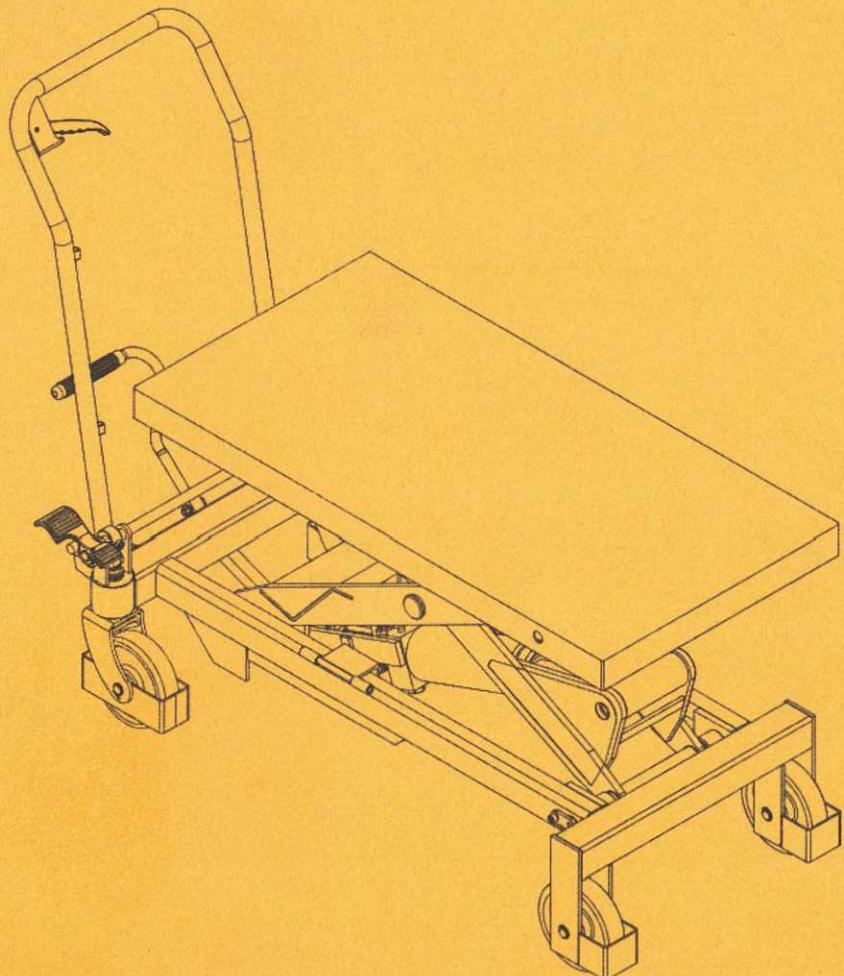


**SP1000
SP1500**
Applicable Model:

Lift Table

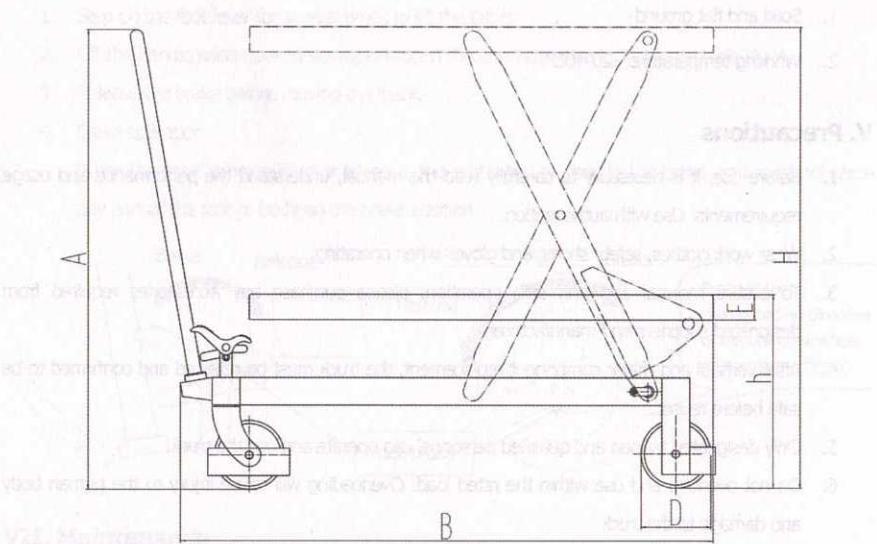


OPERATION MANUAL/PARTS CATALOGUE

Makes Material Handling Easier

E15008A210915V10

I. Structure diagram



II. Basic parameters

Model		SP1000	SP1500
Load capacity	kg	1000	1500
Max. lift height H	mm	1000	1000
Min. height of table h	mm	380	420
Table size L×C×E	mm	1016×515×60	1220×610×60
Handle height A	mm	962	962
Overall length B	mm	1170	1379
Foot pedal cycles to max. height		≤55	≤70
Wheel diameter D	mm	150	150
Working volume of oil cylinder	ml	257	310
Oil capacity	ml	400	400
Service weight	kg	115	135

III. Scope of application

SP series table lift truck is a kind of high-lift transportation vehicle, which is applicable for short-distance transportation as well as goods lifting and lowering. Besides, it can also be used as a work place tool in the workshop.

IV. Environmental conditions for use

1. Solid and flat ground;
2. Working temperature: -20~40°C.

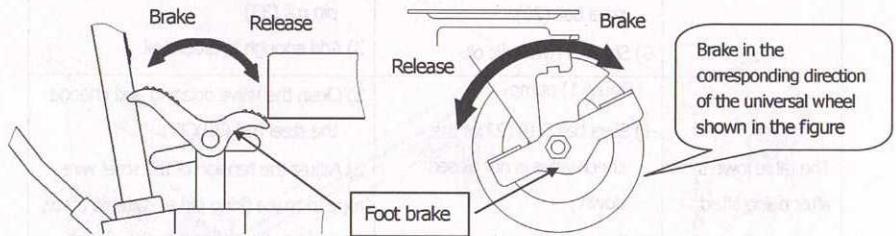
V. Precautions

1. Before use, it is necessary to carefully read the manual, understand the performance and usage requirements. Use with authorization.
2. Wear work clothes, safety shoes, and gloves when operating.
3. To ensure normal and safe operation, please purchase any accessories required from designated suppliers and manufacturers.
4. After overhaul and major component replacement, the truck must be retested and confirmed to be safe before reuse.
5. Only designated trained and qualified personnel can operate and use the truck.
6. Do not overload and use within the rated load. Overloading will cause injury to the human body and damage to the truck.
7. Do not stand or sit on the table.
8. Do not place hands or feet under the falling table.
9. When loading goods, please brake properly to prevent the truck from moving;
10. When loading goods, must evenly distribute the goods on the entire table;
11. It is not allowed to load loose or unstable goods;
12. Do not leave goods on the table for a long time;
13. The truck cannot be moved while the goods are being lifted;
14. The truck can only be used on flat and hard ground, and it is prohibited to use it on slopes or uneven ground;
15. When placing goods on a lifted table, it is important to ensure that the weight of the goods should be within the rated load and be placed evenly (the safety valve only functions during the lifting process. If the truck has been lifted and overweight goods are placed, the safety valve cannot function, which may damage and disable the truck).
16. When loading and unloading goods on a lifted table, be careful not to drag laterally, as it may cause serious eccentric loads and cause the truck to tip over, resulting in accidents;
17. To ensure safety during repairing and maintaining, be sure to use a support rod to support the scissor arms so that the table does not fall (the table should be unloaded).
18. Strictly follow the precaution list; otherwise, it will cause damage to the human body and the truck.

VI. Operation

1. Step on the foot lever for several times to lift the table.
2. Lift the handle knob upward slowly, and open the one-way valve to lower the table slowly.
3. Release the brake before moving the truck.
4. Brake operation

When the truck is being lifted or lowered, it is prohibited to operate the brake, and must not place any part of the foot or body on the brake position



VII. Maintenance

It is very important to conduct necessary maintenance so as to prolong the service life and safety of the lift table. Check the lift table before operation according to the following items:

1. Whether there is any distortion and bending of the truck.
2. Check the brake and the wearing condition of the wheels.
3. Check oil leakage in the hydraulic system.
4. Add or fill lubricant to each friction surface before daily operation.
5. Do not use a faulty truck until it is fixed.
6. Change the hydraulic oil every 12 months. Choose the following or close brand hydraulic oil according to the climate conditions of different areas:
 - a) When the working environment is -10~+40°C: YBN32
 - b) When the working environment is -20~+40°C: YCN32.
7. Oil replacement
Screw out the 11# sealing screw in the pump (see figure 1 : pump) with a wrench; Pull the knob up; Unscrew the oil plug screw 39# and add hydraulic oil;
8. Materials of the sealing parts 1#,3#,4#,16#,25#,26#,32#,35#,36#,42#,43#,45#,48#,49# of the pump(see figure 1 : pump) is rubber, PU, whose maintenance interval is 2-year. Replace the sealings in time to avoid possible damage and poor performance of the truck.

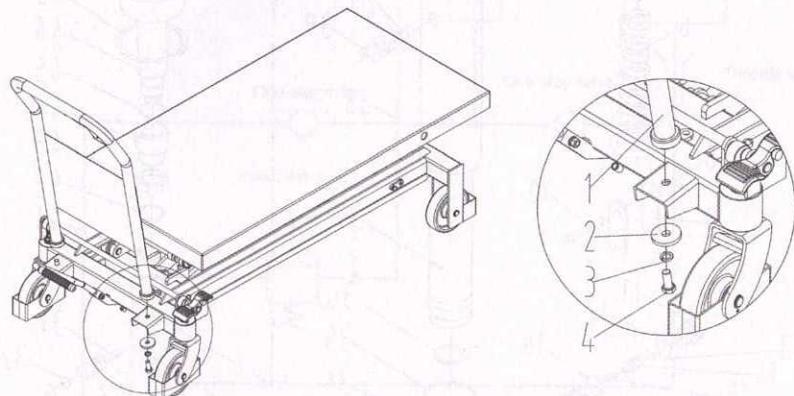
VIII. Trouble shooting

Fault	Possible causes	Trouble shooting
The table fails to lift or insufficient lifting height	(Figure 1) Pump: 1) Steel ball (20) of the check-valve is not closed down. 2) Firing pin (31) withstands the steel ball (20). 3) Short of hydraulic oil.	1) Clean the valve opening and change the steel ball (20). 2) Adjust the tension of the steel wire rope to make firing pin at suitable place, and add or fill lubricant to the pin roll (33) 3) Add enough hydraulic oil.
The table lowers after being lifted	(Figure 1) pump: 1) Steel ball (20) (27) of the check-valve is not closed down. 2) Firing pin (31) withstands the steel ball (20).	1) Clean the valve opening and change the steel ball (20)(27). 2) Adjust the tension of the steel wire rope to make firing pin at suitable place, and add or fill lubricant to the pin roll (33)
The table fails to lower	(Figure 1) Pump: The travel of the firing pin (31) is not enough to open the steel ball (20).	Adjust the tension of the steel wire rope to make firing pin at suitable place, and add or fill lubricant to the pin roll (33) .
Oil leakage at firing pin.	(Figure 1) pump: The O- ring (32) is damaged.	Change the O- ring (32).
Oil leakage at pump (2), pump core (5) and piston rod (44).	(Figure 1) pump: The seal ring (1)(3)(48)(49) are damaged.	Change the seal ring (1)(3)(48)(49)

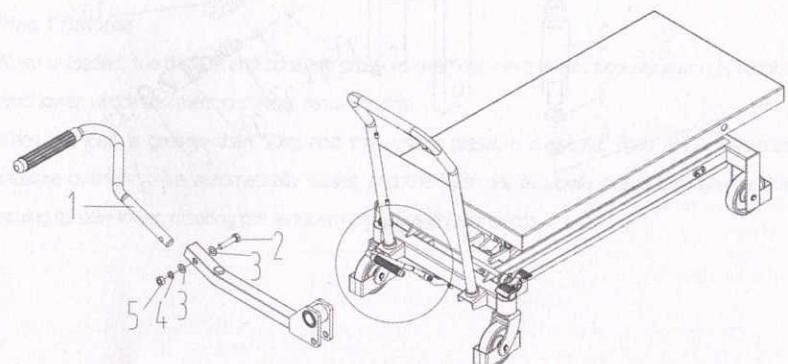
IX. Assembly

The handle and the foot brake lever of the SP1000/SP1500 lift table is disassembled before delivery. The user need to assemble them before use:

1. Handle assembly: according to the parts exploded picture, fix the handle (1) to the mounting hole of the truck body with bolt (4) , spring washer (3) , flat washer (2) , then screw down the bolt with a wrench.



2. Foot brake lever assembly: insert the foot lever (1) into the hole of the square bar (2) , screw in the screw, then put in the plain washer (3) and the spring washer (4) respectively and screw down the nut (5).



X. Structure diagram and schematic diagram

Pump (1)

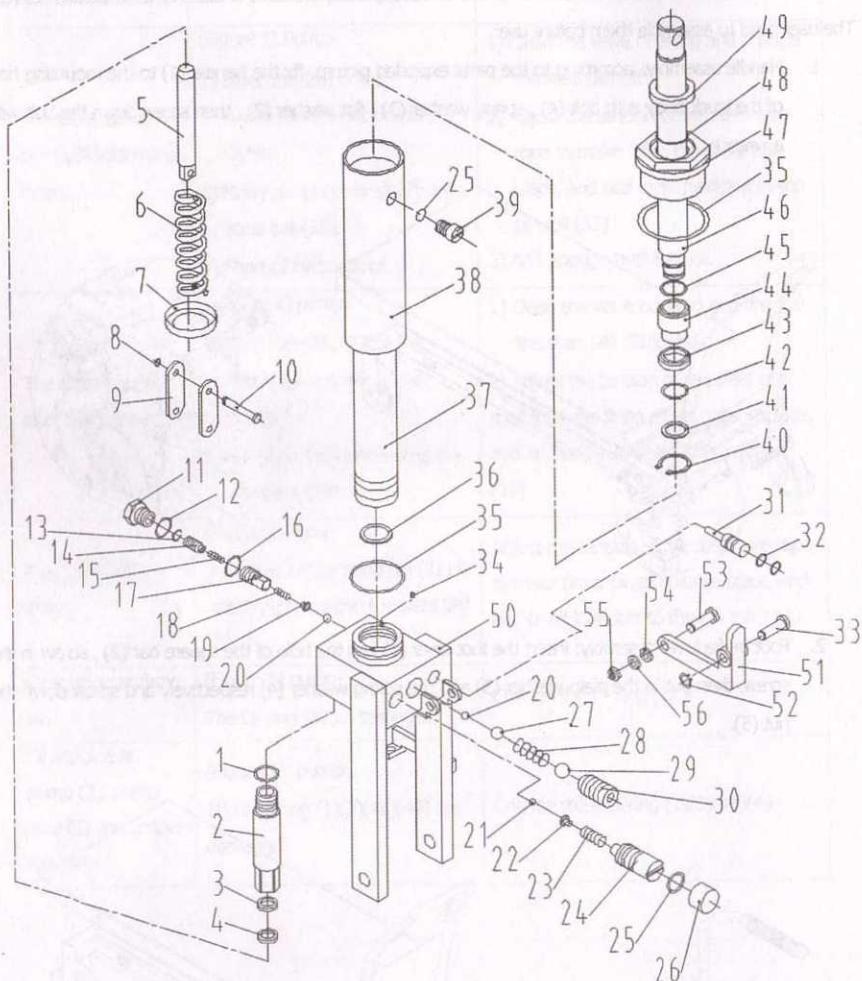


Figure 1

Hydraulic schematic diagram (2)

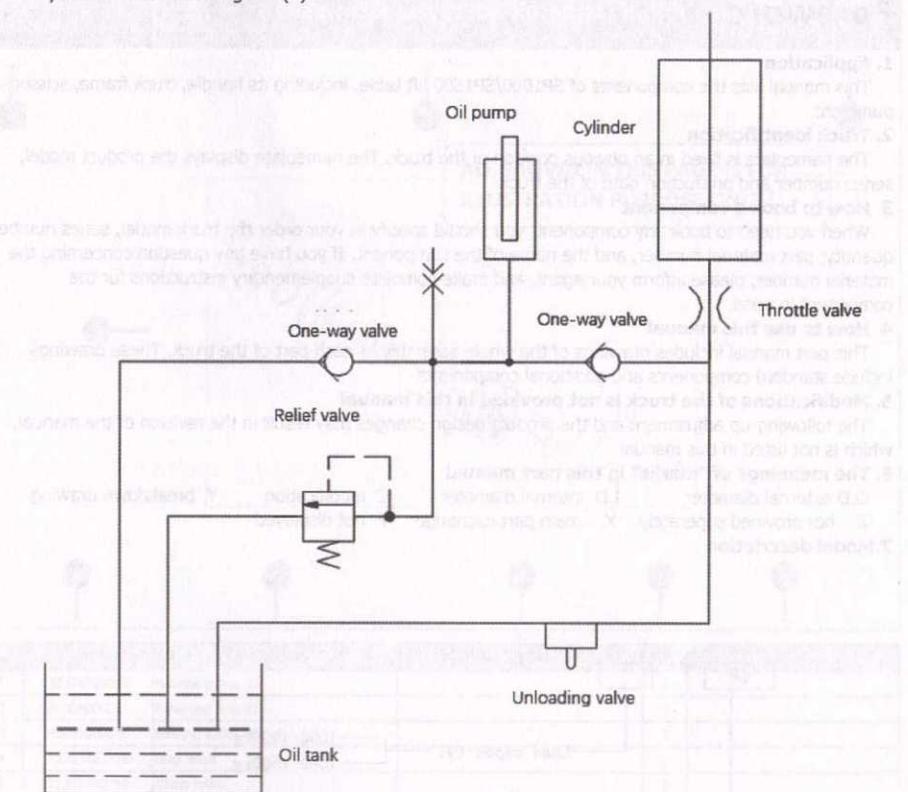


Figure 2

Working Principle

1. When unloaded, the throttle and constant pressure overflow valve simultaneously drain oil, resulting in rapid lowering, which can meet customer requirements.
2. When the load is greater than 50kg and the system pressure is greater than 8Mpa, the constant pressure overflow valve automatically closes, and the hydraulic oil slowly drains through the throttle, leading to slow lowering, meeting the requirements of safety standards.

Foreword

1. Application

This manual lists the components of SP1000/SP1500 lift table, including its handle, truck frame, scissor, pump,etc.

2. Truck identification

The nameplate is fixed in an obvious position of the truck. The nameplate displays the product model, series number and production date of the truck.

3. How to book a component

When you need to book any component, you should specify in your order the truck model, series number, quantity, part material number, and the name of the component. If you have any question concerning the material number, please inform your agent, and make complete supplementary instructions for the component in need.

4. How to use this manual

This part manual includes drawings of the whole assembly or each part of the truck. These drawings include standard components and additional components.

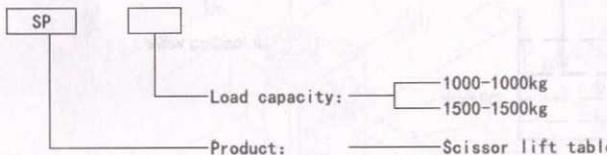
5. Modifications of the truck is not provided in this manual

The following-up adjustment and the product design changes may result in the revision of the manual, which is not listed in this manual.

6. The meanings of "marks" in this part manual

O.D external diameter	I.D internal diameter	C modification	Y breakdown drawing
Z not provided seperately	X main part exchange	F not displayed	

7. Model description

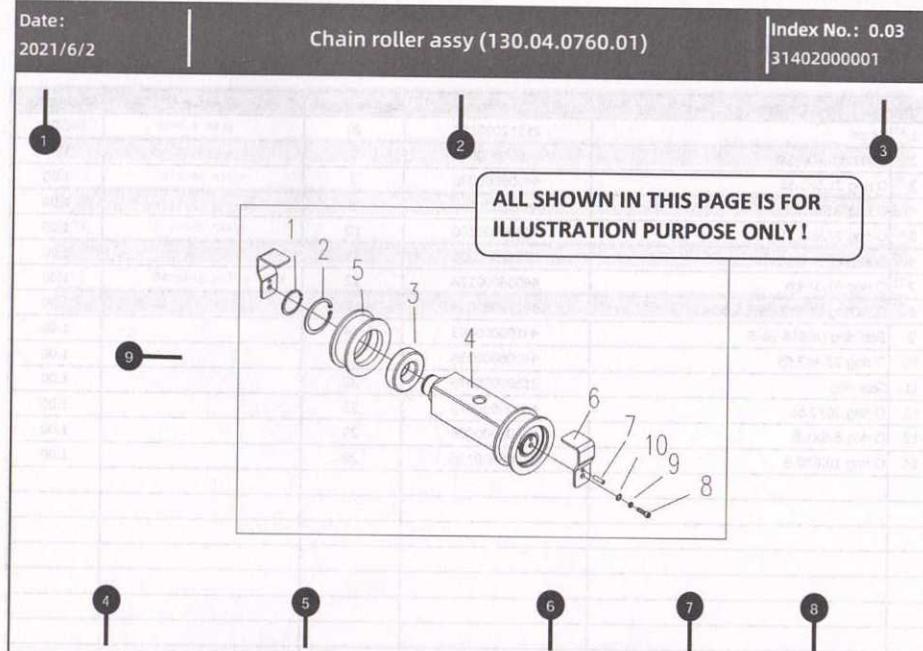


Instructions for use

① Date	⑥ Part specification
② Assembly name&drawing No.	⑦ Part quantity needed
③ Index No.&assembly No.	⑧ Remark
④ Part No.	⑨ Assembly exploded picture
⑤ Part description	

Following information is needed when ordering a part. For example, if a part Retaining ring 30 is in need, provide the following information to the sales for quotation.

Description	Specification	Part No.	Qty
Retaining ring 30	/	41305000018	1



No.	Part No.	Description	Specification	Qty	Remark
1	41305000018	Retaining ring 30		2	
2	41304000021	Retaining ring 62		2	
3	43001000046	Bearing 6206-2RS		2	
4	21703000178	Step shaft		1	
5	21311000010	Chain roller		2	
6	22003000044	Bent plate		2	
7	41402000009	Pin 4X20		2	
8	41100000041	Screw M6X16		2	
9	41300000004	Washer 6		2	
10	41301000004	Washer 6		2	

Wearing Parts List

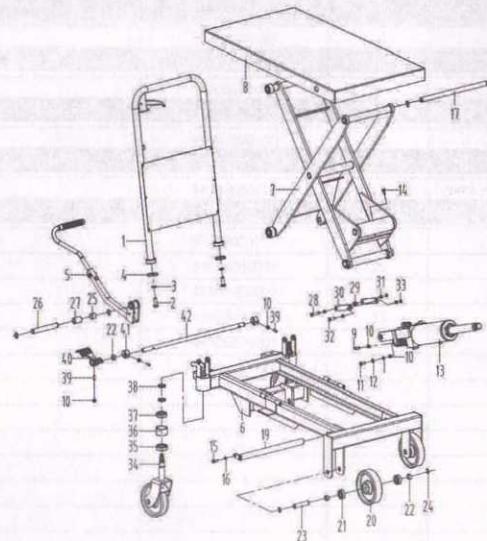
Contents

0.00	Master assy	SP1000	12
0.01	Handle assy		14
0.02	Pedal rod assy		15
0.03	Scissor assy		16
0.00	Master assy	SP1500	17
0.03	Scissor assy		20
1.00	Pump	SP1000	21
1.01	Damping valve assy		23
1.00	Pump	SP1500	24

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2022/5/8

Master assy (SP100-00)

Index No.: 0.00

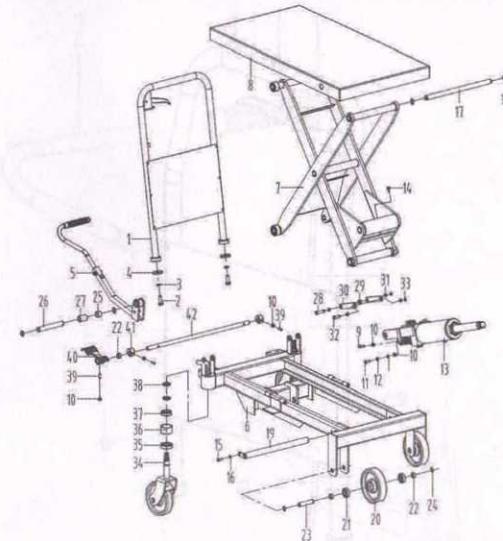


No.	Part No.	Description	Specification	Qty	Remark
1	30905000017	Handle assy		1	Y See 0.01
2	4100100049	Bolt M12X65		2	
3	4130000010	Spring washer 12		2	
4	2181000099	Washer		2	
5	3151000010	Pedal rod assy		1	Y See 0.02
6	30701000534	Truck frame		1	
7	3061000042	Scissor assy		1	Y See 0.03
8	3151300013	Table assy		1	
9	2010100001	Screw		1	
10	4120000008	Nut M8		5	
11	2010100004	Screw		1	
12	4130100006	Washer A-8		1	
13	3100100055	Pump		1	Y See 1.00
14	4110000058	Screw M8X12		1	
15	4110000060	Screw M8X14		1	
16	4130000005	Spring washer 8		2	
17	2170100066	Pin shaft		1	
18	4130500013	Circlip for shaft A-20		4	
19	3111700042	L-pin shaft		1	
20	21312000187	Wheel		2	
21	4300100014	Bearing6203-2RS		4	
22	2181000045	Lining ring		5	
23	2170100035	Pin shaft		2	
24	4130500010	Circlip for shaft A-17		4	

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2022/5/8

Master assy (SP100-00)

Index No.: 0.00

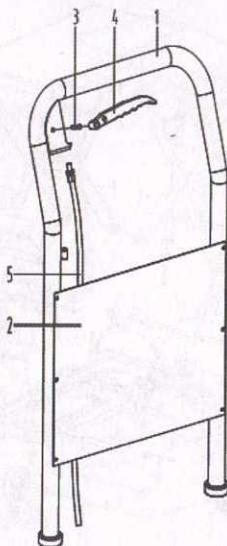


No.	Part No.	Description	Specification	Qty	Remark
25	21810000079	Retaining ring		1	
26	21701000061	Pin shaft		1	
27	21810000081	Retaining ring		1	
28	21703000033	Step shaft		1	
29	21706000007	Pipe shaft		1	
30	21920000585	Connecting plate		2	
31	43100000003	Bearing SF-1-10.06		4	
32	21703000032	Step shaft		1	
33	41305000003	Circlip for shaft A-10		2	
34	NULL	Caster assy		2	
35	43008000002	Bearing 30205E		2	
36	21810000054	Bush		2	
37	43001000033	Bearing6005		2	
38	20103000009	Nut		4	
39	41105000008	Screw M8X20		3	
40	21222000025	Braking pedal		1	
41	21309000005	Braking cam		2	
42	21704000026	Pin shaft		1	

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Handle assy (055.02.0102.01)

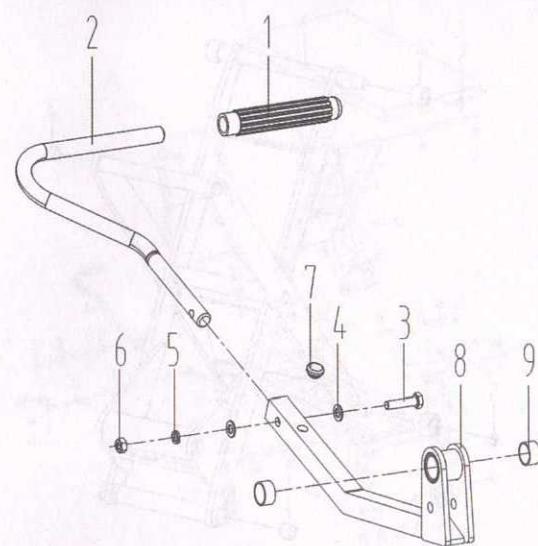
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Pedal rod assy(SP100.17-00)

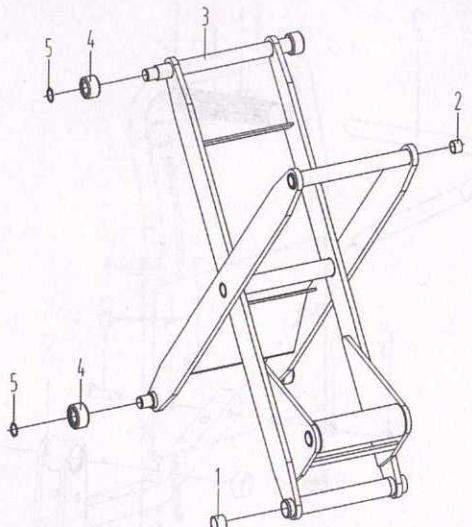
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Scissor assy (SP100.18-00)

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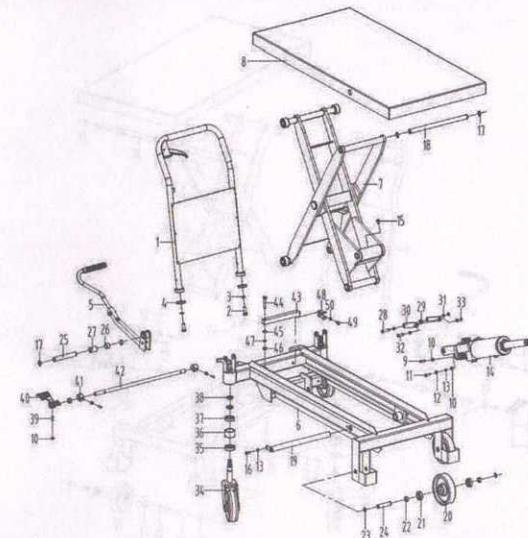


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Master assy (SP150-00)

Index No.: 0.00



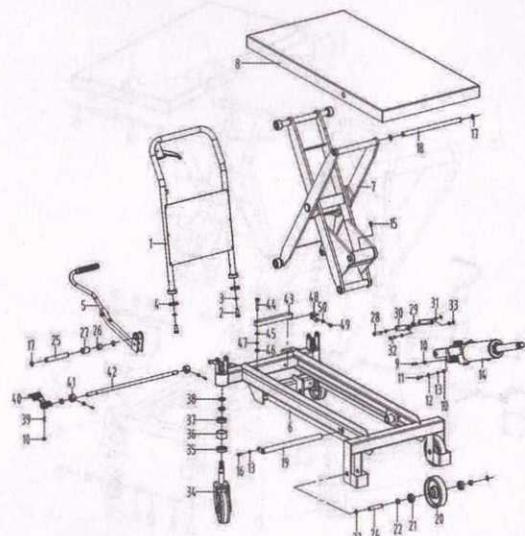
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1	30905000017	Handle assy		1	Y	See 0.01
2	41002000031	Bolt M 12X30		2		
3	41300000010	Spring washer 12		2		
4	21810000099	Washer		2		
5	31510000010	Pedal rod assy		1	Y	See 0.02
6	30701000535	Truck frame		1		
7	30610000044	Scissor assy		1	Y	See 0.03A
8	31513000014	Table assy		1		
9	20101000001	Screw		1		
10	41200000008	Nut M8		5		
11	20101000004	Screw		1		
12	41301000006	Washer A-8		1		
13	41300000005	Spring washer 8		2		
14	31001000054	Pump master assy		1	Y	See 1.00A
15	41100000058	Screw M8X12		1		
16	41100000060	Screw M8X14		1		
17	41305000013	Circlip for shaft A-20		4		
18	21701000066	Pin shaft		1		
19	31117000042	L-pin shaft		1		
20	21312000187	Wheel		2		
21	43001000014	Bearing6203-2RS		4		
22	21810000045	Lining ring		5		
23	41305000010	Circlip for shaft A-17		4		
24	21701000035	Pin shaft		2		

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Master assy (SP150-00)

Index No.: 0.00

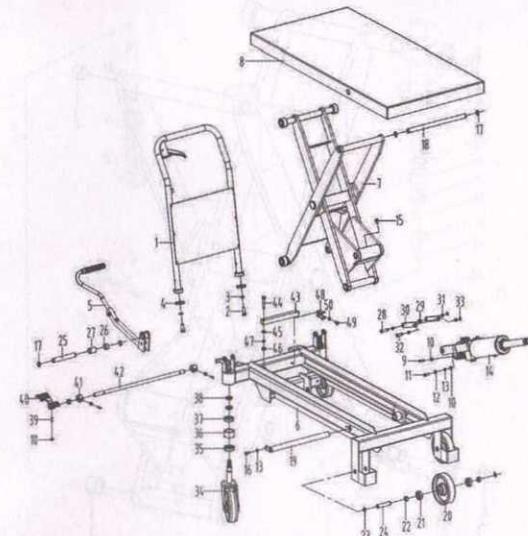


No.	Part No.	Description	Specification	Qty	Remark
25	21701000061	Pin shaft		1	
26	21810000079	Retaining ring		1	
27	21810000081	Retaining ring		1	
28	21703000033	Step shaft		1	
29	21706000007	Pipe shaft		1	
30	21920000585	Connecting plate		2	
31	43100000003	Bearing SF-1-10.06		4	
32	21703000032	Step shaft		1	
33	41305000003	Circlip for shaft A-10.		3	
34	NULL	Caster		2	
35	43008000002	Bearing 30205E		2	
36	21810000054	Bush		2	
37	43001000033	Bearing 6005		2	
38	20103000009	Nut		4	
39	41105000008	Screw M8X20		3	
40	21222000025	Braking pedal		1	
41	21309000005	Braking cam		2	
42	21702000034	Braking connecting rod		1	
43	21705000008	Supporting rod		1	
44	41001000012	Bolt M10X50		1	
45	41301000007	Washer A-10		1	
46	41200000011	Nut M10		1	
47	41300000008	Spring washer 10		1	
48	21006000002	Supporting leg clamp		1	

Date:
2022/5/8

Master assy (SP150-00)

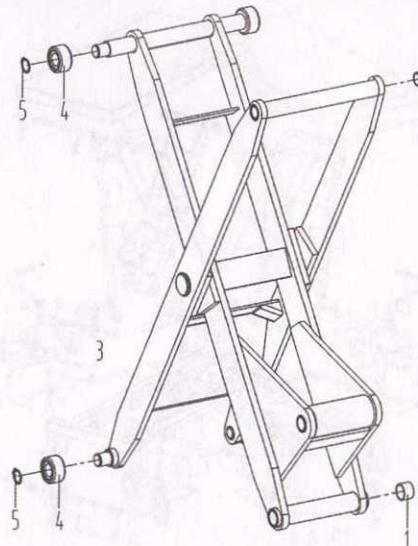
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Scissor assy(SP150.17-00)

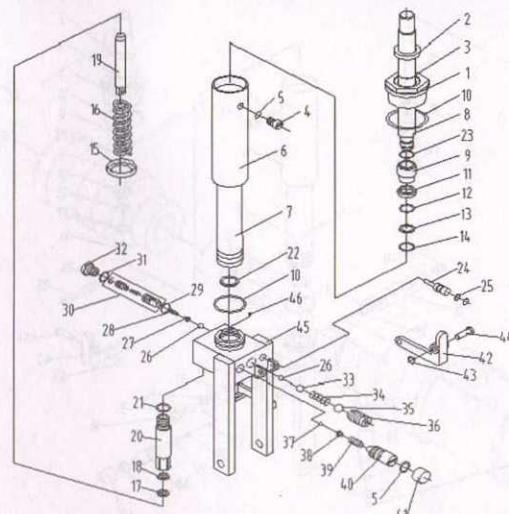
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Pump master assy (492.01.0500.04)

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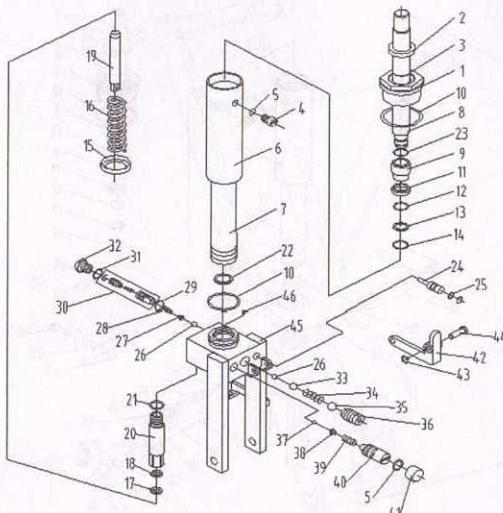


No.	Part No.	Description	Specification	Qty	Remark
1	20307000020	Hood		1	
2	44005000006	Seal ring 32X45X6		1	
3	44006000046	O ring 31.5X3.55		1	
4	20101000020	Screw		1	
5	44006000008	O ring 7.5X2.65		2	
6	20310000015	Outer sleeve		1	
7	20308000295	Cylinder		1	
8	20304000253	Piston rod		1	
9	20309000021	Piston		1	
10	44006000100	O ring 77.5X3.55		2	
11	20519000006	Seal ring		1	
12	44006000128	O ring 41.5X4.6		1	
13	21809000054	Washer		1	
14	41307000004	Circlip for shaft 25		1	
15	20510000001	Spring seat		1	
16	21605000047	Compressed spring		1	
17	44112000004	Dust ring DHS18-26-4.5/6		1	
18	44100000003	Seal ring UHS18-26-5		1	
19	20219000012	Pump core		1	
20	20308000256	Pump cylinder		1	
21	44006000035	O ring 22.4X2.65		1	
22	21809000076	Seal ring		1	
23	44006000033	O ring 20X2.65		1	
24	20218000004	Firing pin		1	

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Pump master assy (492.01.0500.04)

Index No.: 1.00
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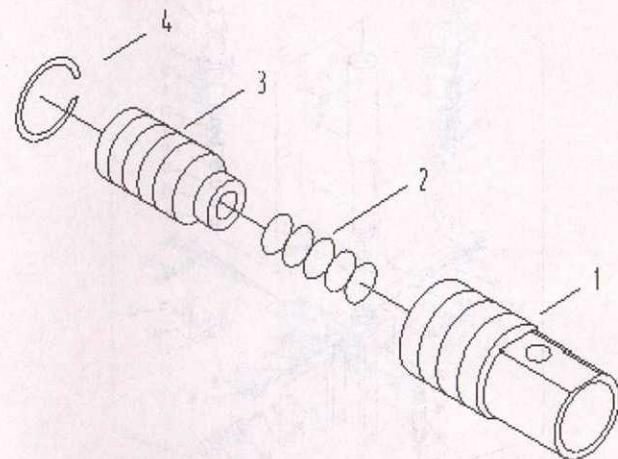


No.	Part No.	Description	Specification	Qty	Remark	
25	4400600006	O ring 6.9X1.8		2		
26	4000200008	Steel ball 1/4		2		
27	2121000007	Damping valve		1		
28	2160500019	Compressed spring		1		
29	44006000126	O ring 10.6X0.8		1		
30	3020900006	Combined sealing washer	Hole φ1.2	1	Y	See 1.01
31	4400700014	Combined sealing washer 20		1		
32	2010400010	Combined sealing washer		1		
33	40002000012	Steel ball 3/8		1		
34	2160500042	Compressed spring		1		
35	40002000015	Steel ball 1/2		1		
36	41105000023	Screw M16X18		1		
37	40002000005	Steel ball 3/16		1		
38	21210000004	Relief valve seat		1		
39	21605000048	Compressed spring		1		
40	20101000033	Relief valve adjusting screw		1		
41	21816000004	Relief valve sleeve		1		
42	21222000009	Unloading lever		1		
43	41305000001	Circlip for shaft A-8		1		
44	21703000016	Step shaft		1		
45	31009000036	Base assy		1		
46	21925000002	Magnetic steel 10X3		1		

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Damping valve assy (506.17.0000.02)

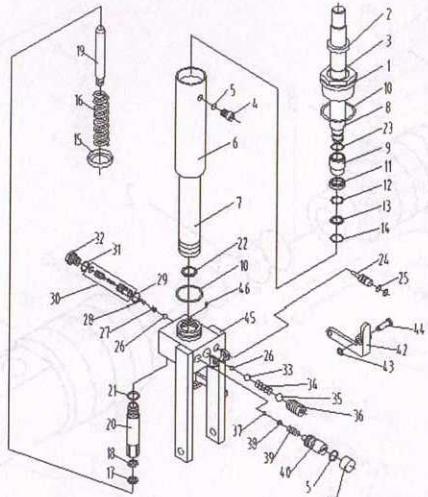
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2022/5/8

Pump master assy (492.01.0500.03)

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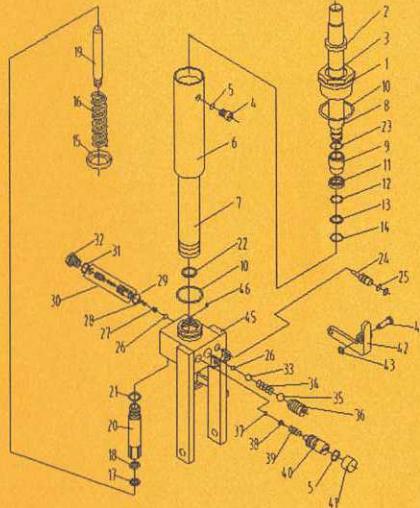


No.	Part No.	Description	Specification	Qty	Remark
1	20307000020	Hood		1	
2	4400500006	Seal ring 32X45X6		1	
3	4400600046	O ring 31.5X3.55		1	
4	20101000020	Screw		1	
5	4400600008	O ring 7.5X2.65		2	
6	20310000015	Outer sleeve		1	
7	20308000294	Cylinder		1	
8	20304000253	Piston rod		1	
9	20309000021	Piston		1	
10	44006000100	O ring 77.5X3.55		2	
11	20519000006	Seal ring		1	
12	44006000128	O ring 41.5X4.6		1	
13	21809000054	Washer		1	
14	41307000004	Circlip for shaft 25		1	
15	20510000001	Spring seat		1	
16	21605000047	Compressed spring		1	
17	44112000004	Dust ring DHS18-26-4.5/6		1	
18	4410000003	Seal ring UHS18-26-5		1	
19	20219000012	Pump core		1	
20	20308000256	Pump cylinder		1	
21	44006000035	O ring 22.4X2.65		1	
22	21809000076	Seal ring		1	
23	44006000033	O ring 20X2.65		1	
24	20218000004	Firing pin		1	

Date:
2022/5/8

Pump master assy (492.01.0500.03)

Index No.: 1.00A
31001000054



No.	Part No.	Description	Specification	Qty	Remark
25	44006000006	O ring 6.9X1.8		2	
26	40002000008	Steel ball 1/4		2	
27	21210000007	Damping valve		1	
28	21605000019	Compressed spring		1	
29	44006000126	O ring 10.6X0.8		1	
30	30209000006	Combined sealing washer	Hole φ1.2	1	Y See 1.01
31	44007000014	Combined sealing washer 20		1	
32	20104000010	Combined sealing washer		1	
33	40002000012	Steel ball 3/8		1	
34	21605000042	Compressed spring		1	
35	40002000015	Steel ball 1/2		1	
36	41105000023	Screw M16X18		1	
37	40002000005	Steel ball 3/16		1	
38	21210000004	Relief valve seat		1	
39	21605000048	Compressed spring		1	
40	20101000033	Relief valve adjusting screw		1	
41	21816000004	Relief valve sleeve		1	
42	21222000009	Unloading lever		1	
43	41305000001	Circlip for shaft A-8		1	
44	21703000016	Step shaft		1	
45	31009000038	Base assy		1	
46	21925000002	Magnetic steel 10X3		1	