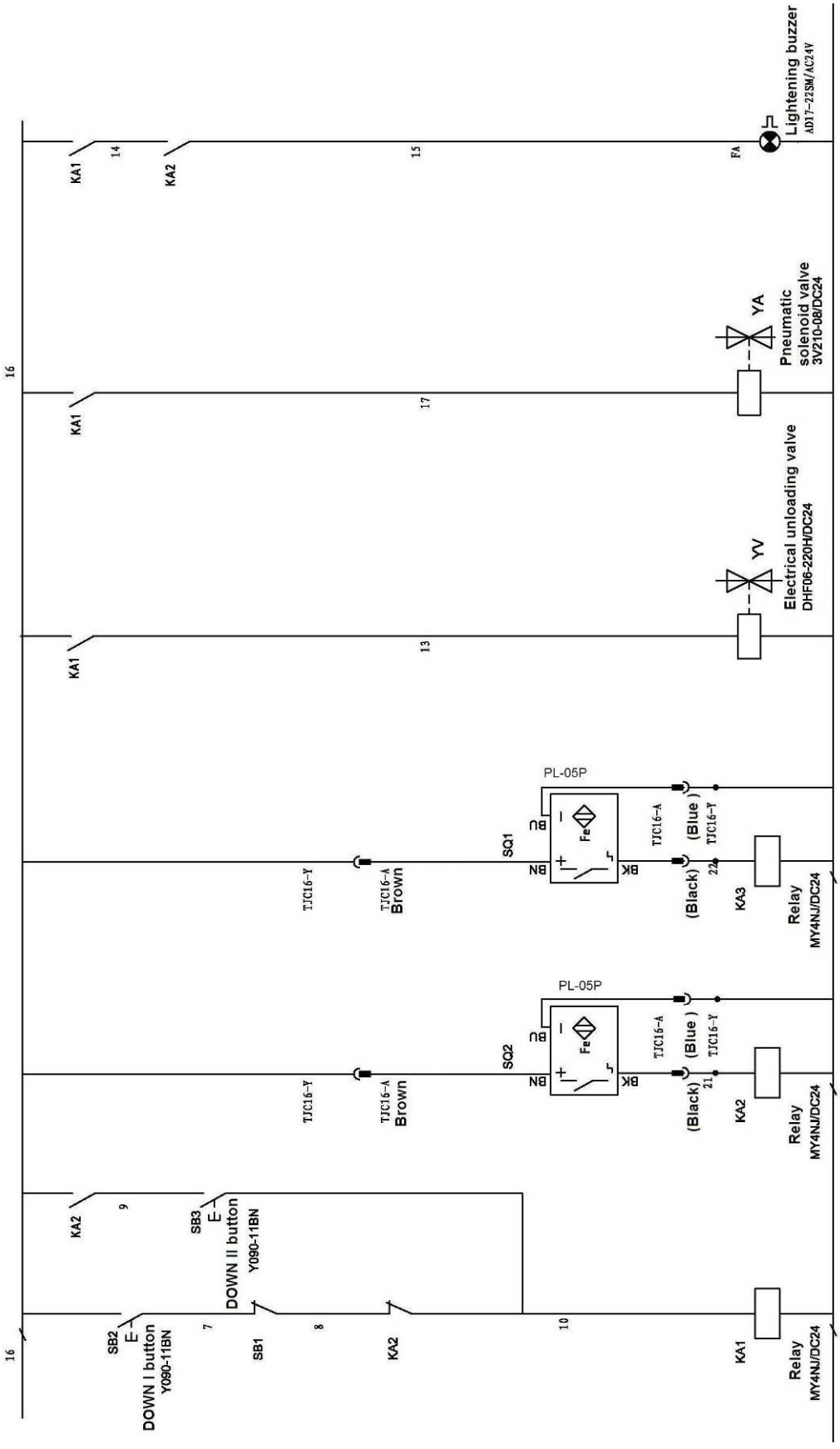
Single phase

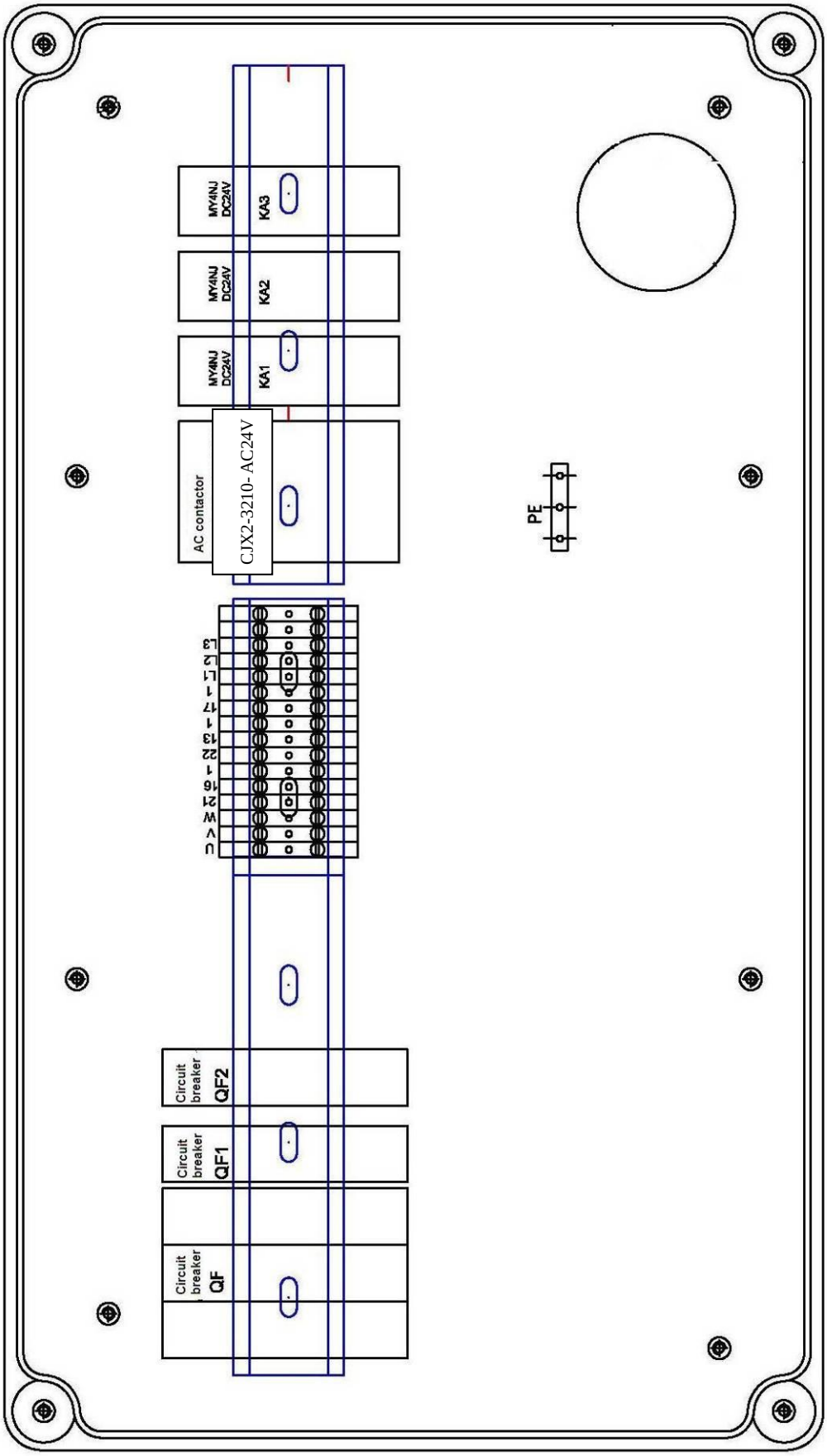


Three phase

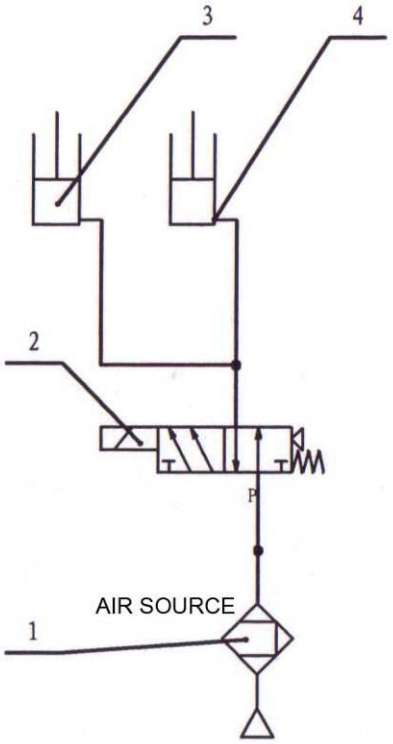








Annex5, Diagram for air supply connection



1、Air Filter

2、Solenoid Directional Valve

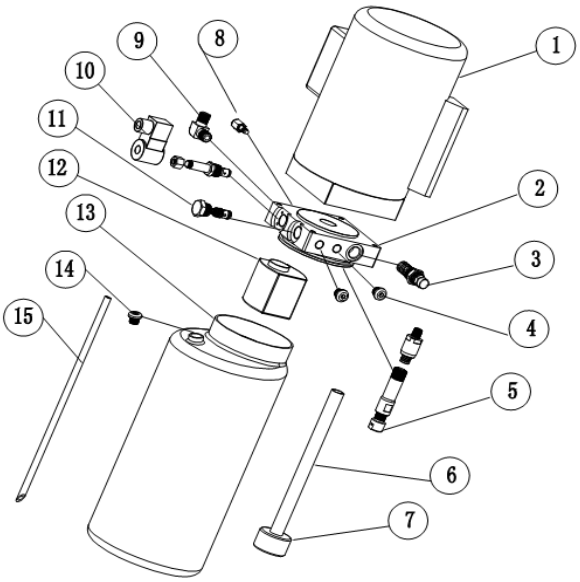
3、Driving cylinder locking

4、Assistant cylinder locking

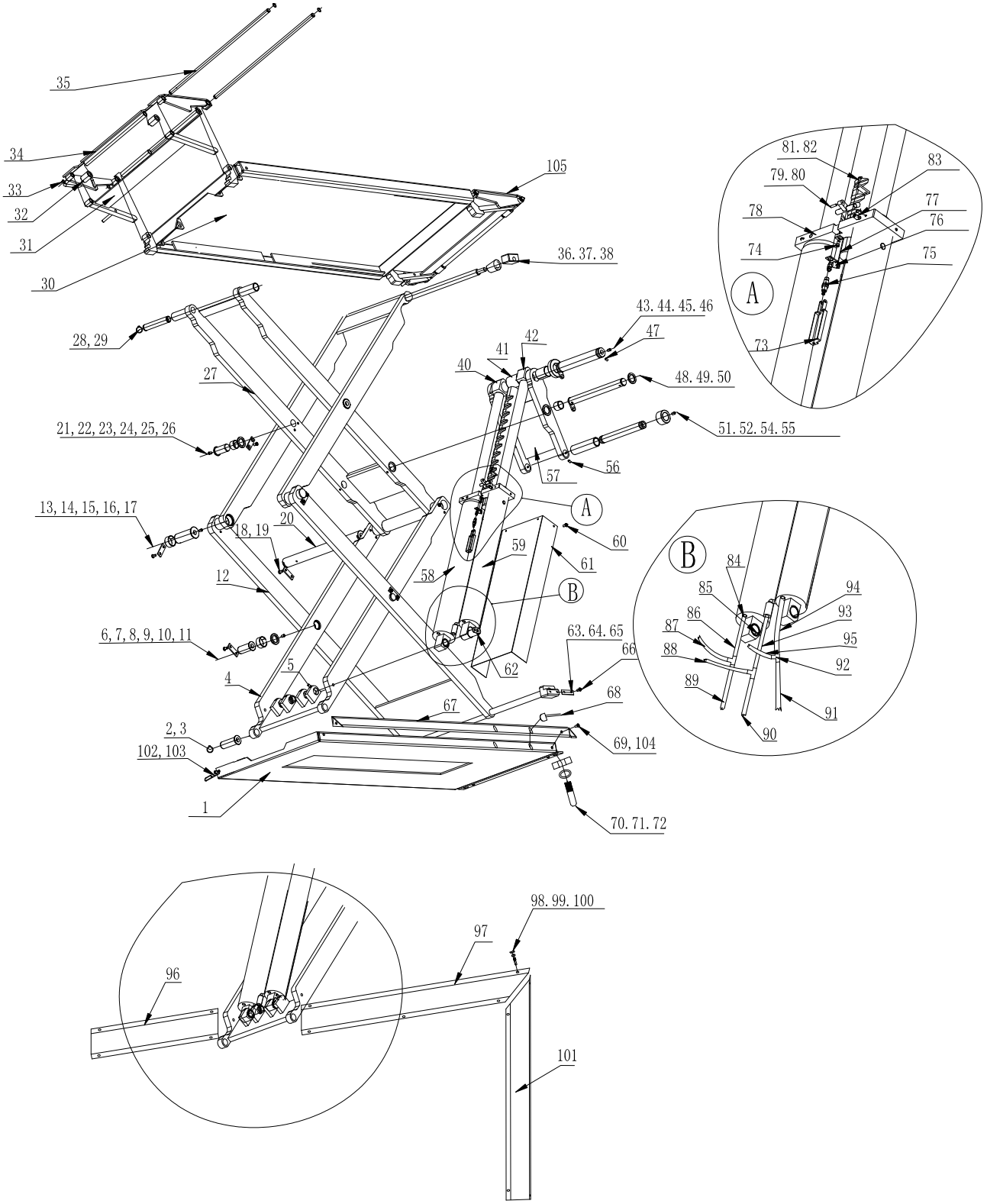
Annex 6, Separated drawings for the lift

For the pump:

S/N	DESCRIPTION	QTY
1	Motor	1
2	Hydraulic block	1
3	Overflow valve	1
4	Fitting	2
5	Cushion valve	1
6	Absorbing oil hose	1
7	Oil filter	1
8	Throttle valve	1
9	Oil hose tie-in	1
10	Electrical unloading valve	1
11	One-way valve	1
12	Gear pump	1
13	Oil tank	1
14	Oil tank cover	1
15	Oil back hose	1



For mechanical assembly



S/N	Material#	Name	Drawing#	Qty	Property	Note
1		Base plate A	FL-8801-A1-B1	1	Welded	
2		Circlip 25	GB/T894.1-1986	4	Standard	
3		Rotor shaft	FL-8801-A1-B5	4	45#	
4		Movable arm C	FL-8801-A2-B3	2	Welded	

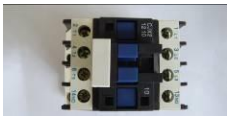
S/N	Material#	Name	Drawing#	Qty	Property	Note
5		Hex head cone screw M6*10	GB/T78-2000	16	Standard	Total qty
6		Cross sunken head screw M8*16	GB/T819.1-1986	32	Standard	Total qty
7		Clip	FL-8801-A2-B5	16	Q235A	Total qty
8		Joint shaft C	FL-8801-A2-B6	4	45#	
9		Bearing 3020	SF-1	8	Standard	Total qty
10		Thick spacer	FL-8801-A2-B7	8	Q235A	
11		Oil nozzle M8*1	JB/T7940.1-1985	32	Standard	Total qty
12		Movable arm B	FL-8801-A2-B1	2	Welded	
13		Cross sunken head screw M8*16	GB/T819.1-1986		Standard	Same as item 6
14		Clip	FL-8801-A2-B5		Q235A	Same as item 7
15		Bearing 4020	SF-1	4	Standard	
16		Joint shaft BB	FL-8801-A2-B9	4	45#	
17		Oil nozzle M8*1	JB/T7940.1-1985		Standard	Same as item 11
18		Cross sunken head screw M8*16	GB/T819.1-1986		Standard	Same as item 6
19		Clip	FL-8801-A2-B5		Q235A	Same as item 7
20		Joint shaft D	FL-8801-A2-B12	2	45#	
21		Oil nozzle M8*1	JB/T7940.1-1985		Standard	Same as item 11
22		Joint shaft C	FL-8801-A2-B6	4	45#	
23		Bearing 3020	SF-1		Standard	Same as item 9
24		Thin spacer	FL-8801-A2-B8	4	Q235A	
25		Cross sunken head screw M8*16	GB/T819.1-1986		Standard	Same as item 6
26		Clip	FL-8801-A2-B5		Q235A	Same as item 7
27		Movable arm A	FL-8801-A2-B2	2	Welded	
28		Circlip 25	GB/T894.1-2000	8	Standard	
29		Rotor shaft	FL-8801-A5-B2	4	45#	
30		Platform	FL-8801-A5-B3	2	Welded	
31		Supporting rod	FL-8801-A5-B1-C6	1	Welded	
32		Small wheel	MR30-A22-B5	4	Nylon1010	
33		Circlip 25		8	Standard	
34		Ramp A	FL-8801-A5-B1	2	Welded	
35		Ramp shaft	FL-8801-A5-B1-C4	4	45#	
36		Rotor shaft	FL-8801-A2-B15	2	45#	
37		Wheel	FL-8801-A2-B16	4	Q235A	
38		Pad	FL-8801-A2-B17	4	Nylon1010	
39		Movable arm B	FL-8801-A2-B1	2	Welded	
40		Cylinder connector A	FL-8801-A4-B11	2		
41		Safety teeth	FL-8801-A4-B2	2	Welded	
42		Oil connector B	FL-8801-A4-B1	2		
43		Oil nozzle M8*1	JB/T7940.1-1985		Standard	Same as item 11
44		Cylinder shaft	FL-8801-A3-B1	2	Welded	
45		Cylinder wheel	FL-8801-A4-B12	4	45#	
46		Bearing 4040	SF-1	4	Standard	
47		Inside hex cap screw M8*12	GB/T78-2000	16	Standard	Same as item 5
48		Thin spacer	FL-8801-A2-B8	4	Q235A	
49		Rotor shaft	FL-8801-A3-B6	2	Welded	
50		Bearing 3025	SF-1	4	Standard	
51		Oil nozzle M8*1	JB/T7940.1-1985		Standard	Same as item 11

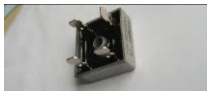
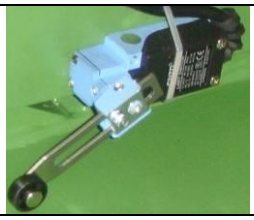
S/N	Material#	Name	Drawing#	Qty	Property	Note
52		Start wheel	FL-8801-A3-B4	4	Q235A	
53		Bearing 3530	SF-1	4	Standard	
54		Start rotor shaft	FL-8801-A3-B3	2	45#	
55		Wheel retaining ring	FL-8801-A3-B5	2	Q235A	
56		Inside hex cone screw M6*10	GB/T78-2000	16	Standard	Same as item 5
57		Start plate	FL-8801-A3-B2	2	Welded	
58		Drive oil cylinder	FL-8801-A4-B8	2	Assembly	
59		Oil cylinder	FL-8801-A4-B7	2	Assembly	
60		Cross cap screw M5*10	GB/T78-2000	4	Standard	
61		Oil cylinder sheath	FL-8801-A4-B14	2	Q235A	
62		Cylinder shaft	FL-8801-A4-B9	4	Welded	
63		Position limit plate	FL-8801-A2-B19	1	Q235A	
64		Position limit slider	FL-8801-A2-B18	1	Nylon1010	
65		Down shaft	FL-8801-A2-B11	2	45#	
66		Cross flat head screw M8*16	GB/T78-2000	2	Standard	
67		Protection cover	FL-8801-A6-B2	1	Welded	
68		Proximity switch		2	Assembly	Optical limit switch
69		Cross cap screw M6*10	GB/T818-2000	4	Standard	
70		Hex nut M16	GB/T41-2000	8	Standard	With expansion bolt
71		Washer 16		8	Standard	With expansion bolt
72		Expansion bolt M16*160		8	Standard	
73		Safety block connector	FL-8801-A4-B5	2	Q235A	
74		Cross cap screw M5*10	GB/T78-2000	2	Standard	
75		Air cylinder	CJPB 6*15* Swivel	2	Assembly	
76		Air hose connector	PL6-M5	2	Assembly	
77		Air cylinder fix plate	FL-8801-A4-B6	2	Q235A	
78		Oil cylinder flange	FL-8801-A4-B3	2	45#	
79		Cylinder pin Φ4*14	GB/T119.1-2000	2	Standard	
80		Safety block	FL-8801-A4-B4	2	45#	
81		Cross cap screw M4*8	GB/T818-2000	14	Standard	
82		Safety block pressure plate	FL-8801-A4-B13	4	Q235A	
83		Inside hex cone screw M8*20	GB/T78-2000	4	Standard	
84		Connector B	FL-8801-A4-B16	4	45#	
85		Bearing 2840	SF-1	4	Standard	
86		Oil hose	FL-8801-A4-B10	1	Assembly	0.27m
87		Oil hose	FL-8801-A4-B10	1	Assembly	1.65m
88		Oil hose	FL-8801-A4-B10	2	Assembly	1.65m
89		Oil hose	FL-8801-A4-B10	1	Assembly	4.1m
90		Oil hose	FL-8801-A4-B10	1	Assembly	4.1m
91		Oil hose	FL-8801-A4-B10	1	Assembly	4.1m
92		Three-way connector	FL-8801-A4-B7	3	45#	
93		Oil hose	FL-8801-A4-B10	1	Assembly	0.25m
94		Oil hose		1	Assembly	0.23m
95		Oil hose	FL-8801-A4-B10	1	Assembly	1.65m
96		Protection cover plate A	FL-8801-A17	1	Q235A	
97		Protection cover plate B	FL-8801-A10	1	Q235A	
98		Hex nut M6		14	Standard	

S/N	Material#	Name	Drawing#	Qty	Property	Note
99		Washer 6		14	Standard	
100		Expansion bolt M6*40		14	Standard	
101		Protection cover plate C	FL-8801-A11	1	Q235A	
102		Oil hose fixer	FL-8801-A1-B7	3	65Mn	
103		Hex head full swivel bolt M8*15	GB/T5781-2000	1	Standard	
104		Hex head full swivel bolt M3*15	GB/T818-2000	4	Standard	
105		Guiding plate B	FL-8801-A5-B4	2	Welded	

Annex 7, Spare parts list

Spare parts list-electrical system

S/N	Material #	Name	Spec.	Unit	Qty/set	Pictures
1		Power switch	LW26GS-20/04	Pcs	1	
2		Button	Y090	Pcs	3	
3		Power indicator	AD17-22G-AC24	Pcs	1	
4						
5						
6						
7		Transformer	Bk 一 160VA110V 一 24V 一 60HZ	Pcs	1	
8						
9						
10		AC contactor	CJX2-3210- AC24V	Pcs	1	
11		Circuit breaker	DZ47-63 C16 /3P	Pcs	1	
12		Circuit breaker	DZ47-63 C32 /2P	Pcs	1	

S/N	Material #	Name	Spec.	Unit	Qty/set	Pictures
13		Circuit breaker	DZ47-63 C3 /1P	Pcs	1	
14		Pneumatic valve	3V210-08/DC24	Pcs	1	
15		Limit switch	ME8104	Pcs	1	
16		Bridge rectifier	KBPC5A-35A	Pcs	1	
17		Capacitor	4700UF/50V	Pcs	1	
18		Control box	Bigger	Pcs	1	
19		Relay	MY4NJ/DC24	Pcs	3	
20		Relay holder	PYF14AE	Pcs	1	
21		Limits switch	8108（TZ8108）	Pcs	1	

Spare parts list---mechanical part

S/N	Material#	Name	Drawing#	Qty/set	Description	Note
1		Straight oil cup M8*1	JB/T7940.1-1985	32	Standard	
2		Pad block	FL-8801-A2-B17	4	Nylon	
3		Positioning slider	FL-8801-A2-B13	4	Nylon 1010	
4		Safety block connection	FL-8801-A4-B5	2	Q235A	
5		Air cylinder	AA6*10	2	Assembly	
6		Fixing plate for air cylinder	FL-8801-A4-B6	2	Q235A	
7		Coverage plate for safety block	FL-8801-A4-B13	4	Q235A	
8		Cover A	FL-8801-A9	1	Q235A	
9		Cover B	FL-8801-A10	1	Q235A	
10		Cover C	FL-8801-A11	1	Q235A	
11		Y- seal ring	B7-80*70*7	1		
12		Y-seal ring	SD38*48*6	1		
13		Anti-dust ring	BHS38*46*6	2		
14		Y-seal ring	B7-70*60*7	1		

Space for notes:

Space for notes:

Space for notes:

Preperation protocol

The lift type …… with the

serial number: …… was built on ……

by the company …… in ……

and was checked for safety and function and was put into operation.

The set up and preparation was carried out by the OPERATOR | EXPORT

The safety of the lift was checked by an .

The operator confirms the installation of the lift, and qualified experts have comfirmed proper install before launching unit.

Date Owner/ Operator Signature

Date Installation expert Signature

Address Owner/ Operator:

Address Installation expert:

Safety review pursuant to UVV type

Safety inspection before commissioning/ regular checks/ extraordinary
(Mark off those that do not apply)

Inspection	Good shape	defective	Re-inspection	Notes
Warning labels/ signs				
Name plate/ ID				
Limit switch function				
Condition of rubber plates				
Function of carrier arm locks				
Supporting structure (cracks etc.)				
Function of safety latches				
All screws tight				
Condition of steel cables				
Condition of covers				
Condition of chain				
Condition of cable pulleys				
Condition of hydraulic lines				
Fluid level of hydraulic unit				
Hydraulic system seals				
Condition of the piston rod				
Condition of electronics				
Function test of the lift				
Foundation condition (cracks)				
Lift Slides/guides in the lift column				
Other				
(Check the appropriate box, if re-inspection is necessary mark that box as well!)				

Inspector (Name, Address): ……

Inspected on: ……

Inspection result:

	Commissioning/ use possible. Resolve issues by ……
	Commissioning/ use prohibited. Re-inspection neccesary.
	No defects. Commissioning/ use possible.

Signature owner/ operator: ……

Signature inspector: ……

Inspection findings

Regular/ extraordinary inspection

On the date of …… this lift was put through a regular/ extraordinary and thorough inspection. During this inspection these issues were/ were not found.

Scope of the audit:

Outstanding partial inspection:

The use of this equipment is authorized and the machine and all features have been inspected .

Location/ Date Inspectors signature

Operator or agent

Taken notes of the defects …… ……

Defect corrected …… ……

Date Signature

Verification

Date Signature

On the date of …… this lift was put through re-inspection. During this inspection these issues were/ were not found.

The use of this equipment is authorized and the machine and all features have been inspected.

Location/ Date Inspectors signature

Safety review pursuant to UVV type

Safety inspection before commissioning/ regular checks/ extraordinary
(Mark off those that do not apply)

Inspection	Good shape	defective	Re-inspection	Notes
Warning labels/ signs				
Name plate/ ID				
Limit switch function				
Condition of rubber plates				
Function of carrier arm locks				
Supporting structure (cracks etc.)				
Function of safety latches				
All screws tight				
Condition of steel cables				
Condition of covers				
Condition of chain				
Condition of cable pulleys				
Condition of hydraulic lines				
Fluid level of hydraulic unit				
Hydraulic system seals				
Condition of the piston rod				
Condition of electronics				
Function test of the lift				
Foundation condition (cracks)				
Lift Slides/guides in the lift column				
Other				
(Check the appropriate box, if re-inspection is necessary mark that box as well!)				

Inspector (Name, Address): ……

Inspected on: ……

Inspection result:

☐	Commissioning/ use possible. Resolve issues by ……
☐	Commissioning/ use prohibited. Re-inspection neccesary.
☐	No defects. Commissioning/ use possible.

Signature owner/ operator: ……

Signature inspector: ……

Inspection findings

Regular/ extraordinary inspection

On the date of …… this lift was put through a regular/ extraordinary and thorough inspection. During this inspection these issues were/ were not found.

Scope of the audit:

Outstanding partial inspection:

The use of this equipment is authorized and the machine and all features have been inspected .

Location/ Date Inspectors signature

Operator or agent

Taken notes of the defects …… ……

Defect corrected …… ……

Date Signature

Verification

Date Signature

On the date of …… this lift was put through re-inspection. During this inspection these issues were/ were not found.

The use of this equipment is authorized and the machine and all features have been inspected.

Location/ Date Inspectors signature

EG-declaration of conformity

CE

TWIN BUSCH GERMANY

The company

Twin Busch GmbH | Amperestr. 1 | D-64625 Bensheim

declares hereby, that the **scissor vehicle lift**

TW S3-19 | 3000 kg

serial no. _____

in the configuration placed on the market by us, meets the relevant safety and health requirements, as required by the following EC directive(s) in it's/their current version(s).

EG-directive(s)

2006/42/EC machines, 2009/42/EC low voltage

Applied harmonized standards and regulations

EN 1493:2010, EN 60204-1/A1:2009

CE Certificate

M6A 14 08 87411 007
N8M 14 08 87411 008

date of issue: 02.09.2014
place of issue: München
technical file no.: 646821 401101

Certification body

TÜV SÜD Product Service GmbH,
Ridlerstraße 65
80339 München, Germany
Notified Body Appointment No. 0123

Any alteration to the equipment, improper use or installation void this declaration.

Authorized person to compile technical documentation is: Michael Glade (adress as below)

TWIN BUSCH GERMANY
TWIN BUSCH GmbH
Amperestr. 1 · 64625 Bensheim
Tel. 06251 / 70585-0 · Fax: 70585-29

Authorized signatory: Michael Glade
Bensheim, 27.11.14 Qualitätsmanagement

Twin Busch GmbH | Amperestr. 1 | D-64625 Bensheim
twinbusch.de | E-Mail: info@twinbusch.de | Tel.: +49 (0)6251-70585-0

Twin Busch GmbH | Amperestraße 1 | D-64625 Bensheim
Tel.: +49 (0) 6251-70585-0 | Fax: +49 (0) 6251-70585-29 | info@twinbusch.de