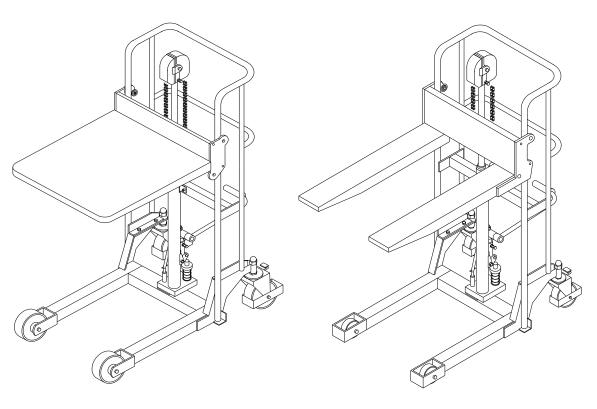
Operational Manual Platform(Fork) Lift

Model: PS2085 PS2120 PS4085 PS4120 PS4150

PF2085 PF2120 PF4085 PF4120 PF4150

PJ2085 PJ2120 PJ4085 PJ4120 PJ4150



PS. Series Stacker

PF(PJ).Series Stacker

Note: Please do read carefully and understand completely this manual before the owner/operator uses the machine.

RevA:06/2007

Contents

- 1. External Shape & Parameter Form
- 2. Names of the Parts
- 3. Assembly and Debug
- 4. Attention and Warning
- 5. Operational Instructions
- 6. Daily Maintenance and Regular Inspection
- 7. Hydraulic Principle Drawing
- 8. Display of the Combination
- 9. List of the Parts

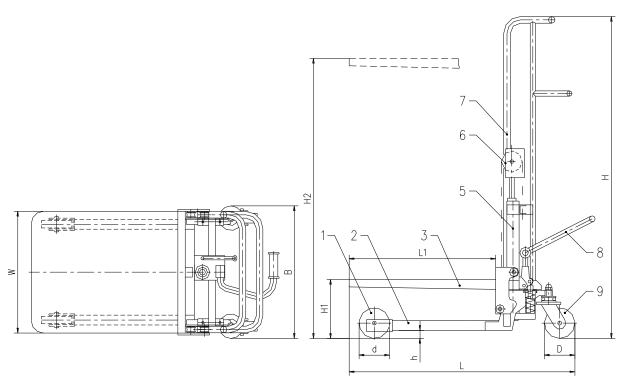
Thank you very much for using this series of platform(fork) lifts.

This operational manual has a description of the right operational methods to ensure safety and the maintenance methods to extend the use lifetime. The operator shall read carefully and completely understand it before using the forklift. This series of platform(fork) lifts are mainly used to load, lift and pile goods or take down goods from a certain height on the flat and solid floor. It is widely used in various plants, markets and warehouses.

This series of forklifts with low forks are especially suitable to transport pallets. Plates attached have the function of platform lift.

1. External Shape & Parameter Form

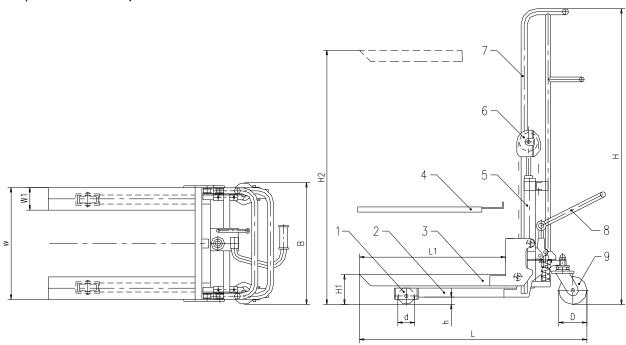
1) External shapes of PS series of platform lift



2) Technical parameters of PS series of platform lift

Р	Н	H1	H2	L	L1	W	В	d	D	Work	Load	NW
М	(mm)	No.	(Kg)	(Kg)								
PS2085	955	200	850	920	600	500	540	Ф125	Ф125	15	200	53
PS2120	1305	200	1200	920	600	500	540	Ф125	Ф125	23	200	58
PS4085	960	200	850	1010	650	550	580	Ф150	Ф150	30	400	72
PS4120	1310	200	1200	1010	650	550	580	Ф150	Ф150	45	400	78
PS4150	1610	200	1500	1010	650	550	580	Ф150	Ф150	58	400	83

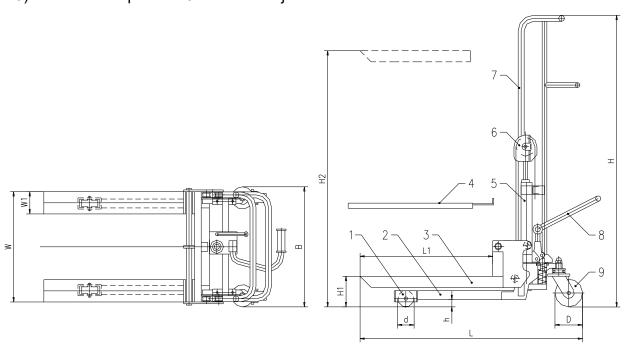
3) External shapes of PF series of forklifts



4) Technical parameters of PF series of forklifts

Р	Н	H1	H2	L	L1	W1	W	В	d	D	Work	Load	NW
M	(mm)	No.	(Kg)	(Kg)									
PF2085	1080	85	850	950	600	100	500	540	Ф75	Ф125	18	200	55
PF2120	1430	85	1200	950	600	100	500	540	Ф75	Ф125	24	200	62
PF4085	1060	85	850	1050	650	110	550	580	Ф75	Ф125	32	400	70
PF4120	1410	85	1200	1050	650	110	550	580	Ф75	Ф125	48	400	76
PF4150	1710	85	1500	1050	650	110	550	580	Ф75	Ф125	60	400	82

5) External shapes of PJ series of adjustable forklifts



6) Technical parameters of PJ series of forklifts

Р	Н	H1	H2	L	L1	W1	W	В	d	D	Work	Load	NW
М	(mm)	No.	(Kg)	(Kg)									
PJ2085	1080	85	850	1000	600	100	500	540	Ф75	Ф125	18	200	58
PJ2120	1430	85	1200	1000	600	100	500	540	Ф75	Ф125	24	200	65
PJ4085	1060	85	850	850	650	110	550	580	Ф75	Ф125	32	400	75
PJ4120	1410	85	1200	1200	650	110	550	580	Ф75	Ф125	48	400	81
PJ4150	1710	85	1500	1500	650	110	550	580	Ф75	Ф125	60	400	86

2. Names of the Parts

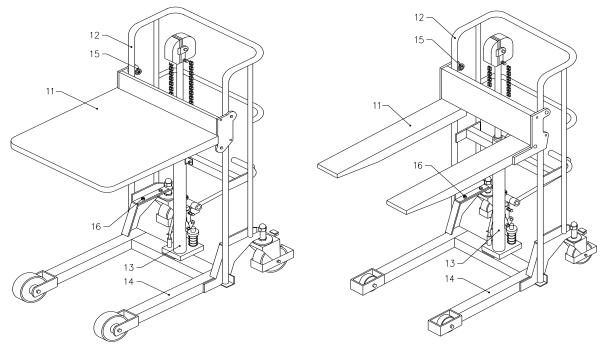
- 1) Front Wheel
- 2) Chassis Assembly
- 3) Platform(Fork) Assembly

- 4) Work Platform
- 5) Cylinder Assembly
- 6) Chains and Wheel

- 7) Slideway Handrail Assembly
- 8) Footstep Lever
- 9) Back Wheel

3. Installation and Debug

The parts are packed when delivered out of the factory. The user can install quickly and easily according to the part numbers in the following order. Please have two 13, 14 or 17 spanners and other necessary tools beside when fixing.



- 1) Confirm No. 11 is the platform(fork) assembly; No. 12, 13 are the handrail and cylinder assembly; No. 14 is the chassis assembly; No. 16 is the connecting bolts (4 sets). Confirm all these are available.
- 2) On the flat floor, put No. 11 the platform(fork) assembly on No. 14 the chassis according to the drawing.
- 3) Make No. 12 handrail go through No. 11 platform(forks) and four rolling

wheels 15, till the position of No. 14 chassis angle iron. And also ensure the positioning hole on the bottom of the cylinder pump plate is identical with the positioning bolt of No. 14 chassis cylinder. Connect tightly and deadly No. 12 the handrail and No. 14 chassis with No. 16 the bolts.

- 4) Connect tightly the bolts of No. 13 cylinder chains and No. 11 platform(fork) connecting plates, and use a split safe.
- 5) The platform(fork) lift height after being installed can be adjusted the parameters specified in this manual by adjusting the chains bolt.
- 6) Make sure all the parts are fixed and the bolts connect tightly and have been adjusted well.
- 7) When operated without load, the platform(fork) lift rises and falls stably and normally.
- 8) When operated with the rated load, the platform(fork) lift rises and falls stably, the foot wheels move flexibly and the brake works effectively.

4. Attention and Warning

- 1) The platform(fork) lift shall be used on the flat and hard floor.
- 2) The load shall not exceed the max. load. Transport goods strictly according to the load curve to assure the load balance.

5. Operational Instructions

- 1) Lock the brake. And close the falling valve pole.
- 2) Operate the rising footstep pole to make the platform(forks) rise stably to the max. height. Turn open the falling valve pole, and the platform(forks) fall. Turn and close the falling valve pole so that the platform(forks) can stop at any height without sliding down.
- 3) When the load exceeds 1.2 times of the rated load, the safety valve of the cylinder works so that the platform(forks) cannot rise and the safety of the operation and equipment are assured.
- 4) When driving the platform(fork) lift with load, make the platform(forks) fall to the lowest position to ensure safety.
- 5) The falling speed of the platform(forks) is adjustable by adjusting the angle of the positioning ring on the falling valve pole.
- ! 6) Don't operate the rising footstep pole quickly. Otherwise, the cylinder will run empty.
- ! 7) The falling valve shall be turned open slowly with heavy load to make the platform(forks) fall slowly. Otherwise, dangers will happen.

! 8) When the rising operation or stops at any height are done with heavy loads, the falling pole shall be closed tightly. Otherwise, the platform(forks) will fall.

6. Daily Maintenance and Regular Inspection

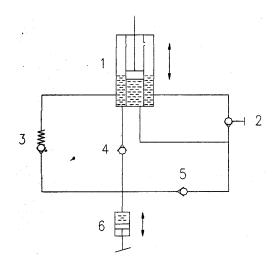
- 1) Daily check if there are any deformations, looseness or abnormal noises of the connecting bolts, wheels, rolling wheels, lifting chains and wheel, the parts of hydraulic cylinder, moving parts.
- 2) Daily check if there is any oil leakage of the hydraulic system.
- 3) Check monthly the wear and tear of the forks, rolling wheels, wheels, chains and wheel.
- 4) After the lifting cylinder runs for 20 hours accumulatively in the beginning, the hydraulic oil shall be changed. Afterwards the oil shall be changed once every 300 hours. When the accumulated hours are not so much, change the oil once every 18 months.

Please fill in the specified hydraulic oil at the following temperatures listed below:

Temperature	Hydraulic Oil
-15°C~-5°C	L-HM68 hydraulic oil (equivalent to ISOVG68)
-5°C~ +45°C	L-HM46 hydraulic oil (equivalent to ISOVG46)

When changing the oil, adjust the pole of the pillar piston to the lowest position. The oil shall be filled to the position of the filling hole.

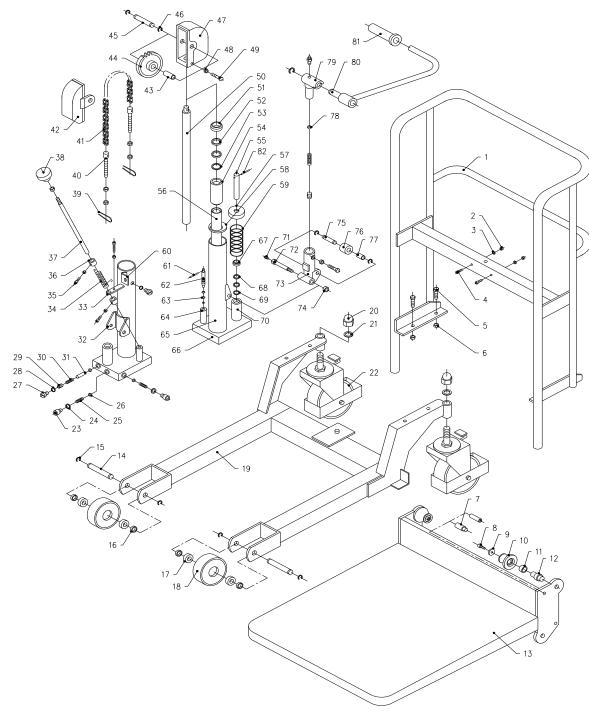
7. Hydraulic Principle Drawing



1	Out-pushing Cylinder
2	Turning Lifting and Falling Valve
3	Safety Valve
4	Oil Returning Valve
5	Work Valve
6	Work Cylinder

8. Display of the Combination

1) Display of the combination of PS series of platform lift



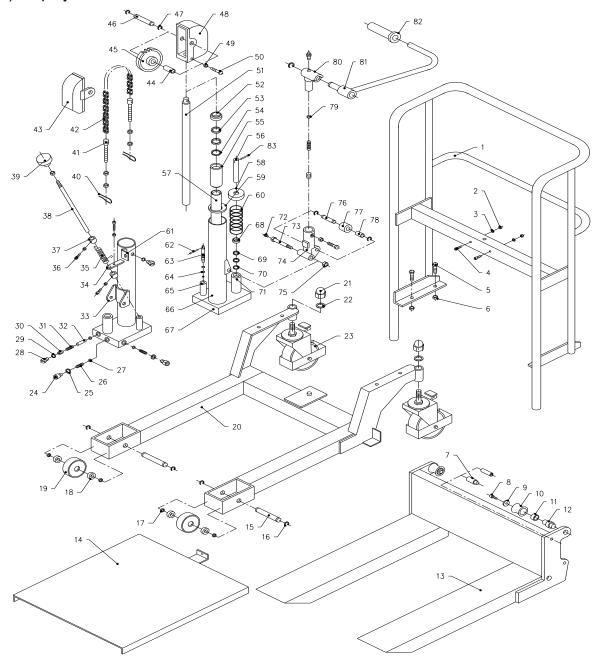
2) List of the parts of PS series of platform lift

No.	Name	Qty	Remark	No.	Name	Qty	Remark
1	Slideway Handrail	1		42	Chains Cover (B)	1	
2	Nut	2		43	Oil-free Bearing	1	
3	Washer	2		44	Chains & Wheel	1	
4	Internal Hex Bolt	2		45	Axle	1	
5	Hex Bolt	4		46	Split Shield Ring	2	

6	Nut	4		47	Chains Cover (A)	1	
7	Spin	4		48	Hex Nut	2	
8	Hex Bolt	4		49	Hex Bolt	2	
9	Washer	4		50	Piston Pole	1	
10	Rolling Wheel	4		51	Dust-proof Ring	1	Damageable
11	Oil-free Bearing	4		52	O-ring	2	Damageable
12	RB Axle	4		53	Nylon Shield Ring	1	
13	Fixed Platform	1		54	Inside Piston Sleeve	1	
14	Front Wheel Axle	2		55	Pump Pole	1	
15	Split Shield Ring	4		56	Internal Cylinder	1	
16	Washer	4		57	Pump Spring Cover	1	
17	Bearing	4		58	Eccentric Sealing Plate	1	
18	Front Wheel	2		59	Oil Pump Spring	1	
19	Chassis Assembly	1		60	Fixed Ear	2	
20	Lid Nut	2		61	Pillar Spin	1	
21	Internal-teethed Lock Washer	2		62	Valve Inner	1	
22	Back Wheel	2		63	O-ring	2	Damageable
23	Internal Hex Bolt	2		64	Valve Pole Pipe	1	
24	Copper Washer	2		65	Outside Cylinder	1	
25	Cone Spring	2		66	Pump Plate	1	
26	Steel Ball	4		67	Dust-proof Ring	1	Damageable
27	Bolt Plug	2		68	O-ring	2	Damageable
28	O-ring	2	Damageable	69	Nylon Ring	1	
29	Bolt	1		70	Pump Glove	1	
30	Spring	1		71	Oil Cup	2	
31	Short Pin	1		72	Short Axle	1	
32	Base Connecting Plate	1		73	Pump Base	1	
33	Positioning Plate	1		74	Nut	1	
34	Torsion Spring	1		75	Pump Pin Axle	1	
35	Positioning Bolt	2		76	Pump Ring	1	
36	Positioning Ring	2		77	Oil-free Bearing	1	
37	Single-direction Valve pole	1		78	Steel Ball	1	

38	Handle	1	79	Axle Sleeve	1	
39	Split Pin	2	80	Foot Step Lever	1	
40	Chains Bolt	2	81	Rubber Glove	1	
41	Roller Chains	1	82	Pillar Spin	1	

3) Display of the combination of PF series of fixed forklifts



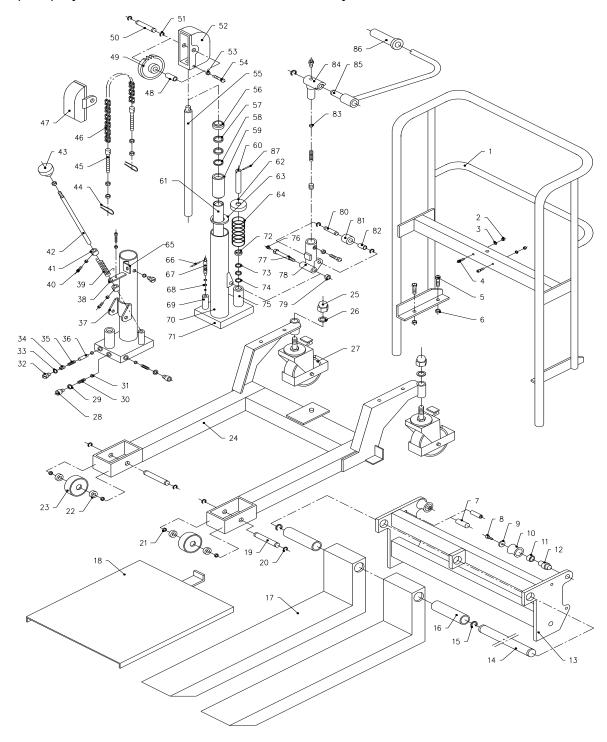
4) List of the parts of PF series of fixed forklifts

No.	Name	Qty	Remark	No.	Name	Qty	Remark
1	Slideway Handrail	1		42	Roller Chains	1	
2	Nut	2		43	Chains Cover (B)	1	
3	Washer	2		44	Oil-free Bearing	1	

4	Internal Hex Bolt	2		45	Chains & Wheel	1	
5	Hex Bolt	4		46	Axle	1	
6	Nut	4		47	Split Shield Ring	2	
7	Spin	4		48	Chains Cover (A)	1	
8	Hex Bolt	4		49	Hex Nut	2	
9	Washer	4		50	Hex Bolt	2	
10	Rolling Wheel	4		51	Piston Pole	1	
11	Oil-free Bearing	4		52	Dust-proof Ring	1	Damageable
12	RB Axle	4		53	O-ring	2	Damageable
13	Fixed Fork	1		54	Nylon Shield Ring	1	
14	Work Platform	1		55	Inside Piston Sleeve	1	
15	Front Wheel Axle	2		56	Pump Pole	1	
16	Split Shield Ring	4		57	Internal Cylinder	1	
17	Washer	4		59	Eccentric Sealing Plate	1	
18	Bearing	4		60	Oil Pump Spring	1	
19	Front Wheel	2		61	Fixed Ear	2	
20	Chassis Assembly	1		62	Pillar Spin	1	
21	Lid Nut	2		63	Valve Inner	1	
22	Internal-teethed Lock Washer	2		64	O-ring	2	Damageable
23	Back Wheel	2		65	Valve Pole Pipe	1	
24	Internal Hex Bolt	2		66	Outside Cylinder	1	
25	Copper Washer	2		67	Pump Plate	1	
26	Cone Spring	2		68	Dust-proof Ring	1	Damageable
27	Steel Ball	4		69	O-ring	2	Damageable
28	Bolt Plug	2		58	Pump Spring Cover	1	
29	O-ring	2	Damageable	70	Nylon Ring	1	
30	Bolt	1		71	Pump Glove	1	
31	Spring	1		72	Oil Cup	2	
32	Short Pin	1		73	Short Axle	1	
33	Base Connecting Plate	1		74	Pump Base	1	
34	Positioning Plate	1		75	Nut	1	
35	Torsion Spring	1		76	Pump Pin Axle	1	
36	Positioning Bolt	2		77	Pump Ring	1	
37	Positioning Ring	2		78	Oil-free Bearing	1	

38	Single-direction Valve pole	1	79	Steel Ball	1	
39	Handle	1	80	Axle Sleeve	1	
40	Split Pin	2	81	Foot Step Lever	1	
41	Chains Bolt	2	82	Rubber Glove	1	
			83	Pillar Spin	1	

5) Display of the combination of PJ series of adjustable forklifts



6) List of the parts of PJ series of adjustable forklifts

No.	Name	Qty	Remark	No.	Name	Qty	Remark
1	Slideway Handrail	1		44	Split pin	2	
2	Nut	2		45	Chains bolt	2	
3	Washer	2		46	Roller Chains	1	
4	Internal Hex Bolt	2		47	Chains cover (B)	1	
5	Hex Bolt	4		48	Oil-free Bearing	1	
6	Nut	4		49	Chains&wheel	1	
7	Shield Pin	4		50	CW Axle	1	
8	Hex bolt	4		51	Split ring	2	
9	washer	4		52	Chains cover (A)	1	
10	Rolling wheel	4		53	Hex nut	2	
11	Oil-free bearing	4		54	Hex bolt	2	
12	Rolling wheel axle	4		55	Piston pole	1	
13	Fixed rack	1		56	Dust-proof ring	1	Damageable
14	Long axle	1		57	O-ring	2	Damageable
15	Split ring	2		58	Nylon ring	1	
16	Sleeve	2		59	Inside piston glove	1	
17	Adjustable fork	2		60	Pump pole	1	
18	Roller plate	1		61	Inside Cylinder	1	
19	Front wheel axle	2		62	Pump lid	1	
20	Spit ring	4		63	Eccentric Sealing Plate	1	
21	Washer	4		64	Oil Pump Spring	1	
22	Bearing	4		65	Fixed ear	2	
23	Front wheel	2		66	Round pillar pin	1	
24	Chassis assembly	1		67	Valve inner	1	
25	Nut	2		68	O-ring	2	Damageable
26	Internal teethed lock washer	2		69	Valve pole glove	1	
27	Back wheel	2		70	Outside cylinder	1	
28	Internal hex bolt	2		71	Pump plate	1	
29	Copper washer	2		72	Dust-proof ring	1	Damageable
30	Cone spring	2		73	O-ring	2	Damageable
31	Steel ball	4		74	Nylon ring	1	
32	Bolt plug	2		75	Pump glove	1	
33	O-ring	2	Damageable	76	Oil cup	2	
34	Bolt	1		77	Pump axle	1	

35	Spring	1	78	Pump base	1	
36	Short pin	1	79	nut	1	
37	Base connecting plate	1	80	Pump ring axle	1	
38	Positioning plate	1	81	Pump ring	1	
39	Torsion spring	1	82	Oil-free bearing	1	
40	Positioning bolt	2	83	Steel ball	1	
41	Positioning ring	2	84	Axle sleeve	1	
42	Single-direction valve pole	1	85	Foot step lever	1	
43	handle	1	86	Rubber glove	1	
			87	Pillar Spin	1	