

# Aluminum-alloy lift platform Series

## Manual Book



Please carefully read the prospectus before  
the opening of the use of the product!

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# I Overview

The aluminum lift platform has digested and absorbed the merits of similar products at home and abroad, to highlight simple, mobile light, smooth take-off and landing, beautiful appearance, safe and reliable, small size, light weight, can be condensed into the elevator and a narrow channel in general, the applicability of the strong characteristics of the fine is a new generation of high altitude operating mechanical products and a good helper.

## **The scope of application:**

- Urban construction, transportation, electricity, communications, factories and road toll stations to install the high maintenance, operation and maintenance;
- Schools, hotels, restaurants, buildings, squares and places of entertainment of high decoration, cleaning, maintenance operations;
- Advertising, building and decorating of high-altitude, installation;
- Film, television, photography, film operations such as the high.

## II Safety rules

### ● Manual of use

1. Machines will be placed on a solid, plane and barrier-free workplaces, and machine operating at the zone below;
2. Install the extended outrigger and use the model-o level instrument to adjust the level position of the machine;
3. Connected to the appropriate power (AC220V, cited outside the power cord is not less than 1.5m/m<sup>2</sup>);
4. Pull air switch ON which inside the electrical control box;
5. Spin out of the red emergency brake button;
6. Workers go into the operating platform to operate the control box button or by ground staff to operate the electrical control. Buttons on the control box control the take-off and landing of platform. Press the green button up, the red button decline. In the event of an emergency, please press the red emergency button to cut off the whole power. (Platform control box and the electrical control box button play the same role.)



7. If the platform cannot be dropped by electronic control, the use of emergency valve, anti-clockwise rotating to make platform drop. After the platform drop, please tighten up emergency valve clockwise.

## ● Notes

1. Do not lift up the platform when the platform is not stable, extended outrigger is not transfer well, or unstable situation;
2. Do not use of the machine on the unstable ground;
3. Do not adjust or put away outrigger extended when some people on the platform or the platform is lifting;
4. Do not move machines when platform raised, unless platform condensation and outrigger released;
5. Overloading is strictly prohibited;
6. Do not use the machine to raise goods or equipments, limited to people and tools used for manned operation;
7. Do not do outdoor operations under conditions of strong winds;
8. Do not push and pull objects when working;
9. Do not sit, stand or climb on the barrier in the platform;
10. Stand or pile up sundries under the platform is strictly prohibited;
11. Do not use this machine as the ground line of a welding machine;
12. Do not use this machine under all dangerous conditions can be expected to!

# III Product structure and working principle

## 1. Product structure;

Platform is combined with the chassis, the system of arm movements, operating platforms, hydraulic control system, the five major system components. (See Figure I)

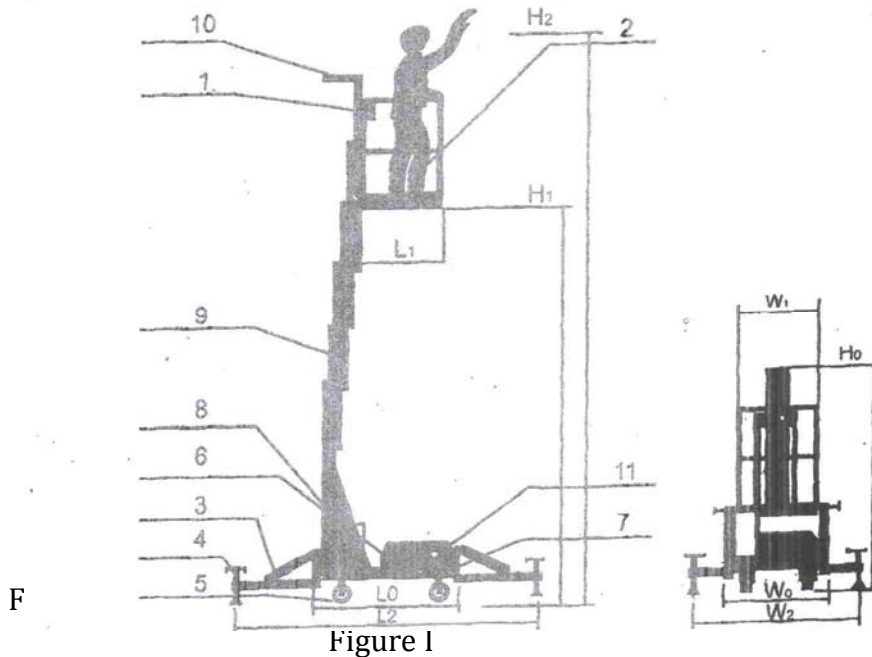


Figure I

1. Control Box 2. Platform 3. Support legs 4. Adjusting screw support 5. universal wheel 6. Hydraulic system 7. Chassis 8. Electrical control box 9. Arms 10. Doo-tool 11. Emergency valve

Single mast aluminum alloy lift platform parameters:

Technical parameters	Unit	Single mast	
The largest height of platform (H1)	M	8	9
The largest height of operation (H2)	M	9.7	10.7
Rated limited weight	Kg	125	125
Platform Size (L1 X W1)	M	0.64X0.58	0.64X0.58
The largest support size (L2 X W2)	M	1.9X1.78	
Operating voltage	V	Ac220	
Electrical power	Kw	0.75	
Size of the combination (Lo X Wo X Ho)	M	1.28X0.8X1.98	1.3 6X 0.85X 1.98
Self-weight	Kg	290	315

## 2 The working principle

Motor drive the pumps to make the high-pressure oil into the valve chamber block P, by the way of one-way valve 1 output to block A. Then the oil rush into the movements fuel tank, so that the platform can rise slowly. According to different load, tune 2 set by the relief valve pressure to prevent overload or excess pressure. Decline in operating platform, the power to open solenoid valve 4. Take-off and landing platform in the tank load of gravity, the hydraulic oil to flow into the valve chamber A Block, as a result of a one-way valve 1 reverse the closure,

Hydraulic oil only through the open solenoid valve 4, the adjustable throttle 3, O into the fuel tank cavity, and then slowly decline in operating platforms. As a result of using a pressure valve within the structure of the balance, as only the start of their closed by the control of electro-magnet, so it will not load and the impact of fluctuations in the rate of take-off and landing stability. (See Figure II)

Electrical control box there is the rise and fall of a button, respectively, starting motor drive up oil platform and open the unloading of electromagnetic one-way valve so that the decline in operating between Taiwan. It has two buttons at the same time in parallel to install platform barrier control box next to the platform, the platform could be an independent operator to control movements. (See Figure III)

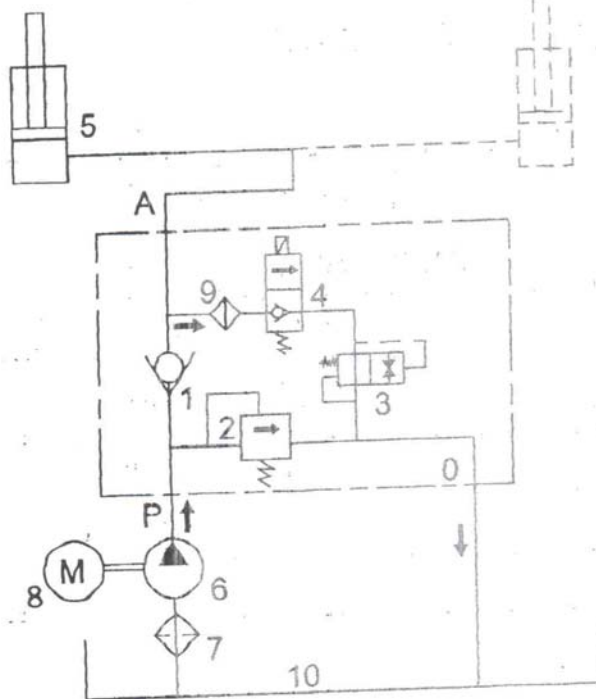


Figure II

1. one-way valve.2 Relief valve, 3. Throttle 4. Solenoid valve 5. Tank 6. Pump 7. Accessories Network, 8. Motor 9. Accessories Network 10. Tank

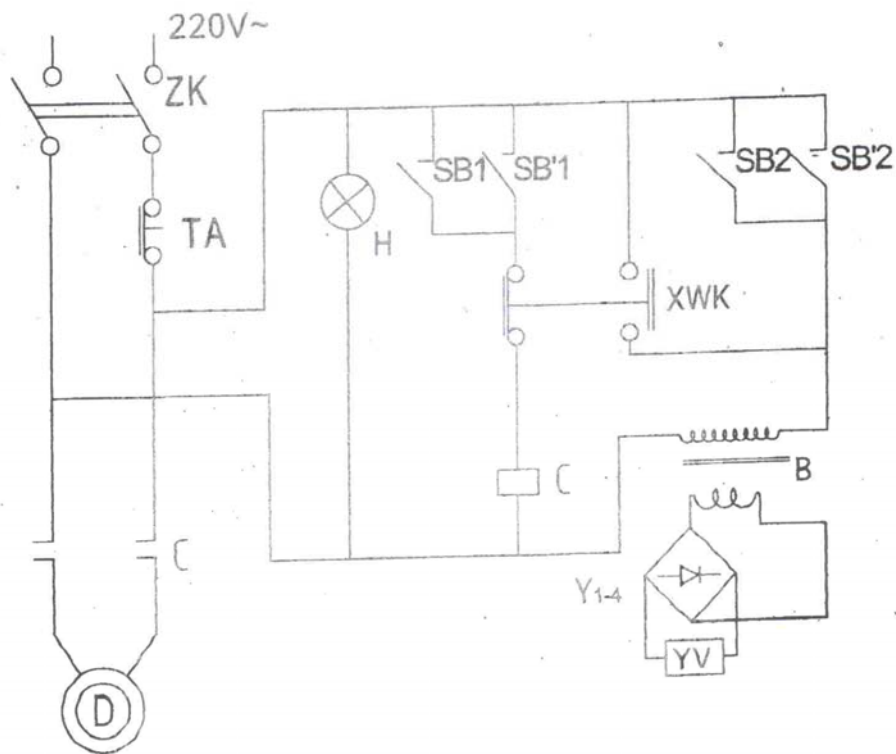


Figure III Electric control system schematic

Symbol	Name	Model(Spec)	Num	Symbol	Name	Model(Spec)	Num
ZK	Air switch	C15	1	XWK	Travel switch	JLXKJ-311	1
TA	Stop switch	CR11	1	D	electromotor	1.1KW/220V	1
C	AC contactor	B16-30-10	1	B	transformer	BKC-25	1
H	indicator light	AD11-25/220V	1	Y1-4	Bridge	KBDC0406	1
SB1、2	Button	LA19-11	2	YV	Hydraulic Solenoid	MC2-L	1
SB'1、2	Button	LA10-3H	2				1



## **IV Equipment maintenance and repair**

1. Replace hydraulic oil after opening the product for 6 months. After the first time, the replacement depending on the using times and the use of hydraulic oil for the degree of pollution. Replacement of the hydraulic oil should be thoroughly clean the tank wall, cannot allow metal particles, cotton yarn, fiber, and other foreign matter into the tank.

2. To strictly prevention of pollution of hydraulic oil, liquid inside the sleeve may not have water, acid, alkali and other impurities. The oil tank cannot besmear anti-corrosion coating.

3. In the use, you must often check the transmission chain group tightness of the arm movements. If there are obviously not among the top flush when not yet risen the lifting arm, or takeoffs and landings in the process of elastic chain inconsistent with the group. You should adjust the length of the chain in a timely manner. Adjustment of the working platform from up to a certain height, need to look for transfer. The whole arm above the lower end of its fixed screw nut (M8 Xl), while adjusted carrying out inspection, until it meets the requirements.

4. If the solenoid valve occurred as a result of foreign body resistance card, so that the hydraulic system failure are discharged

electromagnet. 24M M with longer sleeves electromagnetic valve core wrench to spin, its submerged spool spinning gently in kerosene, cleaning The foreign body stuck out, and then gently pulling spool, check valve passed the exhibits and material damage, after carefully into the spool so that the spool valve can be passed smoothly sliding. Maintain the attention of the original accuracy, Valve together and then into the body, can be fitted with electromagnets.

5. In case of automatic platform whereabouts, then check whether the emergency oil switch loose, if it was then tightened up clockwise. If the check is not a one-way valve sealing reliability, or check whether there are oil soft fiber resulting in a one-way valve failure, 24MM socket wrench to spin out of a one-way valve, in the case sealed then replace the damaged pieces of seals, such as the spool there are foreign bodies with diesel or kerosene spool cleaning, remove foreign matter will be re-spool back tightened up.

6. Arm movements in the exchange wheel or removal of foreign bodies after the installation of the wheel group should be first raised platform of a certain height, will need to change the wheel group pry into the arm movements in parts of rail, and rail and the relative activity Fixed positions, the use of platform will drop into the group of roller arm movements, and then raised platform, a good take-off and landing equipment arm of the insurance end of the block, or try

again several times, no exceptions, to change the assembly work is completed.

7. Arbitrary demolition of non-professionals do not repair hydraulic system components. If uncertain, do not self-study, commissioned our repair factory .

8. Operators and air operations take-off and landing platform should be kept clean. When not in use, should be parked in the rain, sun protection, ventilation and dry.

9. Take-off and landing platform high above the ground need lubrication, maintenance should add the regular N32 machinery oil: the chain wheel mill; sprocket, chain friction axle parts; arm movements in parts of friction wheel; universal under the chassis, directional turning round the site.

## V Causes of simple trouble and treatments

Please invite the professionals for maintenance

Failure phenomenon	The reasons for failure	General approach
Motor does not start	<ol style="list-style-type: none"> <li>1. Not connected to power</li> <li>2. Switches off the air</li> <li>3. Tour disconnected switch often close contact</li> <li>4. Other electrical junction bad</li> </ol>	By the electrical inspection to rule out one by one
Operation of the pump problems	<ol style="list-style-type: none"> <li>1. Load is too large</li> <li>2. Pumps, motors of different axis</li> <li>3. Died oil card</li> <li>4. Valve plug</li> <li>5. Hydraulic oil pollution is serious</li> </ol>	<ol style="list-style-type: none"> <li>1. Rated according to the limits set out</li> <li>2. Adjustment coaxiality</li> <li>3. Hand-set cannot operate motor shaft, really</li> <li>Oil identification card dead, the need to change oil</li> <li>4. Wash or change the valve after confirmation</li> <li>5. Hydraulic fluid replacement</li> </ol>
Electric, oil pump is operating normally,. Platform, but cannot afford to or far from the rated load or weight	<ol style="list-style-type: none"> <li>1. Hydraulic pressure system set too low</li> <li>2. Pump oil pipeline leak air into the hydraulic system</li> <li>3. The oil level is too low fuel tank</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust Hydraulic control valves block the relief valve</li> <li>2. Tightened up the joint replacement or ring</li> <li>3. Hydraulic oil should be added to the normal oil level</li> </ol>
Poor or decreased operating platform too fast	<ol style="list-style-type: none"> <li>1. Loading platform, particularly no-load state</li> <li>2. Hydraulic flow is too small decline caused by poor</li> <li>3. Hydraulic valve flow caused by excessive drop too fast</li> </ol>	According to the "principle" of the hydraulic system operating principle, the relief valve adjustment
Platform cannot suddenly drop	Electromagnetic valve does not have oil or electricity foreign body obstruction	As "Equipment and maintenance" Article 4, wash solenoid valve to remove foreign exchange or valve block
Arm movements above the level of direction have a greater sway in the state of	<ol style="list-style-type: none"> <li>1. Wheel Group and the excessive wear and tear beyond rail</li> <li>2. Paragraph arm in the wheel</li> </ol>	<ol style="list-style-type: none"> <li>1. To change the wheel group to ensure the movement gap</li> <li>2. Removal of foreign bodies to ensure smooth movement (see</li> </ol>

condensation when there is still swinging	so that the foreign body and face outside the blocked rail	the "repair and maintenance," Article 6)
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## VI Spare parts and wearing parts

Users can organize spare parts and wearing parts listed on by themselves and can be equipped with additional random order proposed in the contract.

Spare parts and wearing parts table

Name	Num	Style	Spec	Note
electromotor	1	Horizontal legislation	voltage: AC220V power: 1.1Kw rev: 1400 转/分	
Oil	1	MC <sub>2</sub> -R-V <sub>i</sub> B-F <sub>3</sub> -PF-MM-T <sub>05</sub> -F <sub>1</sub>		
Hydraulic control valve block	1	MC <sub>2</sub> -L	电源: DC24V	
Pipe joints	5	GB3737.1-83	G 1 2	
	2		J 1 2	
Net-oil filter	1	WU-16X100	M 1 8 x 1 . 5	
Hydraulic pump	4.5 litre	#46 hydraulic oil		
Travel switch	1	JL X KI-311.		
Wheel Group	10			Self-made