

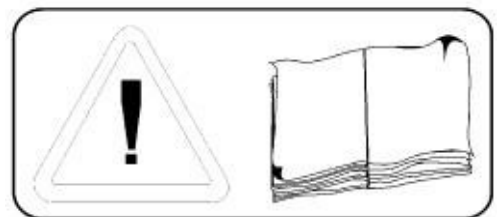
# **INSTALLATION, OPEATION, MAINTENANCE MANUAL**



## ***3.0T Mid-rise Movable Scissor Lift***

\***Manufacturer** keeps the rights to improve the contents in this manual

**SCISSOR LIFT ITEM**  
**NO: *SHVL3000M***



**FOLLOW THE INSTRUCTIONS CAREFULLY TO GRANT THE MACHINE A CORRECT FUNCTION  
AND LONG SERVICE LIFE**

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# USER'S RECORD

RECORD BELOW INFORMATION WHICH LOCATED ON THE NAME PLATE

ITEM NO \_\_\_\_\_

SERIES NO \_\_\_\_\_

DATE OF MFG \_\_\_\_\_

The here blow listed persons have been qualified to use the machine after installation.  
The course for use and maintenance has been carried out by a qualified technician.

1.

2.

3.

4.

.....

# RECORD OF INSTALLATION

MODEL NO \_\_\_\_\_

SERIES NO \_\_\_\_\_

CUSTOMER \_\_\_\_\_

DATE OF INSTALLATION \_\_\_\_\_

WE HEREBY DECLARED THAT THE ABOVE MENTIONED MACHINE HAS BEEN INSTALLED CORRECTLY. ALL FUNCTIONS HAVE BEEN CHECKED AS WELL AS CORRECT OPERATING OF ALL SAFETY DEVICES.

WE CONSIDER THEREFORE THE MACHINE WORK IN GOOD CONDITIONS IN ALL RESPECTS.

Date of Installation

-----

The authorized technician

-----

The customer

-----

# SAFETY INSTRUCTIONS

( READ THE INSTRUCTIONS ENTIRELY BEFORE OPERATING)

1. Do not install the lift on any asphalt surface
2. Read and understand all safety warning procedures before operating the lift.
3. Keep hands and feet away from any moving parts. Keep feet clear of lift when lowering.
4. The lift may only be used by qualified staff, properly trained for the specific use of the machine.
5. Do not wear unfit clothes such as large clothes with flounces, tires, etc, which could get caught by moving parts of the machine.
6. The lift surrounding area must be free from people or objects which could be a danger for lifting operations.
7. The lift is only designed to lift the entire body of vehicle, having maximum weight not more than the lift capacity.
8. Always insure the safety devices are engaged before any attempt to work on or near vehicle.
9. Make sure that the machine and its devices are working correctly, according to the specific instructions for maintenance.
10. Lower the lift to its lowest position when service finish.
11. Do not modify the machine without manufacturer's advice.
12. If the machine is not to be used any more, owners are suggested to make it unusable by removing the power supply connections, emptying the oil tank and disposing the liquids by right way.
13. If the lift is to be left unused for a long period, proceed as follows:
  - a. Disconnect the energy source;
  - b. Empty the control unit tank.
  - c. Grease the moving parts which might be damaged by dust or drying out.

# INTRODUCTION

This guide has been made in order to supply the owner as well the user with the basic instructions for a correct installation, operation and maintenance of the lift.

Read this guide carefully before using the machine and follow the instructions given by this guide carefully to grant the machine a correct function, efficiency and a long service life.

## INTENDED USE

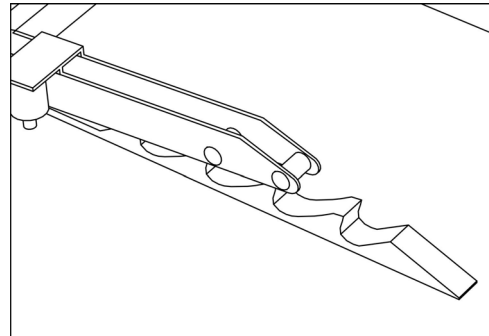
The lift has been designed and constructed for lifting vehicles with the sole purpose of performing service, repairing and inspection. Any other use not described is to be considered as improper and irrational, and thus it will be under the whole responsibility of the operator.

The middle rise scissor lift is mainly used for tire service or other quick service around vehicles. This appliance must be only used for the purpose of which it is expressly designed. It is forbidden to lift people or others not specified in this manual. Any other use is to be considered improper and irrational and thus highly forbidden.

The constructor cannot be held responsibilities for any damage or injuries caused by an improper use or by the non-observance of the following instructions:

## SAFETY SYSTEM

Pneumatic safety lock.



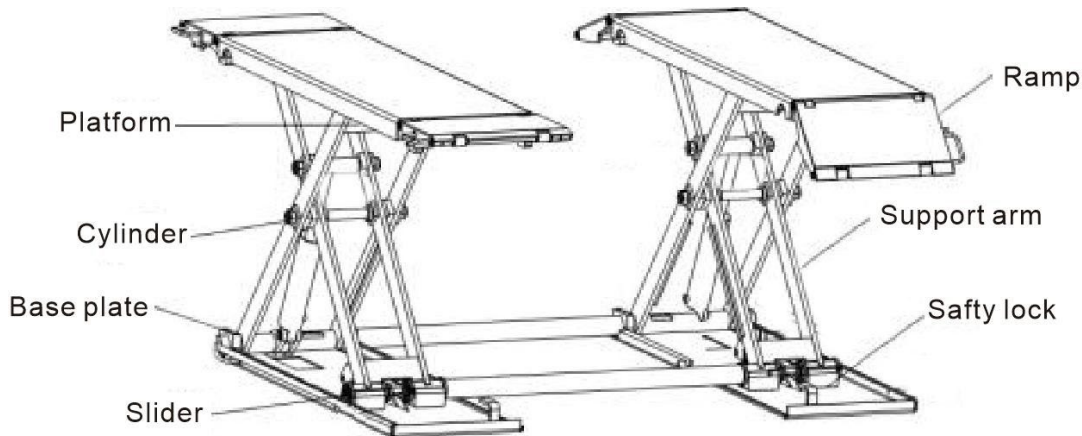
## TECHNICAL DATA

|  |                                       |
|--|---------------------------------------|
| Lifting height                           | 1000mm                                |
| Initial height                           | 120mm                                 |
| Lifting capacity                         | 3000kg                                |
| Platform length                          | 1410-2010mm                           |
| Platform width                           | 460mm                                 |
| Lifting time                             | 30S                                   |
| Power supply                             | 220V, single phase; 380V, three phase |
| (Please see nameplate before connecting) |                                       |

# INSTALLATION

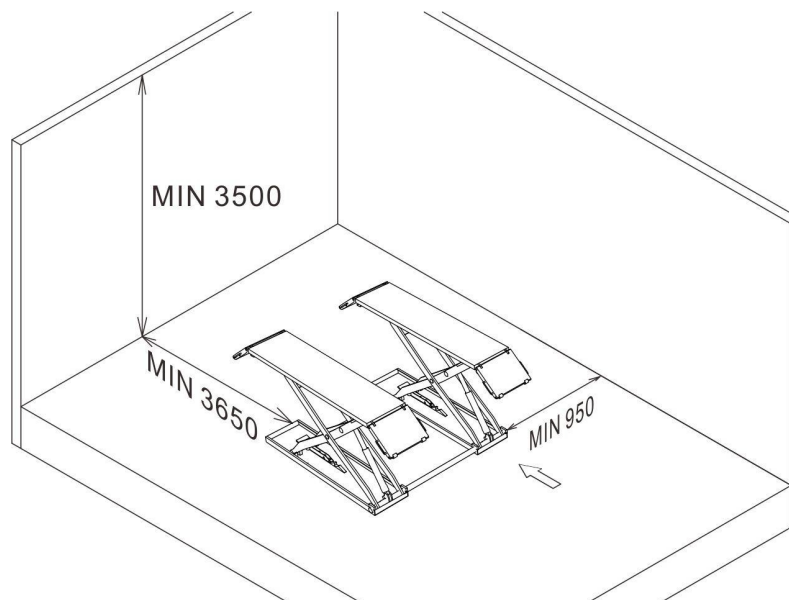
## BEFORE INSTALLATION

1. Identify the components and check for shortages. Contact us immediately if shortage discovered.



2. Installation, adjusting and testing operations are to be performed by qualified staff only.
3. The lift must be installed on a level concrete floor, having minimum thickness of 20cm and an extension of at least 3.65m from the wall.
4. The lift installation concrete surface must be relatively smoothes, leveled in all directions
5. After unloading the lift, place it near the intended installation location.  
Remove the shipping brands and packing materials from the unit.  
Remove the packing things.

## SPACE REQUIRED



Prepare ground base according to the SPACE REQUIREMENT DRAWING.

The concrete's thickness should be  $\geq 200\text{mm}$  and the error of levelness should be  $\leq 5\text{mm}$  when the ground condition is good.

## **ELECTRICAL SYSTEM**

Any work on the electrics must be carried out by qualified personnel only.

Equip the electric system of installation place with effective ground circuit.

The electric system adjusting must be made in accordance with the nameplate showing.

## **CONNECTING**

You may start to connect oil hose, air supply and power after the above preparations.

### **1. OIL HOSE CONNECTING**

See the hydraulic diagram for oil hose connecting. Make sure that no soil or other dirty things into the pipe.

### **2. AIR HOSE CONNECTING**

See pneumatic diagram for air hose connecting.

### **2. POWER SUPPLY CONNECTING**

Connect power line according to the electric diagram

### **3. REFILL THE TANK**

Pour 6 liters of L-HM32 anti-wear hydraulic oil (provided by user) into oil tank. The highest level should be 10mm from the top of the tank and the lowest level should be 40mm from the top of the tank (check with the detective ruler on the oil pouring air cover).

### **4. BASE FRAME FIXED.**

The lift is design also for mobile use, means that you may use it without fixing. If need fixing, please refer to the space required drawing.

### **5. LOADING TEST**

**Never try to use the lift with vehicle on without testing first.**

This step is very important to check if there is any leakage of hydraulic line connectors or air hose. If there's no abnormal noise or leakage after running two or three times, run with load never exceeding 2500kg at a low height.

Then raise higher gradually.

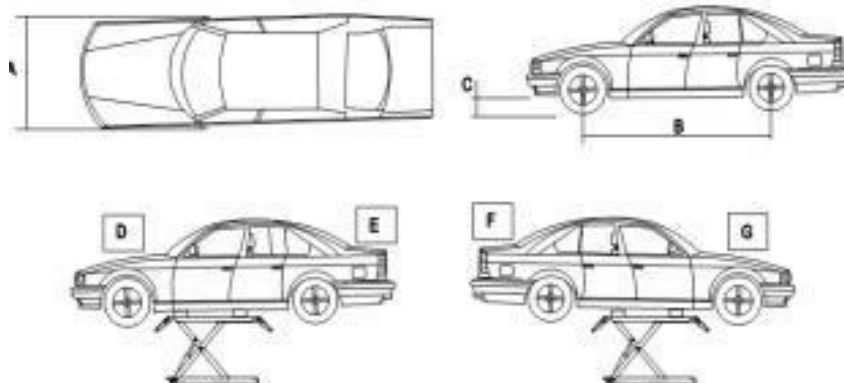


# OPERATION

**WARNING:** DO NOT PLACE ANY VEHICLE ON THE LIFT BEFORE TRIAL OPERATION. RAISE THE LIFT UP AND DOWN SEVERAL TIMES TO INSURE LATCHES CLICK TOGETHER AND AIR EXHAUSTED FROM THE CYLINDERS.

## BEFORE OPERATION

- Check all the pipelines and joints before use. The machine only can be used after there is not any leakage.
- The lift, if its safety device malfunctions, shall not be used.
- The machine shall not raise or lower an automobile if the center of gravity of automobile is not within the supporting range of the supporting device. Otherwise, the manufacturer will not bear any responsibility for the consequence resulted from the operation above mentioned.
- The staff or operators shall be in a safe position when the machine raise or lower.
- When the lift with vehicle on reaches a desired height, first of all, the main switch must be turned off before the automobile is repaired so as to prevent non-operator or unauthorized person from pressing the start switch.



| A    | B    | C    | D   | E   | F   | G   |
|------|------|------|-----|-----|-----|-----|
| (mm) | (mm) | (mm) | (T) | (T) | (T) | (T) |
| 1600 | 1800 | 110  | 1.8 | 1.2 | 1.8 | 1.2 |

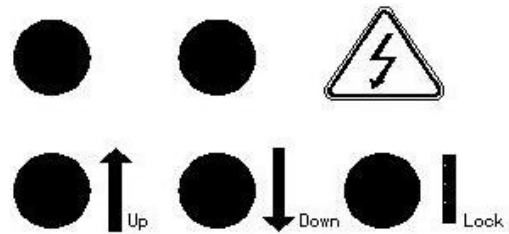
## INSTRUCTIONS FOR USE

### RAISING THE LIFT

1. Make sure that you have read the operation manual before operation.
2. Always lift the vehicle at the manufacturer recommended points.
3. Position the vehicle right on the center of two platforms.
4. Turn on the switch.

Raise the lift by pressing UP button on control box until the pads touch firmly the right points and recheck if the vehicle is secure.

5. Check the security of vehicle, then perform maintenance or repair work.



### LOWERING THE LIFT

1. Press down button to lower the lift.

The lift will raise a little to release the lock then goes down.

# MAINTENANCE

We will give the user one-year warranty of quality for the machine. If something wrong with the machine within the term of service, we will repair or replace the product according to the user's demand. The manufacturer will not take any responsibility for improper installation and operation overload running wrong concrete ground (that can not meet the requirements in the manual), normal mechanical abrasion and insufficient maintenance. The warranty will be carried out on the basis of the type and serial number of the equipment. Therefore, the users shall provide them to the manufacturer without fail.

The several pieces of maintenance operations to be carried out are described below. A low operating cost and a long life of the machine are from routine observation of there operations.

The listed intervention times are given for information and they refer to normal operating conditions. They can change according to the kind of service, environment, frequency of use, etc.

## 1. DAILY PRE-OPERATION CHECK

The user should perform daily check. Daily check of safety latch system is very important - the discovery of device failure before needed could save you from expensive property damage, lost production time, serious personal injury, even death.

- . Check safety lock audibly and visually while in operation
- . Check hydraulic connections, and hoses for leakage.
- . Check chain connections, cable connections, wiring and switch for damage.
- . Check bolts, nut and screws and tighten.
- . Check swing arm restraints.

## 2. WEEKLY MAINTENANCE

- . Check the cleanness of the mobile parts.
- . Check the safety device as previously described.
- . Check hydraulic fluid level as follow: let the trolleys go up completely and in case they do not reach maximum height, add oil.
- . Check and tighten bolts, nuts and screws.

## 3. MONTHLY MAINTENANCE

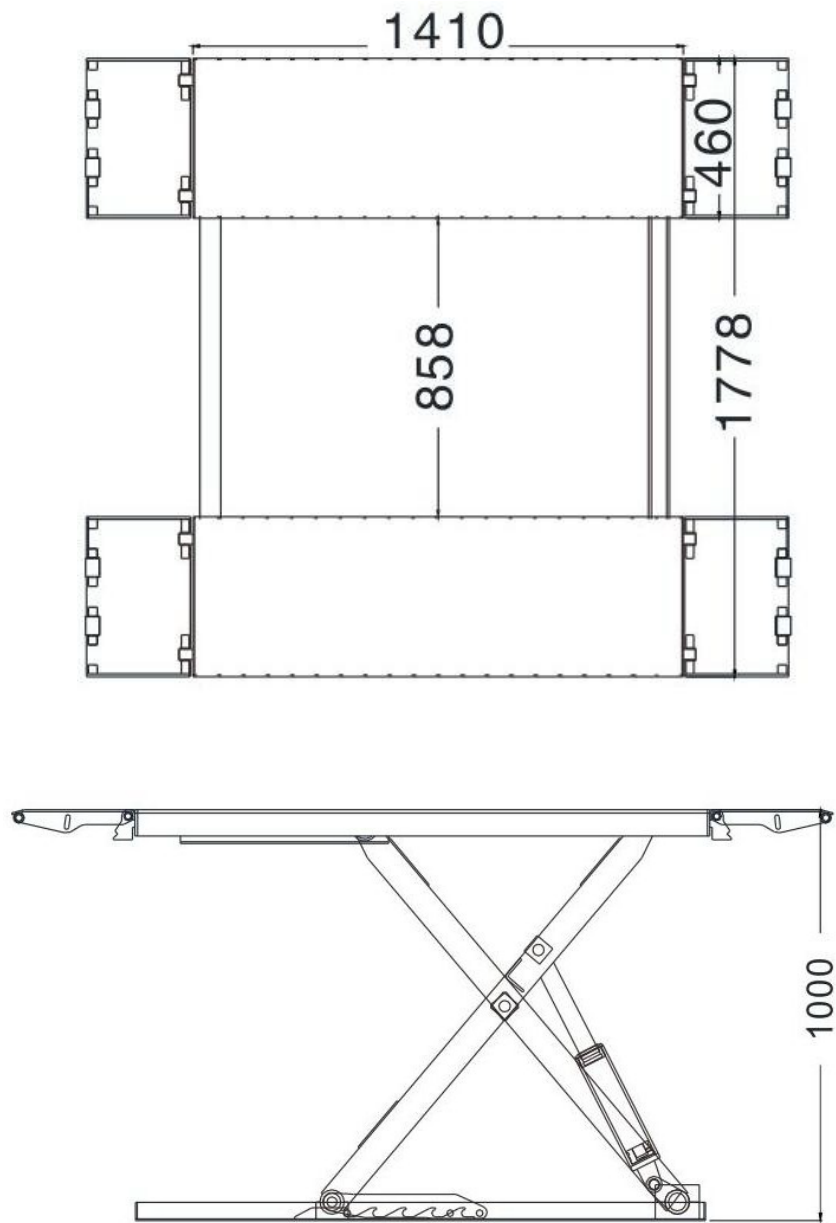
- . Check the tightening of screws
- . Check the hydraulic system seal and tighten the loose unions, if necessary.
- . Check the greasing and wear condition of pins, rollers, bushes, of trolley structure as well as arms and relevant extensions, if necessary, replace the damaged parts by original spare parts.

## 4. YEARLY MAINTENANCE

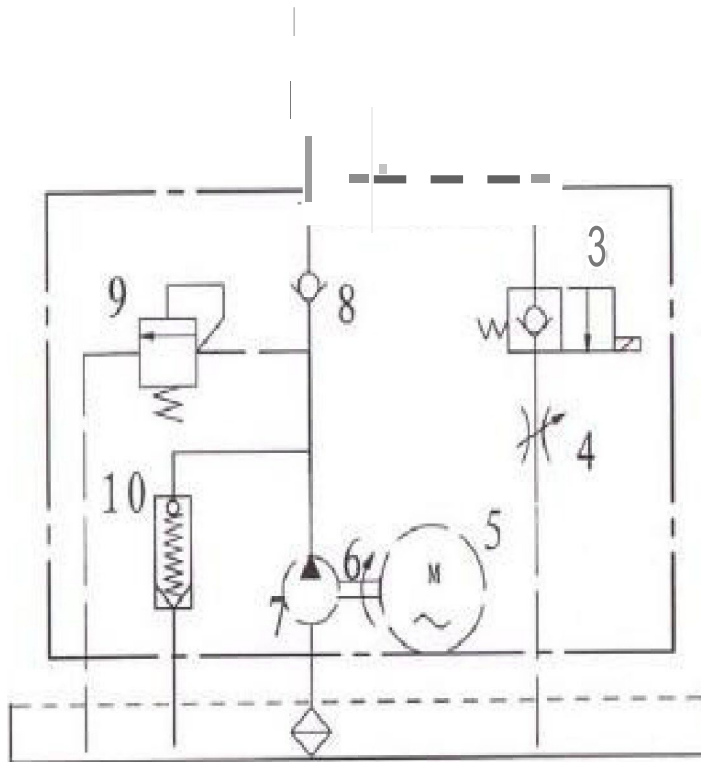
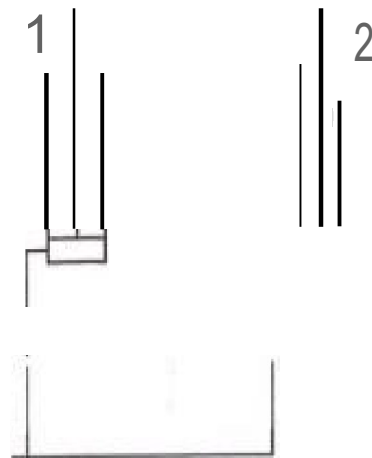
- . Empty the tank and check the conditions of the hydraulic fluid. Clear the oil filter.

If the above maintenance operations are carried out, there will be advantage for the user, who will find the equipment in perfect condition each time he restarts work.

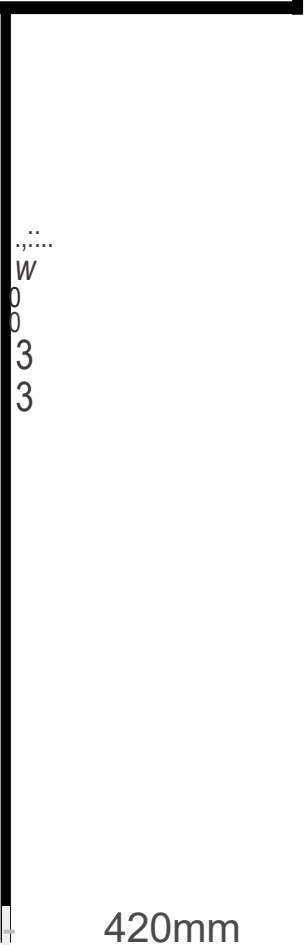
# OVERALL DIAGRAM



# HYDRAULIC DIAGRAM



1. MAIN CYINDER
2. ASSISTANT CYLINDE
3. ELECTRIC RELEASE VALVE
4. LOWERING THROTTLE VALVE
5. MOTOR
- COUPLING
7. GEAR PUMP
8. ONE WAY VALVE
9. OVERFLOWING VALVE
10. CUSHION VALVE



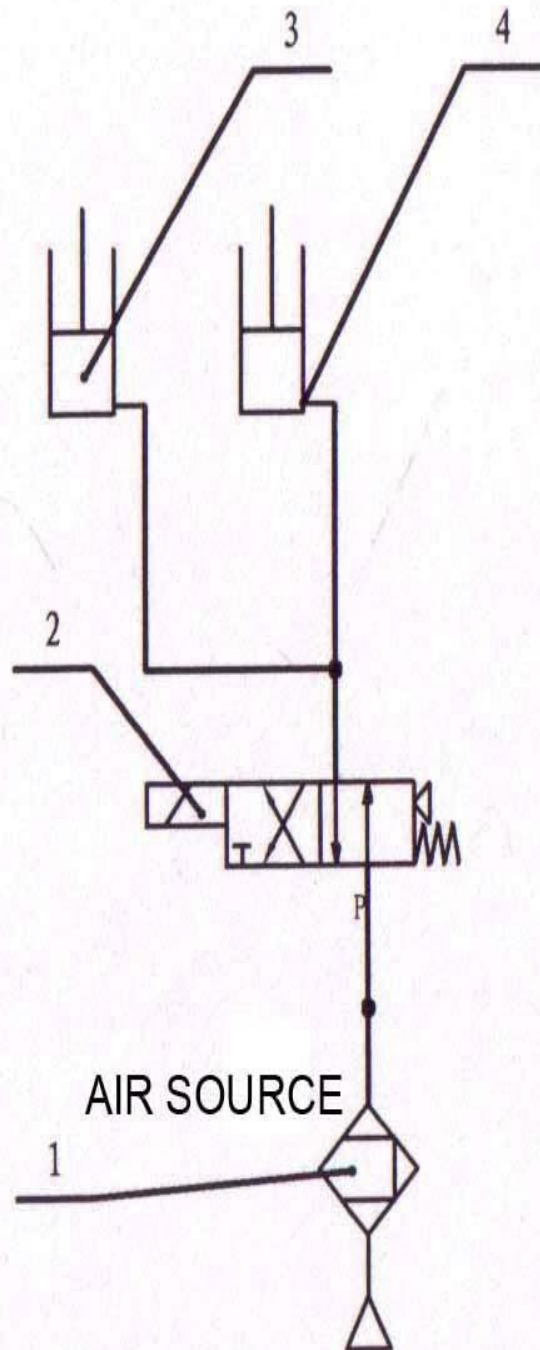
.....  
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3  
3

420mm

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1850mm .Qml I cylinder2 (t0

# PNEUMATIC DIAGRAM



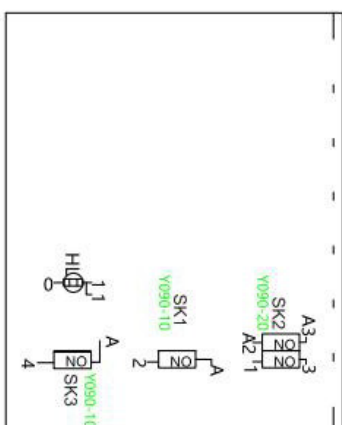
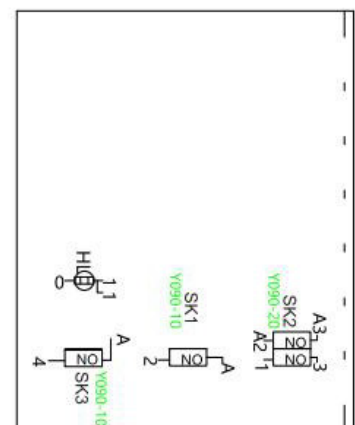
1、 Air Filter

2、 Solenoid Directional Valve

3、 Driving cylinder locking

4、 Assistant cylinder locking

# WIRING DIAGRAM

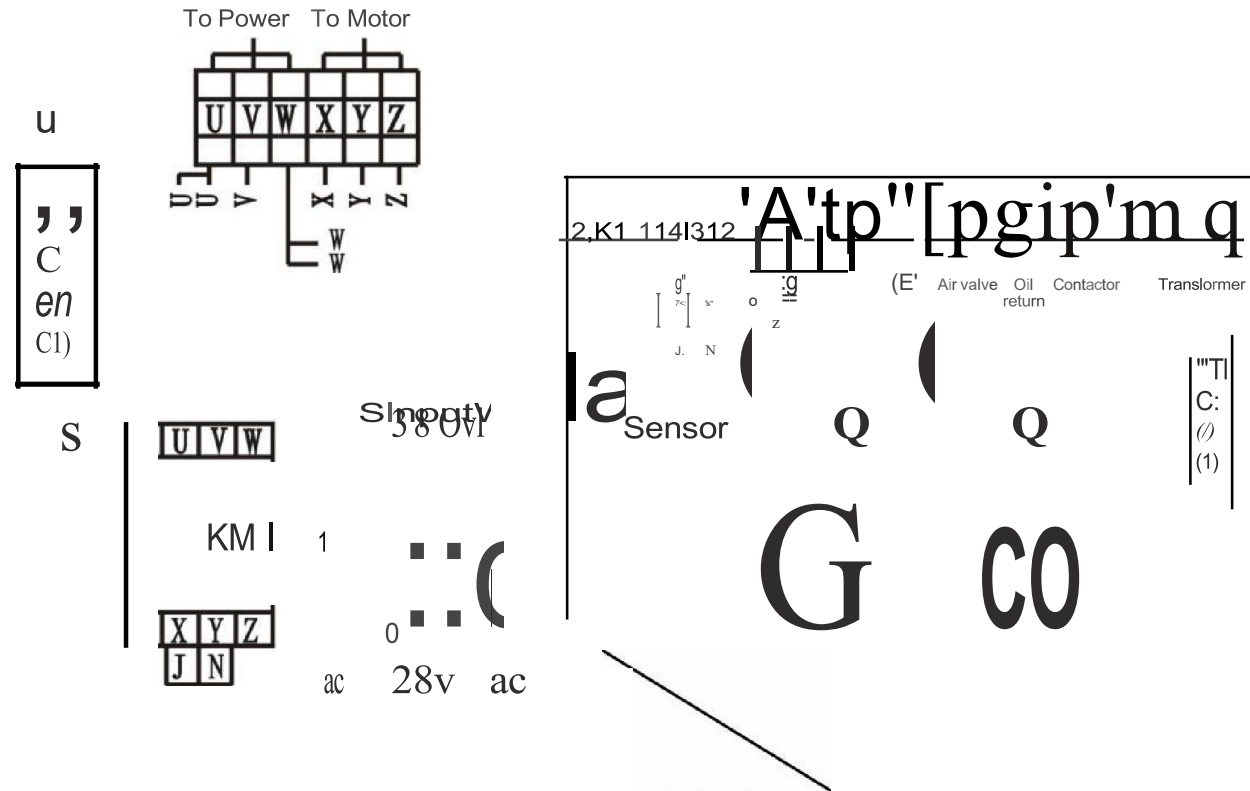




| NO | CODE | NAME                    | TYPE AND SIDES | QTY | REMARKS                |
|----|------|-------------------------|----------------|-----|------------------------|
| 1  | KM   | AC Contractor           | CJX2-1210/AC24 | 1   |                        |
| 2  | KT   | Time relay              | ST6PA-5S/AC24  | 1   |                        |
| 3  | KA   | Relay                   | HH54p/AC24     | 1   |                        |
| 4  | SB1  | Push button             | LA42           | 1   | UP BUTTON              |
| 5  | SB3  | Push button             | LA42           | 1   | DOWN BUTTON            |
| 6  | M    | Motor                   | 3HP            | 1   |                        |
| 7  | FU   | Fuse                    | 2A             | 1   |                        |
| 8  | FU1  | Fuse                    | 16A/32A        | 3/2 |                        |
| 9  | FU2  | Fuse                    | 1A             | 1   |                        |
| 10 | HK   | Power switch            | Lw26GS-20/04   | 1   |                        |
| 11 | SQ1  | Limit switch            | D4MC-5020      | 1   |                        |
| 12 | HL   | Lamp                    | AD17           | 1   | POWER INDICATING LIGHT |
| 13 | JBK  | Transformer             | JBK3-63VA      | 1   |                        |
| 14 | C    | Capacitor               | 4700uf-50V     | 1   |                        |
| 15 | YA   | Electromagnetic         | 3V210-08/DC24V | 1   |                        |
| 16 | YV   | Electromagnetic<br>vale | DC24V          | 1   |                        |
| 17 | VD   | Bridge retifier         | KBPC5A-35A     | 1   |                        |
|    |      |                         |                |     |                        |
|    |      |                         |                |     |                        |
|    |      |                         |                |     |                        |

We've tried to do our very best to provide complete and detailed information so that your installation and operation experience is free of problems. But, please feel free to contact us, if you should run into any problems in installation and operation your new lift, or have questions on some of the parts.

O O @ O O C O C O



K1-©-K2

UP A-@--2 LOCK A-@--4

DOWN 1-@--3 1--©-0

G=Green  
R=RED  
L=Light

# **3.0T Mid-rise Movable Scissor Lift User's Manual**

Applicable Model: **SHVL3000M**