

Eoslift

M Series

Hand
Pallet
Truck

Operating Instructions

Eoslift

Eoslift Automation Technology Corp.

No.99 Yanjia Road, Yuantong Town, Haiyan,

Zhejiang Province China 314317

Tel: +86 573 8622 9999

Fax: +86 573 8622 2900

info@eoslift.com

www.eoslift.com

M Series Hand Pallet Trucks

Esteemed users:

For proper and safe operation of the products, before using the products, be sure to read the operating instructions carefully and retain them properly for future reference.

The operator need to have proficient operation skills. The operator has responsibility to carefully understand the performance and safety rules of the pallet truck. If you have any problemes during the application, please contact Eoslift.

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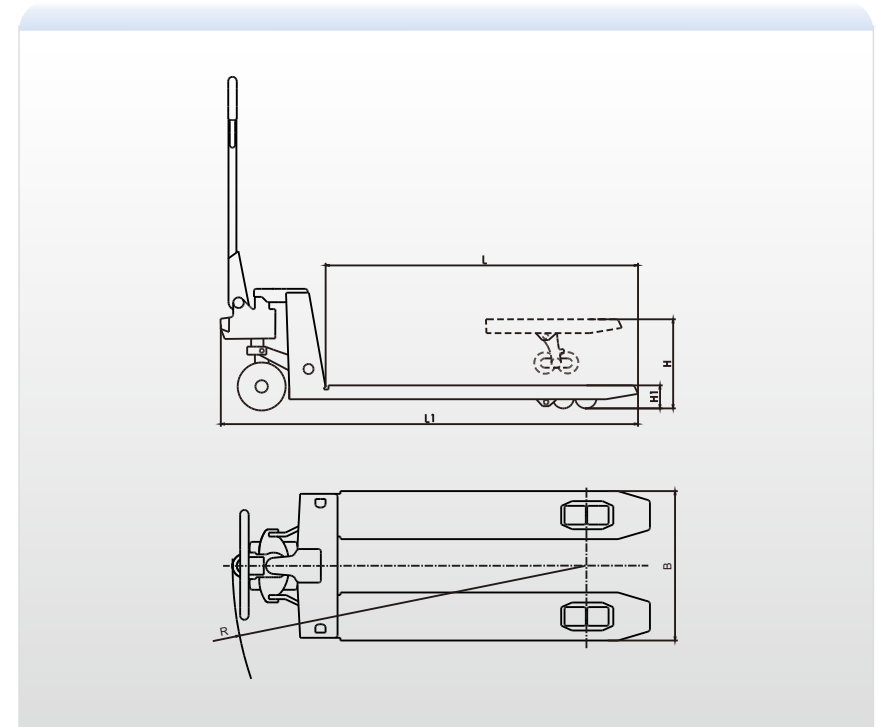
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Technical parameters

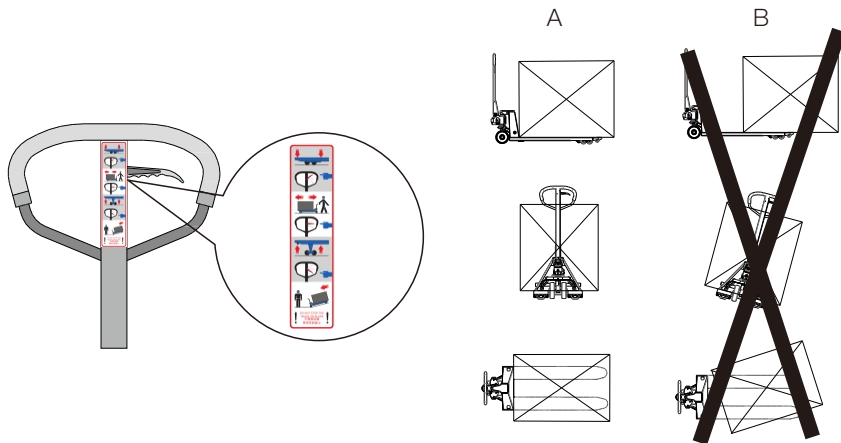
Model		M20/M25/M30/M20Q/M25Q/M30Q/M20Z/M25Z/M30Z	
Rated capacity	kg	2000/2500/3000	
Load center	mm	600	
Service weight	kg	72-79	
Wheel		PU/NYLON/RUBBER	
Max. lift height	<input type="checkbox"/> H mm	200	190
Min. fork height	<input type="checkbox"/> H1 mm	85	75
Steer wheel	mm	Φ200x50/Φ180x50	Φ180x50
Load wheel	mm	Φ80x70	Φ74x70
Single Load wheel	mm	Φ74x93	
Fork width	<input type="checkbox"/> B mm	540/685	
Fork length	<input type="checkbox"/> L mm	1150/1220	
Overall length	<input type="checkbox"/> L1 mm	1580/1650	
Turning radius	<input type="checkbox"/> R mm	1325/1395	

Model		M20L/M25L		M30L	
Rated capacity	kg	2000/2500		3000	
Load center	mm	600			
Service weight	kg	72-85			
Wheel		PU/NYLON/RUBBER			
Max. lift height	<input type="checkbox"/> H mm	200	190	200	190
Min. fork height	<input type="checkbox"/> H1 mm	85	75	85	75
Steer wheel	mm	Φ200x50/Φ180x50	Φ180x50	Φ200x50/Φ180x50	Φ180x50
Load wheel	mm	Φ80x70	Φ74x70	Φ80x70	Φ74x70
Single Load wheel	mm	Φ74x93			
Fork width	<input type="checkbox"/> B mm	540/685			
Fork length	<input type="checkbox"/> L mm	1500/1800/2000/2500		1500/1800/2000	
Overall length	<input type="checkbox"/> L1 mm	1930/2230/2430/2930		1930/2230/2430	
Turning radius	<input type="checkbox"/> R mm	1675/1975/2175/2675		1675/1975/2175	

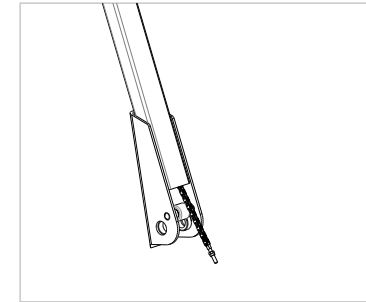


Safety rules

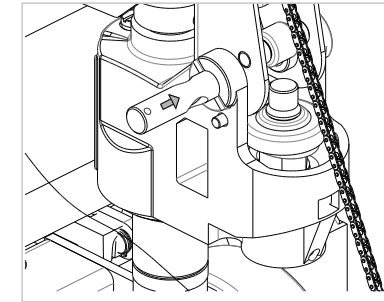
- ▶ The truck is only applicable to indoor use and the application environment must meet the following conditions:
 - Free from rainwater or corrosion of harmful gases;
 - Room temperature of $-20^{\circ}\text{C}\sim+40^{\circ}\text{C}$;
 - Relative ambient humidity $<90\%$;
 - and Requirements for ground: hard, anti-skid and level without barriers.
- ▶ Before using the pallet truck, the operator must read the operating instructions and the warning labels on the truck body carefully.
- ▶ Do not use this truck on the muddy ground.
- ▶ Do not operate the pallet truck unless you are fully familiar with it and have been authorized to do so.
- ▶ Do not operate the pallet truck unless you have carefully checked its condition. Pay special attention to the wheels, the handle assemblies, the truck frame, the unloading plate, etc.
- ▶ To pull the truck, always move the finger grip control handle into the middle position. This makes the handle easier to move and reduces the rebound of the handle by the small piston. This also preserves the hydraulic seals and the piston components. A long service life can be expected.
- ▶ Do not carry or lift passengers.
- ▶ The operator shall wear safety shoes and gloves for protection.
- ▶ While the goods are being transported, all people should stay 600mm away from the truck frame.
- ▶ Do not lift goods in the way as shown in Figure B. Goods should be stacked stably.
- ▶ Overload is prohibited.
- ▶ Do not use the truck in a potentially flammable and explosive atmosphere.
- ▶ Do not use the truck as a vehicle jack.
- ▶ Do not use the truck during strong wind forces.
- ▶ Do not use the truck on places insufficiently illuminated.



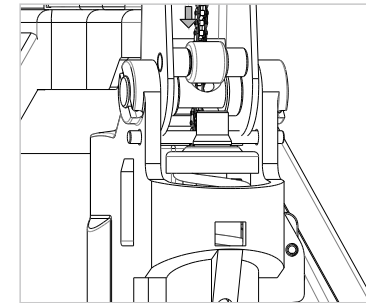
Installation of handles



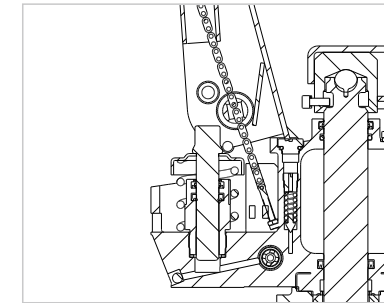
1. Make sure the chain on the handle is in this position shown in the picture.



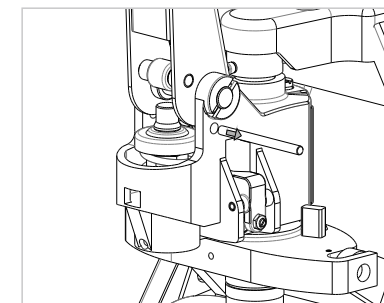
2. Push the handle shaft through the holes, fix it with the spring pin.



3. Put the chain through the hole on the shaft. With the handle at 45° tilt.



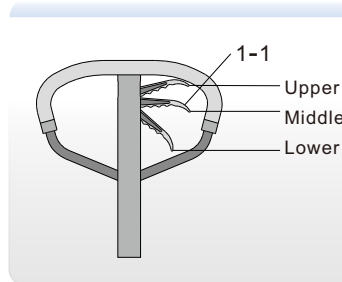
4. Fix the chain in the slot of the unloading plate.



5. Pull the shaft from the hole. Then the assembly is complete.

Adjusting the finger grip handle

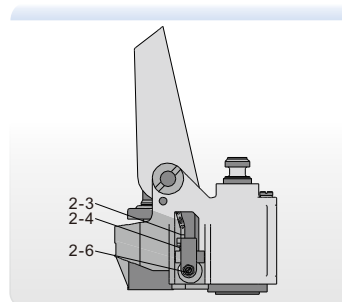
On the handle of this pallet truck, you can find finger grip control handle(1-1) which can be regulated in three positions :



- ① Lifting-set the control handle at lower position. When lift up the hand pallet truck.
- ② Middle position: set the control handle at middle position. When the operator need to move it.
- ③ Lowering: set the control handle at upper position. When lift down the hand pallet truck. The handle moves back to the middle position when released

However if the truck cannot operate normally as above the three positions, you can adjust them according to the following steps:

- ① If the forks elevate while pumping in the Middle position, adjust the adjusting nut (2-4) on the adjusting bolt (2-3) or screw (2-6) clockwise until pumping action does not raise the forks and the finger grip control handle works properly Middle position .
- ② If the forks descend while pumping in the Middle position, adjust the screw(2-6) or nut(2-6) counter clockwise until the forks stop descending.
- ③ If the forks do not descend when the finger grip control handle (1-1) is in the Lower position, adjust the nut (2-4) or screw (2-6) clockwise until the forks. Then check the Middle position according to steps ① and ② to make sure the nut (2-4) and screw(2-6) are in the proper position.
- ④ If the forks can't lift up when the finger grip control handle is in the lower position, adjust the nut (2-4) or screw (2-6) counterclockwise until the forks lift up. Then check the function of the Lower position and Middle position according to steps ①, ② and ③ are normal.



Maintenance

- ① The truck should be parked with the forks lowered to min. height.
- ② Check if the signs and warning labels on the truck are in place before using the truck each time.
- ③ Use original parts.
- ④ The waste liquid shall be place in special collection places for disposal.
- ⑤ Modifications or alterations to the truck, especially the safety device are prohibited.
- ⑥ Only customer service persons specially trained by our company can carry out maintenance of the truck.
- ⑦ Thoroughly standardized maintenance is the most important preconditions to ensure stable and reliable operation performance of the truck. Neglect of regular maintenance could result in failure and malfunction of the truck and poses a potential threat to the safety of the staff and operation.

1. Hydraulic oil

Please check the oil level every six months and change the oil every twelve months. 32 # hydraulic oil is recommended, with total volume of about 0.5 liters.

2. Remove the air

The air may enter into the pump because of transportation or pump in upset position. It will cause the forks fail to be lifted when the finger grip control handle switched to the lifting position. The air can be removed in the following way: pull the finger grip control handle (1-1) to the lowering position and move handle up and down for several times.

3. Daily check and maintenance

Daily check and maintenance of the pallet truck can limit wear as much as possible. Special attention should be paid to the wheels, the axles, as thread, rags, etc. To avoid block the wheels and axles. The forks should be unloaded and lowered in the lowest position when the job is over.

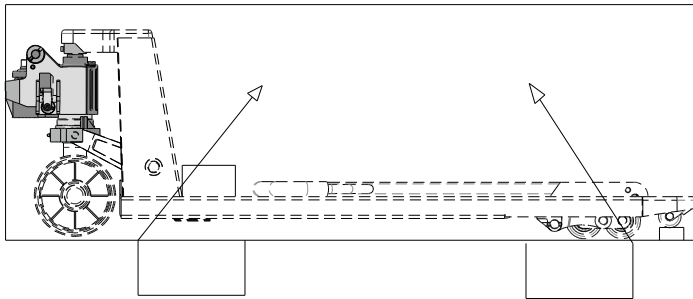
4. Lubrication

All bearings and pivots are provided with long-life lubricants at the factory. You just need to fill the lubrication points with long-life lubricants monthly intervals or after each time the truck is cleaned thoroughly.

Transportation, loading, test and storage

If the truck have to transporte for a long distance, it should be packed in the wooden pallet in order to avoid collision during transportation.

- ▶ The handle should be fixed stably in case sliding and damages and transported by fork truck or crane.
- ▶ Before loading, the operator should first check the truck weight, in order to choose the right crane.
- ▶ When unloading the truck, the operator should be aware of safety of the surroundings to ensure the truck slowly unloaded.
- ▶ If the truck is transported with the forklift, the forklift shall lift and lower slowly to keep the balance of the truck.
- ▶ The truck shall be commissioned according to the following function tests: steering, traveling, loading control and combined functions with rated capacity.
- ▶ If the truck doesn't work, please remove the cargo from the frame and move out the truck from the working area reasonably.
- ▶ When the truck won't be use for a long time, the storage environment shall be kept dry and clean, with forks lift down to their lowest position.



Troubles shooting

This chapter enables the user to identify and rectifies basic faults and the effects of incorrect operation. When trying to locate a fault, proceed in the order shown in the table below. If, after carrying out the following remedial action listed in "actions", the truck cannot be restored to operation, contact the manufacturer's after-sale service department. Additional troubleshooting must only be performed by the manufacturer's specialist service engineers. The manufacturer's customer service department is specially trained to carry out these operations.

No.	Fault	Possible cause	Action
1	The forks cannot be lifted to max. height	<ul style="list-style-type: none"> ▶ The hydraulic oil is insufficient 	<ul style="list-style-type: none"> ▶ Add the hydraulic oil
2	The forks cannot be lifted up	<ul style="list-style-type: none"> ▶ The hydraulic oil is insufficient ▶ The hydraulic oil has impurities ▶ Adjusting nut(2-4) or adjusting screw(2-6) is in wrong positions ▶ Air enters into the cylinder ▶ Seals damaged 	<ul style="list-style-type: none"> ▶ Add the hydraulic oil ▶ Change hydraulic oil ▶ Adjust the adjusting nut(2-4) or adjusting screw(2-6) to correct the position ▶ Put the finger grip handle in the upper position and press the handle dozens of times ▶ Replace the seals
3	The forks cannot be lifted down	<ul style="list-style-type: none"> ▶ Piston rod or the frame is deformed resulting from overloading or cargo slanting to one side ▶ The forks was kept in raised position for extended period of time, then the piston rod is exposed to the air and gets rusted , which blocks the motion of the piston ▶ The adjusting nut(2-4) or the adjusting screw(2-6) in wrong positions 	<ul style="list-style-type: none"> ▶ Replace the related parts of the cylinder or the frame with new ones ▶ Keep the forks at the lowest position while not in use, and keep piston rods lubricated in time ▶ Adjust the adjusting nut(2-4) or adjusting screw(2-6) to correct the position
4	Oil leakage	<ul style="list-style-type: none"> ▶ Seals damaged ▶ Parts damaged 	<ul style="list-style-type: none"> ▶ Replace the seals ▶ Replace the parts

Troubleshooting

5	The forks lift down without operation	► Impurities in the oil cause the valve to be unable to close tightly	► Change hydraulic oil
		► Seals damaged	► Replace the seals
		► The adjusting nut(2-4) or the adjusting screw(2-6) in wrong positions	► Adjust the adjusting nut(2-4) or adjusting screw(2-6) to correct the position



Note: Do not attempt to repair the pallet truck unless you are specially trained.

Parts list - Frame

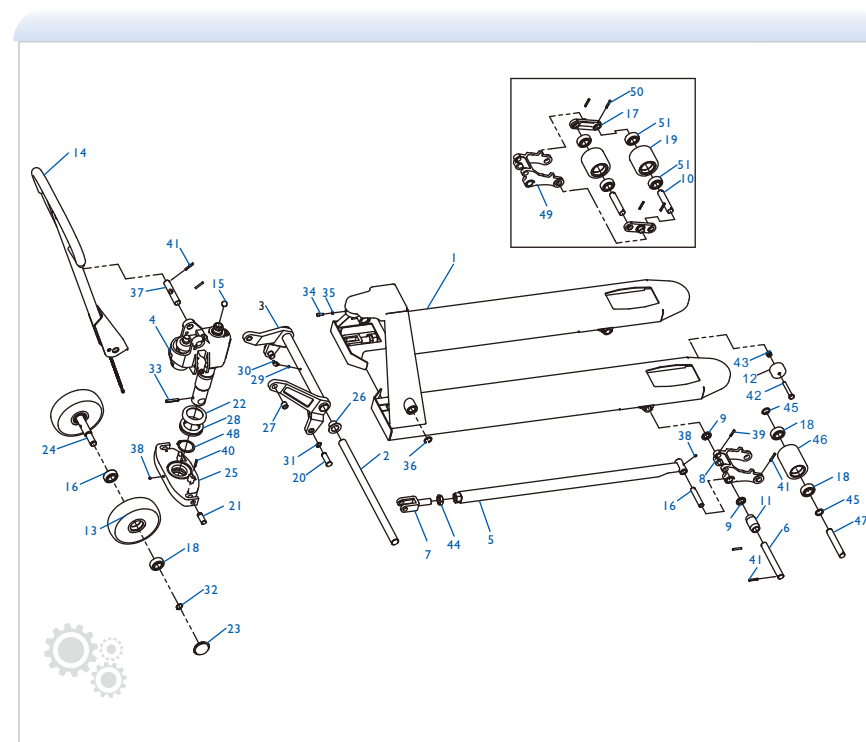
M Series Hand Pallet Trucks

NO.	Parts number	Description	Qty.
1	WC02000001	Frame(2.5t, 540×1150-85), 5012	1
	WC02000083	Frame(3.0t, 540×1150-85), 5012	
	WC02000079	Frame(2.5t, 685×1220-85), 5012	
	WC02000086	Frame(3.0t, 685×1220-85), 5012	
	WC02000119	Double -wheel frame(2.5t, 685×1220-75), 5012	
	WC02000162	Single -wheel frame(2.5t, 685×1220-75), 5012	
	WC02000788	Double -wheel frame(3.0t, 685×1220-75), 5012	
	WC02000490	Single -wheel frame(3.0t, 685×1220-75), 5012	
	WC02000942	Frame(2.0t, 540×1150-85), hot galvanized	
	WC02000852	Frame(2.5t, 540×1150-85), galvanized	
	WC02000761	Frame(3.0t, 540×1150-85), hot galvanized	
	WC02000857	Frame(2.5t, 685×1150-85), galvanized	
	WC02001025	Frame(2.5t, 685×1220-85), hot galvanized	
	WC02000895	Frame(2.5t, 685×1220-85), galvanized	
	WC02000893	Frame for single wheel(2.5t, 685×1220-75), galvanized	
	2	WC02000013	
WC02000082		Long shaft(685)	
WC02000532		Long shaft(540), galvanized	
WC02000186		Long shaft(685), galvanized	
3	WC02000005	Connecting rod assembly(2.0t, 540), black	1
	WC02000084	Connecting rod assembly(3.0t, 540), black	
	WC02000081	Connecting rod assembly(2.0t, 685), black	
	WC02000087	Connecting rod assembly(3.0t, 685), black	
	WC02000604	Connecting rod assembly(2.0t, 540), galvanized	
	WC02000762	Connecting rod assembly(3.0t, 540), hot galvanized	
	WC02000184	Connecting rod assembly(2.0t, 685), galvanized	
	WC02000531	Connecting rod assembly(2.0t, 540), hot galvanized	
WC02001026	Connecting rod assembly(2.5t, 685), hot galvanized		
4	WC01000001	Cylinder assembly (AC-85), galvanized	1
	WC01000006	Cylinder assembly (AC-75), galvanized	
	WC01000005	Cylinder assembly (AC-85), with quick lift, galvanized	
	WC01000007	Cylinder assembly (AC-75), with quick lift, galvanized	
5	WC02000002	Push rod welded (1150), black	2
	WC02000080	Push rod welded (1220), black	

NO.	Parts number	Description	Qty.
5	WC02000605	Push rod welded (1150), galvanized	2
	WC02000182	Push rod welded (1220), galvanized	
	WC02001027	Push rod welded (1220), hot galvanized	
	WC02000134	Push rod welded (1500), black	
	WC02000136	Push rod welded (1800), black	
	WC02000138	Push rod welded (2000), black	
	WC02000154	Push rod welded (2500), black	
6	WC02000009	Connecting shaft for small wheel carrier, galvanized	2
7	WC02000032	Connecting base, galvanized	2
8	WC02000006	Small wheel carrier (85), black	2
	WC02000688	Small wheel carrier (75), black	
	WC02000185	Small wheel carrier (85), galvanized	
	WC02000894	Small wheel carrier (75), galvanized	
9	WC02000008	Plastic washer	4
10*	WC02000011	Wheel shaft, galvanized	4
11	WC02000031	Plastic roller	2
12	WC02000021	Guide wheel (into roller 40 x 50 x 10.5)	2
13	WC02000029	Iron-core PU wheel ϕ 180x50, bright red PU, black iron core	2
	WC02000030	Aluminium-core rubber wheel ϕ 180 x 50 x 140, black	
	WC02000078	Nylon wheel ϕ 180x50(flower-shape wheel)	
	WC02000085	Nylon wheel ϕ 180x50, white(plane wheel)	
	WC02000199	Aluminium-core PU wheel ϕ 180x50, bright red PU	
	WC02000156	Aluminium-core rubber wheel ϕ 200x50x160, black	
	WC02000177	Iron-core PU wheel ϕ 200x50, bright red PU, black iron core	
	WC02000485	Nylon wheel ϕ 200 x 50, white (flower-shape wheel)	
14	WC02000003	Handle EOS-AC, black	1
	WC02000183	EOS-AC Galvanized steel handle(BZ)	
	WC02000530	Handel assembly AC-B, hot galvanized	
15	WC02000020	GB308, Steel ball S18	1
16	WC02000010	Push rod connecting shaft, galvanized	2
17*	WC02000007	Rocker, galvanized	4
18	WC02000022	GB276, Deep groove ball bearing 6204, two-side shielded	8
19*	WC02000023	Iron-core PU wheel ϕ 80x70, bright red PU, black iron core	4
	WC02000077	Nylon wheel ϕ 80 x 70, white	

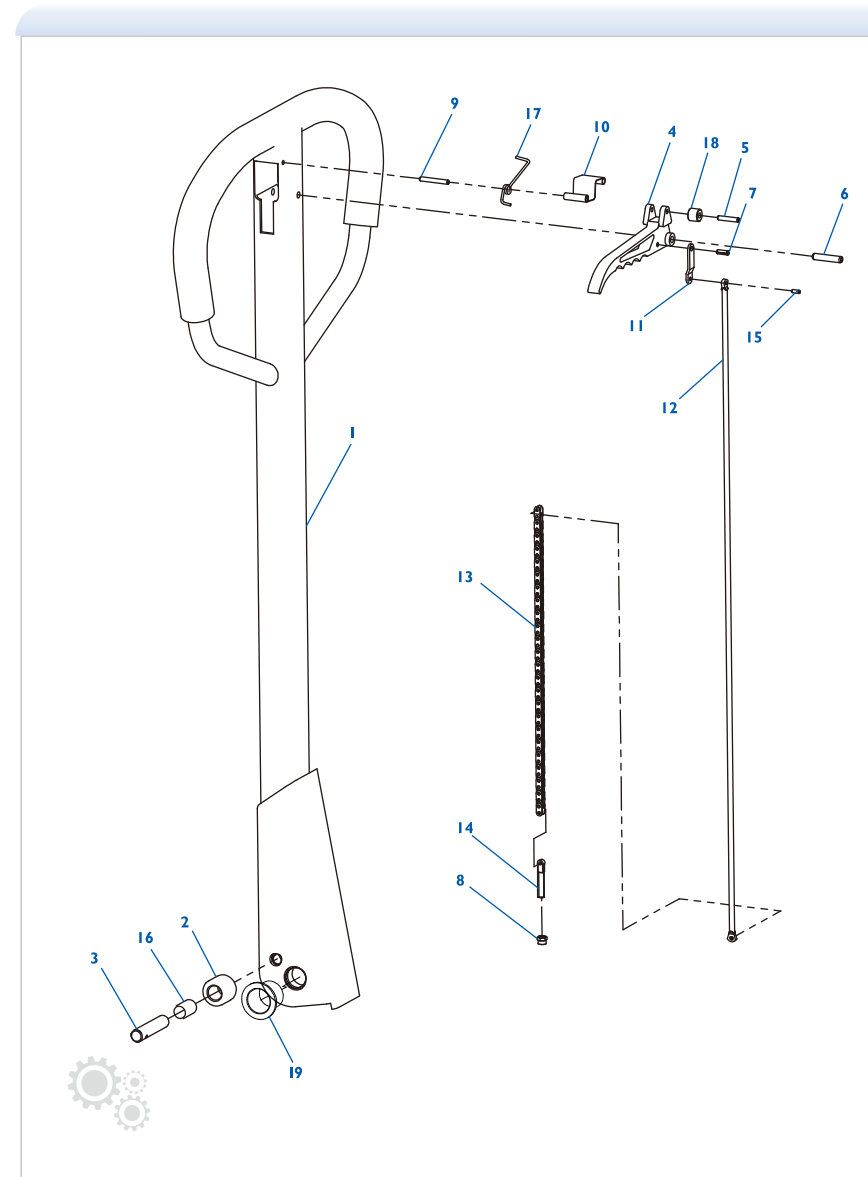
NO.	Parts number	Description	Qty.
19*	WC02000160	Iron-core PU wheel ϕ 74 x 70, bright red PU, black iron core	4
	WC02000120	Nylon wheel ϕ 74 x 70, white	
20	WC02000012	Bolt pin 2, galvanized	2
21	WC02000014	Bolt pin, galvanized	2
22	WC02000015	Dust cover, galvanized	1
23	WC02000016	Big wheel cover, black	2
	WC02000076	Big wheel cover, white	
24	WC02000017	Big wheel shaft, galvanized	1
25	WC02000018	Connecting bracket, galvanized	1
26	WC02000024	Sliding bearing 29x25x25	2
27	WC02000025	Sliding bearing 18x16x15	4
28	WC02000028	GB301, thrust ball bearing 51111	1
29	WC02000027	GB3452.1, O-ring ϕ 5x1.8	1
30	WC02000026	JB7940.2, Angle hydraulic grease nipple M6	1
31	WE07000002	GB894.1, Circlip for shaft 16, blackening	2
32	WE07000004	GB894.1, Circlip for shaft 20, blackening	2
33	WE06000004	GB879.1, Spring type straight pin 8x45, blackening	1
34	WE03000001	GB70.1, Hexagon socket head cap screw M6 x 16, galvanized	1
35	WE05000001	GB93, Normal type spring lock washer 6, galvanized	1
36	WE07000001	GB893.1, Circlip for hole 25, blackening	2
37	WC02000004	Connecting shaft, galvanized	1
38	WC02000019	JB7940.4, Push-fit type grease nipple 6	3
39	WE06000002	GB879.1, Spring type straight pin 5x26, blackening	2
40	WE06000003	GB879.1, Spring type straight pin 5x28, blackening	2
41	WE06000001	GB879.1, Spring type straight pin 5x32, blackening	8
42	WE01000001	GB5780, Hexagon head bolt M10x65, galvanized	2
43	WE04000002	GB889.1, Hexagon locking nut M10, galvanized	2
44	WE04000001	GB6173, Hexagon thin nut M20x1.5, galvanized	2
45	WC02000075	Washer	4
46	WC02000074	Iron-core PU wheel ϕ 74 x 93, bright red PU, black iron core	2
	WC02000118	Nylon wheel ϕ 74x93	
47	WC02000073	Single wheel shaft, galvanized	2
48	WE07000003	GB894.1, Circlip for shaft 52, blackening	1
49*	WC02000006	Small wheel carrier (85), black	2

NO.	Parts number	Description	Qty.
49*	WC02000688	Small wheel carrier (75), black	2
	WC02000185	Small wheel carrier (85), galvanized	
	WC02000894	Small wheel carrier (75), galvanized	
50*	WE06000001	GB879.1, Spring type straight pin 5×32, blackening	8
51*	WC02000022	GB276, Deep groove ball bearing 6204, two-side shielded	8




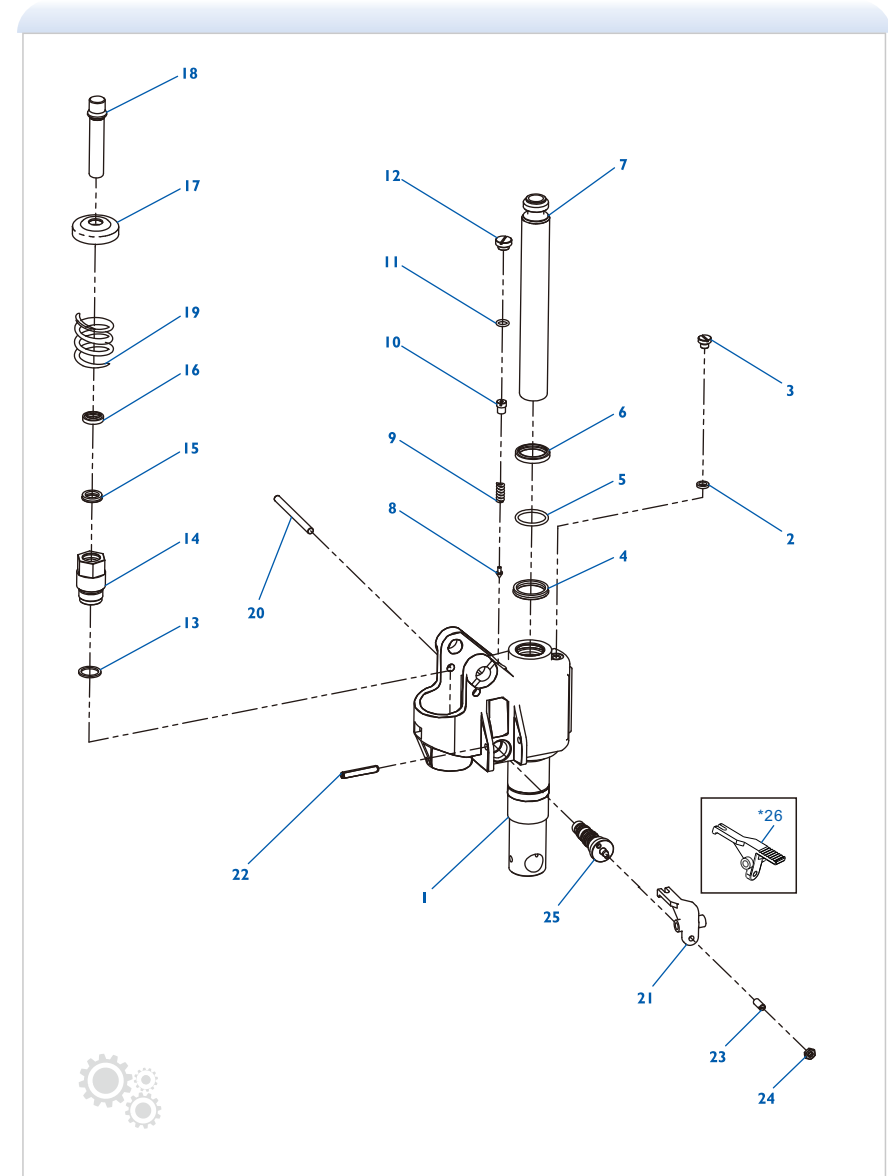
Note: Marked with * are double wheel parts

NO.	Parts number	Description	Qty.
1	WJ10800014	Handle welded	1
2	WJ10800015	Clamping roller	1
3	WJ10800016	Roller pin	1
4	WJ10800011	Finger grip handle	1
5	WJ10800006	Spring type pin (5)	1
6	WJ10800003	Spring type pin (6)	1
7	WJ10800004	Spring type pin (7)	1
8	WJ10800020	Locking nut	1
9	WJ10800002	Spring type pin (9)	1
10	WJ10800008	Positioning plate	1
11	WJ10800012	Connecting sheet of pull rod	1
12	WJ10800013	Pull rod	1
13	WJ10800018	Chain	1
14	WJ10800019	Adjusting bolt	1
15	WJ10800005	Spring type pin (15)	1
16	WJ10800017	Bushing	1
17	WJ10800009	Torsion spring	1
18	WJ10800010	Plastic roller	1
19	WJ10800058	Bush (19)	1

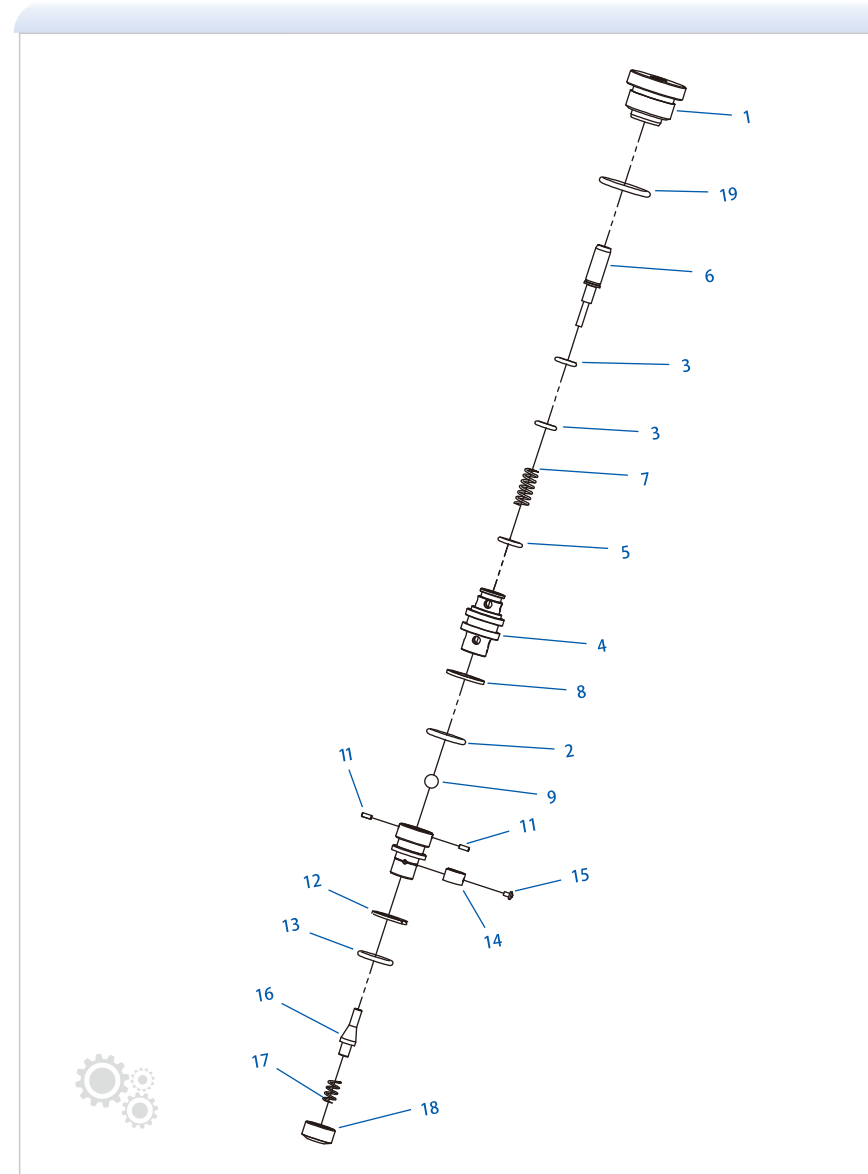


NO.	Parts number	Description	Qty.
1	WC02000157	Valve body welded(75), galvanized	1
	WC02000033	Valve body welded(85), galvanized	
2	WC02000060	GB982, Combination sealing gasket 10	1
3	WC02000036	Screw	1
4	WC02000061	Seal ring UHS35	1
5	WC02000059	GB3452.1, O-ringφ34.5×3.55	1
6	WC02000058	Dustproof ring DH35	1
7	WC02000035	Piston rod	1
8	WC02000045	Safety valve spool	1
9	WC02000046	Pressure adjusting spring	1
10	WC02000038	Pressure adjusting screw	1
11	WC02000071	GB3452.1, O-ring φ11.2×2.65	1
12	WC02000037	Screw plug	1
13	WC02000044	Copper gasket	1
14	WC02000039	Pump body	1
15	WC02000064	Seal ring UHS18	1
16	WC02000063	Dustproof ring DH18	1
17	WC02000042	Spring cover	1
18	WC02000041	Pump core	1
19	WC02000043	Pressure spring	1
20	WC02000040	Pin	1
21	WC02000049	Unloading plate, galvanized	1
22	WE06000005	GB879.1, Spring type straight pin 8×50, blackening	1
23	WE03000003	GB73, Slotted set screws with flat point M8 × 20, galvanized	1
24	WE04000003	GB6172.1, Hexagon thin nut M8, galvanized	1
25	WC01000046	Integrated valve assembly	1
*26	WC02000620	Unloading plate, galvanized	1

 Note: Marked with * are optional parts



NO.	Parts number	Description	Qty.
1	WC02000051	Push pin sleeve	1
2	WC02000065	GB3452.1, O-ring ϕ 15.2x2.4	1
3	WC02000067	GB3452.1, O-ring ϕ 8x1.8	2
4	WC02000053	Return valve sleeve	1
5	WC02000066	GB3452.1, O-ring ϕ 9.5x1.8	1
6	WC02000050	Stem	1
7	WC02000052	Unloading spring	1
8	WC02000054	O-ring retainer II	1
9	WC02000069	GB308, Steel ball S7	1
10	WC02000070	Liquid inlet valve sleeve	1
11	WE06000006	GB117, Copper taper pin 2 x 5	2
12	WC02000055	O-ring retainerI	1
13	WC02000062	GB3452.1, O-ring ϕ 13.2x2.4	1
14	WC02000048	Spring leaf	1
15	WE03000002	GB818, Pan head screw with cross recess M2x2, galvanized	1
16	WC02000056	Boost valve spool	1
17	WC02000057	Spool spring	1
18	WC02000047	Blind nut	1
19	WC02000068	GB3452.1, O-ring ϕ 21.2x2.65	1



NO.	Parts number	Description	Qty.
1	WC02000121	Valve bodyseaming part(AC-85), quick lift pump, galvanized	1
	WC02000723	Valve bodyseaming part(AC-75), with quick lift, galvanized	
2	WC02000060	GB982, Seal washer 10	1
3	WC02000036	Bolt	1
4	WC02000061	Seal ring UHS35	1
5	WC02000059	GB3452.1, O-ring ϕ 34.5x3.55	1
6	WC02000058	Dusty seal ringDH35	1
7	WC02000035	Piston rod	1
8	WC02000045	Safety valve	1
9	WC02000046	Pressure spring	1
10	WC02000038	Pressure adjusting screw	1
11	WC02000071	GB3452.1, O-ring ϕ 11.2x2.65	1
12	WC02000037	Screw	1
13	WC02000122	Quick lift pump body	1
14	WC02000064	Seal ring UHS18	1
15	WC02000063	Dusty seal ringDH18	1
16	WC02000123	Quick lift pump piston	1
17	WC01000046	One valve assembly	1
18	WC02000049	Unloading plate, galvanized	1
19	WE06000005	GB879.1 Pin 8x50, black	1
20	WE03000003	GB73 Screw M8x20, galvanized	1
21	WE04000003	GB6172.1 Hex nut M8, galvanized	1
22	WC02000126	Copper gasket	1
23	WC02000127	Quick lift blind nut	1
24	WC02000132	GB3452.1, O-ring ϕ 9.0x1.8	1
25	WC02000129	GB308, Steel ball S5	1
26	WC02000131	GB3452.1, O-ring ϕ 27x3	1
27	WC02000128	Centre	1
28	WC02000130	Spring	1
29	WC02000124	Spring cover	1
30	WC02000125	Pressure spring	1
31	WE06000011	GB119.1 Pin 4x28, galvanized	1

