



Model No. H8335ME - Mobile Scissor Lift - 3.5T

- B[®] Instruction Manual**
 - B[®] Maintenance Manual**
 - B[®] Spare Parts**
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(Rev. 02 - 2018.11.08)

The specifications stated in this manual are not binding, due to the process of continuous improvement and development we reserve the right to change any specification without prior notification.

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General Information

1.1 Application

This lift is designed for the purpose of lifting light vehicles under 3.5 tons for vehicle test, service and cleaning

1.2 Features

- The lift features advanced design, durability, compact layout.
- The hidden type ultra-thin structure, Floor installation, without construction pit, small occupied space
- Independent control box, low voltage control, good safety performance
- Hydraulic volume synchronous cylinder, platform operation synchronization, smooth.
- Hydraulic system keeps both platforms level, operate safety
- Automatic lubricating system and oil-less bearings

1.3 Specifications

Max lifting height (mm)	Minimum height (mm)	Max lifting weight (kg)	Up time (s)	Down time (s)	Power (kw)	Number of platform (pcs)	Lift weight (kg)	Synchronization Precision (mm)	Height difference (mm)
920-940	≤105	3500	≤40	≥20	2.2	2	630	<40	≤8

Electric specifications:

Motor (Optional): 2.2kw

Voltage options according to different voltage

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

Noise: ≤70dB (A)

Hydraulic System

Max. Working Pressure: 28 MPa, Flow rate: ≥4.5L/min.

Pneumatic System

Working Pressure: 5 kgf/cm²

! Notice: At the bottom position, the max load of the lift is 1T.

1.4 Environment requirements

Temperature: 0°C~ +40°C

Relative Humidity: ≤80% at 30°C

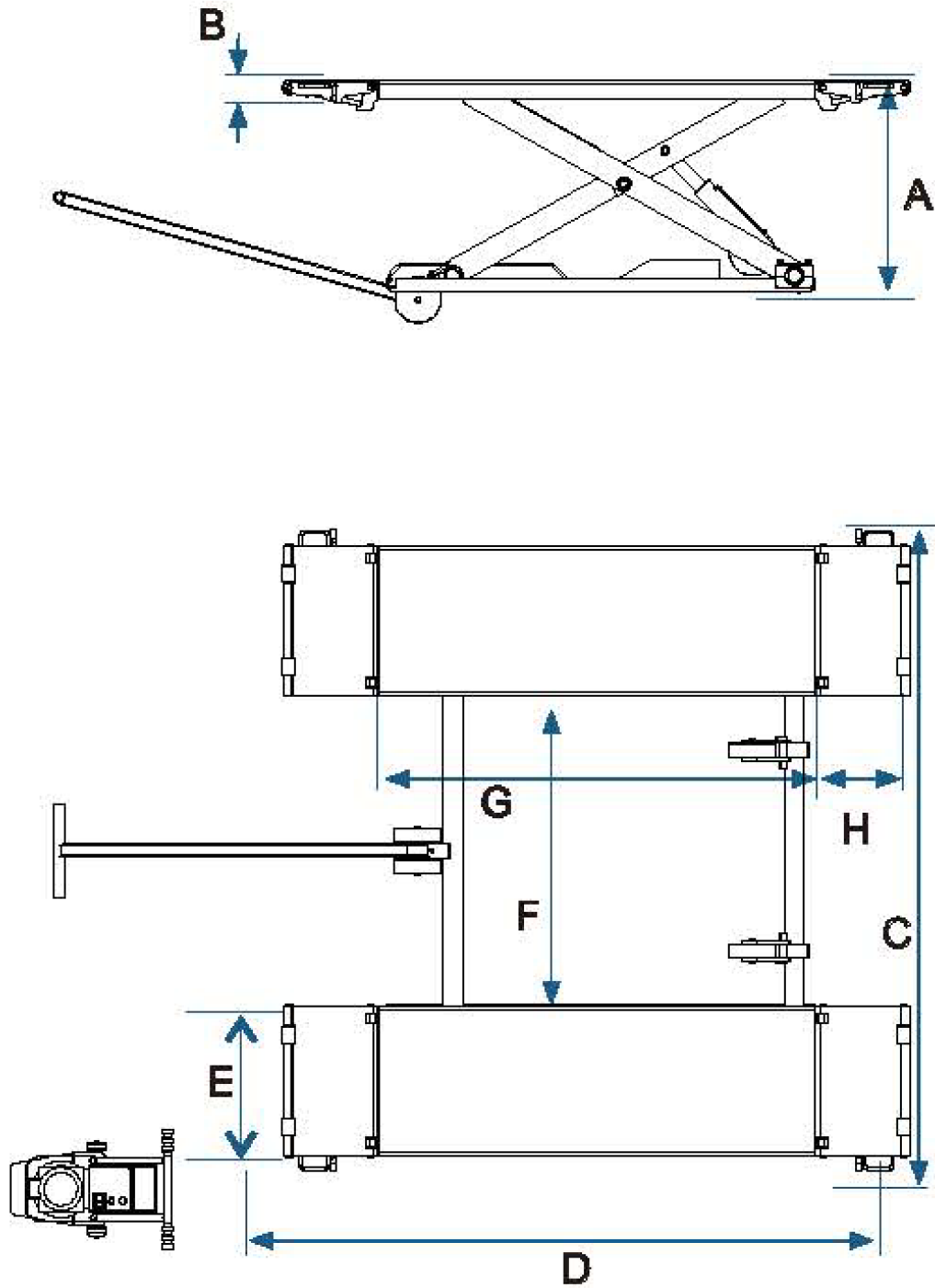
Transportation/Storage Temperature: -25°C~+55°C

Altitude: ≤2000m(78740")

2 Structure and working principle

2.1 Outlay

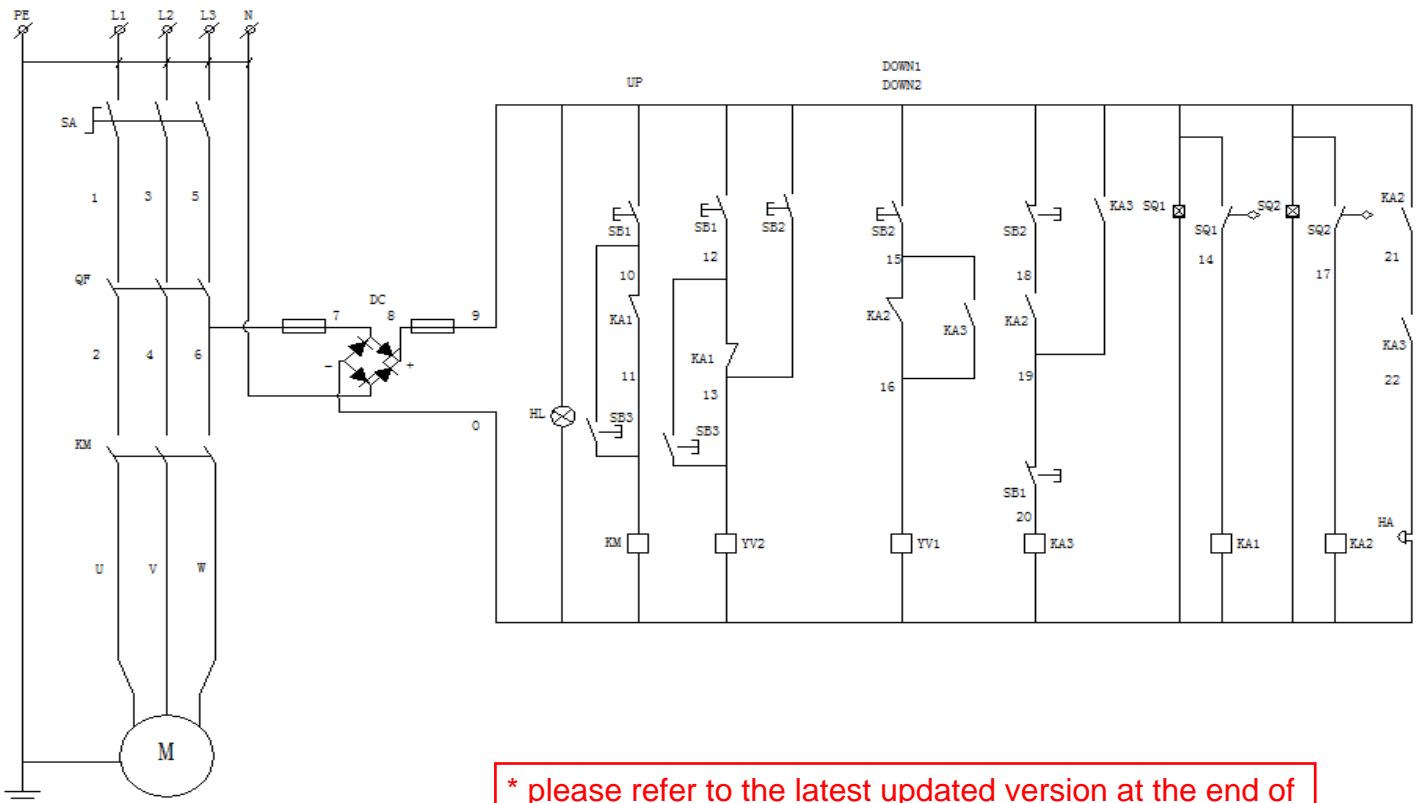
Pic.1



A	Max Lifting	920-940mm
B	Drive on height	105mm
C	Overall width	1960mm
D	Overall length	2025mm
E	Runway width	480mm
F	Distance between platforms	900mm
G	Platform length	1400mm
H	Ramp length	310mm

2.2 Electrical Diagram

Pic.2



* please refer to the latest updated version at the end of this manual

Lifting: press the up button SB1, the motor will drive the gear pump to provide the oil. and then the cylinder will push the lift up. Loosen the button SB1, the lift will stop going up. If continue press the SB1 button, the lift will raising to the Max height, the lift protect by the usage by the limit switch or lowering valve

3 Installation

3.1 Overall layout

Installation position :

- Machine supply status for the whole package, that is, electric control box, oil pipe and platform are connected and adjusted well
- Open the package, remove the packing material to check the lift for any damage during the transportation
- Place the packing material away from children to prevent any danger. Properly dispose of the

packing materials that may cause pollution

- 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 4.2m high to give enough space
- Allow enough space (1.5m) at the front electrician.
- Power should be prepared before install. Electrical wiring should be conducted by certified electrician.
- It is default installation, the control unit could be installed at the right side of lift as well. The installation should be performed by qualified people

3.2 Control Desk Installation

- Place the control desk in place according to the ground layout.(Fig.6)
- Use cover plate to protect the wires if there is no wire channel on the concrete floor
- Fill hydraulic oil into the oil tank (using oil dipstick to check the level). Pay special attention to avoid dust and contaminants into the oil.

3.3 Connecting power

- Open the control desk, connect the wires according to the electrical diagram. After check the connection, switch on the power. Turn on the power supply switch which is on the panel of control desk. The indicator light will turn on.
- Power switch is needed, and installed near control desk. Cut the power when maintenance or emergency. The damage which is caused by wrong wire connection is not covered by warranty.
- Make sure the oil level is above the standard level. DO NOT operate the lift if oil tank is empty. Fix all the oil hoses and press UP button, test the electrical parts: if motor does not operate, abnormal sound, platform does not rise, motor is hot, STOP operating immediately and check the wire connection

4. Test

4.1 Preparation before test

- Lubricate the moving surface of the roller with #2 lithium lubricant. Lubricant should be applied evenly from left to right.
- Lubricate the joints of the lifts with #2 lithium lubricant.
- Fill tank full with Oil N32 or N46

4.2 Test step

- Check if all the connection bolts are tightly fastened.
- Press UP button, the platforms are raising; release the UP button, the platforms stop raising. Press DOWN button, the platforms are lowering.
- If there is air in hydraulic system due to new installation, air bleeding performance is needed. The air in the main & sub oil cylinder can be discharged through the rise and fall repeatedly. When see the

transparent hose continuously return oil, hydraulic leveling, so that the platform to reach the same height.

 **Attention:**

- ◆ ***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 don not get stuck with platforms moving downward***

5 Safety Rules for Electrical Control System

- Only personnel who are properly trained and have adequate knowledge and skill should undertake all electrical/electronic troubleshooting and repair.
- Do not alter or bypass protective interlocks.
- Before starting, read and observe all warning labels.
- When trouble shooting make sure the power source has been disconnected and main switch has been locked.
- Take extra precautions in damp areas to protect you from accidental grounding.
- Before applying power to any equipment it must be established, without a doubt, that all persons are clear.
- Do not open the electrical control panel unless it is necessary to check the electrical equipment.
- Do not alter the electrical circuits unless authorized to do so by the manufacturer.
- When replacing electrical components, make sure they conform to the manufacturer's specifications, including proper color coding.
- Do not wear metal frame glasses, metallic necklaces or chains while working on any electrical equipment. Also do not wear any ring, watch or bracelet while operating electrical equipment.

6 Operation

6.1 Operation panel



Pic.3

Operation Instruction

Lifting process: Press UP button ,left&right platform raising , Release the button , the platform will stop raise. .If continue press the button,the lift will raising to the limited height then stop

Lowering process: Press DOWN button , the platform begin to lower.

6.2 Preparatory Inspections

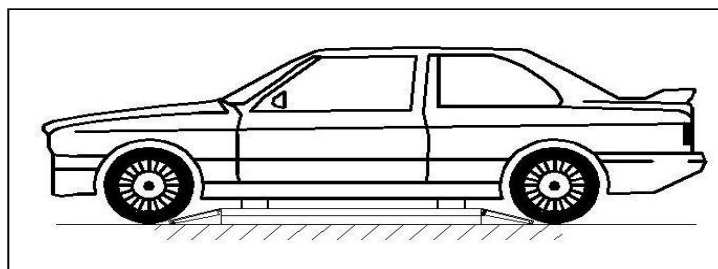
- Check for the synchronized and steady movement of the platforms
- Make sure the platforms would automatically stop when they reach the max lifting height
- Check two if two platform up and down movement are consistently and smoothly
- Check for possible leakage in the cylinder, hoses and fittings Check 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

6.3 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
- Press UP button to lift the vehicle to 200mm~300mm from the floor
- 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
- After the maintenance is done, keep the work area clear and safe before lowering lift

6.4 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.
- Operation and maintenance personnel are not allowed to enter the unsafe working area (such as machine and vehicle) when lifting the vehicle
Ensure correct position on the platform of the vehicle
- Ensure the vehicle on the correct position on the platform



- Ensure do not exceed the allowable weight, maximum height, length range
- Personnel may not be stranded on the platform when lifting
- The lifts should be insured before personnel do under car job

- 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 .
- In the mesa distance base about 450 mm in height, lifting machine in decline process will automatically stop once. This phenomenon is not lifting machine fault
- Keep the lift area clean to avoid the dangerous happen

RISK OF FALLING OFF:



Oil under the platform must clean to keep person from falling off.



During up and down operations, personnel are prohibited from entering the platforms and the vehicle to avoid falling off.



This hazard may arise in the case of incorrect positioning of the vehicle on the platforms, overweight of the vehicle, or in the case of vehicles of dimensions that are not compatible with the capacity of the lift.



When the platform is being tested, the vehicle engine can not be turned on. There is nothing should be placed on the lift-lowering area and the movable parts of the lift



RISK OF ELECTRIC SHOCK

Risk of electric shock of the areas of insulated in electric equipment were shattered. Do not use jets of water, steam solvents or paint next to the lift, and take special care to keep such substances clear of the electrical control panel.



RISKS RELATED TO INAPPROPRIATE LIGHTING

The operator and the maintenance fitter must be able to assure that all the areas of the lift are set with light, which will avoid lack light cause the parts missing and person danger.

During up and down operations, the operator should continually observe the lift and can operate it only in the position of operator. When lifting and lowering the vehicle, the cushion needs being put in the bottom of chassis.



The handling of safety devices is strictly forbidden. Never exceed the maximum carrying capacity of the lift, make sure the vehicles to be lifted have no load.

7 Troubleshooting

Symptoms	Reasons	Solutions
The motor does not work.	Check the molten core is burned Voltage is not correct. Fuse burning. Motor is broken.	Reset molten core Supply power of correct voltage. Change Fuse. Change motor.
The motor works, but the platforms do not move.	The motor rotates in the wrong direction. Oil level is too low. Oil leak.	Change wiring of motor to change direction. Add oil. Check the oil hose.
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.
Lowering speed is slow.	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.
Lifting speed is slow or oil spill.	Oil and air are mixed.	Change oil or eject air.
The platforms are not synchronized.	One cylinder has much more oil than another.	Adjust the oil in both cylinders according to manual.

8 Maintenance

8.1 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.

8.2 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 moving parts are well-lubricated with high-quality #2 lithium lubricant.
- Apply #2 lithium lubricant on a monthly basis.

8.3 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

8.4 Maintenance for 3 Years or 5000 Times Operations

- Replace the bushings at all joints.
- Replace all seals.
- Replace sliding blocks

9 Storage and Scrapping

9.1 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

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9.2 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

10. Hydraulic Oil Data

#2 Lithium Lubricant

Item	Specifications
Conical degree (1/10mm)	278
Dropping point °C	185
Erosion (T2 Copper Plate, 100 °C, 24h)	No Change
Copper Screening (100°C, 22h) %	4
Evaporation (100°C, 22h) %	2
Oxidizing Stability (99°C, 100 h)	0.2
Non-corrosibility (52°C, 48)	Grade 1
Foreign substance (Microscopic method) / (number/cm ³) Above 10µm Above 25µm Above 75µm Above 125µm	No more than 5000 No more than 3000 No more than 500 0
Relative Viscosity (-15°C, 10s ⁻¹) ,(Pa·s)	<800
Humidity Loss (38°C, 1h) (%)	≤8

N32 Mechanic Oil (for winter)

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

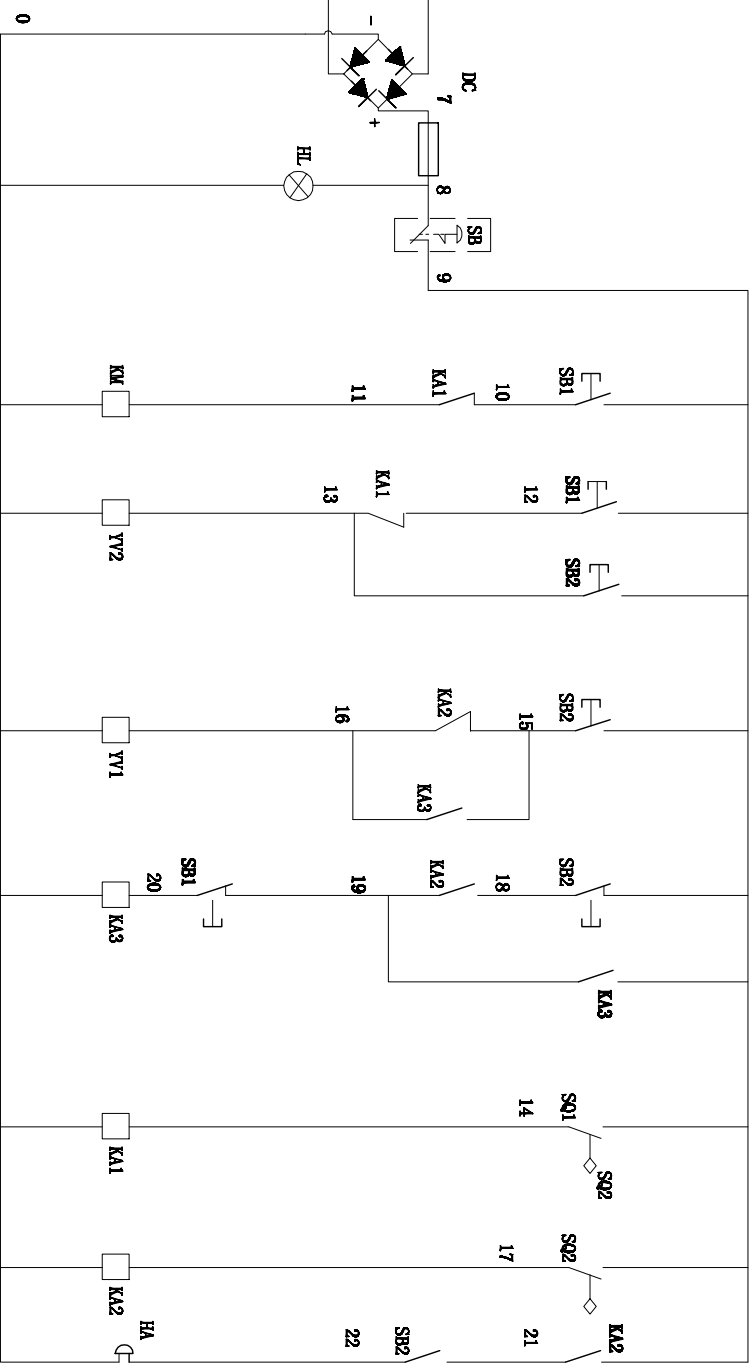
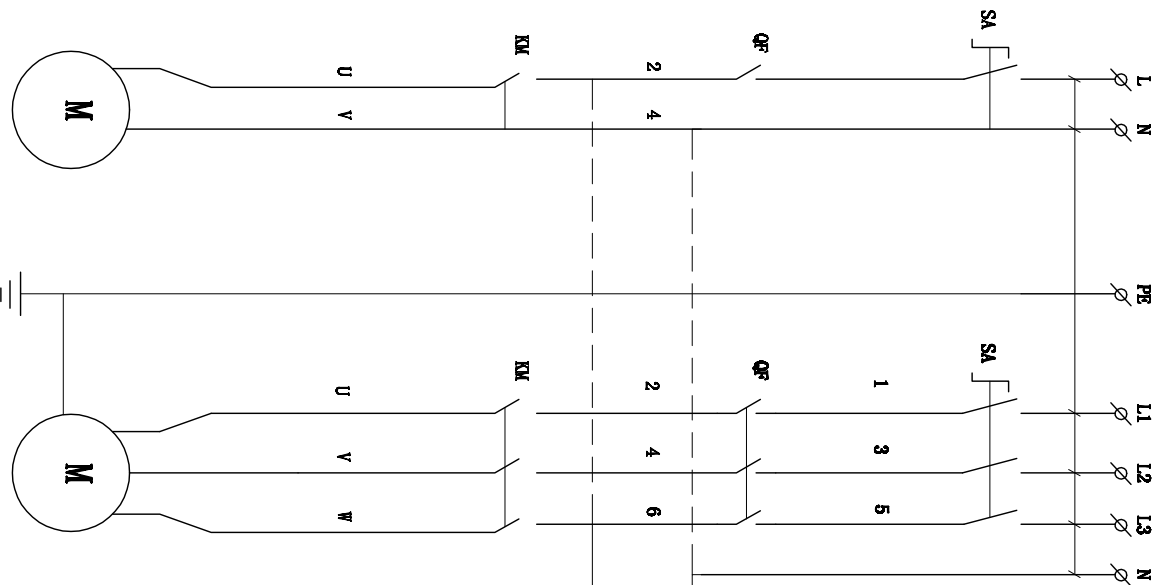
N46 Mechanical Oil (for summer)

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

Electrical Wiring Diagram

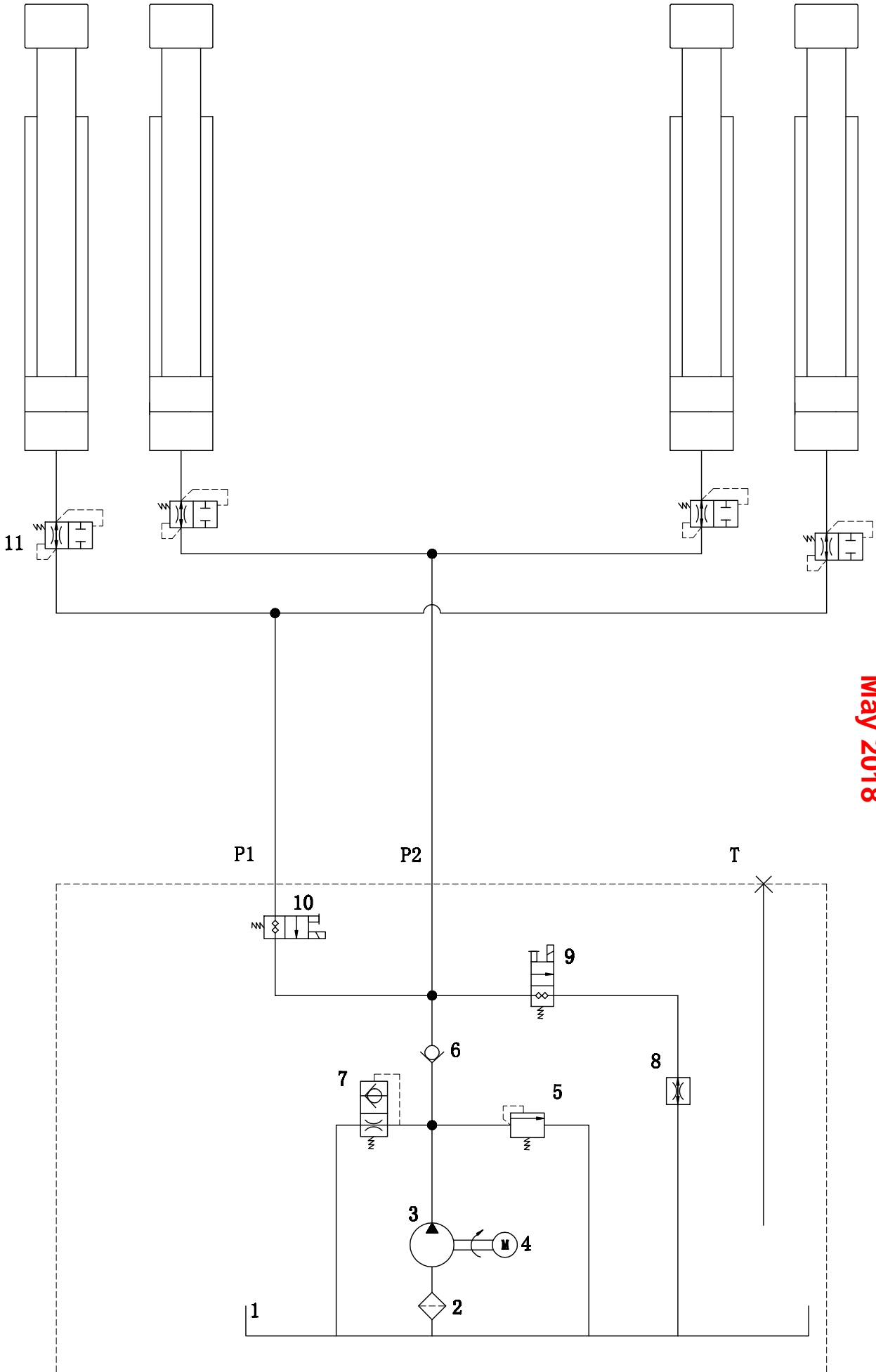
May 2018

BRADBURY EQUIPMENT



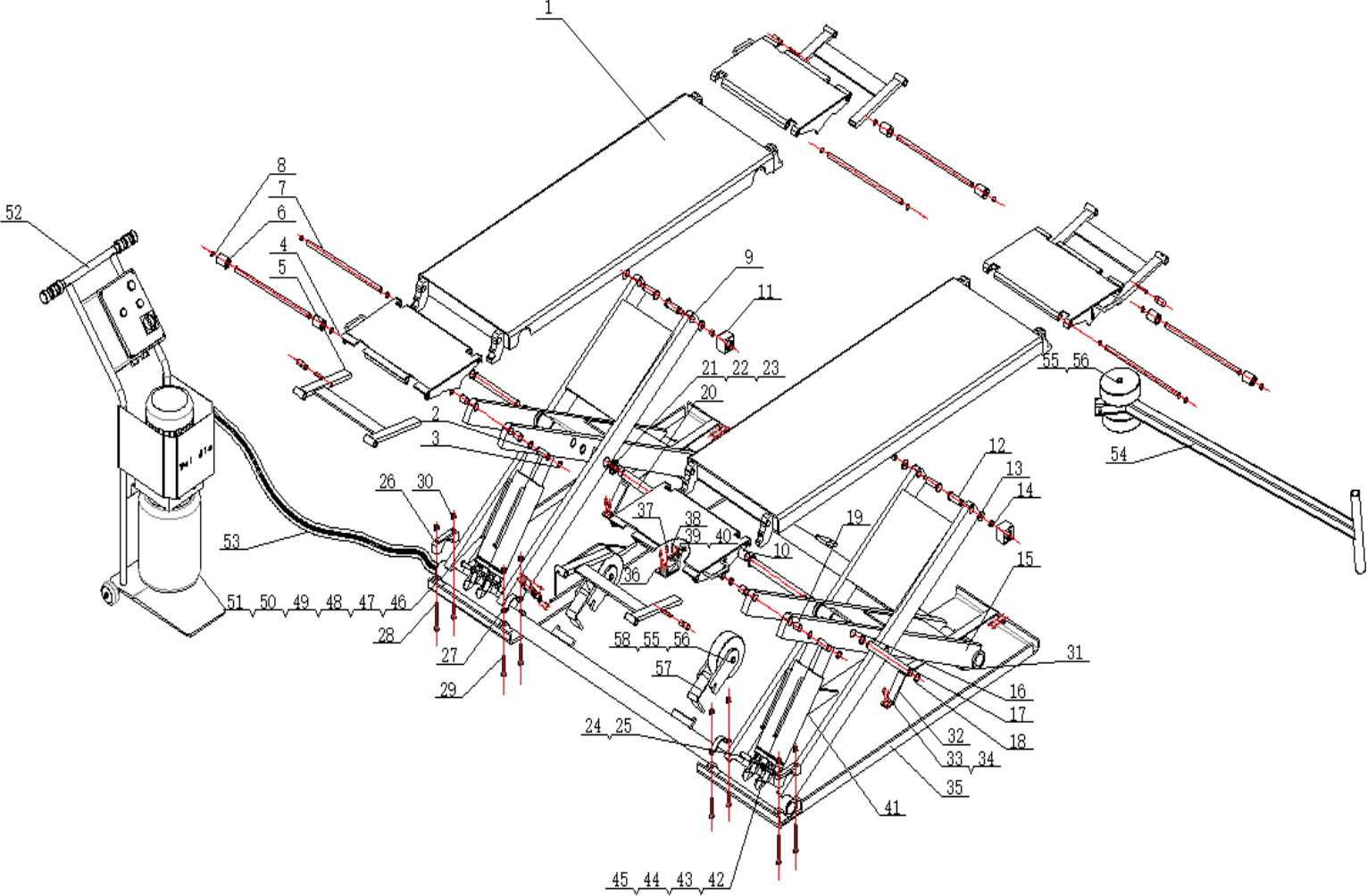
LEGEND

KM:	Contactor
QF:	Breaker
SA:	Transfer switch
L:	Firing line
N:	Null line
PE:	Ground wire
L:	Line
DC:	Direct current
SB:	Button
KA:	Time relay
VV:	Solenoid valve
SQ:	Limit switch



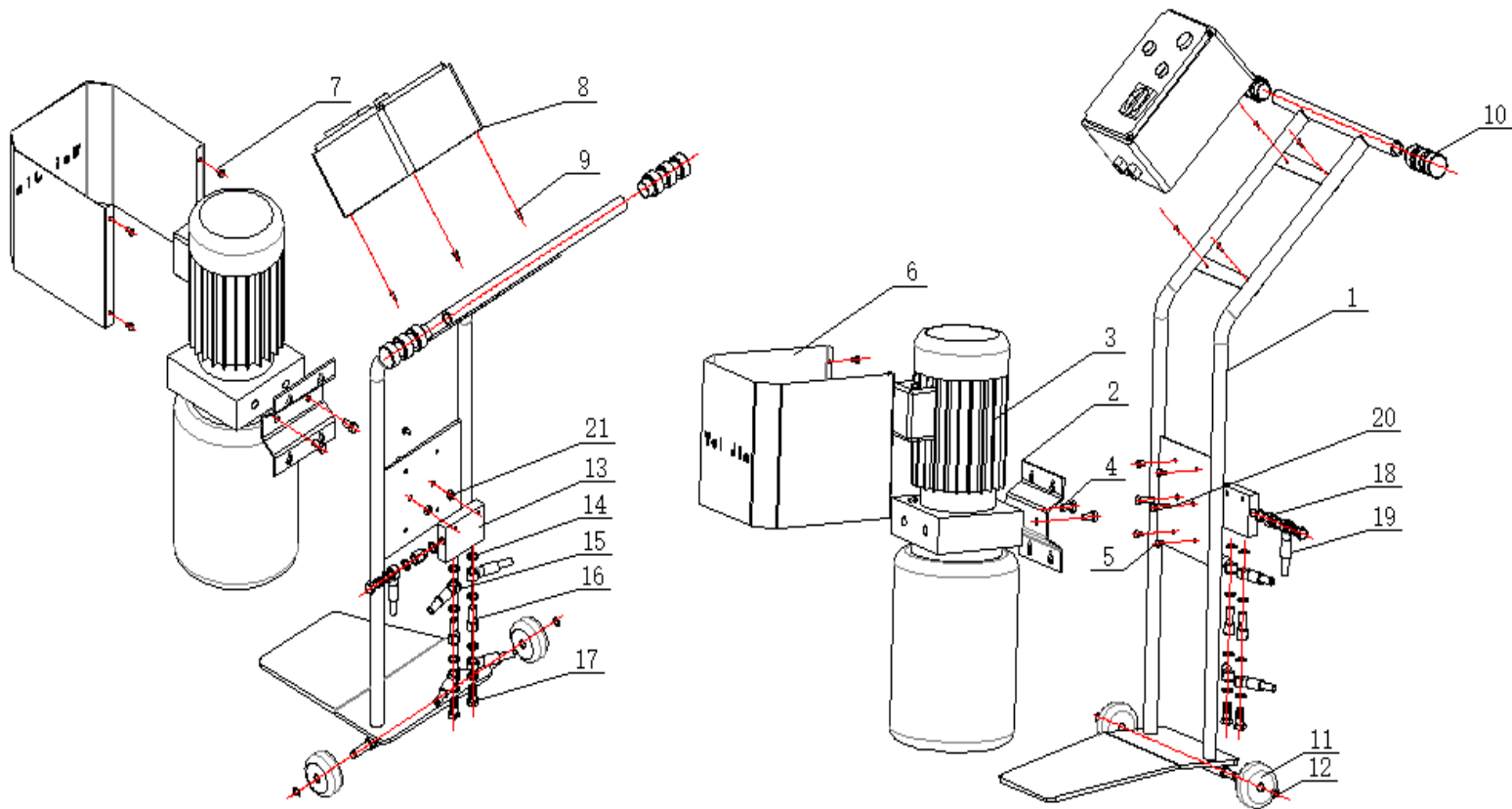
Hydraulic Diagram
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11.SPARE PARTS



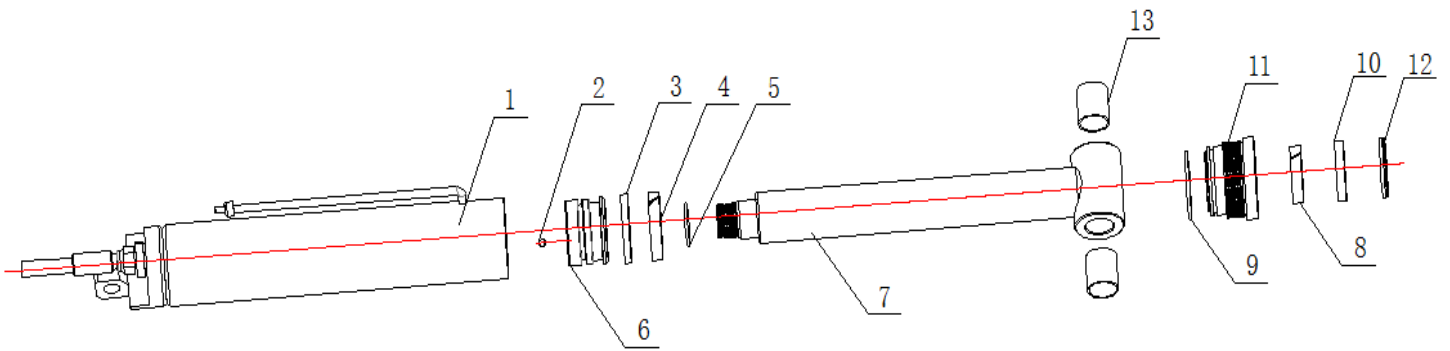
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Drawing No.	Code	Part number	Description
1	QWJ635Z-400-00	RZ1001	Platform
2	QWJ635Z-000-07	RZ1002	Platform pin
3	GB/T 894.1	RZ1003	Pin stopper 20
4	QWJ635Z-010-00	RZ1004	ramp
5	QWJ635Z-020-00	RZ1005	ramp support bar
6	QWJ632W-11-02	RZ1006	rollor
7	QWJ635Z-000-13	RZ1007	long support pin
8	GB/T 894.1	RZ1008	Pin stopper 20
9	QWJ635Z-200-00	RZ1009	Ouside support bar
10	SF-1	RZ1010	Bushing 3036 (P34x30x35)
11	QWJ635Z-000-08	RZ1011	Nylon block for platform
12	QWJ635Z-000-09	RZ1012	Shaft for nylon block
13	GB/T 97.1	RZ1013	washer 12
14	GB/T 6170-2000	RZ1014	Nut M12
15	QWJ635Z-300-00	RZ1015	inside supprt bard
16	SF-1	RZ1016	Bushing 2540 (P28x25x40)
17	QWJ635Z-000-05	RZ1017	cylinder pin
18	GB/T 894.1	RZ1018	pin clip stoper 25
19	SF-1	RZ1019	bushing 2025 (P23x20x25)
20	QWJ635Z-000-06	RZ1020	Pin for scissors
21	GB/T 812-1988	RZ1021	Locking Nut M27x2
22	GB/T 858	RZ1022	stoping washer 27
23	GB/T 95	RZ1023	washer 27
24	QWJ635Z-000-04	RZ1024	shaft for bottom of cylinder
25	GB/T 894.1	RZ1025	pin stopper 15
26	QWJ635Z-000-01	RZ1026	base nylon block
27	QWJ635Z-000-02	RZ1027	cover
28	GB/T70.3-2000	RZ1028	inner hex. bolt M10x100
29	GB/T70.3-2000	RZ1029	inner hex. bolt M10x70
30	GB/T889.1-2000	RZ1030	Nut M10
31	QWJ635Z-000-03	RZ1031	Inner scissors nylon block
32	QWJ635Z-000-10	RZ1032	Stopper board
33	GB/T70.1-2000	RZ1033	inner hex. Round bolts M6x12
34	GB/T 93	RZ1034	washer 6
35	QWJ635Z-100-00	RZ1035	base frame
36	ME 8108	RZ1036	down limit switch
37	QWJ209B-000-25	RZ1037	protection for wires
38	ME 8108	RZ1038	upper limit switch
39	GB/T 818	RZ1039	bolt M4x12
40	GB/T 818	RZ1040	bolt M4x25
41	QWJ635Z-500-00	RZ1041	cylinder
42	QWJ635Z-000-11	RZ1042	high pressure hydraulic hose
43	QWJ632W-600-01	RZ1043	parachute oil pipe connector
44	QWJ209B-712-00	RZ1044	Parachute valve
45	JB/T982-1977	RZ1045	combination seal kit
46		RZ1046	304 stainless steel connector G1/8-06
47		RZ1047	Direct quick connector G1/8-06 (KLC6-01)
48		RZ1048	Ø6 PU oil return hose
49		RZ1049	PU0604 3-way connector
50		RZ1050	PU0604 3-way quick connector
51	QWJ632W-000-06	RZ1051	Pump air connector
52	QWJ635Z-700-000	RZ1052	Complete control box
53	QWJ635Z-000-18	RZ1053	Hoses cover L-2500
54	QWJ635Z-600-00	RZ1054	guiding frame
55	φ17x46x150	RZ1055	nylon wheel
56	GB/T 894.1	RZ1056	stopper 17
57	QWJ635Z-030-00	RZ1057	rollor frame
58	QWJ635Z-030-01	RZ1058	rollor shaft



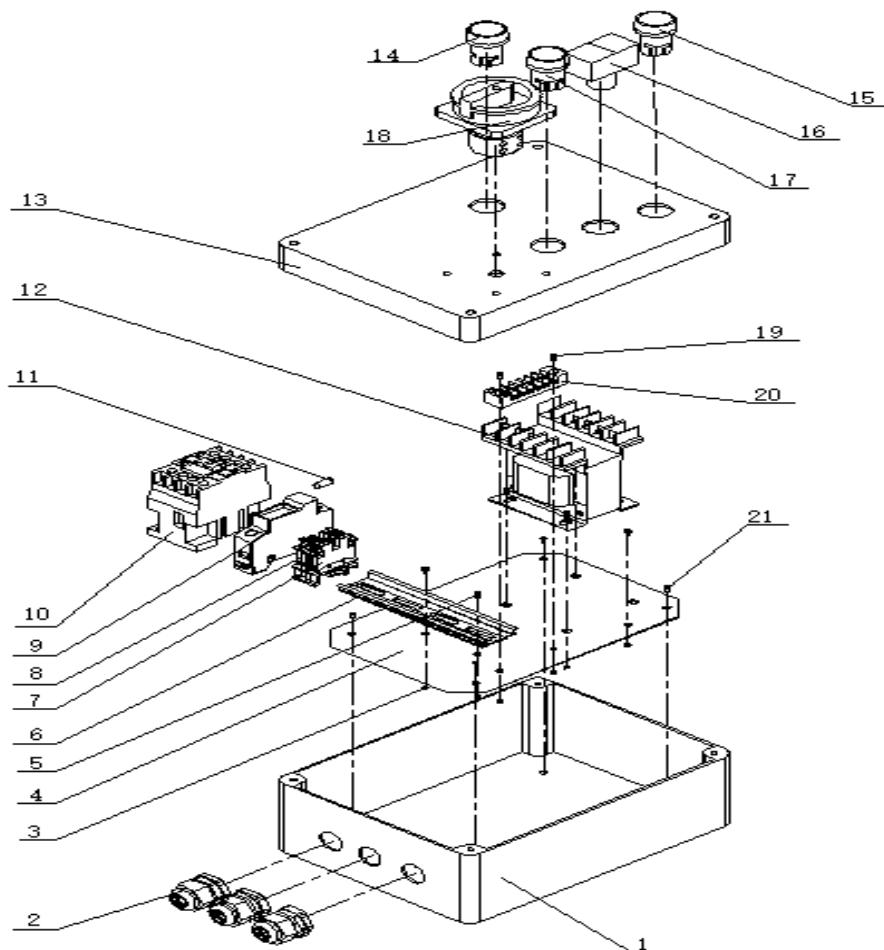
Drawing No.	Code	Part number	Description
1	QWJ635Z-700-00	RZ2001	control box support frame
2	QWJ2140S-000-01	RZ2002	Pump installation frame
3	YS79L-2F	RZ2003	double control pump
4	GB/T 5781	RZ2004	bolts M10x20
5	GB/T 5781	RZ2005	bolts M6x10
6	QWJ635Z-700-07	RZ2006	Protection cover / Safety cover
7	GB/T 818	RZ2007	bolts M6x10
8	QWJ635Z-1100-00	RZ2008	Large electrical box
9	GB/T 818	RZ2009	Bolt M4x12 (with M4 nuts)
10		RZ2010	handle cover
11	φ12x35x75	RZ2011	rollor
12	GB/T 894.1	RZ2012	stopper 12
13	QWJ203-000-11	RZ2013	Valve seat
14		RZ2014	combination seal 14 / Oil seal 14
15	QWJ635Z-000-11	RZ2015	high pressure hydraulic hose
16	QWJ213A S/US-000-01	RZ2016	pressure connector
17	QWJ209B-000-07	RZ2017	Short Pressing bolt
18	QWJ203-000-11	RZ2017	Transition joint
19	QWJ635Z-000-16	RZ2018	High pressure hose
20	GB/T 5781	RZ2019	Bolt M8x30
21	GB/T 6170-2000	RZ2020	Nut M8

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Drawing No.	Code	Part number	Description
1	QWJ635Z-510-00	RZ3001	Cylinder tube
2	GB/T 78	RZ3002	bolts M5x6
3	D1 55x45x6	RZ3003	piston seal
4	C17-002-0550S-47	RZ3004	T47 guiding seal
5	GB/T 3452.1	RZ3005	O ring $\phi 30 \times 2.65$
6	QWJ635Z-500-01	RZ3006	piston
7	QWJ635Z-520-00	RZ3007	piston shaft
8	C18-002-0400S-47	RZ3008	T47 guiding seal
9	GB/T 3452.1	RZ3009	O-ring $\phi 50 \times 2.65$
10	D2 40x48x8	RZ3010	seal
11	QWJ635Z-500-02	RZ3011	guidng seal
12	DH 40x48x5	RZ3012	dust gasket
13	SF-1	RZ3013	bushing P28x25x30

BRADBURY EQUIPMENT



Drawing No.	Code	Part number	Description
1	635Z-1100-01W	RZ4001	Electrical box body
2	635Z-1100-02W	RZ4002	electrical box cover
3		RZ4003	wire press device PG13.5
4	ND16-22DS/2	RZ4004	signal light DC24V
5	LAY-39-11BN	RZ4005	UP button
6	LAY-39-11BN	RZ4006	DOWN button
7	ND1622FS	RZ4007	alarm DC24V
8	LW26-20 GS-20/04-2	RZ4008	Main power switch
9	DR-120-24	RZ4009	Power board device
10	RT28N-32	RZ4010	Fuse seat (for 6A fuse)
11	DZ47-60	RZ4011	circuit breaker
12		RZ4012	trail
13	UK-2.5B	RZ4013	connector
14	LP1K0901BD	RZ4014	AC contactor DC24V
15	JZX-22F(D)/4Z	RZ4015	Contactor (include seat)
16		RZ4016	12 line wire connectors
17	GB/T 847-1985	RZ4017	Self lock bolts M4x8
18	GB/T 818	RZ4018	bolts M4x10
19	QWJ203D-1000-01	RZ4019	board for electrical parts