

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

INSTALLATION and SERVICE MANUAL

Model: LG6600G

Four Post Hydraulic Lift



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Product Qualification Certificate

Product name: _____

Product model: _____

Manufacturing code: _____

Shipment date: _____

Quality inspector: _____

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

Product Guarantee Card

User's unit	
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 year3. 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 consumable (electrical appliances, rubber pad, slider, steel cable etc. consumable parts)
Repair records	

I. Introduction

The four post lifting machine is used to lift the car to an appropriate height for examine and repair. It provides a daylighting, convenient, safe and comfortable working environment.

The machine has advantages such as smooth operation, low noise, and large work space, etc. We have the various types such as G440A, G440C, G440, G440D for users to have a better choice.

II. Main functional specifications

Model	Lifting capacity(kg)	Max. Lifting height(mm)	Power supply	Note
LG6600G	4000	1650	220v-380v	Basic type, without subsidiary beam and secondary lifting jack

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#

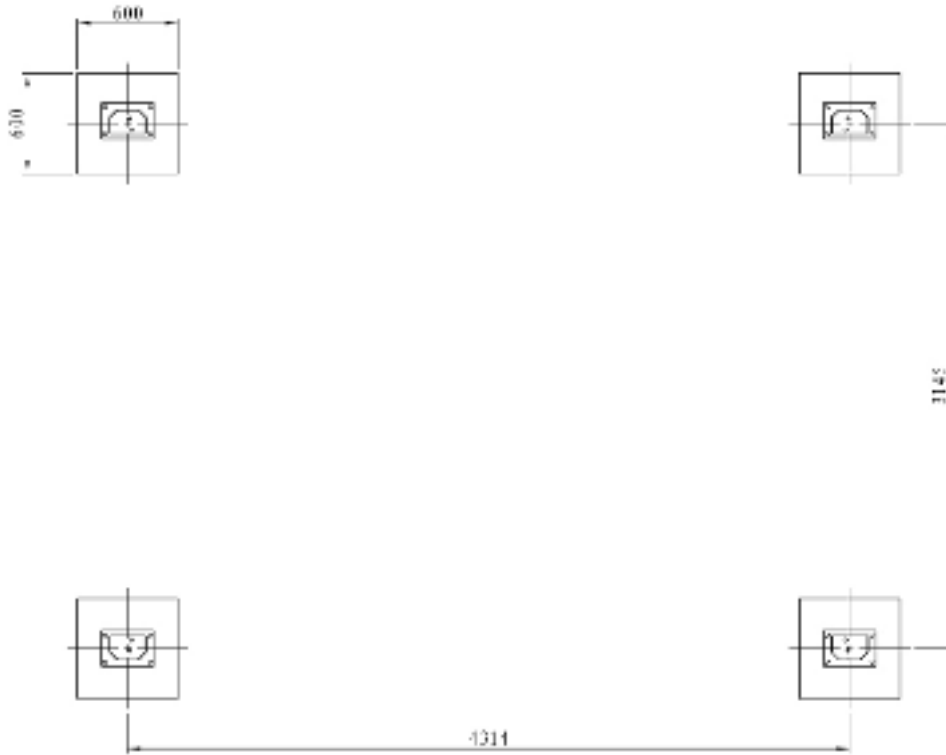
V. Installation and Test Run

Note: 1. the difference of foundation level can not be more than 5mm

2. you can tighten it with expansion bolt directly if the thickness of ground concrete is more than 150mm and ground level meet the requirements

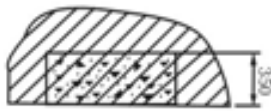
Before installation, read the instruction book carefully, learn the theory of machine structure clearly, check the machine to find out whether there is any damage during transportation, count the spare parts to find any omission, then start your work according to the following steps:

1. make a foundation according to the foundation drawing (Graph 1). If the thickness of the ground concrete is over 350mm, and the ground level reaches the standard, immediately fix the posts with expansion bolt.



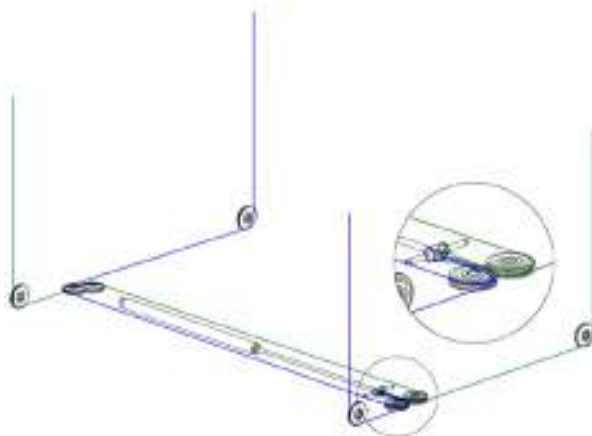
The width between the post is 3 meters

FOUR POST FOUNDATION



Graph<1> Foundation

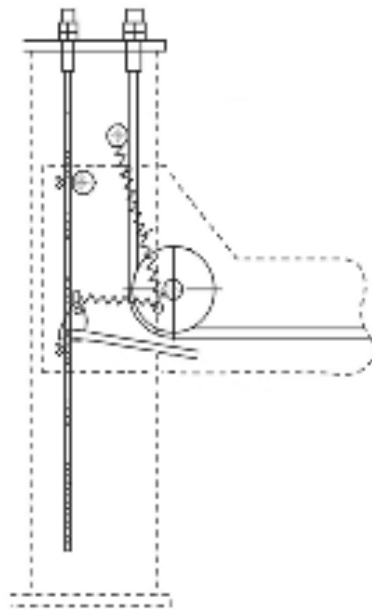
2. in your selected repair position, according to the external form of the machine, put the posts and cross beams on the installation site, and pull out the hydro-cylinder piston rod from the main post, insert the



steel wire rope (refer to graph 2).

Graph<2> Steel cable and pulleys

- connect the longitudinal beams with cross beams, tighten bolts to form a workbench. Set the workbench from the ground about 300mm, adjust the safety handle of the main longitudinal beam to the descend position of the workbench (here the four hooks at the end of cross beams are out of position), then equip the cross beam with nylon guide block.
- put the four posts to the ends of cross beams respectively, adjust the relative position and space of the posts and cross beams, and the verticality of the posts. Then connect the foundation with bolts and fix them, install the hanging boards into the four posts respectively, connect the four steel wire rope decorations with posts and preset them. Read Graph (3) for reference.

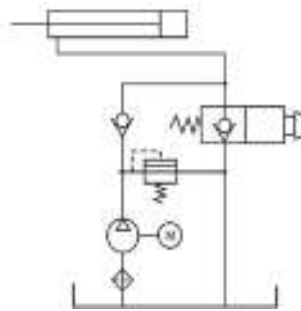


Graph<3> Safety structure

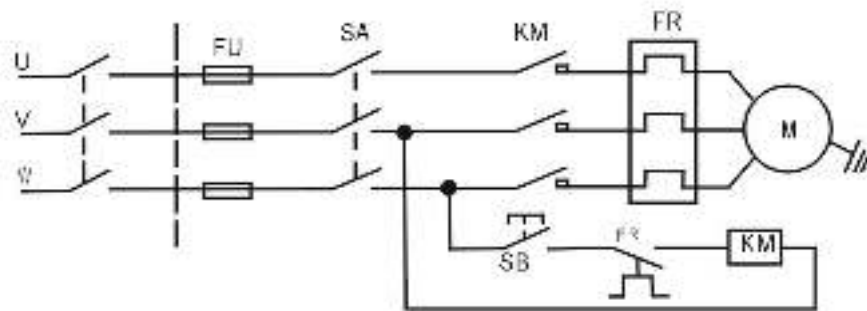
- fix the hydraulic pump and electrical box on the posts, use the high pressure hose(accessories) to connect the pump outlet with the oil entry of posts, fix them. Then inject 11 liters of 46# hydraulic oil through the oil entry, and connect the electric wire.
- install the secondary-lifting device on the guide rail between the posts, and push-and-pull twice. Make sure the secondary-lifting device move smoothly back and forth on the posts.
- check the steel wire rope (refer to the Graph 2) and ensure the ropes, the handle, the manual directional valve are in the corresponding positions: The manual directional valve must be at the main engine, the pump be filled in hydraulic oil. After confirmation, test the machine, downward observe the machine to ensure it rotates counter-clockwise (if not, adjust the power cable). Then press the rise button to ascend the workbench about 1meter, hang the four hooks in the hanging board. Finally, with the steel rope grip, tighten the four steel wire ropes at the front end of the catshaft part of the hydro-cylinder piston rod.
- adjust the steel wire rope nut on the top of the four posts to level workbench. Adjust the hanging board nut on the top of the four posts, so that the hooks in the four cross beams that are put into the holes of the hanging board (which sounds in tune). Adjust the nylon guide block of the beams to make the inter space

evenly between the posts and cross beams. Then run three times without load and adjust it in case you find anything abnormal.

9. find no abnormalities after non-load commissioning. Turn the manual directional valve into the secondary-lifting device, check and ensure it moves normally. Press the button to ensure the secondary-lifting device ascend smoothly and the protective equipment operate normally. The secondary-lifting device can descend to the lowest position when you press the descending handle of the pump.
10. as you find no abnormalities after non-load commissioning, install the eccentric gear spring and put lubricating oil on the steel wire rope, string groove, axle oil cup, hanging board, roll wheel guide rail of the secondary-lifting device, roll wheel oil cup, etc. then you can test the machine with load.
11. after you testing the machine with load for three times, the steel wire rope may be longer. So you need to adjust the workbench level again before the equipment was put into use.



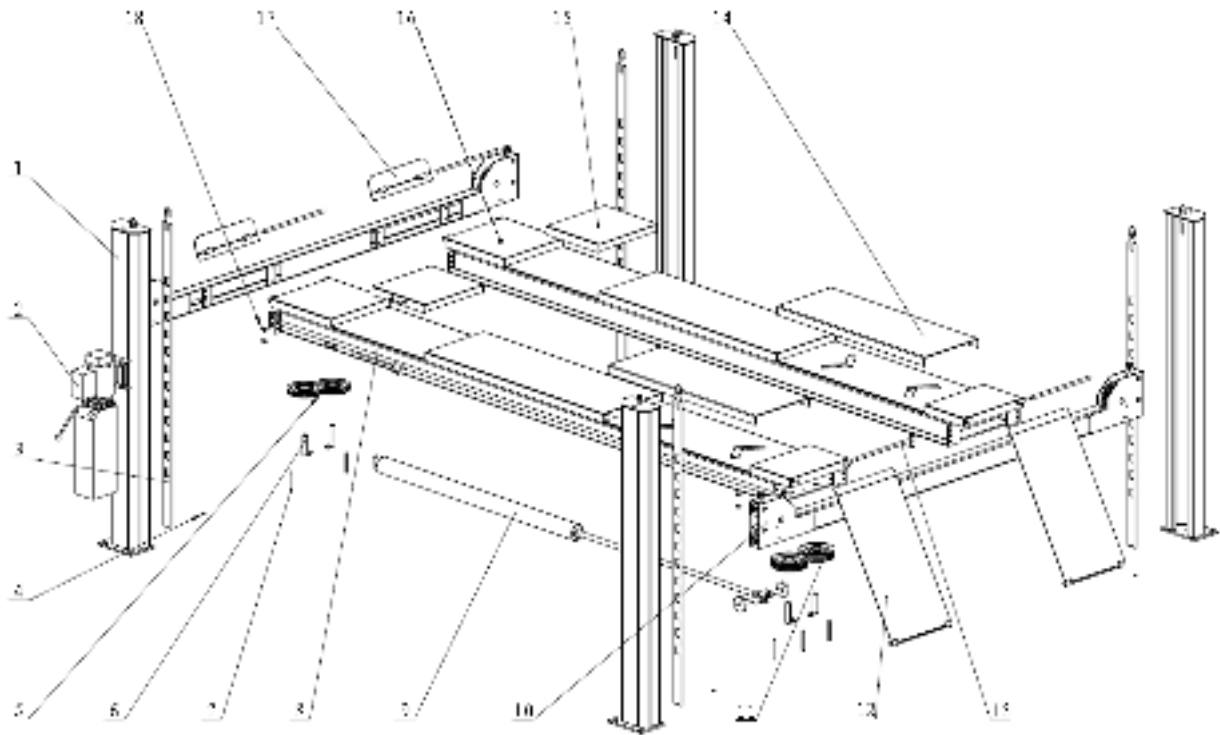
Graph<4> Hydraulic principle graph



Graph<5> Electrical principle graph

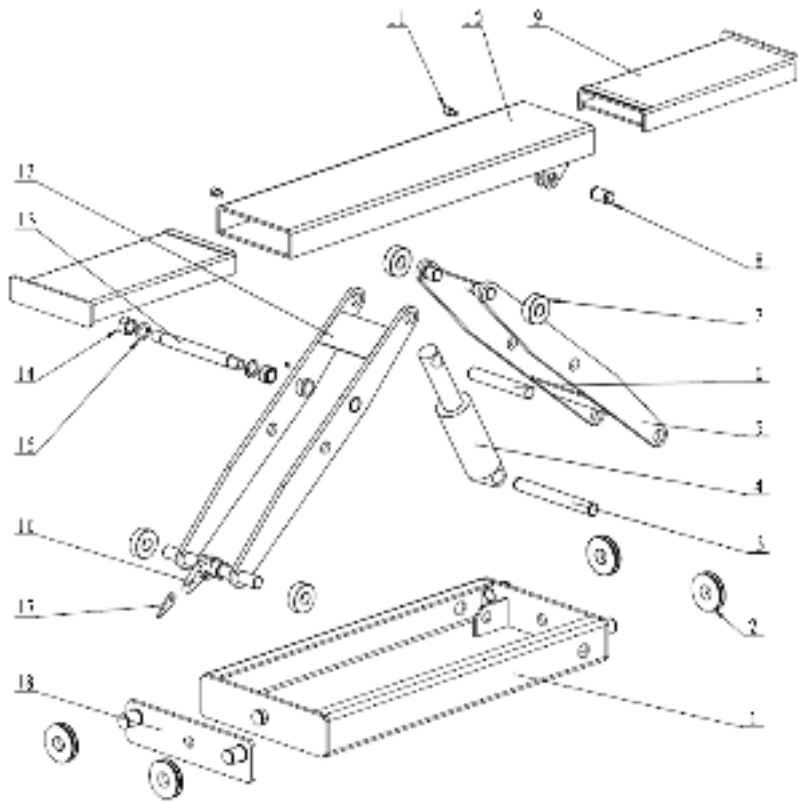
No.	Code name	Name	Quantity	Model	Specification	Note
1	SB	Button	1	LA18-22		
2	M	Electric motor	1	Y90L-4B5	1.5Kw	
3	FR	Thermorelay	1	JR1620/3D	3.2-5A	
4	KM	AC contactor	1	DSL9-10	380V	
5	SA	Combination switch	1	HZ5D-20L02	20	
6	FU	Fuse	3	RT14-20	16A	

V. Exploded View



Graph<6> Exploded View of Lift

No.	Name	Qty	No.	Name	Qty
1	Column	4	10	Cross beam	2
2	Power unit	1	11	Pulley (2 groove)	2
3	Safety ladder	4	12	Drive thru -ramp	2
4	M8 Bolt	4	13	Shaft	4
5	Pulley (1groove)	2	14	Slider board	2
6	Shaft for Pulley	4	15	Cover	2
7	Screw for the cable	5	16	Offside platform	1
8	Powerside platform	1	17	Baffle	2
9	Oil cylinder	1	18	M12 Bolt	16



Graph<7> Exploded View of trolley jack

No.	Name	Qty	No.	Name	Qty
1	Base frame	4	10	Platform	2
2	Roller	1	11	Hex. Bolt M10	2
3	Shaft 25	4	12	Inside arm	2
4	Cylinder	4	13	Central shaft	4
5	Outside arm	2	14	Self-block nut	2
6	Shaft 25	4	15	Washer	2
7	Roller	5	16	Safety block	1
8	Shaft 25	1	17	Release block	2
9	Movable platform	1	18	Balance board	16

VI. Operation and Usage Information

1.operation process

- a) check the machine power source to find out whether it is installed correctly.
- b) check all the connecting bolts to find out whether they are strong enough.
- c) press the rise button, the workbench ascends. Loosen the button, and the workbench stops.
- d) the workbench will stop when it ascends to a certain height. The four hooks should be stably hanged inside

the holes.

e) the four hooks can be out of hanging board when you push the safety handle of the workbench to the locked position.

f) when you press the descending handle of the pump, the workbench should descend in a normal speed. While you loosen the descending handle, the workbench should stop.

2. Usage information

a) It should be operated by engineers. Those without qualification are forbidden to use

b) over-load or operating under breakage is forbidden

c) cut off the power supply when the lifting machine is non-operating

d) follow the instructions, and operate and maintain the equipment.

VII. Maintenance

Maintenance and repair of the steel cable.

1. Daily check: do it once a day, check the obvious parts of the steel wire rope. Then solve it if you find any abnormality

2. Regular check: at least once a week. It should be done by specialist to check the total length, fixed position, connection, moving around the pulley position, broken rope and damage condition of the steel wire rope. Replace the steel wire rope if you find any condition as follows:

(1) broken ropes exceeds 9 excluding 72mm, or the broken number exceeds 1 within 350mm

(2) the steel wire rope is totally break down

(3) when the broken ropes assembled on the same rope yarn, or the broken ropes assembled in a small range.

(4) there is any losing conditions in the connection of steel wire rope

(5) because of wear and tear, the decrease number of external diameter exceeds 7%, or external steel wire rope wears out up to 35%, plus obvious wear and tear in the inside part of steel wire rope

(6) other damage of the steel wire rope, such as internal corrosion, being out of shape, rope heart damage and so on.

3. Length adjustment of the steel wire rope: Check it once after the equipments have been put into use for a month. After that, check it once every three months, if you find any abnormality, you should adjust the four hooks to hang into the rectangular holes of the hanging board synchronically, then tighten the nut.

4. Lubrication

Put lubricating oil on steel wire rope, pulley groove, pulley shaft (with oil cup), hook shaft, eccentric cover shaft, hanging board and the gyro-wheel of jacking lifting device. Gyro-shaft (with oil cup), and the appearance of the pole vault shaft. Check them once a month, and make up for them if you find any wear and gear.

5. Protection and maintenance of the hydraulic system

1) the oil level of the fuel tank in pump: check the oil level before starting work of each shift (check it when the workbench is on the lowest position), you should add 46# hydraulic oil when the oil level is too low

2) replacement of the hydraulic oil: Replace the oil after the machine has been used for three months. From then on, replace it once a year. You should clear the used oil, clean the fuel tank and filter machine when replacing the oil. Then inject 46# hydraulic oil.

3) hydraulic pipe: check it once a month, including high pressure hose, connections, manual directional valve, repair them immediately if you find any abnormality

- 4) system pressure: adjust the safety valve (integrate it with manual sustaining valve) to 12Mpa. Check it once a year, and repair it immediately if you find any abnormality

VIII. Problems and Solutions

Problems	Reasons of the problems	Solutions
The electric motor isn't moving when press the rise button	Failure in power supply	Eliminate the faults of power source
	Failure in electrical control system	Find out the problems in electrical system, such as fuses, etc.
The workbench isn't ascending when press the rise button	Motor reversal	Replace the power source sequence
	Leaks in hydraulic system	Find out the leaking location and solve it
	Damages in manual support valve	Repair or replace it
	Heavy wear-out of pump, output pressure is not enough	Replace it
	Damages in safe valve	Repair or replace it
	Damages in seal of oil cylinder	Replace the seal
The workbench isn't descending or is descending too slow when press the descending button	Hooks can't get out of hanging board	Adjust the pull rod of hooks shorter. Let the hooks be out of hanging board when you pull the handle
	Failure in electrical system, the button can not be restored	Repair or replace the button
	Damage or blockage in manual directional valve	Replace or clean it
	Width between columns and cross beams is too small	Adjust the width between columns and cross beams
The hydraulic system has loud noise	Blockage in oil filter network	Clean or replace it
	Oil level is too low	Add hydraulic oil
	Poor sealed in suction pipe	Find out the problem and solve it
	Screws are loosing	Tighten the screws uniformly
	Cooling fan is loosing	Tighten the screws

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, steel cable etc.