ALIGNMENT SCISSOR LIFT

MODEL NO: EE-6603S, 6603A, 6603B

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

EVER-ETERNAL AUTOMOTIVE EQUIPMENT
Tel/fax 86-21-61136391/61136390
www.ever-eternal.com
# TABLE OF CONTENT

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>USER’S RECORD</td>
<td>3</td>
</tr>
<tr>
<td>RECORD OF INSTALLATION</td>
<td>4</td>
</tr>
<tr>
<td>SAFETY INSTRUCTIONS</td>
<td>5</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>6</td>
</tr>
<tr>
<td>WARNING SIGNS</td>
<td>7</td>
</tr>
<tr>
<td>INSTALLATION</td>
<td>8-12</td>
</tr>
<tr>
<td>OPERATION</td>
<td>13</td>
</tr>
<tr>
<td>MAINTENANCE</td>
<td>14</td>
</tr>
<tr>
<td>SPACE REQUIRED</td>
<td>15</td>
</tr>
<tr>
<td>HYDRAULIC DIAGRAM</td>
<td>16</td>
</tr>
<tr>
<td>HYDRAULIC CONNECTION</td>
<td>17</td>
</tr>
<tr>
<td>PNEUMATIC CONNECTION</td>
<td>18</td>
</tr>
<tr>
<td>WIRING DIAGRAM</td>
<td>19-21</td>
</tr>
</tbody>
</table>
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. The lift, in its standard version, is not designed for outdoor use.

4. Keep hands and feet away from any moving parts. Keep feet clear of lift when lowering.

5. The lift may only be used by qualified staff, properly trained for the specific use of the machine.

6. Do not wear unfit clothes such as large clothes with flounces, tires, etc, which could get caught by moving parts of the machine.

7. The lift surrounding area must be free from people or objects which could be a danger for lifting operations.

8. The lift is only designed to lift the entire body of vehicle, having maximum weight not more than the lift capacity.

9. Always insure the safety devices are engaged before any attempt to work on or near vehicle.

10. The vehicle must be centered and positioned in a stable correct way with respect to the posts and following the instructions given by manufacturer.

11. Make sure that the machine and its devices are working correctly, according to the specific instructions for maintenance.

12. Lower the lift to its lowest position when service finish.

13. Do not modify the machine without manufacturer’s advice.

14. 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.

15. 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 alignment scissor lift is suitable for lifting motor vehicles having maximum total weight of 3200kg, and 4000kg. 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:

The lift, in its standard version, is not intended for outdoor use, in this case, it is necessary to ask the constructor for a special version.

SAFETY SYSTEM

The pneumatic locking system.

TECHNICAL DATA

- Lifting height: 1800mm after installation.
- Lifting capacity: 3500kg, 4000kg
- Lifting time: 60S
- Power supply: 220V, single phase; 380V, three phase

(Please see nameplate before connecting)
WARNING SIGNS

All safety warning signs presented on the machine with the purpose to draw the operator’s attention from dangerous or unsafe situations. The labels must be kept clean and they have to be replaced if detached or damaged. Read the meaning of the labels carefully and memorize it.

Warning 1: It is not allowed to stay under the being serviced vehicle during operation.

Warning 2: Operator and standby should not stay too close to the machine, but in the safety place.

Warning 3: When the lift lowers, no auxiliary stand or wooden stick is allowed to use.

Warning 4: Do not shake the vehicle hard, when it still lays on the lift runways.

Warning 5: Only trained technician is permitted to operate the lift.

Warning 6: Take care of your feet when the equipment lifts and lowers.

Warning 7: It is not allowed to lift or lower just one side track.

Warning 8: Do not change safety system of the lift.

Warning 9: Take notice of you feet when the lift lowers.

Warning 10: Ensure the lifting weight balanced on two runways to avoid tilting and sliding.

Warning 11: Keep clean in equipment groove.

Warning 12: Please read carefully the operation manual before use the machine.

Warning 13: Keep the being serviced car parallel with the lifting runways.

Warning 14: High voltage in control box.
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 15cm and an extension of at least 1.5m from anchoring points.
4. The lift installation concrete surface must be relatively smooth, 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 brackets and bolts holding the two columns together.

SPACE REQUIRED

Prepare ground base according to the SPACE REQUIREMENT DRAWING.
The concrete’s thickness should be ≥150mm and the error of levelness should be ≤5mm 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

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. POWER SUPPLY CONNECTING
   Connect power line according to the electric diagram.
The black lines are phase wire, and blue line is N wire. Yellow and green line is for grounding.

3. REFILL THE TANK
   Pour 16 litres 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. SYNCHRONIZATION OF PLATFORMS AND JACKS

Platforms synchronization can be done by MANUAL or ELECTRICAL. JACK synchronization is only by manual as our product standard.

ELECTRICAL SYNCHRONIZATION for Platforms

Make sure first the hydraulic hoses are connected correctly.

WRONG CONNECTING OF HYDRAULIC HOSE MAY CAUSE UN-SYNCHRONIZED OR DAMAGE TO CYLINDER.

Step 1. Turn the shift switch on control panel to MAIN position and turn on POWER SWITCH.
Step 2. Open the cover of control unit and you will see the ABS box, a switch indicating WORKING and LEVELLING on it. Shift the switch to LEVELLING.

Step 3. Press UP button. Two platforms will go up together, but not synchronized, until to utmost high.

   THIS STEP IS TO DRIVE AIR OUT OF CYLINDERS.

Step 4. Turn switch to WORKING.
Step 5. Press DOWN I button to lower platforms to utmost low position.

THE TWO PLATFORMS SHOULD BE SYNCHRONIZED BY THIS STEP. PRESS UP BUTTON TO CHECK.

IF STILL NOT SYNCHRONIZED:

Step 1. Turn switch to LEVELLING.
Step 2. Press UP button.
Step 3. Stop pressing when two platforms at same height.
Step 4. Switch button to WORKING and press DOWN I to utmost low position.

THE TWO PLATFORMS SHOULD BE SYNCHRONIZED BY THIS STEP.

Control buttons

Status of valves when making synchronization electrically.
Manual synchronization for jacks

Step 1. Turn switch on control panel, to JACK.
Step 2. Switch on the manual ball valve.
Step 3. Press UP button. Two jacks go up, but not synchronized, until utmost top, to drive air out of cylinders.
Step 4. Close the ball valve.
Step 5. Press DOWN I, until jacks lower to utmost low position.
PRESS UP BUTTON TO CHECK. THE JACKS SHOULD BE SYNCHRONIZED BY THIS STEP.

IF STILL NOT,
Switch on the ball valve, and press UP button.
Stop pressing, when two jacks go at same height.
Switch off ball valve.
Press UP button and the two jacks should be synchronized.

WARNING:
WRONG CONNECTING OF HYDRAULIC OIL HOSE MAY CAUSE UN-SYNCHRONIZED OR DAMAGE TO CYLINDER.
MANUAL SYNCHRONIZATION for platforms.

Step 1. Switch shift button to MAIN position.
Step 2. Turn ball valve ONE to open position.
Step 3. Press UP button, two platforms raising, but not synchronized, until utmost top.

**THIS STEP IS TO DRIVE AIR OUT FROM CYLINDERS.**
Step 4. Switch off ball valve one and press DOWN I button to lower platforms to utmost low position.

**THE TWO PLATFORMS SHOULD BE SYNCHRONIZED BY THIS STEP. PRESS UP BUTTON TO CHECK.**

**IF STILL NOT SYNCHRONIZED:**
Step 1. Switch on ball valve one to open condition.
Step 2. Press UP button.
Step 3. Stop pressing button when two platforms raising at same height.
Step 4. Switch off valve one.

**THE TWO PLATFORMS SHOULD BE SYNCHRONIZED BY THIS STEP.**
MANUAL synchronization for jacks (MANUAL LEVELLING PLATFORM)

A
Manual ball valve 2 open
Leveling status of jacks

B
Manual ball valve 2 closed
Working status of jacks

Step 1. Turn switch on control panel, to JACK.
Step 2. Open the manual ball valve 2.
Step 3. Press UP button. Two jacks go up, but not synchronized, until utmost top, to drive air out of cylinders.
Step 5. Press DOWN I, until jacks lower to utmost low position.

PRESS UP BUTTON TO CHECK. THE JACKS SHOULD BE SYNCHRONIZED BY THIS STEP.

IF STILL NOT,
Switch on the ball valve 2, and press UP button.
Stop pressing, when two jacks go at same height.
Switch off ball valve 2.

Press UP button and the two jacks should be synchronized.
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

a. Check all the pipelines and joints before use. The machine only can be used after there is not any leakage.
b. The lift, if its safety device malfunctions, shall not be used.
c. 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.
d. The staff or operators shall be in a safe position when the machine raise or lower.
e. 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.
f. Always press teeth engaged button to make the locking teeth engaged, then go under the vehicle.

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. Raise the lift by pressing the 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.
2. The control unit will give alarming when the lift lowered to about 500mm to ground.
3. Press button DOWN II to continue lowering, until reaching complete bottom.
MAINTENANCE

Ever-Eternal 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 an advantage for the user,
who will find the equipment in perfect condition each time he restarts work.
Different platform length needs different length of groove.
1. EMERGENCY UNLOADING VALVE
2. UNLOADING VALVE
3. SINGLE WAY VALVE
4. OVERFLOW VALVE
5. LOWERING THROTTLE VALVE
6/14. Main electro-magnetic valve for platform and central jack
7. Electrical refilling valve.
8. CUSHION VALVE
9. PUMP
10. MOTOR
11. OIL LUBRICATOR
12-1,13-1. Main cylinder
12-2,13-2 Assistant cylinder
HYDRAULIC CONNECTING

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEM NO.</th>
<th>DESC</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>P1-4</td>
<td>CONNECTING TO central jack</td>
</tr>
<tr>
<td>7</td>
<td>P1-3</td>
<td>CONNECTING TO central jack</td>
</tr>
<tr>
<td>6</td>
<td>P1-2</td>
<td>CONNECTING TO PLATFORM</td>
</tr>
<tr>
<td>5</td>
<td>P1-1</td>
<td>CONNECTING TO PLATFORM</td>
</tr>
<tr>
<td>4</td>
<td>P0-4</td>
<td>CONNECTING TO POWER UNIT</td>
</tr>
<tr>
<td>3</td>
<td>P0-3</td>
<td>CONNECTING TO POWER UNIT</td>
</tr>
<tr>
<td>2</td>
<td>P0-2</td>
<td>CONNECTING TO POWER UNIT</td>
</tr>
<tr>
<td>1</td>
<td>P0-1</td>
<td>CONNECTING TO POWER UNIT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PNEUMATIC DIAGRAM

1. Air filler
2. Reversing valve
3. Air cylinder of platform safely releasing
4. Air cylinder of jack safely releasing

- P1 Main cylinder of Jack
- P1 Main cylinder of platforms
- P0 Power unit
- P2 assistance cylinder of Jack
- P2 assistance cylinder of platform
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.