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Special Instructions

1. The loading process causes the damage of equipment, please contact with the manufacturer at first time.
2. Design and manufacturing of the Safety performance has been considered. However, the training and careful Operation can also increase security. Did not read the instructions, may not operate or repair the equipment.
3. Look at the power of the motor plate , it shows the power supply and current status and other requirements, the machine must be connected electricity by professional and qualified electrician.
4. The company have all rights about the machine, include the products are improved and modified the structure and dimensions without notice. Update of previous sales products without any obligations.
5. Please read it carefully and fill in the "warranty card" of this manual, send it back to the dealer and the company for the record. It is used as the basis of providing after-sales service. Otherwise it be deemed abandoned automatically enjoy the rights of the corresponding service responsibility conceited.
6. Don't allow to increase more than the rated lifting weight of the car.
7. Please carefully read the warnings on the equipment.

Maintenance and inspection instructions

Daily maintenance and inspection

Check up the position of safety lock in the process of operation

Check up the vehicle mode to be locked, Check up the working situation of the safety lock of the lift between the lifting carriage and lock bar, rotation –angle lock equipment of lift arms and so on.

Check- up whether the hydraulic fittings, oil pipes and other parts leak oil .

If with the chain institutions to check - up the chain connection situation - bent, broken, and loosen.

Check- up whether the cables are connected, bent, broken, and loosen.

Check-up the wire rope wear in the process of lifting.

Check-up whether all the shaft retaining rings are connected, they must be reliable connection.

Check-up the connection of all bolts, nuts, and screws, found loose must tighten immediately

Check-up whether the wire and switch is damaged

Check-up the foundation strength around the Expansion bolts.

Check-up the condition of swing arms, such as serious deformation must be replaced.

Keep the column base plate clean, prevent the dust, grease and other corrosive substances to hurt the lift. Ensure that the swing arm lock is meshing and reliable when it works.

Weekly maintenance and inspection

Check the strength of expansion bolts and connection

Check-up the foundation strength around the expansion bolts and connections.

Inspect the oil level height of the hydraulic oil box.

Check-up and tight the loosen bolts, nuts and screws

Check-up whether the cables are connected, bent, broken, and loosen

If with the chain institutions to check the oil cylinder roller assembly - connecting the plate of oil cylinder and roller pin is worn

Maintenance and inspection every year

If you have any chain agencies require the chain lubrication.

The plastic sliders and column inside where contact with the slide block use grease lubrication.

Replace the hydraulic oil

1. Use and directions for use

The machine is more advanced repairing and maintenance device. It was used in lifting under 10000lbs of the repair and maintenance of all kinds of small cars, overcome the shortcomings of old type repair, with a small field, the advantages of less investment, get high efficiency, is the ideal of modern automobile repair industry products.

2. Technical Parameters

Lifting Capacity	(Rated parameters)	10000lbs
Lifting Height	Max	1800mm
Lifting time	up	45—60s
	down	15—25s
Angle of swing arm		90 °
Drive mode		Electricity and hydraulic
Net weight		550kg

3. Safety device

Hydraulic system is equipped with self-locking device, the master column equipped with machinery insurance, driven column is equipped with the chain (steel wire rope) suddenly break insurance system.

4. The main structure and working principle

1. Main structure

chassis plate and two columns on one side, a master column, and a driven column, pillar with bracket by chain (steel wire rope) traction connection, guide wheel bracket between columns with three groups and four groups of guide pulley, each bracket to install a long a short two swing arms, form a four-point support under the working of the oil cylinder, through the iron bar (steel wire rope). It smooth lifting, rotating sleeve structure is used to arm, rotating and scaling, ensure accurate support seat, safety.

2. Working Principle

Mast column is equipped with hydraulic device, the stroke amplification mechanism, through the pulley block, using the chain (steel wire rope) tract the mast and driven lifting carriages of lift arms, make them work in synchronous movement.

5. Installation

1. Foundation

In order to ensure the equipment is smooth, the use of safe, lay the foundation before installation.

2. Installation

Chassis plate put on a good foundation, and Levelness is measured with a spirit level, adopt suitable anchor bolt tightening, the lifting Carriage installed on the chassis (arm) to the inside, on the threaded hole, each with bolts and washers and tighten.

3. The installation of chain (steel wire rope)

Chain (steel wire rope) by the driven column, through the chassis frame to active column on the bracket, with a nut. Through the chain on the bracket (steel wire rope) the adjustment of the bolt nut to adjust bracket height, ensure highly consistent.

6. Adjustment of Equipment

Preparation before adjustment

1. Plastic sliding blocks of lifting carriage contact surface filling grease, from top to bottom all the smooth sliding surfaces.
2. Injecting with N32 or N46 anti-wear hydraulic oil in oil tank.
3. According to the conditions of the motor nameplate to connect the power supply, three in the direction of the rotation of the motor, please notice direction of motor.

Adjustment and Operation

1. Check the motor power supply is installed correctly.
2. Check whether all the connecting bolts fastening.
3. Press Up button, the lifting Carriage will rise. Loose the UP button, the Lifting Carriage will stop. If the lifting Carriage will fall, must pull the safety lock after press the unloading hydraulic power unite handle, The lifting carriage began to decline, loosen the unloading handle, the lifting carriage stopped falling. (Note: repair work is that after the car to the required height, should press oil unloading handle, make the safety lock be locked, ensure the safety of the operation).
4. Due to the newly installed in hydraulic system may be air in oil pipes, rising and falling can be repeated several times.

The matters needing attention when it lifts the car

All kinds of car's centre of gravity position is different, should first understand the position of the car, car drive on the lifting machine, to make the centre of gravity is close to the plane formed of two columns. Adjust swing arm, make strong supported point to support on the car.

Do not open the cover of post circled hole when the equipment is switched on.

Read the warnings seriously.

Hydraulic valve has been adjusted before delivery, Users are not allowed to adjust itself, Otherwise the user's will take charge of everything.

Lifting machine is on the rise and fall, under the car may not someone or other objects such as repair tools, there are no persons in potentially dangerous positions.

Fig. 1 Technical Specifications

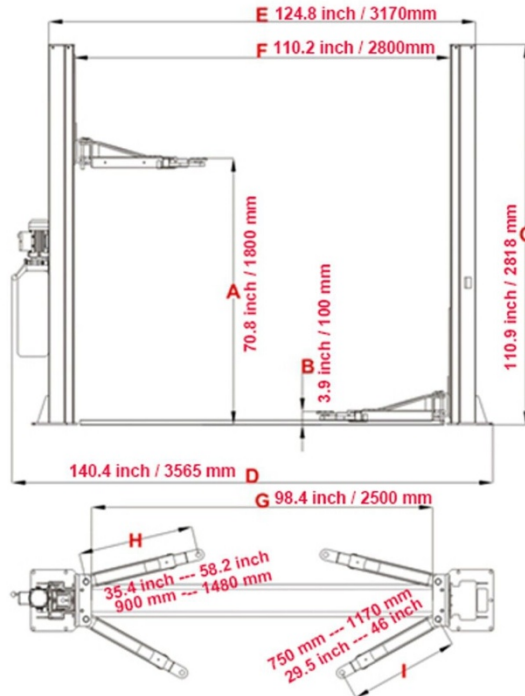


Fig. 2 Steel wire ropes installation

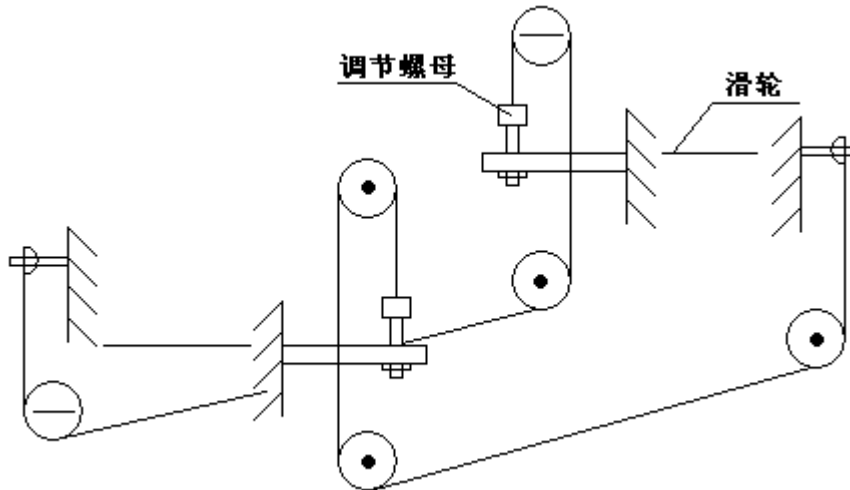
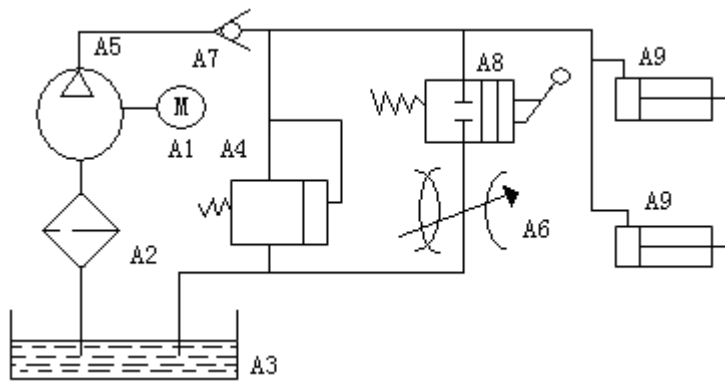
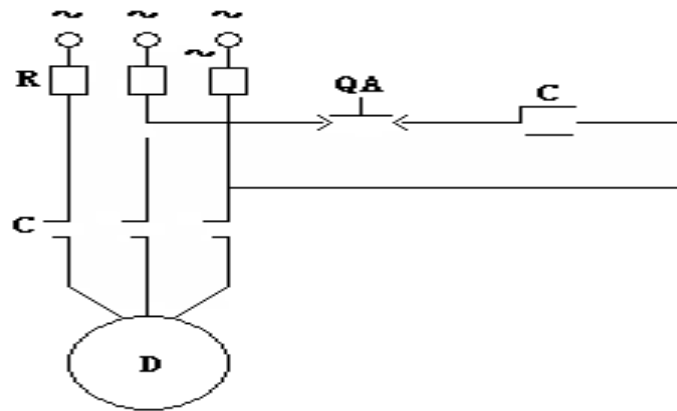


Fig.3 Hydraulic system diagram 3



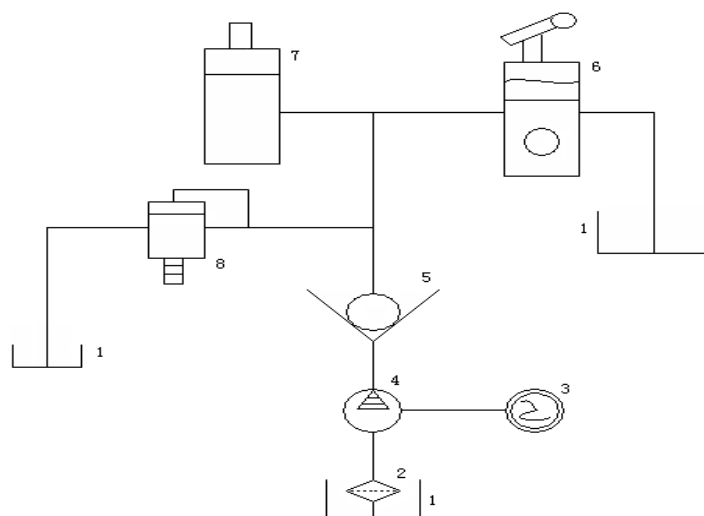
A9	Oil cylinder			2	
A8	Manual Valve			1	
A7	Check Valve			1	
A6	Throttle Valve		(decline)	1	
A5	Oil pump			1	
A4	Overflow valve			1	
A3	Oil tank			1	10Liter
A2	Oil Filter			1	
A1	Motor		220V 60HZ, 2.2Kw	1	Single phase
No.	Name	Model	Specifications	PCS	Remark

Fig.4 Electrical schematic diagram



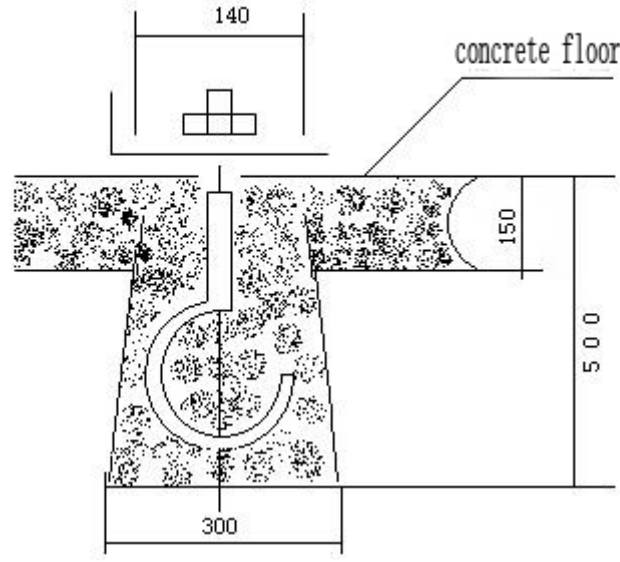
		380V	110V
Code Name	Name	Model No.	Model No.
R	Fuse	PL115A	Do not set fuse
C	Ac contactor	QC10-10	DC12-20
D	Asynchronous motor	Y90L-2	YC112-4
QA	Start switch	LK19K	LX19K

Fig.5 Hydraulic principle diagram



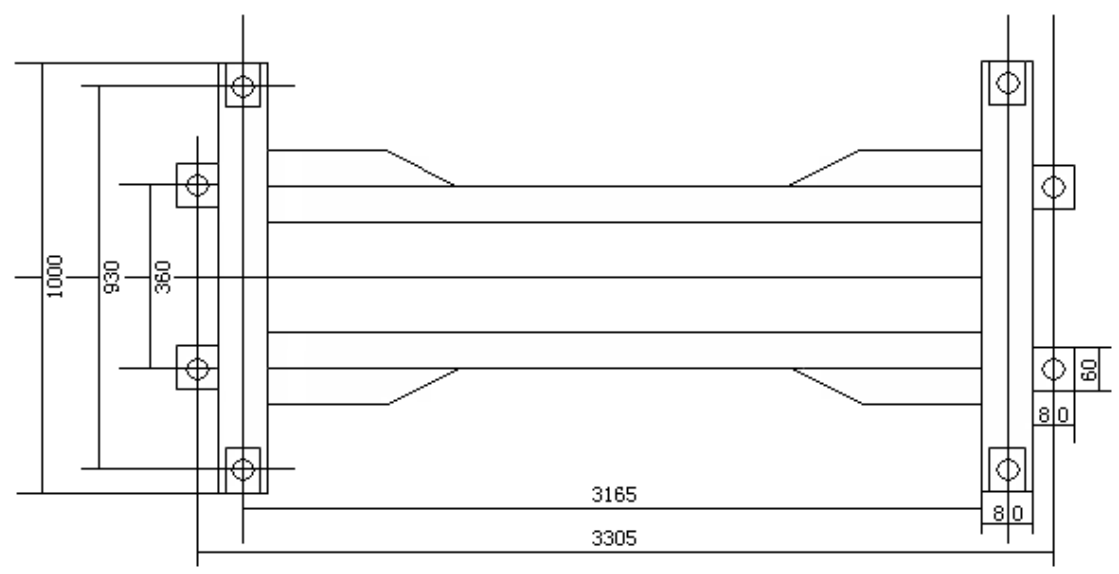
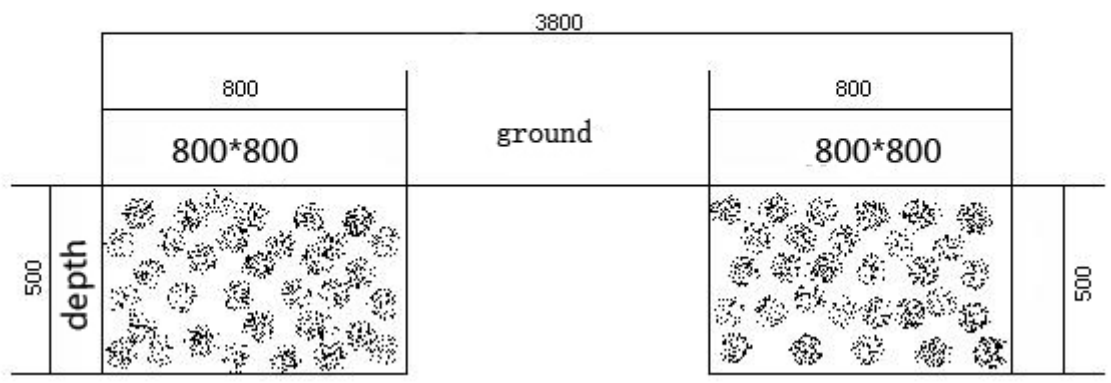
1.Oil Tank	2.Net oil filter TLW-12
3.MotorY90L-4	4.Oil Pump CBN-E3
5.Check Valve	6、 Manual Valve
7.Oil Cylinder	8.Overflow Valve

Fig.6 Foundation



Embedded Screw

bolt	M18 × 400
gasket	18
Nut	M18



Possible Problems and Solutions

Problem	Possible cause	Solutions
The motor does not work	<ol style="list-style-type: none"> 1. Check up fuse 2. Check up whether voltage is normal 3. motor burned 4. start switch burned 5. limit switch burned 	<ol style="list-style-type: none"> 1. replacing the fuse 2. normal power to the motor 3. change the motor 4. replace the start switch 5. change the limit switch
The motor work, But it can't lift.	<ol style="list-style-type: none"> 1. motor reversal 2. pressure relief valve is open 3. the pump suction air 4. suction tubing leave the pump 5. oil level is low 	<ol style="list-style-type: none"> 1. Switch the input line of 2 phase 2. replace or clean pressure relief valve 3. tight into the tubing 4. tighten suction tubing 5. add the hydraulic oil
Lift will rise and decline slowly stop	<ol style="list-style-type: none"> 1. check whether there is sundry in the valve body 2. the pressure relieve valve is blocked 3. whether the oil pipe leaks oil . 	<ol style="list-style-type: none"> 1. Eliminate clutter in the valve body 2. remove clutter from the pressure relieve valve 3 repair or replacement
It can rise and fall but not rise and fall with the vehicle.	<ol style="list-style-type: none"> 1. the voltage is too low 2. the pressure relief valve with sundry 3. Overflow Valve is adjusted to working pressure. 4. overload lifting 	<ol style="list-style-type: none"> 1. install regulator 2. remove clutter from the pressure relief valve 3. appropriate adjustments to the pressure of work 4. according to the requirements of the lifting capacity
Lifting speed is slow or oil spill tank	<ol style="list-style-type: none"> 1. there is air in the oil 2. there are air in suction tubing 3. return pipe loose 	<ol style="list-style-type: none"> 1. there is air in the oil 2. there are air in suction tubing 3. return pipe loose
Rising or Falling is not level	<ol style="list-style-type: none"> 1. wire rope, no adjustment 2. above ground installation is not level 	<ol style="list-style-type: none"> 1. adjust the level 2. adjust the column level
The bolts cannot tight	<ol style="list-style-type: none"> 1. the hole is too large 2. concrete thickness, strength is not enough 	<ol style="list-style-type: none"> 1. drill again after casting 2. pouring the foundation again
Safety Lock does not work	<ol style="list-style-type: none"> 1. shaft, pin is rusted usually occur in the external damp places or rust cleaning area 2, insurance piece of tension spring break 	<ol style="list-style-type: none"> 1. the lift machine rose to the highest in the slider and column joint filling lubricating oil 2. change the tension spring

Warranty card

The user name		Telephone		Date	
Add.					
Product number		serial number		Invoice no	
The warranty place name				The warranty phone	

Maintenance record card

Date	Maintenance content	Content of the replacement parts				handlers	Remark
		Name	Model	Specifications	PCS		

Warranty conditions

1. within one year from the delivery date, under the condition of normal use and the user according to the journal instruction manual operation requires the use of this product fails, my company have limited free maintenance.

2. The warranty period when domestic demand for repair, warranty cards, invoices for the free service users. Replaced parts owned by the company.

3. Do not belong to the warranty scope: a. basis for transportation, improper use, insufficient strength, power is not in conformity with the provisions, not operated according to the operation instruction handbook "damage caused by not warranty scope; B. more than free service period, need to offer service fees according to the cost price of the company; C. the vulnerability does not belong to the warranty scope.