

FULL RISE SCISSOR LIFT



INSTALLATION, OPERATION AND MAINTENANCE MANUAL

**READ THIS ENTIRE MANUAL BEFORE INSTALLATION TO ENSURE A CORRECT
OPERATION AND LONG SERVICE LIFE**

Safety instructions

Safety Instructions for commission

1. The lift may be installed and commissioned by authorized service personnel only.
2. The standard lift version may not be installed and commissioned in the vicinity of explosives or flammable liquids, outdoors or in moist rooms (e.g. car wash).

Safety Instructions for Operation

1. Read the operating manual.
2. Lift operation by authorized personnel over 18 years only.
3. Always keep the lift and lift area clean and free of tools, parts, debris etc.
4. Once the disk adapters contact the lift points, check arm restraints for engagement.
5. After raising the vehicle briefly, stop and check the disk adapters for secure contact.
6. Always lift the vehicle using all four adapters.
7. Make sure the vehicle doors are closed during raising and lowering cycles.
8. Closely watch the vehicle and the lift during raising and lowering cycles.
9. Do not allow anyone to stay in lift area during raising and lowering cycles.
10. Do not allow anyone on lift or inside raised vehicle.
11. Only use the lift for its intended purpose.
12. Comply with the applicable accident prevention regulations.
13. Do not overload the lift. The rated load capacity is indicated on the lift nameplate.
14. Only use the vehicle manufacturer's recommended lift points.
15. After positioning the vehicle apply the parking brake.
16. Use caution when removing or installing heavy components (center-of-gravity Displacement).
17. The main switch serves as emergency switch. In case of emergency turn to position 0.
18. Protect all parts of the electrical equipment from humidity and moisture.
19. Protect the lift against unauthorized usage by padlocking the main switch.

Safety Instructions for Servicing

1. Maintenance or repair work by authorized service personnel only.
2. Turn off and padlock the main switch before doing any maintenance, or repair work.
3. Work on pulse generators or proximity switches by authorized service personnel only.
4. Work on the electrical equipment by certified electricians only.
5. Ensure that ecologically harmful substances are disposed of only in accordance with the appropriate regulations.
6. Do not use high pressure / steam jet cleaners or caustic cleaning agents. Risk of damage!

The manufacturer reserves the power to the technological improvements and the proper slight modifications of the manual.

Special specification

1. Equipment damage which in the process of shipment shall be claim by the buyer to the carrier.
2. Design and manufacture have considered the safety performance. However, proper training and thorough operation can increase the safety. Not reading illustrates, shall not operate or repair the equipment.
3. Identify the motor and the current state requirement of the nameplate, by professional and qualified electrician to connect.
4. Products of the company to the part structure improvement without notice. On the previous sales product updates without any obligation to notify customer.
5. Please carefully to read and fill in the instruction of the 《warranty card》 , feedback to the distributor and the company filing. As the evidence of after service. Or regard give up the enjoyment of the corresponding service power, responsible for themselves responsibility.
6. Not be more than the rated lifting weight.
7. Please carefully read the warning marks.
8. Temperature: 5℃–55℃

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Packaging, transportation and storage

All packaging, load and unload, transport and assembly operations must be limited to the professional operation

Transportation

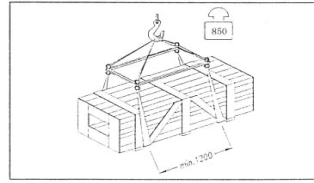
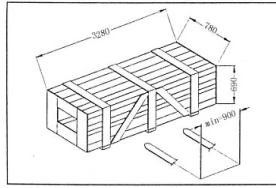
The goods shall be more than 1 tons crane, forklift handling and mobile, in order to prevent the goods fall, when lifting one should be observe the goods, to avoid the accident.

1. The goods adopt to the car, shipping
2. When the arrival of the goods, should check the cargo integrity, to prevent breakage and loss in the process of the transportation
3. If the packing breakage during the shipment, should according to the "packing list" to check the breakage box, insure the condition of breakage goods and components of loss, and at the same time should immediately notify the carrier

This machine is heavy goods! Not consider the human load 、unload and carry method, safety operation is very important

- ◆ In addition, in the process of loading and unloading should be according to the diagram

The PACKAGE may be lifted and moved with a lift truck (Fig.). If either of the latter two is used, crates must be harnessed with at least 2 slings.



Storage

1. Equipment should be put in the warehouse to storage , storage in the outdoor should be waterproofing
2. In the process of transportation should be adopt to van, container storage by shipping.
3. Control board should be placed upright, and prevent the other goods extrusion
4. Storage environment temperature: $-25^{\circ}\text{C} \sim 55^{\circ}\text{C}$

This manual for car repair operation and routine repair personnel to use, the relevant personnel should carefully to read it before operation, the manual included important information:

- The personnel safety of operation and repair
- The installation's safety
- safety operation

Please keep this manual

- ◆ The manual is an integral part of the lift, which it should always accompany even if the unit is sold.
- ◆ The manual must be kept in the vicinity of the lift in an easily accessible place so that the operator and maintenance staff must be able to locate and consult the manual quickly at any time.

1. Characteristics

This scissor lift suits for the checking、maintenance of different kinds of light automobile, and especially for working outside.

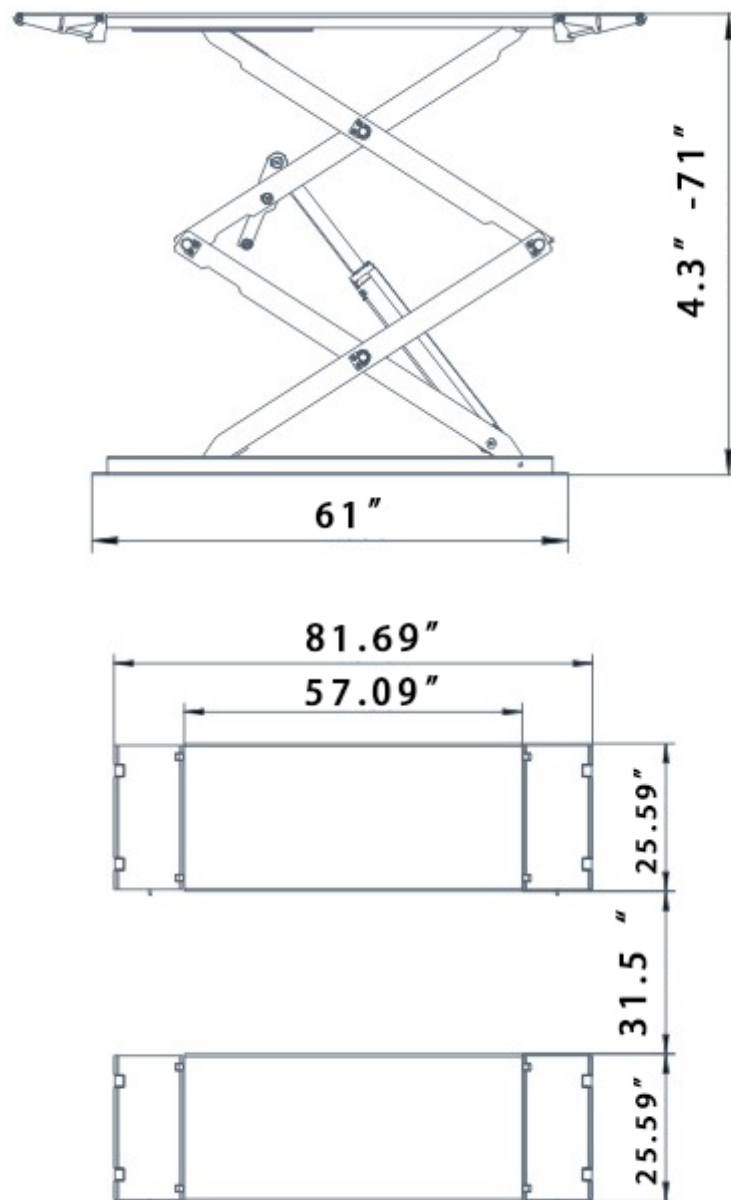
The lift use the rotatable arm to support the car, the length and width of supportive point can be adjusted. Compact structure, save space, light and convenient to move.

2.Main technical parameters:

Lifting capacity	9000lbs
Lifting height	71”
Platform height	4.3”
Platform length	57.09”
Platform width	25.59”
Rising time	≤50s
Descending time	≤60s
Overall platform width	81.5”
Overall length	82.68”
Overall weight	1874lbs
Power supply	220V/60HZ/1PH

Air supply	0.6-0.8Mpa
Rated oil pressure	22Mpa

3.Outline dimension:



4.Installation and debugging:

4.1 Take out the machine from the packing and place it on the ground,

then connect the oil tube.

4.2 Fill the hydraulic oil:

Fill 18L of hydraulic oil into oil tank(hydraulic oil provided by user).winter 32#, summer 46# resistant antiwear hydraulic oil, ensure clean, impurities are not allowed to enter the tank, prevent circuit poor and the action of the electromagnetic valve failure and unable to work.

4.3 When connecting the oil pipe,pay attention to protection of the oil pipe joint and prevent some matter from entering the circuit!.



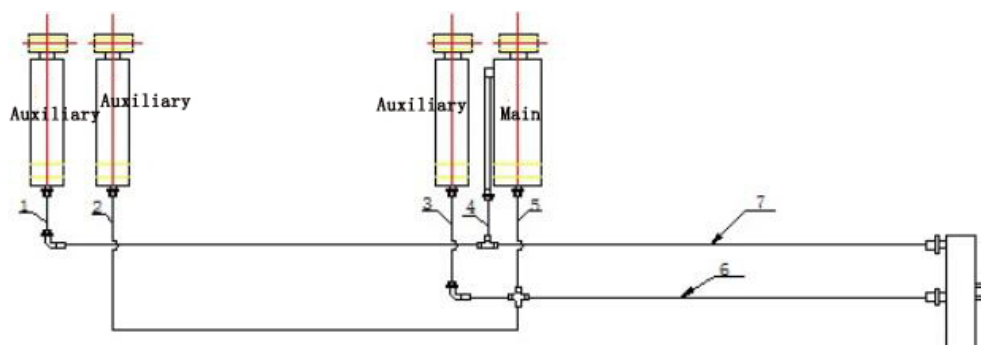
Pay attention to the pipe joint protection , prevent the varia into the hadraulic circuit.



When connect to the pipe, Be careful of the pipe number cannot mistake.

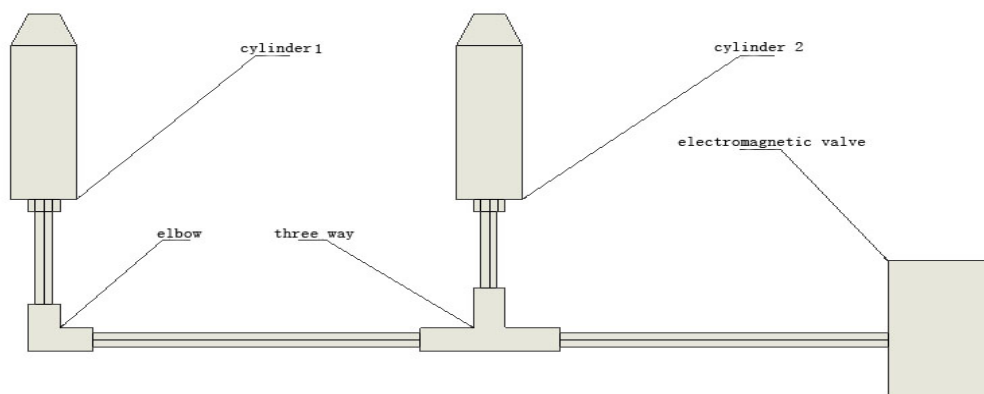
Contrl board should be in the left of car direction, and if it is in the right need adjusted the relevant pipe.

4.4 Look at the tubing connection and size:



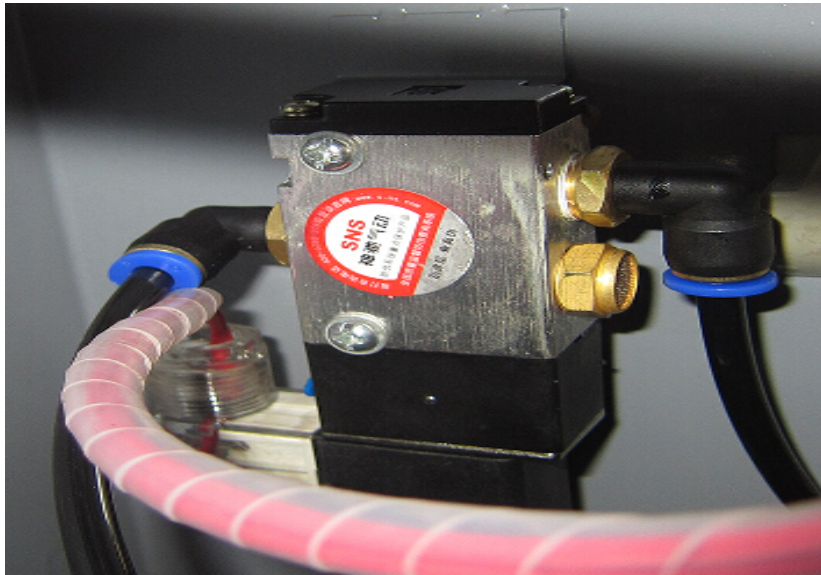
No.	Feature	Dimension	Quantity	No.	Feature	Dimension(mm)	Quantity
1	All straight	1770	one	7	curve/straight	3810	one
2	curve/straight	1770	one				
3	curve/straight	240	one				
4	All straight	290	one				
5	All straight	220	one				
6	All straight	3890	one				

According to the "gas connection" to connect



The lift must be installed by authorized professional personnel only.

- ◆ Put $\varnothing 8 \times \varnothing 6$ compressed air pipe connected to the console of pneumatic valve inlet



- ◆ According to the "gas connection" put $\varnothing 6 \times 5$ compressed air pipe from pneumatic electromagnetic valve outlet connecting to the lifting claw valve

Pay attention to the air pipe joint's protection to prevent the entry of varia .

Before put the compressed air pipe connect control board should install oil-water separator(the user self-prepared), separate the oil and water, so as to avoid damage to pneumatic components,add lubricating oil or hydraulic oil to oil cup , for lubricating cylinder and the pneumatic electromagnetic valve;s flexibility use.

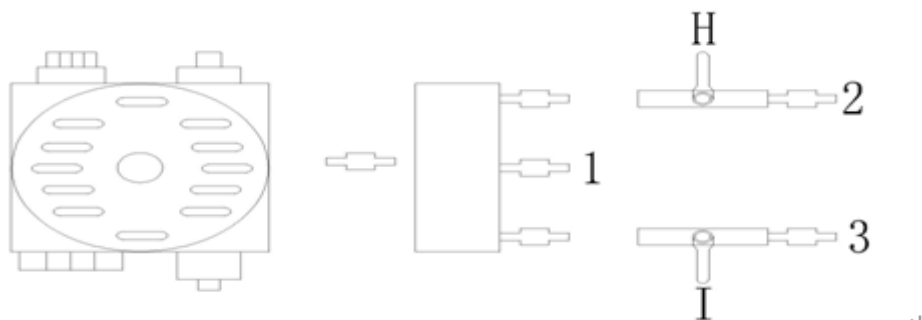


*(During installation the trachea,the pipe can't curve、knot, prevent blocked or gas jam.)

4.5 Debug motor :

- ① Connected power supply well, press "up" button, check direction rotation of motor is correct or not (from up to down should clockwise rotation), if opposite direction, cut off the power, adjust the power phase sequence ..
- ② When connect power supply, the control box has the possibility of electric shock, need electrical qualification and experienced professional personnel only, prevent the risk of electric shock .

4.6 Oil supplement and exhaust air adjustment:



- ① Open the supplement oil valve "H" and "I", press “up” button to , rise two platforms to the highest level.
- ② In the course of descending, press “lock” and “down” button,

after the motor stop rotation,can loose lock button.

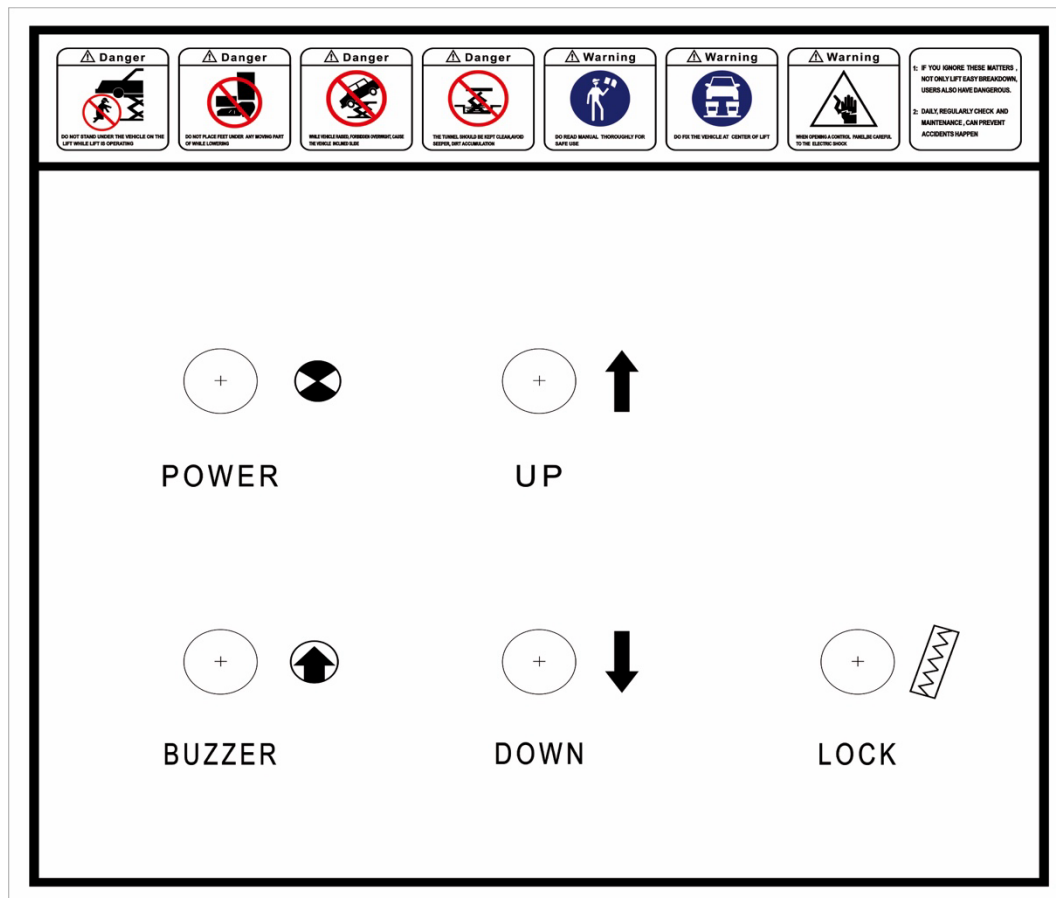
Note:Press lock button is time-delay rise release,prevent damage the cylinder or close the timer-delayer.

- ③ Down two platforms to floor,do not loose the down button,when heard the sound of tank then loose which is the exhaust sound.
- ④ Rise two platforms to the heighest level,loose exhausted screw of the main oil cylinder,screwed it after exhaust foma and bubble.

4.7 Level Platform adjustment to suplement oil or oil reduction procedure:

- ① Rise the platform to 100-200mm,check if two platforms are levelling
- ②If “P1” platform low, open fill oil valve "I" press up button levelling;
“P2” platform high, open "H" valve ,press lock button fall to lev
- ③Press “up” button check if two platforms are levelling,if not, open "I" or "H" to adjust.
- ④rise two platforms,fall level, leveling the end. Check the oil circuit no leakage.

4.8 Adjustable time-delayer and switch lock procedure:



- ① Rise two platforms and watch if two unlocking plate are support cylinder up, if not ,check gas circuit, pressure gauge, valve, adjusted to normal.
- ② Rose to 1.4 meters, press lock button down. Let the unlocking plate fell in the gear shaft of the lock, adjust time-delayer 3-4 seconds, press down button, check delay time is long or short. Whether the air cylinder can flexible support lock plate and smoothly down. If the delay time is long,can be reduced, delay time short can increase .as long as rise delay time can be disengaged from the locking plate.

4.9 Adjusting travel switch and stable equipment:

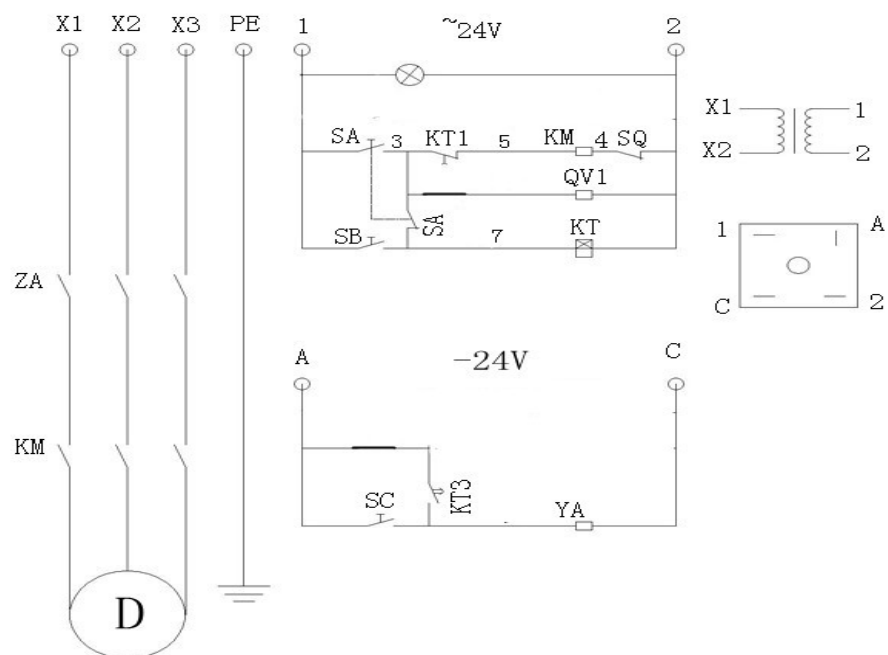
- ① Rose to the highest level 1850mm, but the maximum distance of the trip is not allowed to exceed 1800mm, 50mm is to retain the power to unlock space.
- ②Adjust this equipment well ,please according to the screw to drill the machine with the fixed expansion

5、 Safety mechanism

Emergency manual lowering operation: Manual operation,there is vehicle as the platform ,so must be observe the platform;s condition,if abnormal should be immediately tighten the oil return valve.

Descendinig procedure manual :

- 5.1 Raise insurance claw of the two platforms and thin plate underlay.
- 5.2 Turn off the power supply(avoid the sudden call),open the console's cover,look for the lowering electromagnetic valve
- 5.3 Slowly loosen the lowering electromagnetic valve core end 's manual back oil bolt and then the platform can decreased.
- 5.4 After the lift down ,tightening the manual back oil bolt in time.
- 5.5 Finished the manual lowering procedure.



- 5.6 The lift may be installed and commissioned by authorized personnel

only.

5.7 Open the control box cover.

5.8 The power line connection:

5.9 380V three-phase five wire (3x1.5+1x1.0cable) or 220v

(2x2.5+1x1.0)connect to the console X1, X2, X3, N and line

terminal, PE connect to ground bolt, and then connected to the

bottom of the two platforms ground bolt

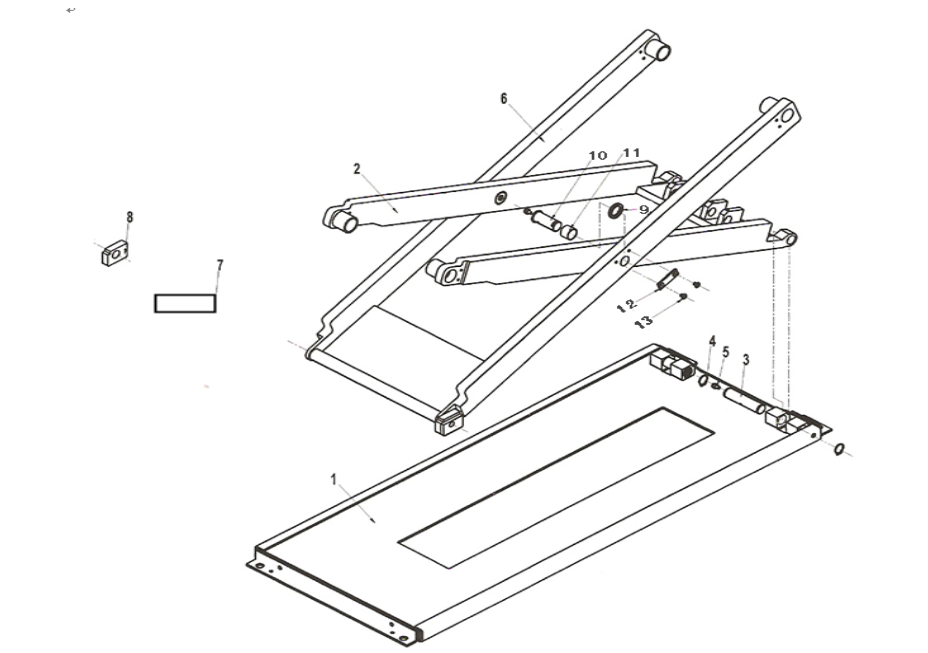
6、Maintenance and repair

Establish a periodic preventive maintenance procedure to ensure trouble free operation and long service life.

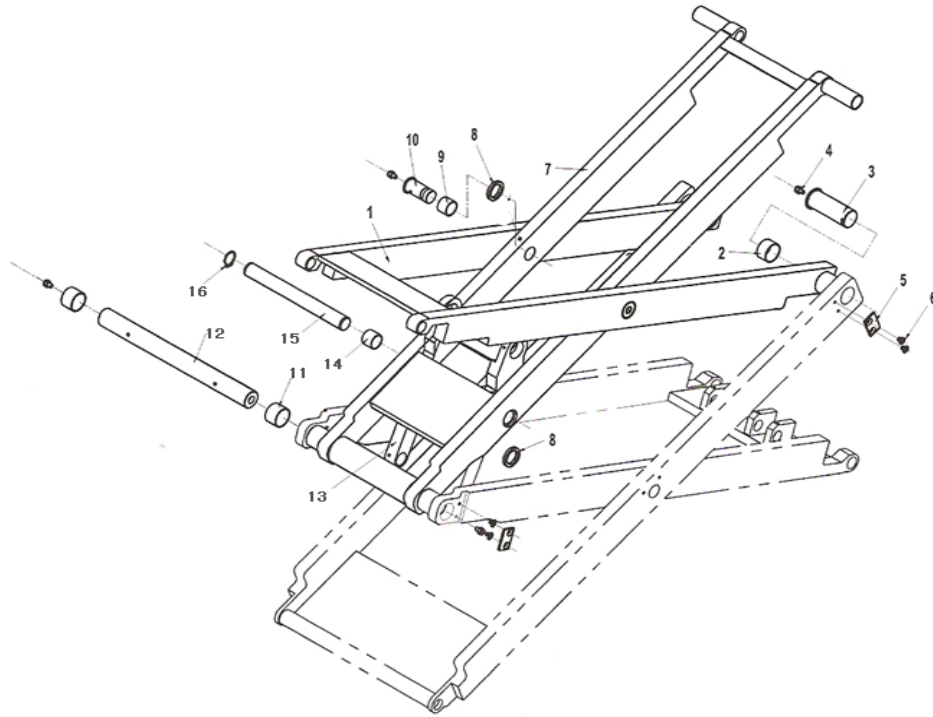
Maintenance and repair should be trained operator only!

Interval	Maintenance to be performed on	Items
1 week	All the machine	*Add oil with oil pot each week on all branch hinge axes of this machine.
1 months	Greasing points	*Up and down wheels should be kept clean, added lubricant. *Check arm extensions *Threads of disk adapters
	Nuts of anchor bolts	*Check all nuts for correct torque and retighten them as required.
6months	Hydraulic system	* Change hydraulic oil one time each half year. clean the oil box and oil filter while changing oil. Keep oil level on upper limit for long time. (winter 32#,summer46#)

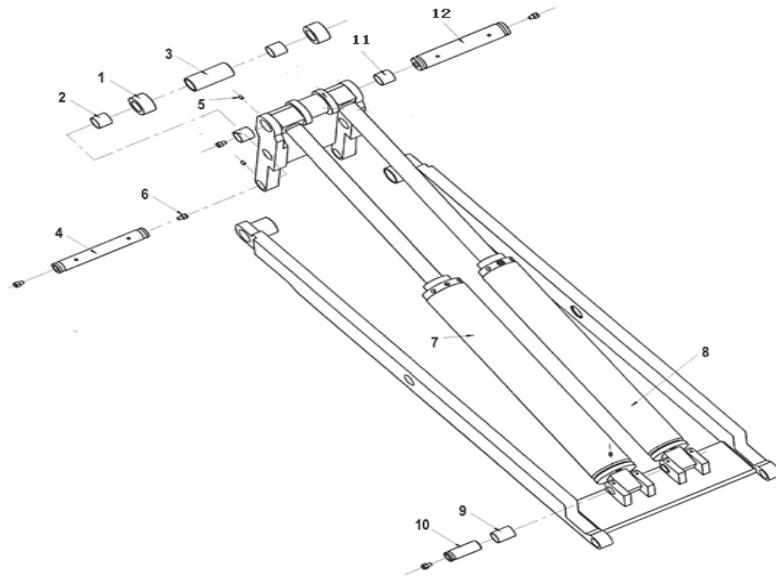
7、 Exploded view with spare parts list



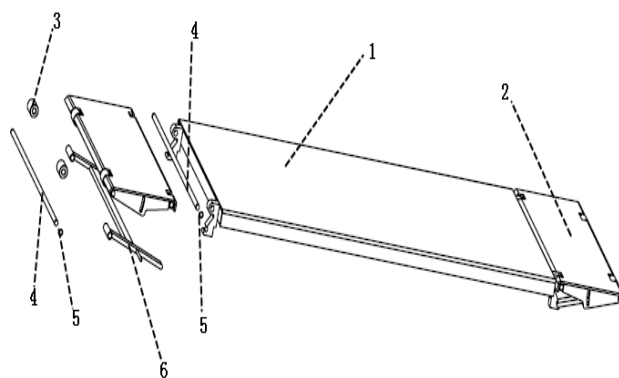
S/N	Describe	S/N	Describe
1	base	8	sGRONHr1
2	support-arm welding	9	30 washer
3	support-arm welding	10	outer axle
4	washer 25	11	(DU) 3025
5	oil cup M8	12	big clip
6	support-arm welding	13	bolt M8×20
7	down sliding shaft		



S/N	Describe	S/N	Describe
1	arm package	9	(DU)3025
2	(DU) 4050	10	outer axle
3	middle-fix axle	11	(DU) 4030
4	oil cup M8	12	middle sliding shaft
5	small clip	13	skip
6	bolt M8×20	14	(DU) 3027
7	arm package	15	skip middle-shaft
8	washer	16	washer 30



S/N	Describe	S/N	Describe
1	skip lower-wheel	7	hydraulic cylinder
2	(DU) 3030	8	hydraulic cylinder
3	skip separate over	9	(DU) 2840
4	skip lower-shaft	10	oil-cylinder lower axle
5	bolt M6×8	11	(DU) 4040
6	oil cup M8×1	12	skip upper-shaft



S/N	Describe	S/N	Describe
1	Upper cover	4	Approach shaft
2	The bridge plate	5	Washer 15
3	Approach wheel	6	Jam plate

8、Troubleshooting



TROUBLES	POSSIBLE REASONS	WAYS TO SOLVE
Engine doesn't rotate	①Bad contact of wires	Check and joint the wires
	② contact device doesn't work	Check or change contact device
	③ bad action of limited switch	Adjust or change limited switch
Engine rotates but not ascend	①have dust in the center of the electromagnetism valve	Check the electromagnetism valve and clean it
	②the line pole is loose	Fix it
	③falling short of hydraulic oil	Makeup hydraulic oil
The ascend speed is slow	The oil seal hole is leak	Change the oil seal
Shake in the running	Air in the hydraulic pressure loop	Release the air by redo the ascend and decent
	Air leak at the top connect oil tube mouth of the pump	Check the seal of the oil tube mouth
	Filtrate net is jam	Clean it
Only ascend ,can not descend	①electromagnetic damage	Check it and mend it
	②connect invalidation in the button	Check the button
	③ electromagnetic valve blocked	Check or change electromagnetic valve
	④ descending electromagnetic valve unopened	Check or change electromagnetic valve
	⑤hydraulic oil too dense (in winter)	Add oil according to the manual
Oil leak	Loose tie-in	Screw the tie-in
	Mangled oil seal on tie-in	Change oil seal

9、Warranty card

User name		Contact number		Date of purchase	
Contact add					
Product ID		Serial number		Invoice number	
Maintenance place name				Warranty phone	

Maintenance record card

Date	Record content	Change parts content				broker	appendix
		Name	Model	specification	quantity		

Warranty conditions

1、 This card and the voice user should be stored properly, Warranty must show at the same time.

2、 This equipment from the date of invoice normally to use, without overhaul and machinery parts breakdown by the factory identification indeed manufacturing due to bad, according to the provisions of the warranty time limit , by virtue of this the factory is responsible for warranty. Due to improper storage, supply voltage is not conform to it or not according to the method of instruction manual to operate etc. and other improper use of damage, it is not covered by the warranty.(this machine warranty for one year).

10、 packing list

NAME	QUANTITY	ATTACHMENT
①racket	2	Oil pipe: 12
		Groove: 6
		setscrew: M16*150 8sets
		gommures: 4 ps
		air pipe: 3
		ramp:4ps
		shaft lever:4ps
		pin:8ps
②pump station	1	Instruction: 1 copy