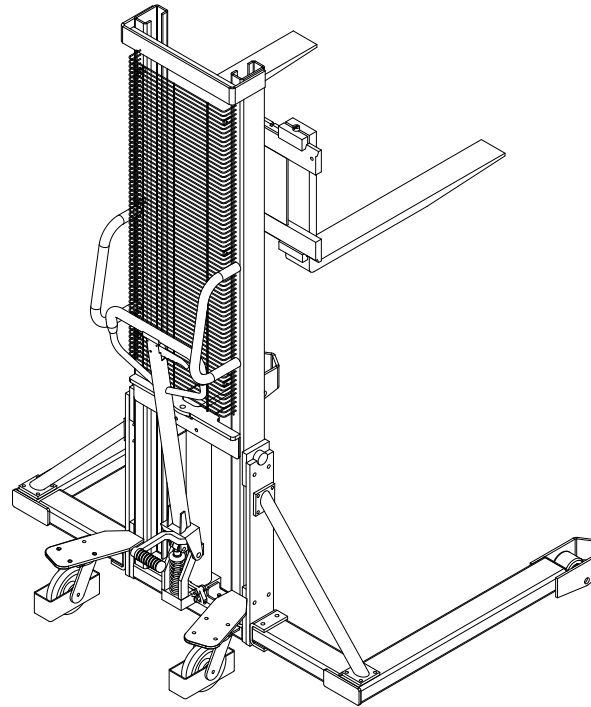


# **SDJAS1000 Manual Hydraulic Stacker**

● **original instruction**

● **operation Manual**



Welcome to select SDJAS1000 manual hydraulic stacker.



Warning!

Pay attention to the following matters before operating this stacker:

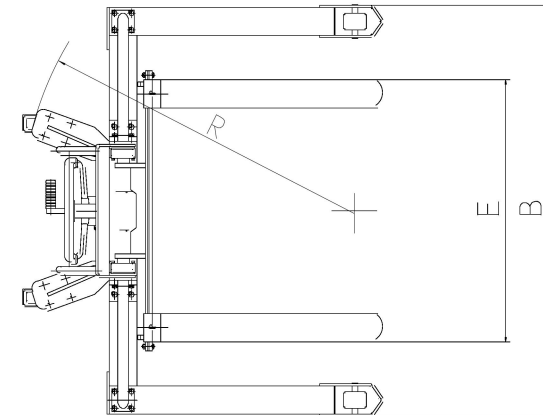
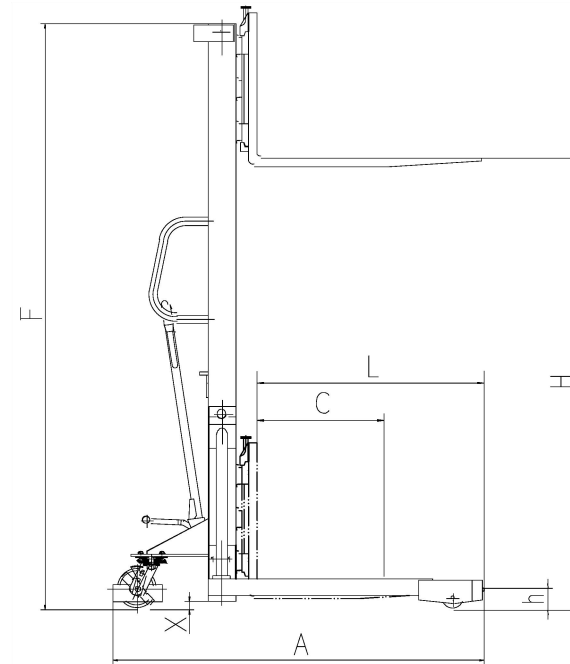
1. SDJAS1000 manual hydraulic stacker can only be operated indoor on level and solid ground and it is strictly prohibited to operate this stacker in a corrosive environment with acid and alkali.
2. Please read this manual carefully and understand the performance of this stacker before operating; Inspection of the stacker should be conducted carefully every time before operation to ensure that the stacker is in normal condition. It is strictly prohibited to operate a stacker with trouble.
3. It is strictly prohibited to operate the stacker when overloaded. The load capacity and the load center should meet the requirements in the parameter table of this manual.
4. When SDJAS1000 stacker is used for piling, the gravity center of the goods must be within the two forks and it is strictly prohibited to pile bulk goods.
5. When it is required to transport the goods for a comparatively long distance, the height of the forks from the ground should not exceed 0.5m.
6. When piling goods, it is strictly prohibited for people to stand under the forks or around the stacker.
7. It is strictly prohibited to stand on the forks for operation.
8. When the goods are on high level, the goods should be pushed forward or pulled backward slowly and no cornering is allowed in such a case.

## I. Applications

SDJAS1000 manual hydraulic stacker is a vehicle used for high lift loading and unloading and short distance transportation. As no sparks and electromagnetic field are generated, the stacker is especially suitable for truck loading and unloading as well as the loading and unloading and transportation of flammable and fire prohibited goods in workshops, warehouses, dock, station and freight yard, etc. The stacker is characterized in smooth lifting, flexible cornering and convenient operation, etc. To ensure safe and reliable operation, the universal wheels are equipped with braking device, which are ideal tool for reducing labor intensity, improving production efficiency and achieving safe loading and unloading.

## II. Key technical parameters :

Model		SDJAS1000	
Rated loading capacity	Q (kg)	1000	1000
Max. lifting height	H (mm)	500	500
Minimum height of the forks	h (mm)	336	370
Length of forks	L (mm)	2050	1840
Load center	C(mm)	1600	2500
Width of fork	E (mm)	2155	3055
Length of the stacker	A (mm)	70	70
Width of the stacker	B (mm)	1300/1560	1300/1560
Height of the stacker	F (mm)	1450	1450
Minimum clearance from ground	X (mm)	30/100/800 (1060)	30/100/800 (1060)
Stage number of door frame		950	950
Lifting speed, full / no load	mm/rime	25	25
Decline speed, full / no load	mm/s	1500/2100	1500/2100
Cornering radius	R(mm)	1542/2158	1542/2158
Front wheel size	(mm)	1235	1235
Back wheel size	(mm)	25	25
Dead weight	(kg)	Controllable	Controllab



### III Structural characteristics

SDJAS1000 manual hydraulic stacker consists of a hydraulic system and a door frame.

The stacker uses a manual hydraulic jack (hydraulic device) as force to lift heavy goods, which are pushed, pulled and handled manually. The hydraulic device is equipped with an oil return valve and the fork decline speed is controlled via a hand lever to make the operation of the hydraulic system correct, safe and reliable. The door frame is welded with high quality section steel such as to good rigidity and high strength. Universal wheels with braking device are adopted as the back wheels, which can rotate freely, easily and flexibly. Both front and back wheels are installed on wheel shafts with ball bearings so as to rotate flexibly. Wear-resistant and durable Nylon wheels are adopted so that it is not easy to damage the operation ground.

When lifting goods, insert the forks under the pallet of the goods, when necessary, brake the back wheels and pull the hand lever. The pinch wheel presses the pump core to make the oil in the pump cylinder flow into the piston cylinder, in order to push the piston rod move upward and lift the forks upward via a chain for a two times travel. Pull the hand lever back and forth so as to lift the goods and achieve the purpose of lifting. When the forks are lifted to the maximum height, the pressurized oil flows back into the oil tank via an oil draining hole and in that case, even the hand lever is pulled, the forks rise no more to avoid damaging components by impacting the top.

When handling heavy goods, the stacker is able to travel via manual pushing (pulling).

When unloading, pull the unloading hand lever, the oil return valve opens and with the effect of the dead weight of the heavy goods and forks, the operational oil in the piston cylinder flows back into the oil tank through the oil return valve, and when the piston rod and the forks decline to the lowest position, the goods are unloaded and the forks are withdrawn.

### Operation conditions

The operation of SDJAS1000 manual hydraulic stacker should meet following conditions:

1. Ambient temperature for operation:  $-25^{\circ}\text{C} \sim +40^{\circ}\text{C}$ .
2. The relative humidity of the environment should be less than 90%RH.
3. The stacker can only operate in an environment without rain and harmful gas erosion.
4. The stacker can only operate indoor on level and solid ground.

### V. Operation and maintenance

1. The oil must be filtered and clean and ensure sufficient oil quantity.
2. Before operation, inspection must be conducted for the stacker to ensure the stacker is in normal condition and there is no loose component.
3. The goods should be smoothly distributed on the forks and no overload is allowed.

4. After the operation is completed, the heavy goods should be unloaded and the heavy good are not allowed to be on the forks for a long time.
5. When lowering goods, the hand lever of the oil return valve should be operated slowly and gently to avoid sudden declination during quick declination process which causes unsafe situation. When lowering the goods quickly, the oil return valve must not be closed suddenly as inertial acceleration is generated during the process of quick declination. If that, a great force will be generated to damage the components and goods.
6. Raise and pull outward the front part of the panel by hands, take off the panel and then the stacker can be used as pallet transporting cart or pallet stacker.
7. The brakes on back wheels are installed for the purpose of safety in operation process. When the forks are rising for lifting goods or is used as an operation platform, the brakes should be stepped down with foot to prevent the stacker from moving.

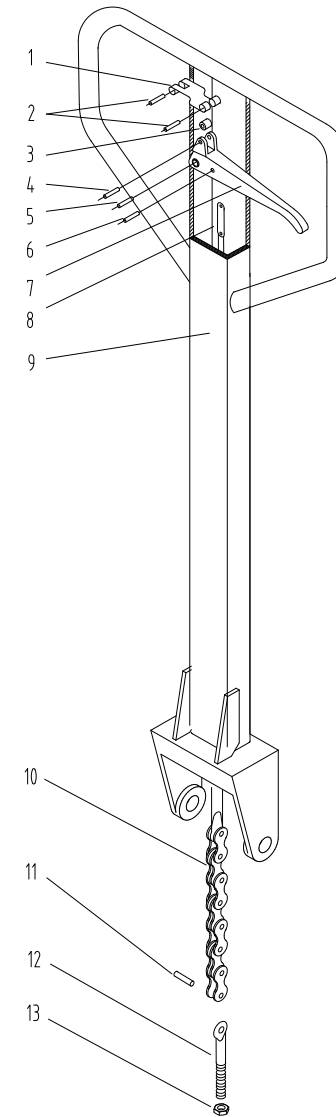
## VI. Possible failures in operation and trouble shooting

Number	Failure	Cause analysis	Trouble shooting
1	The lifting height cannot meet the design requirement	Insufficient operation oil	To fill oil into the oil cylinder, turn out the bolt, fill in filtered and clean operation oil to the oil inlet height and then tighten the bolt.
2	When the hand lever is pulled, the forks do not rise.	1. The viscosity of the operation oil is too great or no operation oil has been filled in	Replace or fill in operation oil according to the oil quantity regulated.
		2. There is foreign matter in operation oil, which makes the oil inlet valve cannot be tightly closed.	Filter out the foreign matter or replace operation oil according to the stipulation.
		3. The oil draining valve, unloading hand lever and tension spring do not work, are not at the lowest position or stuck by other foreign mater.	Examine the tension spring to see if it is correct, adjust the unloading hand lever to the lowest close position and remove foreign mater.
		4. The positions of the oil draining valve and unloading hand lever have not been correctly adjusted.	Readjust the unloading tension bar nut position.
3	After being raised, the forks do not decline	<ol style="list-style-type: none"> <li>1. The unloading hand lever is not correctly adjusted.</li> <li>2. Too great piston load deviation so permanent deformation occurs.</li> <li>3. The fork frame, roller or chain wheel is stuck</li> </ol>	Adjust as described above, disassemble for maintenance or replace the piston rod, disassemble for maintenance or replace bearing
4	Oil leakage	<ol style="list-style-type: none"> <li>1. Damaged or failed seal washer</li> <li>2. There is slight crack or through hole in individual component</li> <li>3. Loose thread connection or non-tightly pressed sealing ring</li> </ol>	Replace with new sealing washer, repair or replace new components, repair and tighten

## VII. Explosion diagram

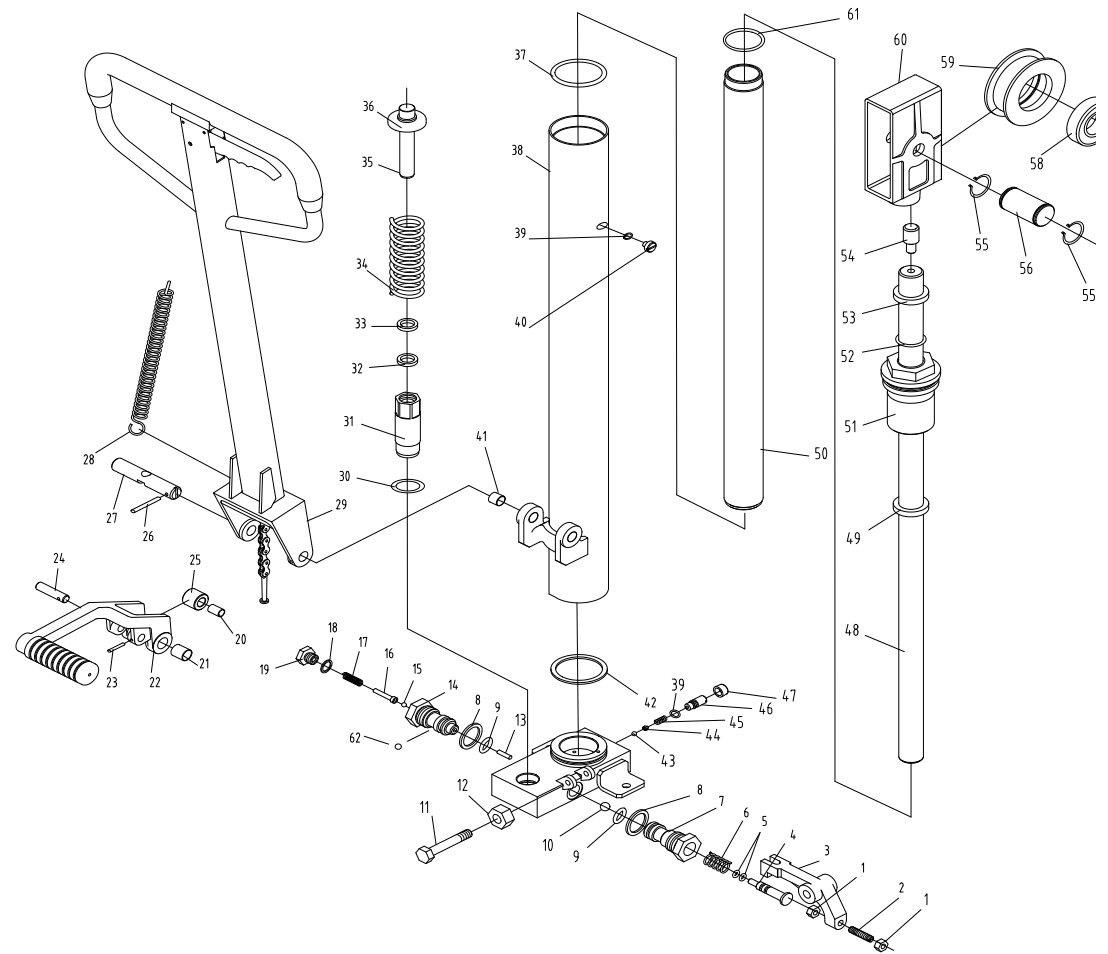
### 1. Hand lever

No.	Description	Stock code	Qty.
1	Locating tab		1
2	Elastic pin $\text{Ø}4 \times 32$	0908500015	2
3	Roller	0904010006	1
4	Elastic pin $\text{Ø}4 \times 20$	0908500012	1
5	Elastic pin $\text{Ø}6 \times 32$	0908500040	1
6	Elastic pin $\text{Ø}4 \times 20$	0908500012	1
7	Knob	0909170002	1
8	Tension bar		1
9	Handle	1133600002	1
10	Chain		1
11	Pin		1
12	Eyelet bolt	0908140004	1
13	Lock nut	0908010004	1



## 2. Jack:

No.	Description	Stock code	Qty
1	Hex nut M6	0908030012	2
2	Screw M6×25	0908170014	1
3	Lever plate	0860010007	1
4	Striker	090109007	1
5	O ring Ø4.87×1.8	0902050003	2
6	Striker spring	0903040003	1
7	Striker valve seat	0901100003	1
8	Combined washer Ø20	0902010009	2
9	O ring Ø12.5×2.65	0902050028	2
10	Steel ball Ø8	0907010014	1
11	Bolt M8×50	0908420039	1
12	NutM8	0908030013	1
13	Pin Ø3×15.7	0908470003	1
14	Valve seat 1000	0901110007	1
15	Steel ball Ø5	0907010010	1
16	Pin	0901150010	1
17	Valve seat spring	0903080002	1
18	Combined washer Ø10	0902010004	1
19	Bolt	0901120036	1
20	Combined bushing 1220	0907040011	1
21	Combined bushing 2017	0907040023	2
22	Compressed frame	0860010014	1
23	Elastic pin Ø4×25	0908500014	1



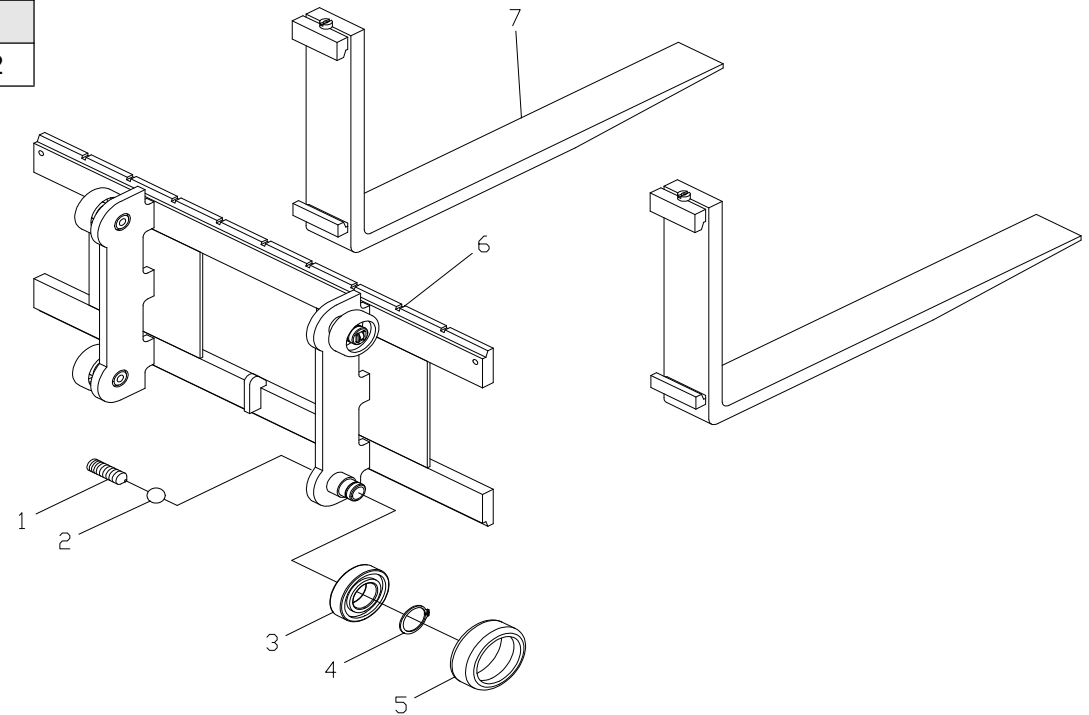
No.	Description	Stock code	Qty
24	Axle with a hole	0906140005	1
25	Pinch roller	0909120016	1
26	Elastic pin Ø5×35	0908500017	1
27	Compressed frame bearing pin	0906170003	1
28	Tension spring	0903110001	1
29	Hand lever		1
30	O ring Ø22.4×2.65	0902050046	1
31	Pump cylinder Ø16	0901020022	1
32	Seal ring Ø16	0902030004	1
33	Dust proof ring Ø16	0902040006	1
34	Large spring	0903130009	1
35	Pump core Ø16	0901030020	1
36	Large spring seat	0909060002	1
37	O ring Ø65×3.55	0902050108	1
38	Cylinder		1
39	O ring Ø7.5×2.65	0902050011	2
40	Oil plug		1
41	Combined bushing 2012	0907040029	2
42	Rectangular seal ring	0902070004	1
43	Steel ball Ø6.5	0907010012	1
44	Safety valve seat	0901110020	1
45	Safety valve spring	0903130005	1
46	Safety valve adjusting screw	0901120010	1

No.	Description	Stock code	Qty
47	Safety valve boot	0901150012	1
48	Piston rod	0901010081	1
49	Seal ring Ø31.5	0902030021	1
50	Oil cylinder	1113600006	1
51	Top cap	1109600001	1
52	O ring Ø31.5×3.55	0902050059	1
53	Dust-proof ring Ø31.5	0902040018	1
54	Bolt M12×25	0908240097	1
55	Axial elastic backing ring Ø35	0908320029	2
56	Chain wheel shaft	0906170601	1
57	Elastic backing ring for holes Ø72	0908310029	1
58	Bearing 60207	0907020045	1
59	Chain wheel	0909120031	1
60	Chain wheel cover	31050502025	1
61	O ring Ø47.5×3.55	0908240097	1
62	Steel ball Ø4	0907010007	1



### 3. Fork frame assembly :

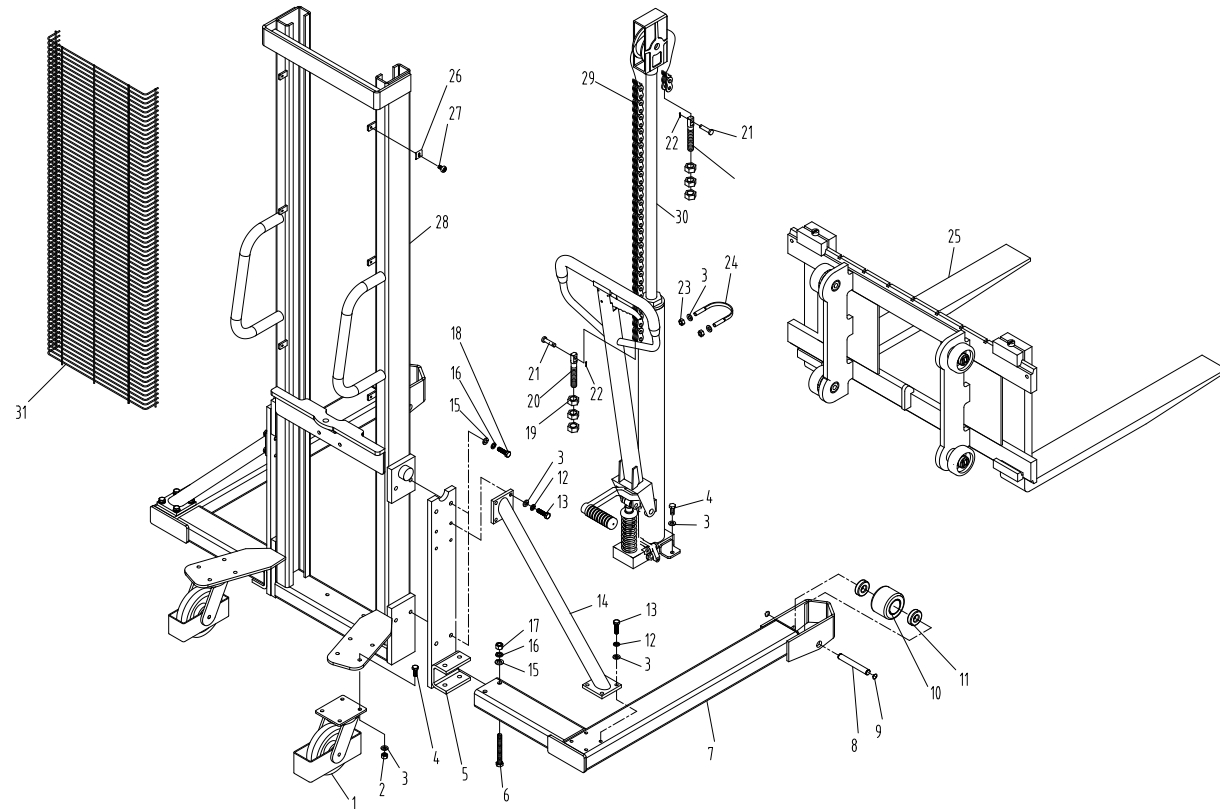
No.	Description	Stock code	Qty
1	Locking screw M16×50	0908220014	4
2	Steel ball Ø19	0907010026	4
3	Bearing 60207	0907020045	4
4	Axial elastic backing ring Ø35	0908320029	4
5	Large pulley	0909120008	4
6	Fork frame		1
7	Forks		2



#### 4. Final assembly:

No.	Description	Stock code	Qty
1	Universal wheel	201903001	2
2	Hex nut M10	0908030015	10
3	Washer Ø10	0908350016	32
4	Hex bolt M10×25	0908420050	10
5	Supporting plate		2
6	Hex bolt M12×25	0908420093	4
7	Wheel fork		2
8	Front wheel pin	0906200004	2
9	Axial elastic backing ring Ø20	0908320018	4
10	Front wheel	0905010013	2
11	Bearing 60204	0907020038	4
12	Spring washer Ø10	0908370014	16
13	Hex bolt M10×30 (8.8)	0908420051	16
14	Support bar		2
15	Washer Ø12	0908350022	16
16	Spring washer Ø12	0908370015	12
17	Nut M12	0908010010	4
18	Hex bolt M12×35 (8.8)	0908420187	8
19	Hex nut M16	0908030021	6
20	Screw rod	0909190009	2
21	Chan box	061405085	2
22	Split pin Ø3×20	0908490012	2
23	Lock0nutM10	0908010009	2
24	Screen-cover	0909190002	1
25	Fork frame assembly		1

No.	Description	Stock code	Qty
26	Oil cylinder jacket		6
27	Hexagon socket head cap screws M6×16	0908240024	6
28	Frame		1
29	Chain	061405017	1
30	Lofting jack	201815001	1
31	Fixed handle	120603002	1



### Packing list

### SDJAS1000 Manual Hydraulic Stacker

Consignee:

Ex-factory number:

Contract number:

Ex-factory date:

序号	Name	Quantity	Net weight (kg)	Overall dimension (L×W×H)	Remark
1	SDJAS1000 manual hydraulic stacker	1	255	1600×1470×2090	The whole unit
2	SDJAS1000 operation manual	1			
3	Quality certificate	1			
4	Packing list	1			
6	Combined washer Φ20	2			Jack
7	O seal ring Φ47.5×3.55	1			
8	O seal ringΦ65×3.55	1			
9	UHS seal ringΦ16	1			
10	UHS seal ringΦ31.5	1			
11	DHS dust-proof ring Φ16	1			
12	DHS dust-proof ring Φ31.5	1			