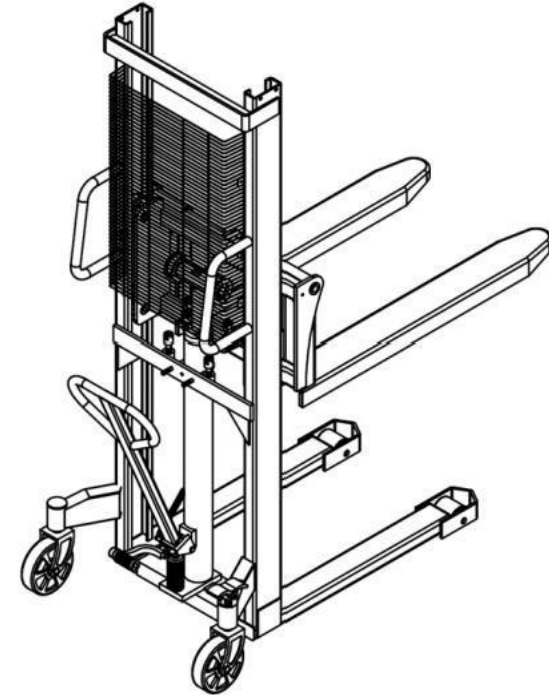


Manual &Part List of ALD Manual Hydraulic Stacker

Note: Please read the instruction manual carefully before using the manual hydraulic stacker !

Note: This manual is a general manual. Our company reserves the right to improve the manual hydraulic stacker technology at any time . If the manual is inconsistent with the facts , Please note that the actual product shall prevail !



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Warn

Please pay attention to the following matters before using this vehicle:

1. The manual hydraulic stacker is limited to indoor use on a flat and hard ground. It is strictly prohibited to use it in corrosive environments such as acids and alkalis.
2. Please read this manual carefully before operating the vehicle and understand the vehicle performance. Check the vehicle carefully before each use to see if it is normal. It is strictly forbidden to use a faulty vehicle.
3. Overloading is strictly prohibited. The load capacity and load center should comply with the requirements of the parameter table in this manual.
4. When the vehicle is used for stacking, the center of gravity of the goods must be within the two forks, and it is strictly forbidden to stack loose goods.
5. When transporting goods in bundles over long distances, the height of the goods from the ground should not exceed 0.5 meters.
6. When stacking goods, it is strictly prohibited to stand under the goods or around the vehicles.
7. It is strictly forbidden to stand on the fork while working.
8. When the goods are at a high place, they should be pushed forward slowly or pulled backward slowly. Turning is not allowed.

Product Appearance and Technical Parameters

		ALD Series Manual Hydraulic Stacker Diagram				
		Model	ALD1016	ALD1025	ALD1516	ALD2016
	Rated load	q(kg)	1000	1000	1500	2000
	Load center distance	c(mm)	400	400	500	500
	Self weight	kg	270	340	280	290
	Mast Lowered height	h1(mm)	2080	1830	2080	2080
	Max. Lifting height	h3(mm)	1600	2500	1600	1600
	Max. height during operation	h4(mm)	2165	2925	2150	2150
	Min. Fork height	h13(mm)	90			
	Overall length	l1(mm)	1700			
	Overall width	b1(mm)	800			
	Fork size	s/e/l(mm)	65×160×1070(1150)			
Overall fork width	b5(mm)	685/850				
Turning Radius	Wa(mm)	1235				
Lifting speed, Laden /unladen	mm/s	25				
Lowering speed, Laden /unladen	mm/s	Manual Control				

Structural Characteristics and Working Principle

The manual hydraulic stacker consists of three parts: hydraulic system, mast and fork.

The vehicle uses a manual hydraulic jack (i.e. hydraulic device) as the power to lift heavy objects, and push and pull heavy objects by manpower. The hydraulic device is equipped with an oil return valve, which controls the lowering speed of the fork through the handle and makes the hydraulic system operate correctly. The mast is welded with high-quality steel, which has good rigidity and high strength. The rear wheel uses a universal wheel with a brake device, which can be freely selected and rotated flexibly and conveniently. The front and rear

wheels are installed on the axle with ball bearings, which can rotate flexibly. The wheels are made of nylon wheels, which are wear-resistant, durable, and not easy to damage the working surface.

When lifting the cargo, insert the cargo under the cargo pallet, brake the rear wheel if necessary, and pull the handle. The pressure wheel presses the pump core, causing the oil in the pump cylinder to enter the piston cylinder, pushing the piston rod upward and The chain makes the fork lift up twice the stroke, and the goods can be lifted by pulling the handle back and forth to achieve the purpose of lifting. When the fork is raised to the highest position, the pressure oil flows back to the mailbox through the oil drain hole. The goods will no longer rise, avoiding damage to the machine parts due to top impact.

When carrying heavy objects, the stacker can be pushed (pulled) manually.

When unloading, pull the unloading handle, the oil return valve opens, and under the action of the heavy object and the dead weight of the cargo, the working oil in the piston cylinder returns to the oil tank through the oil return valve, and the piston rod and the cargo fork descend to the lowest position, remove the load and pull out the forks.

Conditions of Use

The use of ALD manual hydraulic stacker should meet the following conditions:

1. Ambient temperature: -25°C $+40^{\circ}\text{C}$
2. The relative humidity of the environment is less than 90% RH.
3. In an environment without rain and harmful gas erosion.
4. Use indoors on a flat and hard surface.

Use and Maintenance

1. The oil must be filtered clean and sufficient oil volume must be maintained.
2. Before use, check whether the vehicle is in normal condition and whether there is any looseness.
3. The goods should be evenly distributed on the forks and must not be overloaded.
4. After the operation is completed, the heavy objects should be unloaded and heavy objects are not allowed to be pressed on the fork plate for a long time.
5. When the cargo is lowered, the oil return valve should be operated slowly and gently to prevent sudden drop when the cargo is lowered too quickly, which may cause unsafe conditions.

The oil valve cannot be closed suddenly because inertial acceleration is generated during rapid descent. If the oil return valve is closed suddenly, a strong force will be generated, which will damage the machine parts and cargo.

6. Lift the front of the countertop with both hands, pull it outward, remove the countertop, and use it as a pallet truck or pallet stacker.
7. The brakes on the rear wheels are for safety during operation. When lifting cargo or using it as a working platform , the brakes should be pressed with your foot. No rolling of the car.

Possible Faults During Use and Their Elimination methods

Serial number	Fault	Cause Analysis	Troubleshooting
1	The lifting height does not meet the design requirements	Insufficient operating oil.	Add oil to the oil cylinder, open the bolts, and inject filtered working oil until the oil hole is high. and retighten the bolts
2	The fork does not rise when the handle is pulled	(1) The viscosity of the working oil is too high or the working oil is not injected.	Replace the working oil or inject the specified amount of working oil.
		(2) There are impurities in the working oil, causing the oil inlet valve to not close tightly	Remove impurities or replace the operating oil.
		(3) The oil drain valve, unloading handle, and tension spring do not work; It is stuck in the lowest closed position or there is other debris.	Check whether the tension spring is correct, adjust the unloading handle to the lowest closed position, and remove impurities.
		(4) The position of the unloading handle and the oil drain valve is not adjusted properly.	Re-adjust the position of the unloading rod nut.
3	The fork does not drop after rising	(1) The unloading handle is not adjusted properly.	Adjust according to the above method, disassemble and repair or replace the piston rod, disassemble and repair or replace the bearing
		(2) The piston is overloaded and permanently deformed.	
		(3) The fork frame and roller sprocket are stuck.	
4	Oil seepage or leakage	(1) The sealing gasket is damaged or failed.	Replace the new sealing ring, overhaul and replace the new parts, overhaul and tighten.
		(2) Some parts have slight cracks, cracks or small perforations.	
		(3) The threaded connection is loose or the gaskets are not tightened.	

Appearance Components and Parameters

Serial number	Name	Quantity
1	Grille	1
2	Splint	6
3	Hexagon bolt M6*12	6
4	Steering wheel frame	2
5	Steering wheel 180*50	2
6	Axle 20*55	2
7	Bearing 6204	4
8	Circlip 020	4
9	Front wheel 080*93	2
10	Bearing 6204	4
11	Gasket	4
12	Axle 20*55	2
13	Circlip 020	4
14	Fork assembly	1
15	Frame components	1
16	Hexagon bolt M10*45	4
17	Handle assembly	1

