

Forward this manual to all operators. Failure to operate this equipment as directed may cause injury.

INSTALLATION and SERVICE MANUAL

Model: LM30G Scissors lift



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Product Qualification Certificate

Product name: movable car lift

Product model: LM30G

Manufacturing code: _____

Shipment date: _____

Quality inspector: _____

The inspection of product accords with standard, which is conforming product.

Product Guarantee Card

User	
Address and telephone	
Equipment name and model	
Shipment No.	
Shipment date	
Specification for using the guarantee card	<p>Dear users:</p> <p>Thank you for using the machine produced by our company, in order to make you safely use the product for a long time, you should let professional to follow the specification and instructions to use and maintain the machine. You can get the following service according to our guarantee card and invoice.</p> <ol style="list-style-type: none"> 1. Guarantee: from the date you buy our products, the problems caused by following the instructions to use it. 2. Guarantee period: one year 3. Not belong to the guarantee range: the damage caused by man-made due to transportation, improper use, insufficient foundation strength, the power is not in conformity with the stipulations. The components which are easy to damage (electrical appliances, rubber pad, slider, steel cable and so on consumable parts)
Repair records	

I. Purpose and Features

LM30G super thin scissors lift is an ideal choice for vehicle body service and workshop. Moveable design lift can be used flexibly in the workshop with low layer, which is suitable for maintenance and repair of light car with 3000kg.

II. Main functional specifications

Lifting capacity	3000kg
Lifting height	1000mm
Min height	120mm
Lifting time	20s
Power supply	V Hz ph

GL3.0 super thin scissors lift is composed of support board, platforms, arm structure and motor. Unique design of fixed rack can be connected with the lift. It can be moved easily. The safety structure is adapted automatic safety release system. It's not only safe and reliable, but easy to operate.

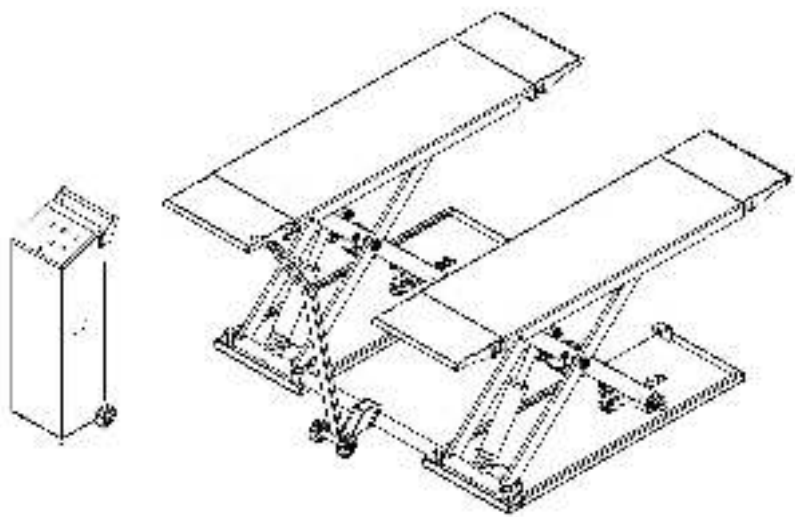
III. Installation Requirement

1. Hex-key/Allen Wrench Set (4#, 6#)
- 2.Screw Sets
3. Carpenter's chalk
- 4.Tape Measure (7.5m)
5. Needle Nose Pliers
- 6.Lock Wrench
7. Rotary Hammer Drill ($\Phi 18$)
- 8.Hammer
9. Foot Level
- 10.English spanner (12")
11. Ratchet spanner with socket 10#, 13#, 14#, 15#, 17#, 19#, 24#, 27#, 28#

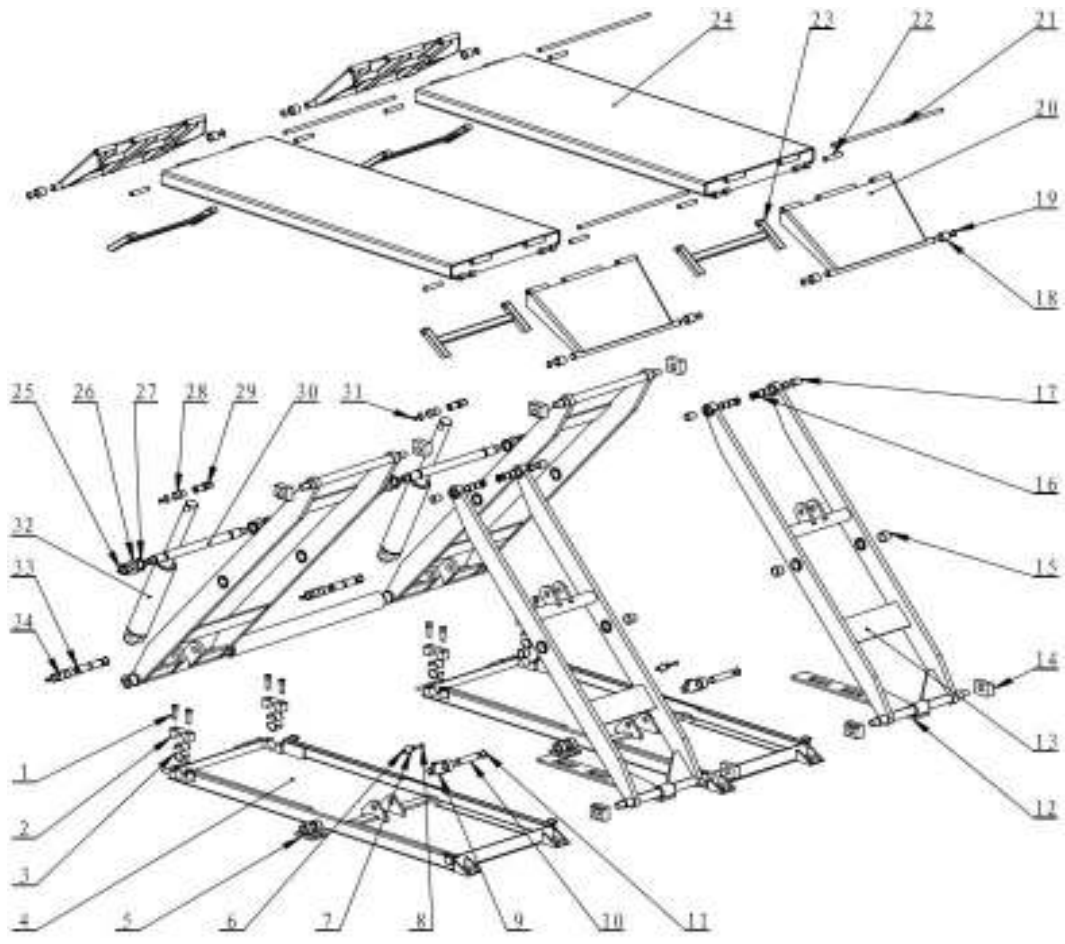
IV. Installation and Test Run

Operators must read and understand the user's manual completely before being allowed to operate. Check the components and spare parts as listed in the user's manual.

- 1). Open the spare parts box, and unpack the accessories' package to check the spare parts.
- 2). Fix the motor on the fixed rack with screws.
- 3). Connect the motor and car lift with oil pipe (put on the oil seals).
- 4). Add 46# anti-wear hydraulic oil 15L.
- 5). Get through power cord, make sure the power voltage is matched with the machine. The cross-sectional area of power cord not less than: voltage $\geq 220V(2.5mm^2)$, voltage $\geq 110V(4mm^2)$.
- 6). Start the motor. Fix on the arm structure when the lift ascends to a proper height..
- 7). Spread butter on the safety structure, and make the lift up and down two times to make sure the lift can be operated smoothly. Then it can be put into use.



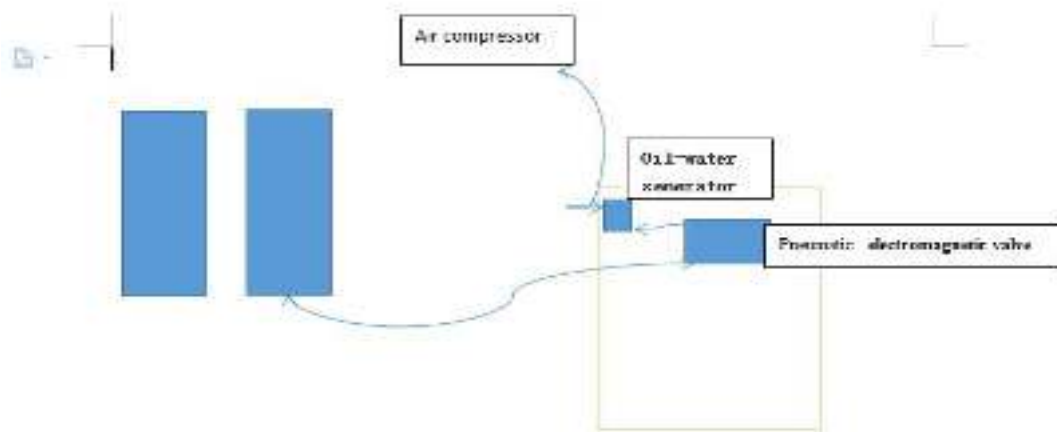
V. Exploded View & parts list



Graphic <2> Exploded View

NO.	Name	Qty
1	Hexagonal blot	4
2	block hinge cover	2
3	copper bush	4
4	base frame	1
5	safety limited board	2
6	nut	1
7	release washer	1
8	blot	1
NO.	Name	Qty
17	copper bush	2
18	roller	4
19	flexible ring	6
20	drive-ramp	2
21	ramp shaft	2
22	support pin	4
23	support rack	4
24	paltform	1
25	selflock nut	2

NO.	Name	Qty
9	safety paw	1
10	hinge axis	1
11	flexible washer for pin	6
12	safety ladder	1
13	inner arm	1
14	slidder	4
15	copper bush	2
16	hinge axis	2
NO.	Name	Qty
26	washer	2
27	nylon busher	2
28	copper bush	2
29	hinge axis	1
30	arm shaft	1
31	grease fitting	6
32	oil cylinder	1
33	hinge shaft	1
34	copper bush	2



VI. Operation and usage information

Installation and commissioning:

Personnel installing the car lift must be trained by a professional car lift to obtain a qualification certificate for the operator. Before installing the machine, carefully read the instruction manual, find out the structure and principle of the machine, check whether the machine is damaged during transportation and loading, whether the parts are missing or not. If there is any leak, you must contact the dealer or manufacturer immediately. In the case of missing fittings, the installation of the machine is also carried out, and the manufacturer and the distributor are not responsible.

1. Open the box and unpack the machine parts.
2. Connect the two ends of the oil pipeline to the power unit and lift of the control cabinet.
3. Inject 6 liters of 46# anti-wear hydraulic oil into the fuel tank of the power unit.
4. Turn on the power cord and determine the voltage corresponding to the unit when wiring. 220V or 380V.
5. Start the motor and raise the lift to the appropriate height.
6. Apply butter to the active part of the fuse and lift it twice to ensure smooth use.

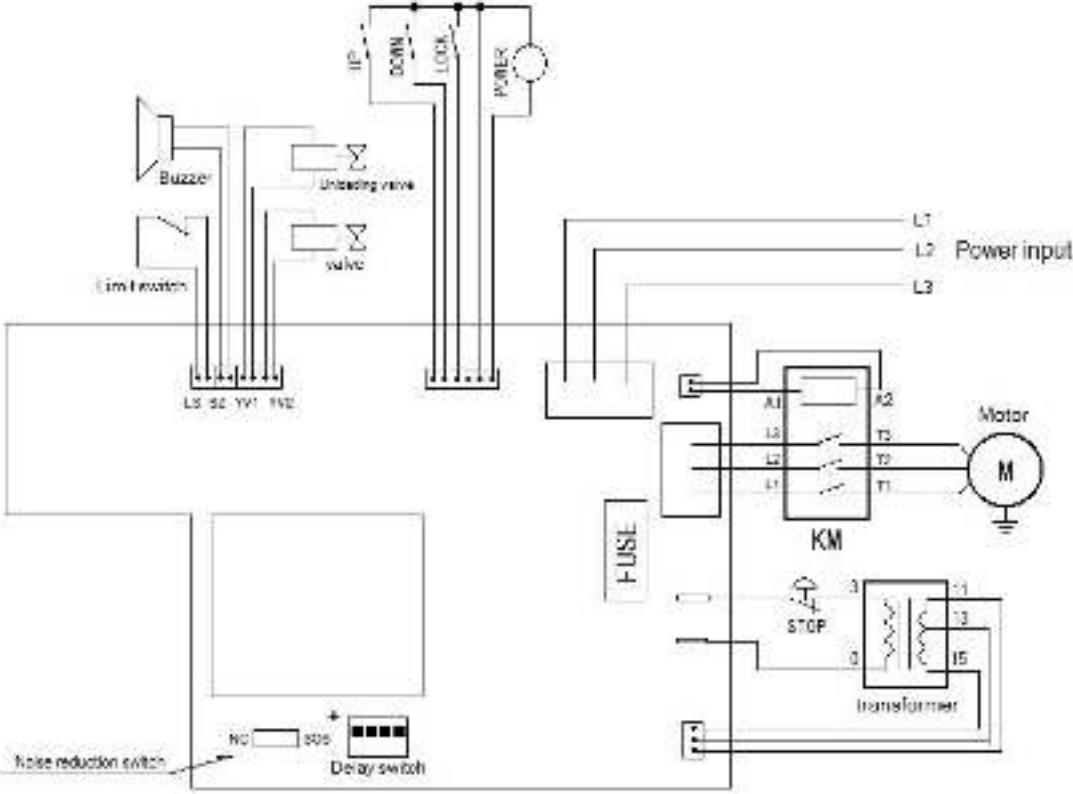
VII. Security check

Security check is an important measure to assure the proper use, at least once a month is needed and stop using when any abnormality is appeared.

- A) check the wear out condition of safe cog point and rack
 - B) whether there is oil leakage in hydraulic cylinder, oil pipe and connector
 - C) whether there are air leakage and worn in the air cylinder, oil pipe and air valve.
 - D) check the worn condition of support shaft and hole.
 - E) whether there has falling off in axial-tab terminals circlip, whether there has the phenomenon of axis shift or falling off.
- 2) maintenance examination
- A) whether support shaft is bending or out of shape
 - B) whether support roller is worn, and the worn of hole is increasing.
 - C) whether each weld position has sealing off and crack
 - D) whether the support is bending, platform is out of shape
 - E) whether the hydraulic oil is enough or go bad
 - F) check each electrical apparatus element to find out whether it is reliable, whether the circuitry is loosened or aged.

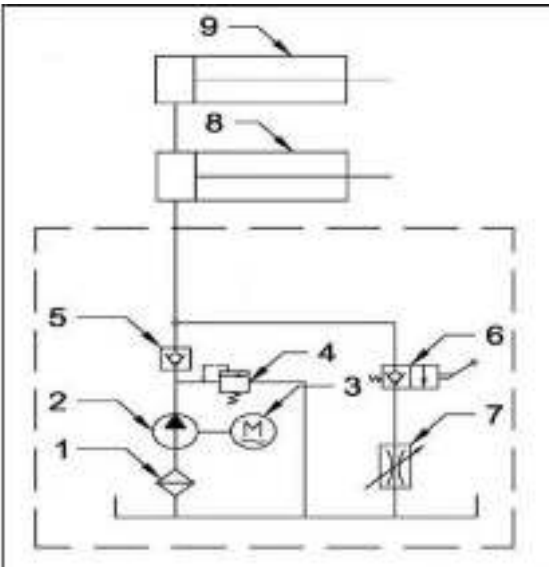
G) whether there has abnormal sound during the process of ascending and descending.

Circuit schematic:



FU:Fuse SA:Combination Switch KM:AC contactor M:Motor SB:Button

Hydraulic schematic:



- 1: filter 5: One way valve
 2:gear pump 6:release valve
 3:motor 7:throttle valve
 4:relief valve 8:Main cylinder
 9:Deputy cylinder

VIII. Maintenance, Trouble Shooting

Problems	Reasons of the problems	Solutions
The electric motor isn't running	Poor connection of electric wire	Check and well connect the wire
	Damage in electrical apparatus element	Check and repair or replace it
	Damage in electric motor	Repair or replace the electric motor
The electric motor is running but the platforms aren't ascending	Motor reversal	Change the way of wire connection
	The Overflow valve is always open	Readjust the oil pressure or solve the overflow valve problem
	Damage in gear pump	Change the gear pump to a new one
	Hydraulic oil is not enough	Add hydraulic oil
	Damage in solenoid valve	Repair or replace the exchange valve
	The entrance of oil pump sucked in air	Reassemble the imported connector
Slow descending after ascending	Oil leakage in pipeline	Screw the interface of pipeline or change it
	Bad sealing in hydraulic cylinder	Replace the seal components
	Bad sealing in single valve and solenoid valve	Replace the single valve or seal components of solenoid valve
Slow ascending	Blockage in oil filter	Clean the oil screen or change the hydraulic oil
	Serious worn in oil pump	Replace the oil pump
	Hydraulic oil become heat	Change the oil type
	Rotation speed of motor become lower	Repair or replace the electric motor
Slow falling or it does not fall at all	Didn't turn on the safe cog	Whether the air cylinder travel is high enough
	Didn't turn on the gas circuit	Check the air pressure, air pipe and air valve to find out whether they are folded, blocked or damaged
	Improper adjustment in descending flow valve	Readjust the descending speed
	Damage in descending solenoid valve	Replace the solenoid valve
Deviation in platform standard	Leak pressure in oil cylinder	Replace the seal components
	Poor close in adjustment of oil line	Change the adjustment valve of oil line
	Platform happen to move	Readjust the platform level
dissynchronous in lifting between the two scissors	Air in the oil cylinder	Re-dry out the air
	Poor close in adjustment valve	Replace the adjusting valve to cut off spool valve

IX. Warranty Conditions

- 1) one year warranty(from the date of installation)
- 2) warranty scope: the failure caused because of responsibility of factory, the factory responsible for repairing the equipment
- 3) Not belong to the guarantee range: the damage caused by man-made due to transportation, improper use, insufficient foundation strength, the power is not in conformity with the stipulations. The components which are easy to damage(electrical appliances, rubber pad, slider etc.)