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

INSTALLATION and SERVICE MANUAL

Model: LT202MG

Two post clear-floor lift



CONTENTS

Product Qualification Certificate	3
Product Guarantee Card	4
I. Purpose	5
II. Main functional specifications	5
III. Installation Requirement	5
IV. Installation and Test	5
V. Exploded View & Parts list	10
VI. Operation and usage information	11
VII. Maintenance schedule	12
VIII. Maintenance, Trouble Shooting	13
IX. Warranty Conditions	14

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 easy to damage (electrical appliances, rubber pad, slider, steel cable etc. consumable parts)
Repair records	

I. Purpose

Double-cylinder hydraulic automotive lifting machine is used for different vehicle maintenances within 4000kg.

II. Main functional specifications

Model	Lifting capacity	Lifting height	Lifting time	Over height	Overall Width	Width bt. columns	Power supply
LT202MG	4000kg	1800mm	50seconds	3880mm	3500mm	2850mm	220V-380V

III. Installation Requirement

1. Hex-key/Allen Wrench Set (5#, 6#)
- 2.Screw Sets
3. Carpenter's chalk
- 4.Tape Measure (7.5M)
5. Needle Nose Pliers
- 6.Lock Wrench
7. Rotary Hammer Drill (Φ18)
- 8.Hammer
9. Foot Level
- 10.English spanner (12")
11. Ratchet spanner with socket 10#, 13#, 14#, 15#, 17#, 24#, 27#, 30#

IV. Installation and Test Run

Structures:

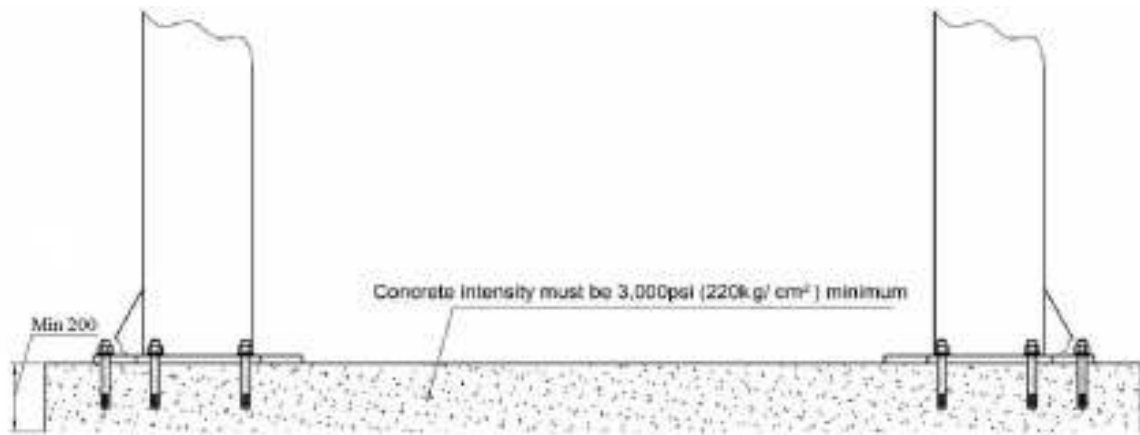
Double-cylinder hydraulic automotive lifting machine is composed of chassis, posts, oil cylinder, carriage, corbel, chain, pulley, steel cable, protective equipment, etc. The posts are straightly fixed on the chassis and equipped with oil cylinder. Through sprocket and chain, the cylinder drives the carriage, each set of which is equipped with eight guide blocks to ensure the carriage work smoothly. By shifting the steel cable that fixed on the carriage, both carriages will work synchronically.

Foundation requirement:

1. Concrete must be thickness 150mm minimum and without reinforcing steel bars, and must be dried totally before the installation.
2. Concrete must be in good condition and must be of test strength 3,000psi

(220kg/cm²) minimum.

3. Floors must be level and no cracks.



LT202MG Two post hydraulic car lift

Inside level of basement ± 5mm

Concrete intensity ≥ 250kg/cm²

Graph<1 > Basement requirement

Installation

Hydraulic double posts (Clear-floor design)

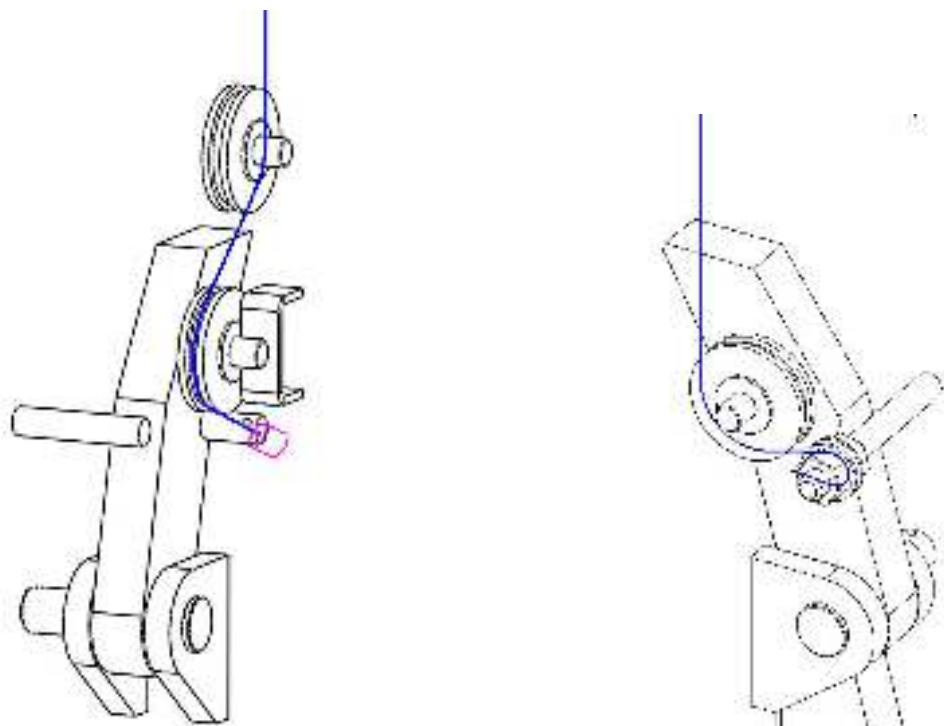
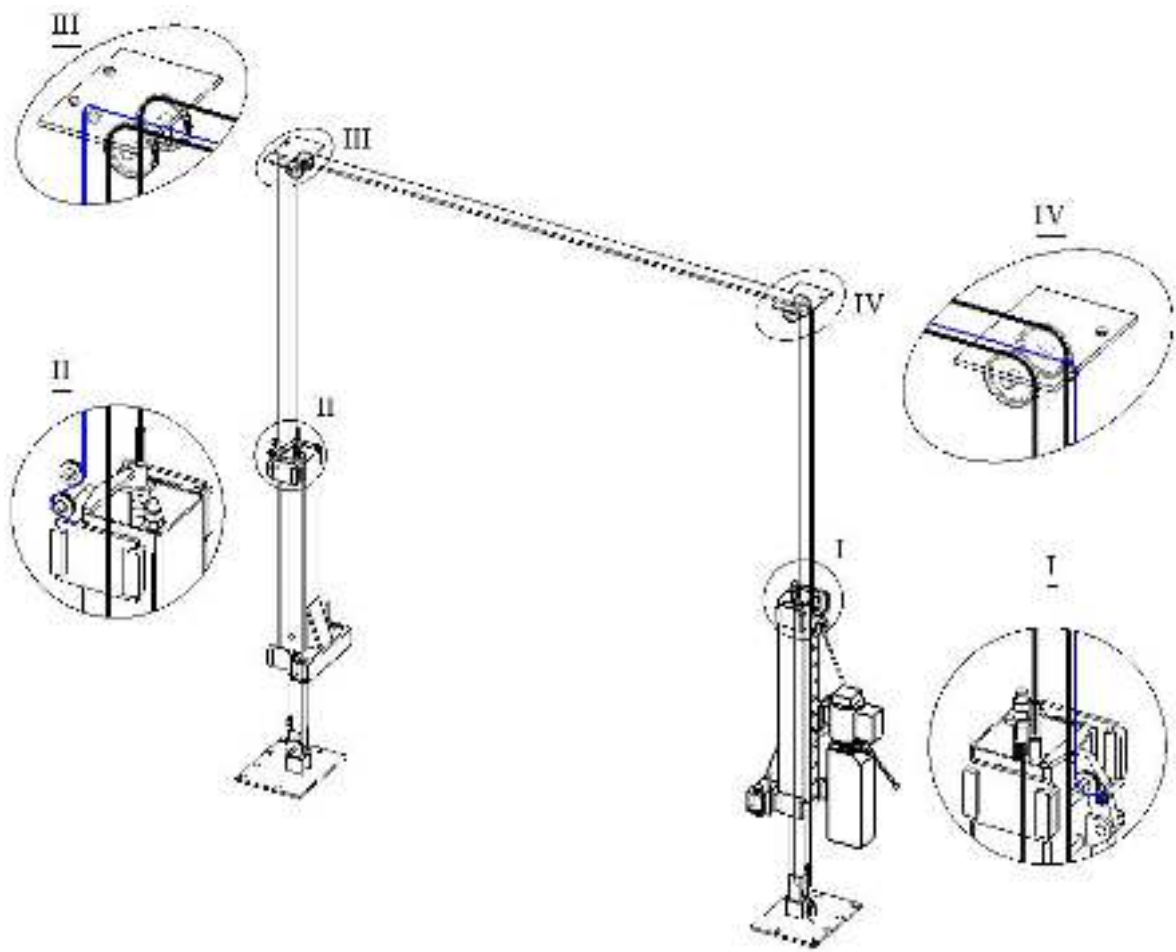
- Check the components and parts, accessories and fastener of lifting machine as what are listed in the packing of instruction book



Graph<2 > Components

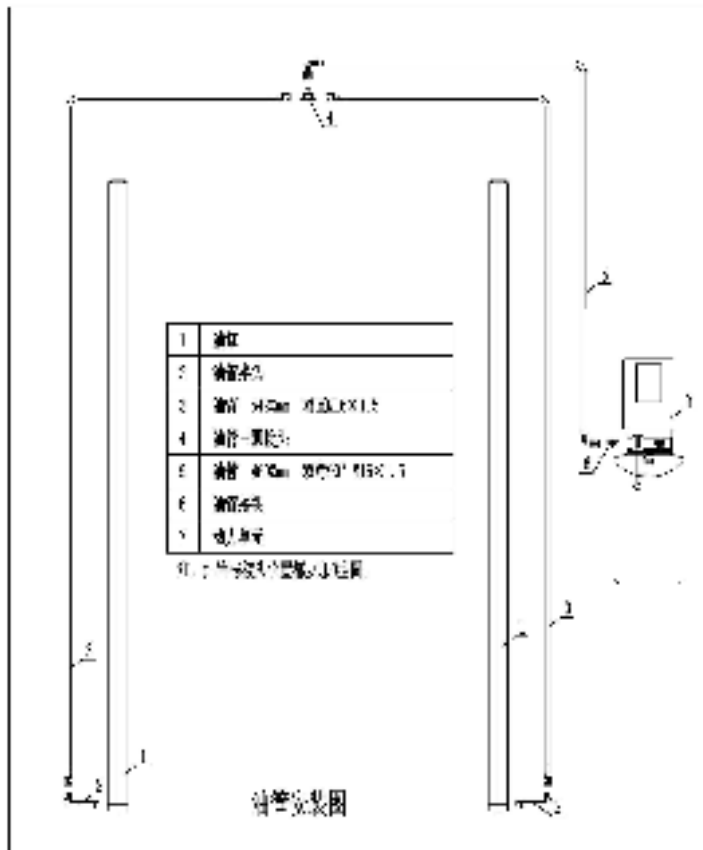
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- b). Erect the main and subsidiary post in the selected location (ground) and fix them with expansion bolts.
 - c). Install the 4 sets of corbel on the carriage, and then install the tray.
 - d). Install the hydraulic pump in the main post, connect the high-pressure hose with the oil outlet of pump station and the fuel injection port at the main post cylinder bottom (sealing ring must be installed), then connect it with special high-pressure tube and the fuel injection port of subsidiary post oil cylinder, and tighten the inlet opening.
 - e). Put the carriage on the bottom, and watch the main and subsidiary posts to ensure the chains are not folded, then inject 46# or 68# hydraulic oil (about 7kg) through the fuel injection port of pump station.
 - f). Start the electric motor after having confirmed the connection of oil line and circuit correctly, and observe from top the rotation direction of the electric motor to guarantee the direction should be counter-clockwise; if not, the power cord phase should be changed.
 - g). Connect the top cover with top cross beam, put them on the corbel, press the rise button to transfer the beam to the top for installation, then string the balancing steel cable. During the process, make sure the steel cable has been put into the inside of pulley grooves, and the nut of steel cable is preliminarily tightened.
 - h). Conduct non-load tests for several times, adjust the balancing steel cable and tighten the nut, so that the lift height of the two carriages work coherently and synchronically
 - i). [put the grease on the sprocket, chain, pulley groove, steel cable, and slide lead rail to make it work smooth](#), and cover the bottom. Installation finished.

I. Steel cable installation drawing :



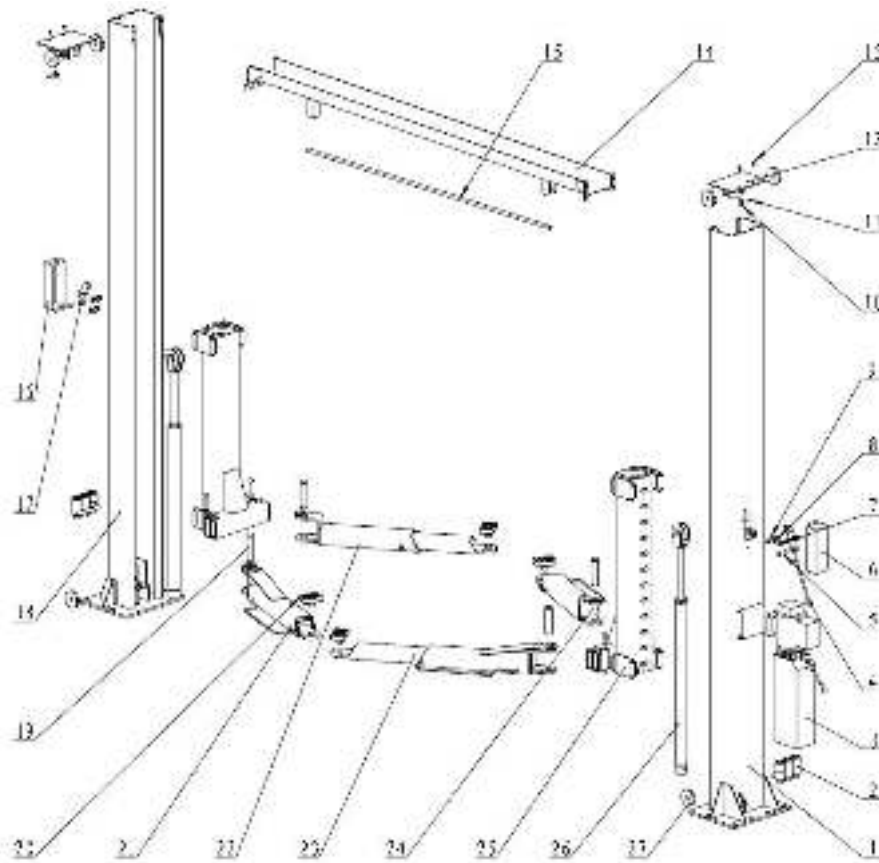
Graph <1> connection of steel cables

II. Oil pipe connected drawing:



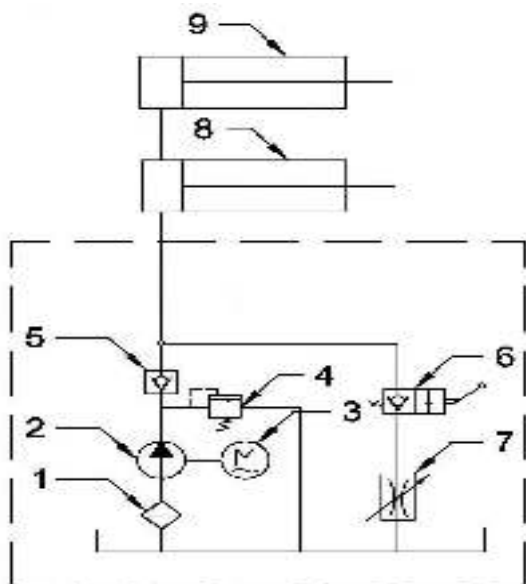
1	Oil cylinder
2	Oil connector
3	Oil pipe 420mm, M16*1.5
4	T connector
5	Oil pipe 460mm 90degree M16*1.5
6	Oil pipe connector
7	Power unit

V. Exploded View & Parts list



Graph <5> Exploded view and parts list

No.	Name	No.	Name
1	Power side column	15	Limited rod
2	Adapter	16	Cover
3	Power unit	17	Safety block
4	Safety block	18	Offside column
5	Pin	19	Gear limited
6	Cover	20	Rubber pad
7	Nut	21	Rear Arm
8	Washer	22	Front arm
9	Pulley	23	Rear Arm
10	Pulley	24	Front arm
11	Pin for pulley	25	Carriage
12	Column cover	26	Oil cylinder
13	Screw	27	Pulley
14	Beam		



编号说明

- 1. 滤网
- 2. 齿轮泵
- 3. 电机
- 4. 溢流阀
- 5. 单向阀
- 6. 手动下降阀
- 7. 节流阀
- 8. 双柱主油缸
- 9. 双柱副油缸

液压原理图 Hydraulic scheme diagram

1	filter
2	Gear pump
3	motor
4	Spill valve
5	One way valve
6	Manual release valve
7	Throttle valve
8	Main cylinder
9	Deputy cylinder

VI. Operation and usage information

To lift vehicle

- A) Keep clean of environment near the lift;
- B) Position lift arms to the lowest position;
- C) To shortest lift arms;
- D) Open lift arms;
- E) Position vehicle between columns;
- F) Move arms to the vehicle's lifting point;

Note: The four lift arms must at the same time contact the vehicle's lifting point where manufacturers recommended

- G) Press the **UP** button until the lift pads contact underside of vehicle totally. Recheck to make sure vehicle is secure;
- H) Continue to raise the lift slowly to the desired working height, ensuring the balance of vehicle;
- I) Push lowering handle to lower lift onto the nearest safety. The vehicle is ready to repair.

To lower vehicle

1. Be sure clear of around and under the lift, only leaving operator in lift area;
2. Press the button of **UP** to raise the vehicle slightly, and then release the safety device, lower vehicle by pushing lowering handle.
3. Open the arms and position them to the shortest length;
4. Drive away the vehicle.
5. Turn off the power.

VII. Maintenance schedule

Monthly:

1. Re-torque the anchor bolts to 80-117 Nm;
2. Check all connectors, bolts and pins to insure proper mounting;
3. Lubricate cable with lubricant;
4. Make a visual inspection of all hydraulic hoses/lines for possible wear or leakage;
5. Check Safety device and make sure proper condition;
6. Lubricate all Rollers and Pins with 90wt. Gear oil or equivalent;

Note: All anchor bolts should take full torque. If any of the bolts does not function for any reason, DO NOT use the lift until the bolt has been replaced.

Every six months:

1. Make a visual inspection of all moving parts for possible wear, interference or damage.
2. Check and adjust as necessary, equalizer tension of the cables to insure level lifting.
3. Check columns for plumpness.
4. Check Rubber Pads and replace as necessary.
5. Check Safety device and make sure proper condition.

VIII. Maintenance, Trouble Shooting

TROUBLE	CAUSE	REMEDY
Motor does not run	<ol style="list-style-type: none"> 1. Button does not work 2. Wiring connections are not in good condition 3. Motor burned out 4. Height Limit Switch is damaged 5. AC Contactor burned out 	<ol style="list-style-type: none"> 1. Replace button 2. Repair all wiring connections 3. Repair or replace motor 4. Replace the Limit Switch 5. Replace AC Contactor
Motor runs but the lift is not raised	<ol style="list-style-type: none"> 1. Motor runs in reverse rotation 2. Gear Pump out of operation 3. Release Valve in damage 4. Relief Valve or Check Valve in damage 5. Low oil level 	<ol style="list-style-type: none"> 1. Reverse two power wire 2. Repair or replace 3. Repair or replace 4. Repair or replace 5. Fill tank
Lift does not stay up	<ol style="list-style-type: none"> 1. Release Valve out of work 2. Relief Valve or Check Valve leakage 3. Cylinder or Fittings leaks 	Repair or replace

Lift raises slowly	<ol style="list-style-type: none"> 1. Oil line is jammed 2. Motor running on low voltage 3. Oil mixed with Air 4. Gear Pump leaks 5. Overload lifting 	<ol style="list-style-type: none"> 1. Clean the oil line 2. Check electrical system 3. Fill tank 4. Replace Pump 5. Check load
Lift can not lower	<ol style="list-style-type: none"> 1. Safety device are in activated 2. Release Valve in damage 3. Safety cable broken 4. Oil system is jammed 	<ol style="list-style-type: none"> 1. Release the safeties 2. Repair or replace 3. Replace 4. Clean the oil system

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.