SMALL SCISSOR-TYPE LIFT

**OPERATIONAL INSTRUCTIONS**



**Catalogue**

1. Safety caution………………………………………………………………………
2. Characteristics introduction……………………………………………………
3. Main technical parameters……………………………………………………
4. Overall dimension…………………………………………………………………
5. Installation and debugging……………………………………………………
6. Maintenance and repair………………………………………………………
7. Troubleshooting……………………………………………………………………
8. Warranty card………………………………………………………………………
9. Certificate of conformity………………………………………………………
10. **Safety caution**

1.Please read the instructions carefully before use the equipment , Only professional personnel can control and operate it.

2.Clearing obstacle around platform before it begins to work.

3.Don’t stand around lift when it raises or descends, anyone in lifting car is banned.

4. Weight of lifted car should be within the scope of rated lifting capacity.

5.Keep eyes on two platforms observing whether or not at the same level when to raise and descend. Power will be cut off for abnormal fault , only could be used after checking and solving them.

6.The platforms will raise for short time and then descend when to press down button.

7.Equipment should be descended at its lowest position and cut off power when it is out of work for long time or put for the night.

8. Fire-extinguishing device should be equipped on the spot(user-owned)

9. Air intake pipe which connects with lubricator (user-owned) should meet standard of air-compressed pressure 6~8kg/c ㎡

10.Air-compressed should be filtered by oil-water separator for avoiding air pressure system to be frozen if equipment is used below 10 ℃.

1. **Characteristics introduction**

1.Utilizing hidden, scissor –type and thin structure and cover small space ,without construction for digging.

2.Independent control box with lower pressure,safety performance in good condition.

3.Hydraulic capacity,synchronized cylinder,platforms operated in stability.

4 .With hydraulic and mechanical lock device for safety

5.With device of hydraulic warning **、**overload safety valve protection、anti-explosion safety valve for preventing lift to descend quickly when oil pipe bursts.

6.Untilizing imported high quality hydraulics and electric parts

7.With manual descent device when power off.

**3. Main technical parameters**

|  |  |
| --- | --- |
| Max.lifting capacity | 3000kg 3500KG |
| Lifting height | 1850mm |
| Lifting time | ≤50S |
| Platform length | 1535mm |
| Platform width | 620mm |
| Motor power | 2.2kw |
| Rated oil pressure | 20MPa |
| Air pressure | 6-8kgf/c ㎡ |

1. **Overall dimension(Refer to picture1)**

**5. Installation and debugging**

Remark: Foundation below two platforms belongs to concrete structure, when interior ground thickness less than 150mm, concrete area 2500mm\*2500mm , thickness≥150mm will be poured under them. Basic thickness and levelness are both important. Self-adjustment function of mechanism could not be depended on too much.

Installation requirements:

Lift should be installed according to regulated safety distance of wall 、column and other equipments.

Power and air supplying should be connected to control box in installation place

Installation height of interior space not less than 4000mm

Any interior ground will be feasible to install if ground conditions

meet requirements and sufficient weight-load capacity (≥250kg/c ㎡，thickness of ground concrete ≥150mm )

Bright light will be needed for debugging and repairing when to install and harsh light will be prevented to cause weakness on

eyesight of workers.

Lifting platform installation:

Put two lifting platforms on the necessary position

Bottom of oil cylinder will be forward of whole machine(direction of getting on)

Using fork lift or other lifting equipments raising platforms and ensuring mechanical lock will be locked.Wood block could be inserted between connecting rod which prevents the lock out of operation in a sudden.

Do not operate under lifting machine when hydraulic system without oil for raising or descending .

Move platforms and adjust space distance between them, keep them to be parallel and connect oil pipe.

Gas circuit could be connected when to complete hydraulic system’s connection. Keep oil pipe、 electric wire and gas pipe in a good condition.Joint will be protected when to connect oil pipe and gas pipe,preventing the impurity to enter oil and gas circuit for breaking hydraulic system.

No-load debugging

Press “up” button and observe whether two platforms are stable and synchronized or not when to raise.

Observe whether safety claws drop the position exactly or not and so do the oil and gas leakage.

**Any persons and items are prohibited in the regulated area of lifting when to test.**

**Stop for abnormal fault and test again after solving them.**

Load test

A car will be driven to platforms and its weight should be within maximum scope of lift.All ones should leave from the car.

Rubber pads of lift will be on top position of a car

Press “up” button and observe whether two platforms are stable and synchronized or not when to raise.

Observe whether safety claws drop the position exactly or not and so do the oil and gas leakage.

**Any persons and items are prohibited in the regulated area of lifting when to test for load.**

**Weight of tested car should be within the scope of maximum lifting weight**

**Check leakage for oil and gas circuit.Stop for abnormal fault and test again after solving them.**

Operation safety instructions:

Clear obstacles around machine before it starts to work.

Anyone will be banned in regulated areas and so do the car on platforms when to raise or descend

Do not lift car that weight not be within maximum capacity.

Do not lift cargos

Keep eyes on position of rubber block under car’s chassis when to raise

Platforms will be raised a little when to descend ,observe whether two safety claws and two safety tooth are fully separated or not.

Platforms should be on its lowest position when mechanism is out of operation for long time or put for night. Car should be moved and power cut off.

Operation for manual descent of power off

Carry off safety claws of two platforms and place hard object under them.

Cut off switch(preventing the sudden electric),open control box and find “down” solenoid valve.

Release slowly manual oil-returningbolt which locates in the end part of solenoid valve and then platform will be lowered.

Screw tightly the manual oil-returningbolt after descending.

**6. Maintenance and repair**

1. Anti-wear hydraulic oil should be replenished to keep oil level height when the machine is operated for its first time or terminated for more than one month.

2. Lubricating oil should be greased into oil-hole for one time every week.

3. Roller parts should be kept clean and greased on their surface .

4. Fuel strainer should be cleaned every three months , hydraulic oil should be changed every three months for its first operation and does it half a year after that.

Fuel tank and strainer should be cleaned with gasoline when to change hydraulic oil.

5. Air-compressed should be filtered by oil-water separator in air system for ensuring cylinder and solenoid valve operated in stable conditions, air-compressed pressure should be 6-8kg/c ㎡.

6.Voltage regulator should be installed if local voltage fluctuation value over 10%.

**7.Troubleshooting**

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| **TROUBLES** | **REASONS** | **SOLUTIONS** |
| Motor doesn’t rotate when to raise  | 1:Problems on power supply or neutral wire2:AC contactor of motor’s main circuit is not magnetic 3:Limit switch is not closed | 1:check and connect electric wires2:control loop will be checked if motor could work when to press with insulation rod forcely. AC contactor will be changed if coil voltage of both sides is normal.3:fault disappears after switch terminal connecting by wires.Check limit switch、wires and adjust or replace.  |
| Motor rotates but not raise when to press up button | 1:Motor reverse rotation2:Light load for raising,Heavy load not raise3:insufficient hydraulic oil 4: “Working stop valve” is not opened | 1:change power wires2:rotate lightly to right side and increase safety pressure value of spill valve.Core of lowering solenoid valve is blocked by impurity and clean it. 3:replenish hydraulic oil4:Unscrew working stop valve from left side ,making hydraulic oil supplied to main cylinder |
| Not descend for pressing down button | 1:safety claw not separate from safety tooth2:safety claw not be lifted3:solenoid valve not work4:power supply in lowering solenoid valve and not work5:high on viscosity of hydraulic oil or frozen、 deterioration(winter) | 1:raise lightly and then descend2:insufficient air pressure or safety claws are blocked 3:solenoid valve will be checked or changed if it is on power out of work,making gas circuit blocked.4:check plug、coil of lowering solenoid valve and confirm whether nut is screwed tightly from right side or not5:change hydraulic oil |
| Normal load but it descends slowly | anti-explosion valve is blocked | Remove or close intake pipe for ensuring safety claw will not be raised but to be lockedRemove anti-explosion valve in oil-hole in the bottom of oil cylinder and clean it. |
| Left and right platform are not synchronized and not in the same level  | 1:air of oil cylinder is not exhausted fully2:leakage on oil pipe or joint3:”Oil replenishing valve “ is loose（it needs to be replenished oil nearly every day） | 1:refer to operation of oil replenishing adjustment2:check joint or change oil seal and then replenish oil for adjusting。3:change oil replenishing valve and then adjust. |
| Noise when raise and descend | 1:lubricate oil not too much2: foundation or machine itself is skewed | 1:grease oil into all joints and moving parts2:place something under the foundation for adjusting machine levelness |

**8.Warranty card**

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

**Maintenance record card**

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| --- | --- | --- | --- | --- |
| Date | Record content | Change parts content | Broker | Remark |
| name | model | specification | quantity |
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| Warranty Statement一、The card and the purchase invoice should be reserved by user,showing both of them for warranty.二、The equipment could be used properly since the day of issuing invoice,fault with mechanical parts without overhaul will be checked by our factory for confirming reasons.Our factory will be responsible for maintenance as stipulations of warranty time by the note.Not within warranty scope which includes abnormal voltage for storing unproperly or not operate and use as instructions or breakdown for others.(warranty for one year) |

**9.Certificate of conformity**

**This equipment is granted to leave the factory**

**Product name：small scissor-type lift**

**Product ID：**

**Date of inspection：**

**Inspector：**