

CE

HAND PALLET STACKER OPERATION INSTRUCTIONS



Carefully read the instructions and obey all kinds of warning labels before operation.
Please confirm that the vehicle is safe without damage.

SYG Series Manual Hydraulic Stacker Instruction Manual

WARNING:

Our warranty will turn invalid automatically if this operating manual is violated. And this is also applied to the illegally export products without the manufacturer's authorization. If the client or any other operates this stacker illegally without the permission of our Customer Service Department, our company will not take the responsibility for any loss.

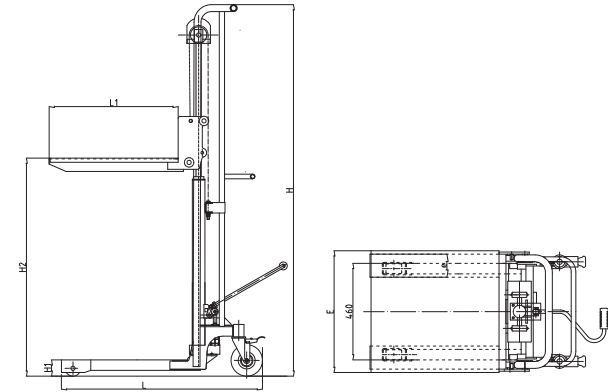
NOTICE: For the need of further improvement to the product, the manufacture reserves the right of making changes to the design or specifications without notice.

Welcome to use the latest SYG manual hydraulic palletizer produced by our company. This series of vehicles are: SYG-Q (light), SYG-I (channel steel), SYG-II (C steel). This series of car models are welded with profiled steel, which has the advantages of good steel, high strength, durability, simple operation and so on. For your safety and correct operation, please read the instructions and warning labels carefully before using them.

1. Use

SYG Manual Hydraulic Stacker Truck is a dual-purpose vehicle with high lift, loading and unloading and short distance transportation. It is especially suitable for loading and unloading of automobiles and cargo in workshops, warehouses, wharfs, stations and freight yards. It is strictly forbidden to load, unload and transport inflammable, explosive and dangerous goods. The product has the advantages of lifting balance, flexible rotation, convenient operation, safety and reliability. It is an ideal tool for reducing fatigue strength, improving production efficiency and realizing safe handling.

2、Technical parameter

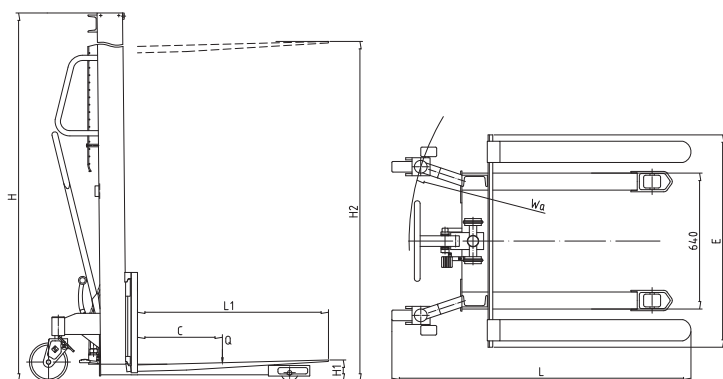


SYG-Q

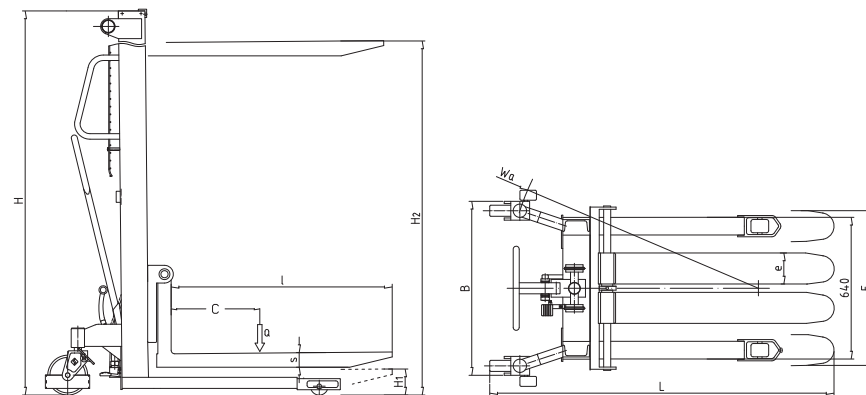
Main parameter

Base	Model		SYG-Q 0411	SYG-Q 0413	SYG-Q 0415
	Capacity	Q(Kg)	400	400	400
	Load center	C(mm)	350	350	350
	Type of lifting		Foot	Foot	Foot
	Operating type		Walkie	Walkie	Walkie
Wheel	Material		PU/Nylon	PU/Nylon	PU/Nylon
	Quantity of Steering/Bearing Wheel		2/2	2/2	2/2
	Wheel base	mm	789	789	789
	Bearing wheel size	mm	Φ75×42	Φ75×42	Φ75×42
	Steering wheel size	mm	Φ150×38	Φ150×38	Φ150×38
Dimensions	Min.fork height	H ₁ (mm)	90	90	90
	Max.fork height	H ₂ (mm)	1100	1300	1500
	Fork outside width	mm	550	550	550
	Fork inside width	mm	310	310	310
	Fork length	L ₁ (mm)	615	615	615
	Single fork size	e/s(mm)	120/60	120/60	120/60
	Overall length	L(mm)	1000	1000	1000
	Overall width	E(mm)	610	610	610
	Overall height	H(mm)	1370	1570	1770
	Min.ground clearance	mm	30	30	30
	Min.turning radius	Wa(mm)	1022	1022	1022
Performance	Max. pump pressure(laden)	times	≤35	≤42	≤48
	Lowering speed(laden/unladen)	mm/s	Foot control	Foot control	Foot control
Weight	Net weight	Kg	94	100	105

* The company reserves the right to change product design and specifications without prior notice.



SYG-I



SYG-II

Main parameter

Base	Model		SYG-I 0516	SYG-I 1016	SYG-I 1516	SYG-I 2016
	Capacity	Q(Kg)	500	1000	1500	2000
	Load center	C(mm)	400	400	400	400
	Type of lifting		Manual/Foot	Manual/Foot	Manual/Foot	Manual/Foot
	Operating type		Walkie	Walkie	Walkie	Walkie
Wheel	Material		Nylon	Nylon	Nylon	Nylon
	Quantity of Steering/Bearing Wheel		2/2	2/2	2/2	2/2
	Wheel base	mm	1140	1140	1140	1140
	Bearing wheel size	mm	Φ75×42	Φ80×60	Φ80×60	Φ80×60
	Steering wheel size	mm	Φ180×50	Φ180×50	Φ180×50	Φ180×50
Dimensions	Min.fork height	H ₁ (mm)	90	90	90	90
	Max.fork height	H ₂ (mm)	1600	1600	1600	1600
	Fork outside width	mm	220-720	200-940	200-940	240-940
	Fork inside width	mm	20-520	0-740	0-740	0-700
	Fork length	L ₁ (mm)	800(Covered fork)	900(Forged fork)	900(Forged fork)	900(Forged fork)
	Single fork size	e/s(mm)	100/48	100/30	100/30	120/30
	Overall length	L(mm)	1284	1375	1430	1430
	Overall width	E(mm)	820	1000	1000	1000
	Overall height	H(mm)	1985	1985	2085	2085
	Min.ground clearance	mm	30	30	30	30
	Min.turning radius	Wa(mm)	1250	1400	1400	1400
Performance	Max. pump pressure(laden)	times	≤76	≤76	≤110	≤110
	Lowering speed(laden/unladen)	mm/s	Foot control	Foot control	Foot control	Foot control
Weight	Net weight	Kg	190	220	250	275

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Main parameter

Base	Model		SYG-II 2016	SYG-II 1020	SYG-II 1025
	Capacity	Q(Kg)	2000	1000	1000
	Load center	C(mm)	400	400	400
	Type of lifting		Manual/Foot	Manual/Foot	Manual/Foot
	Operating type		Walkie	Walkie	Walkie
Wheel	Material		Nylon	Nylon	Nylon
	Quantity of Steering/Bearing Wheel		2/2	2/2	2/2
	Wheel base	mm	1140	1140	1140
	Bearing wheel size	mm	Φ80×60	Φ80×60	Φ80×60
	Steering wheel size	mm	Φ180×50	Φ180×50	Φ180×50
Dimensions	Min.fork height	H ₁ (mm)	90	90	90
	Max.fork height	H ₂ (mm)	1600	2000	2500
	Fork outside width	E(mm)	340-710	320-710	320-710
	Fork inside width	mm	20-390	20-410	20-410
	Fork length	l(mm)	1000(Covered fork)	1000(Covered fork)	1000(Covered fork)
	Single fork size	e/s(mm)	160/60	150/60	150/60
	Overall length	L(mm)	1525	1525	1525
	Overall width	B(mm)	790	790	790
	Overall height	H(mm)	2090	1580	1830
	Overall height after lifting	mm	2090	2600	3050
	Min.turning radius	Wa(mm)	1400	1400	1400
Performance	Max. pump pressure	times	≤110	≤95	≤120
	Lowering speed(laden/unladen)	mm/s	Foot control	Foot control	Foot control
Weight	Net weight	Kg	275	280	300

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3、Structural Principle

SYG manual hydraulic stacker consists of lifting cylinder and control parts, lifting arm and sprocket parts, portal frame and rear wheel parts. It consists of three parts.

The vehicle lifts heavy objects with manual or pedal hydraulic devices. Manpower pulls low to move heavy objects. Hydraulic device set back Oil valve. The descending speed of the fork is controlled by the pedal, and the hydraulic system is operated correctly and safely. The doorpost has a back elevation of 0.65 degrees and the fork arm has an upward tilting foot, which is beneficial to the smooth operation under heavy load. The rear wheel uses universal wheel with brake device, which can rotate freely, rotate easily and flexibly. The front and rear wheels are installed on the axle with ball bearings, and rotate flexibly. The wheel is made of nylon wheel or polyurethane material. Wear-resistant, durable, and not easy to damage the working surface.

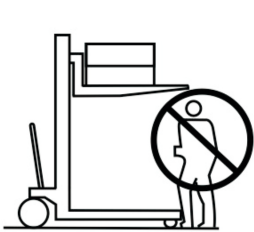
Working process:

When lifting heavy objects, insert the fork under the heavy objects, pay special attention to the load center, strictly prohibit eccentric loading, if necessary.

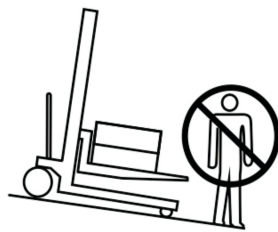
The rear wheel can be braked and the handle can be pulled. The pressure wheel drives the compression cylinder to work, so that the oil in the pump cylinder enters the lower part of the piston cylinder, and promotes the lifting piston rod assembly to move up one stroke. The cargo fork rack and the fork arm are lifted up twice by the chain. Reciprocating the handle can lift the weight and achieve the purpose of lifting. When unloading, the pedal is pressed and the return valve is opened. Under the action of the weight of the heavy object and the fork, the working oil in the piston cylinder is returned to the tank through the return valve. When the lifting piston rod assembly and the fork arm fall to the predetermined position, the heavy object is unloaded and the fork arm is pulled out, so as to achieve the effect of lifting and transportation.

4、Safety guidance

Do not use this car without training or authorization. Before using this car, please check it. Pay special attention to the condition of wheels, handles, rollers, doorframes, chains and other parts.



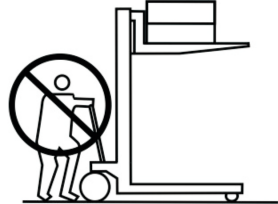
No standing under the stacker when upgrading



No standing at the head of the stacker when working on a slope



No standing on the fork



No using the handle pull or push with the weights at a high position when upgrading

5、Load characteristics

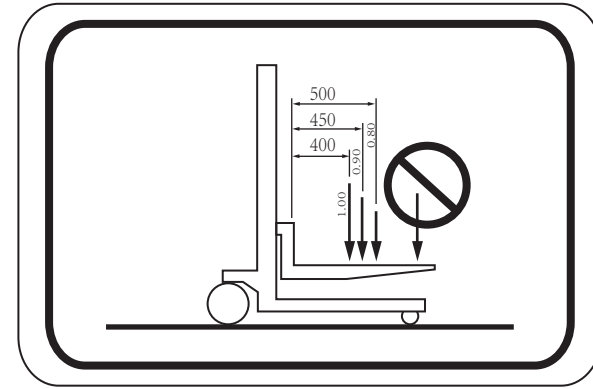


Figure 3

6、Use and Maintenance

- 1) The usage of SYG manual hydraulic palletizer is in a bad condition of - 15 - 40 C.
- 2) The oil must be filtered and kept in sufficient quantity. The total oil quantity is about 3.0 liters. The brand name is L-HM32-46.
- 3) Before use, it is necessary to check whether the structures are normal and the connecting parts are loose. Four lateral positioning steel balls should be adjusted to prevent the cargo fork rack and portal rack from being jammed by eccentric load.
- 4) The forklift truck is designed for use on horizontal hard ground. The cargo should be stacked evenly on the fork according to the load characteristic curve. The length of the cargo should not exceed 1000mm, the width of the cargo should not exceed 800mm, and the load center should not exceed 400mm. It is strictly forbidden to overload the overlength and overload.
- 5) Cargo should be carried out slowly, the height of the fork arm should not be greater than 300 mm, and the distance should be as short as possible.
- 6) After the operation, the cargo should be unloaded and the heavy objects should not be parked on the fork arm for a long time.
- 7) When the goods drop, the oil discharge pedal should be trampled slowly and gently to prevent the sudden drop of goods caused by too fast and unsafe phenomena.
- 8) When the goods drop rapidly, the return valve should not be closed suddenly. Because the inertial acceleration occurs when the rapid descent occurs, such as the sudden closure of the return valve will produce a strong force, damage the parts and cargo.
- 9) Because of handling or other reasons, the air may enter the hydraulic oil, causing the handle operation failure, fork arm can not rise, at this time, air should be discharged, step down the discharging pedal, up and down swing the handle assembly several times, so that the air in the hydraulic oil can be removed.
- 10) Stacking operation: Keep the fork below 300 mm, and carry the goods to the shelf. The head of the fork should not exceed 100 mm from the shelf. Lift the goods to a suitable height. Stack the goods smoothly in the stacking place. Separate the fork from the goods, withdraw the fork and drop the goods below 300 mm.
- 11) Stackers are not allowed to stand within the operating radius of the stacking truck.
- 12) General troubleshooting is shown in Table 5.

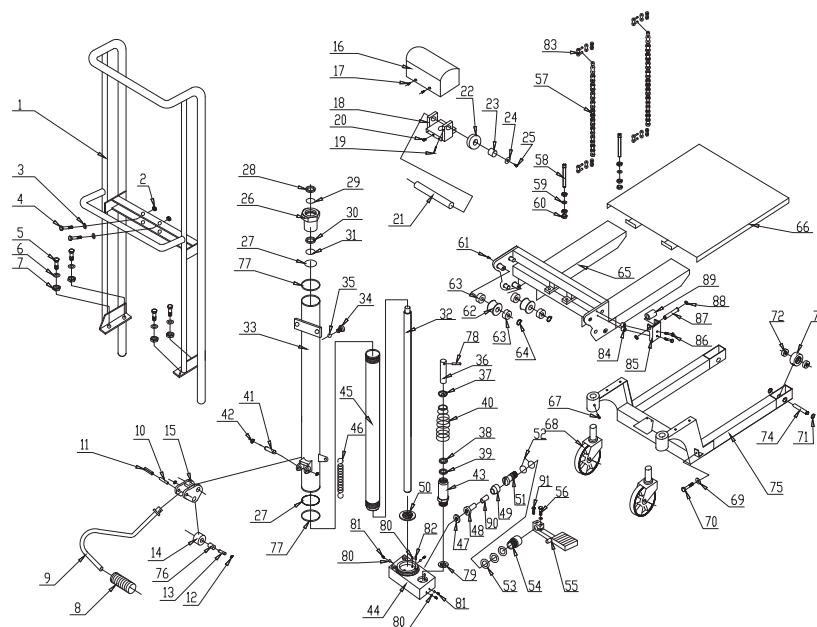
7、General Fault Handling

table 5

Accident	Analysis on Causes	Method of disposal
① Lifting height can not meet the design requirements	Insufficient working oil	Open the cylinder filling bolt or plug.Inject filtered working oil, amount of oil Add oil hole height and re-screw the screw Bolt.
② Pull the handle and fork arm not to rise	1、 Working Oil Viscosity Excessive or Not Injected	Change the working oil or inject the working oil according to the prescribed amount of oil.
	2、 Impurities in working oil make the intake valve not closed tightly	Remove impurities or replace working oil
	3、 Oil drainage, pedals and springs do not work; they are not in the highest closing position or other impurities are stuck.	Check the tension spring, loosen the pedal connection clamping bolt, adjust repeatedly, after normal, tighten the clamping bolt, install the tension spring.
	4、 The position of discharging pedal and discharging valve stem has not been adjusted properly.	Release the spring, release the pedal connection clamping bolt, adjust repeatedly, after normal, tighten the clamping bolt, install the spring.
③ The fork arm does not descend after rising	1. Oil discharge pedal is not adjusted properly. 2. The piston deforms permanently when the eccentric load is too large. 3. Fork rack, rollers and sprockets jammed	Adjust, disassemble, repair or replace the piston rod, disassemble, repair or replace the bearing according to the above methods
④ Oil seepage or leakage	1. Damage or failure of gasket 2. There are slight cracks or perforations in individual parts. 3. The threaded joints have been loosened or the gaskets have not been tightened.	Replacement of new sealing rings and overhaul. Replace new parts and tighten them.

NOTE: Please do not attempt to repair the stacker without special training.

8、Parts and Bill of Material



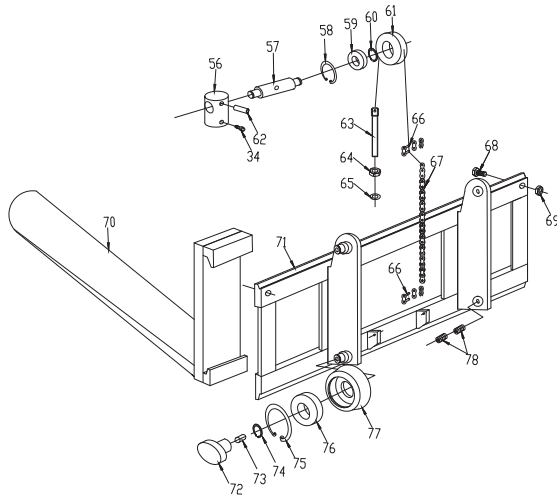
SYG-Q(List 1)

NO	Name	QTY	NO	Name	QTY	NO	Name	QTY
1	frame assembly (see list 2)		32	Lifting rod (see list 2)		62	Roller Φ45×20	4
2	Nut M10	8	33	Cylinder (see list 2)		63	Roller gasket Φ32×5	4
3	Flat pad Φ10	12	34	Fuel hole screw Φ12×10	1	64	Cross Flat Base Bolts M8×55	4
4	Outer hexagonal bolt M10×30	2	35	O-ring d5×2.65	1	65	Lifting frame (Assembly)	1
5	Outer hexagonal bolt M10×35	4	36	Compression rod Φ16×117	1	66	Bedplate 610×580×20	1
6	Flat pad Φ10	4	37	Spring cap Φ35×8	1	67	Inner hexagonal bolt M6×10	2
7	Nut M10	4	38	Dustproof ring DH16×24×4.5/6	1	68	Universal Rear Wheel Assembly Φ150×38	2
8	Rubber pedal sleeve Φ38×98	1	39	Y-ring Φ16×22×8	1	69	Flat pad Φ8	2
9	Pedal pole Φ16×540	1	40	Conical spring D40×d5×156	1	70	Outer hexagonal bolt M8×30	2
10	Cylindrical pin Φ5×40	1	41	Cylinder Ear Pin Shaft Φ12×67	1	71	Shaft ring Φ20	4
11	Elastic pin Φ8×40	1	42	Circlip Φ9	2	72	Bearing 6204	4
12	Circlip Φ9	2	43	Compression cylinder Φ34×Φ16×100	1	73	front wheel Φ75×42	2
13	Press Wheel Shaft Φ12×47	1	44	Oil valve plate 145×80×50	1	74	Front axle Φ20×68	2
14	Pressing wheel Φ30×20	1	45	Lift cylinder (see list 2)		75	Rack base (Assembly weldment)	1
15	Tread lever (Steel castings)	1	46	Drag spring D18×135	1	76	bushing Φ14×12×20	1
16	Chain cover 224×120×110	1	47	Sealing gasket d18×12.4×2.5	1	77	J-ring d55×64×3/6	2
17	Screwdriver bolt M6×15	4	48	Valve group Φ17.7×42	1	78	Cylindrical pin Φ5×30	1
18	Sprocket seat (Assembly weldment)	1	49	Sucker Φ22×16	1	79	Compression Cylinder Filter Pad Φ28×4.5	1
19	Elastic pin Φ4×40	1	50	Cylinder Bottom Pad Φ36×4.2	1	80	steel ball SΦ6	6
20	Internal hexagonal bolt M8×20	1	51	Stem Φ19.2×65	1	81	Internal hexagonal top screw M8×10	4
21	Sprocket shaft Φ20×185	1	52	O-ring d12.5×2.65	2	82	Oil intake nozzle Φ6×10	1
22	Sprocket wheel Φ79×25	2	53	Copper cushion Φ25×Φ32×1.5	1	83	Chain buckle 10A	4
23	bushing Φ20×20	2	53	Copper cushion Φ25×Φ32×0.5	2	84	Cushion Cover Φ14×8×6	4
24	Gasket self-made Φ32×5	2	54	Sealing nut Φ32×39	1	85	Lifting fixing block 80×50×30×5	2
25	Inner hexagonal bolt M6×10	2	55	Oil discharge pedal (Steel castings)	1	86	Outer hexagonal bolt M8×25	4
26	Cylinder nut Φ60×75	1	56	Outer hexagonal bolt M8×30	1	87	Lifting roller axle Φ12×57	2
27	O-ring d48.7×3.55	2	57	chain see list 2		88	Shaft ring Φ12	4
28	Dustproof ring d25×33×4.5/6	1	58	Connecting bolt Φ16×M10×105	4	89	Fixed block roller Φ20×39	2
29	O-ring d24.7×3.55	1	59	Spring washer Φ10	2	90	Inner hexagonal bolt M6×10	1
30	Y-ring Φ25×35×6	1	60	Self-locking nut M8	4			
31	O-ring d33.5×3.55	1	61	Roller bushing Φ18×16×15	4			

SYG-Q (List 2)

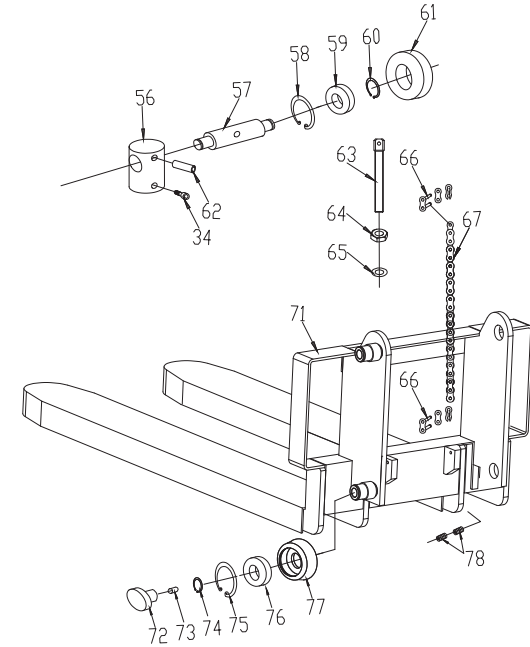
NO	Name	SPEC	QTY	NO	Name	SPEC	QTY	NO	Name	SPEC	QTY
1	frame assembly	4085	1	32D	Lift rod 4015	Φ25×865	1	45B	Lift cylinder 4011	Φ36×4.5×575	1
1A	frame assembly	4010	1	32E	Lift rod 4017	Φ25×965	1	45C	Lift cylinder 4013	Φ36×4.5×675	1
1B	frame assembly	4011	1	33	Cylinder 4085	Φ60×4×515	1	45D	Lift cylinder 4015	Φ36×4.5×775	1
1C	frame assembly	4013	1	33A	Cylinder 4010	Φ60×4×590	1	45E	Lift cylinder 4017	Φ36×4.5×875	1
1D	frame assembly	4015	1	33B	Cylinder 4011	Φ60×4×590	1	57	Chain 4085	10A-44	2
1E	frame assembly	4017	1	33C	Cylinder 4013	Φ60×4×690	1	57A	Chain 4010	10A-48	2
32	Lift rod 4085	Φ25×565	1	33D	Cylinder 4015	Φ60×4×790	1	57B	Chain 4011	10A-52	2
32A	Lift rod 4010	Φ25×640	1	33E	Cylinder 4017	Φ60×4×890	1	57C	Chain 4013	10A-64	2
32B	Lift rod 4011	Φ25×665	1	45	Lift cylinder 4085	Φ36×4.5×500	1	57D	Chain 4015	10A-74	2
32C	Lift rod 4013	Φ25×765	1	45A	Lift cylinder 4010	Φ36×4.5×575	1	57E	Chain 4017	10A-82	2

SYG-Lifting rack, fork (forged)



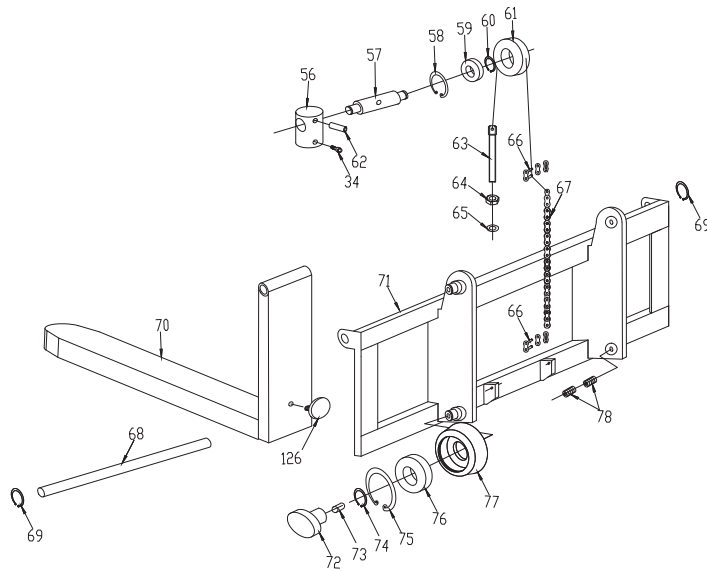
NO	NAME	SPEC	QTY	NO	NAME	SPEC	QTY	NO	NAME	SPEC	QTY
34	Inner hexagonal bolt	M8×16	1	63	Connecting bolt 2T	Φ25×160	2	69	Nut Universal	M10	2
56	Lift rod joint 1.5/2T	Φ55×95	1	63	Connection bolt 1.5T	Φ20×160	2	70	Fork 2T	120×900	2
56	Lift rod joint 0.5/1T	Φ50×90	1	63	Connection bolt 0.5/1T	Φ16×160	2	70	Forging fork 1.5T	100×900	2
57	Sprocket Shaft 2T	Φ35×208	1	64	Nut 2T	M20×1.5	6	70	Fork 1T	100×900	2
57	Sprocket Shaft 1.5T	Φ35×202	1	64	Nut 1.5T	M16×1.5	6	71	Forging Lift 2T	490×140×1000	1
57	Sprocket Shaft 0.5/1T	Φ35×201	1	64	Nut 0.5/1T	M14×1.5	6	71	Forging Lift 1.5T	490×140×1000	1
58	Hole retaining ring 2T	Φ72	2	65	Gasket 2T	Φ20	4	71	Forging Lift 1T	330×120×1000	1
58	Hole retaining ring 1.5T	Φ52	2	65	Gasket 1.5T	Φ16	4	72	Nylon adjusting pad for general use	Φ50×22	4
58	Hole retaining ring 0.5/1T	Φ47	2	65	Gasket 0.5/1T	Φ14	4	73	General purpose of adjusting iron block	Φ10×12	4
59	Bearing 2T	6306	2	66	Chain lock 2T	16A	4				
59	Bearing 1.5T	6205	2	66	Chain lock 1.5T	12A	4	74	Axis retaining ring 1.5/2T	Φ35	4
59	Bearing 0.5/1T	6204	2	66	Chain lock 0.5/1T	10A	4	74	Shaft retaining ring 0.5/1T	Φ30	4
60	Axle retainer 2T	Φ30	2	67	Chain 1016	10A-68L	2	75	Hole retaining ring 1.5/2T	Φ80	4
60	Axis retaining ring 1.5T	Φ25	2	67	Chain 1020	12A-78L	2	75	Hole retaining ring 0.5/1T	Φ62	4
60	Shaft retaining ring 0.5/1T	Φ20	2	67	Chain 1025	12A-94L	2	76	Bearing 1.5/2T	6307	4
61	Sprocket 2T	Φ100×36	2	67	Chain 1516	12A-59L	2	76	Bearing 0.5/1T	6206	4
61	Sprocket 1.5T	Φ90×33	2	67	Chain 1520	12A-82L	2	77	Roller 1.5/2T	Φ104.5×Φ70×42	4
61	Sprocket 0.5/1T	Φ80×32	2	67	Chain 1525	12A-94L	2	77	Roller 0.5/1T	Φ82×Φ48×36	4
62	General purpose of elastic cylindrical pin	Φ8×50	1	67	Chain 2016	16A-44L	2	78	Internal hexagonal fastening bolt	Flat end M12×20	4
				68	General purpose of outer hexagonal screw	M10×35	2	78	Internal hexagonal fastening bolt	sophisticated M12×20	4

SYG-Lift frame, fork (fixed cover type)



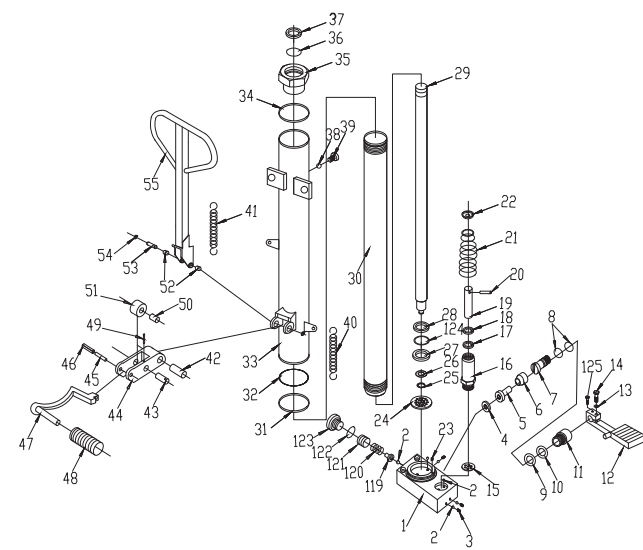
NO	NAME	SPEC	QTY	NO	Name	SPEC	QTY
34	Inner hexagonal bolt	M8×16	2	65	Gasket 2T	Φ20	4
56	Lift rod joint 1.5/2T	Φ55×95	1	65	Gasket 1.5T	Φ16	4
56	Lift rod joint 0.5/1T	Φ50×90	1	65	Gasket 0.5/1T	Φ14	4
57	Sprocket Shaft 2T	Φ35×208	1	66	Chain lock 2T	16A	4
57	Sprocket Shaft 1.5T	Φ35×202	1	66	Chain lock 1.5T	12A	4
57	Sprocket Shaft 0.5/1T	Φ35×201	1	66	Chain lock 0.5/1T	10A	4
58	Hole retaining ring 2T	Φ72	2	67	Chain 1016-0516	10A-68L	2
58	Hole retaining ring 1.5T	Φ52	2	67	Chain 1516	12A-58L	2
58	Hole retaining ring 0.5/1T	Φ47	2	67	Chain 2016	16A-44L	2
59	Bearing 2T	6306	2	71	Fixed Covered Lifting Frame	2T	1
59	Bearing 1.5T	6205	2	71	Fixed Covered Lifting Frame	1.5T	1
59	Bearing 0.5/1T	6204	2	71	Fixed Covered Lifting Frame	1T	1
60	Axle retainer 2T	Φ30	2	71	Fixed Covered Lifting Frame	0.5T	1
60	Axis retaining ring 1.5T	Φ25	2	72	Nylon adjusting pad for general use	Φ50×22	4
60	Shaft retaining ring 0.5/1T	Φ20	2	73	General purpose of adjusting iron block	Φ10×12	4
61	Sprocket 2T	Φ100×36	2	74	Axis retaining ring 1.5/2T	Φ35	4
61	Sprocket 1.5T	Φ90×33	2	74	Shaft retaining ring 0.5/1T	Φ30	4
61	Sprocket 0.5/1T	Φ80×32	2	75	Hole retaining ring 1.5/2T	Φ80	4
62	General purpose of elastic cylindrical pin	Φ8×50	1	75	Hole retaining ring 0.5/1T	Φ62	4
63	Connection bolt 2T	Φ25×180	2	76	Bearing 1.5/2T	6307	4
63	Connection bolt 1.5T	Φ20×160	2	76	Bearing 0.5/1T	6206	4
63	Connection bolt 0.5/1T	Φ16×160	2	77	Roller 1.5/2T	Φ104.5×Φ70×42	4
64	Nut 2T	M20×1.5	6	77	Roller 0.5/1T	Φ82×Φ48×36	4
64	Nut 1.5T	M16×1.5	6	78	Internal hexagonal fastening bolt	Half flat and half pointed M12×20	8
64	Nut 0.5/1T	M14×1.5	6				

SYG-I/II Lifting frame, fork (mobile cover type)



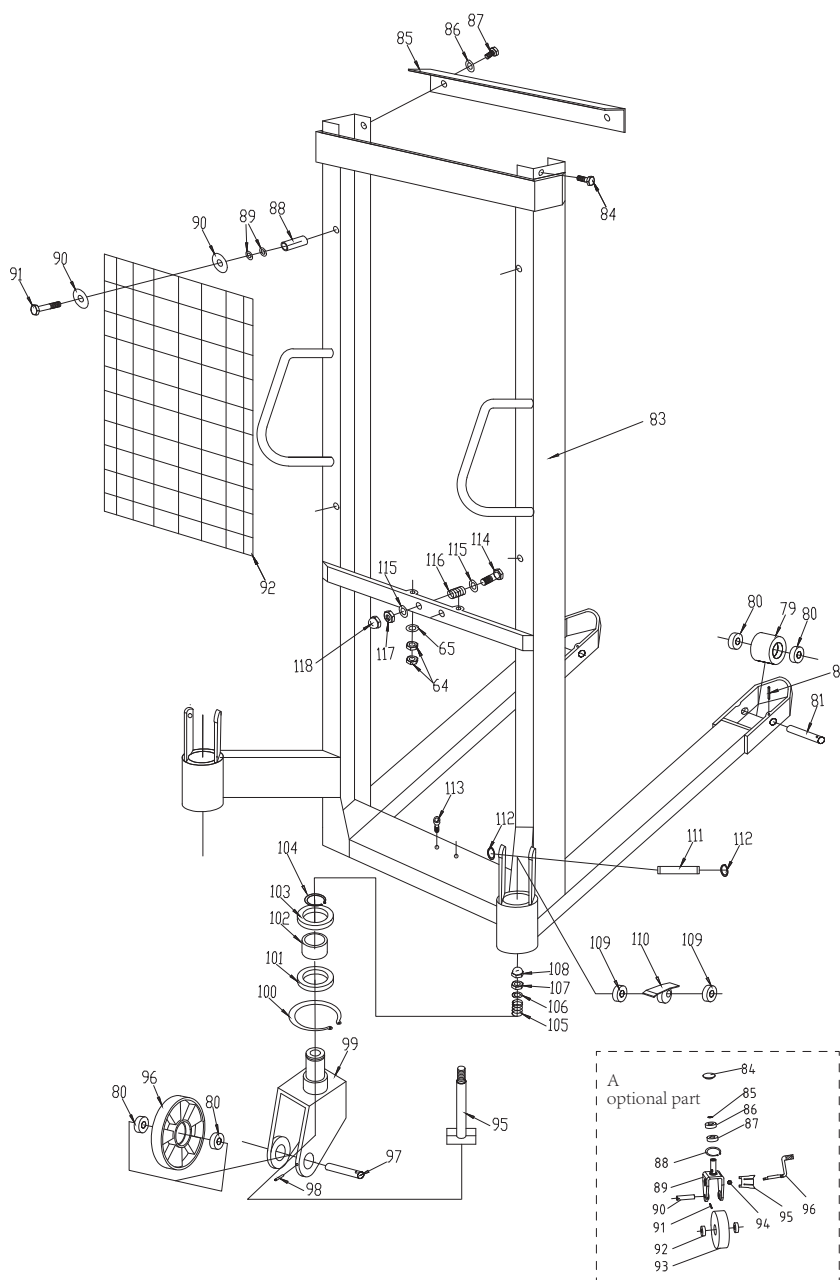
NO	Name	SPEC	QTY	NO	Name	SPEC	QTY
34	Inner hexagonal bolt	M8×16	2	67	Chain 1016-0516	10A-68L	2
56	Lift rod joint 1.5/2T	Φ55×95	1	67	Chain 1020	12A-76L	2
56	Lift rod joint 0.5/1T	Φ50×90	1	67	Chain 1025	12A-92L	2
57	Sprocket Shaft 2T	Φ35×208	1	67	Chain 1516	12A-58L	2
57	Sprocket Shaft 1.5T	Φ35×202	1	67	Chain 1520	12A-80L	2
57	Sprocket Shaft 0.5/1T	Φ35×201	1	67	Chain 1525	12A-92L	2
58	Hole retaining ring 2T	Φ72	2	67	Chain 2016	16A-44L	2
58	Hole retaining ring 1.5T	Φ52	2	68	Long axle of lifting frame	Φ32×753	2
58	Hole retaining ring 0.5/1T	Φ47	2	69	Shaft ring	Φ30	2
59	Bearing 2T	6306	2	70	Covering fork	2T	2
59	Bearing 1.5T	6205	2	70	Covering fork	1.5T	2
59	Bearing 0.5/1T	6204	2	70	Covering fork	1T	2
60	Axle retainer 2T	Φ30	2	70	Covering fork	0.5T	2
60	Axis retaining ring 1.5T	Φ25	2	71	Covered elevator	2T	1
60	Shaft retaining ring 0.5/1T	Φ20	2	71	Covered elevator	1.5T	1
61	Sprocket 2T	Φ100×36	2	71	Covered elevator	1T	1
61	Sprocket 1.5T	Φ90×33	2	71	Covered elevator	0.5T	1
61	Sprocket 0.5/1T	Φ80×32	2	72	Nylon adjusting pad for general use	Φ50×22	4
62	General purpose of elastic cylindrical pin	Φ8×50	1	73	General purpose of adjusting iron block	Φ10×12	4
63	Connection bolt 2T	Φ25×160	2	74	Axis retaining ring 1.5/2T	Φ35	4
63	Connection bolt 1.5T	Φ20×160	2	74	Shaft retaining ring 0.5/1T	Φ30	4
63	Connection bolt 0.5/1T	Φ16×160	2	75	Hole retaining ring 1.5/2T	Φ80	4
64	Nut 2T	M20×1.5	6	75	Hole retaining ring 0.5/1T	Φ62	4
64	Nut 1.5T	M16×1.5	6	76	Bearing 1.5/2T	6307	4
64	Nut 0.5/1T	M14×1.5	6	76	Bearing 0.5/1T	6206	4
65	Gasket 2T	Φ20	4	77	Roller 1.5/2T	Φ104.5×Φ70×42	4
65	Gasket 1.5T	Φ16	4	77	Roller 0.5/1T	Φ82×Φ48×36	4
65	Gasket 0.5/1T	Φ14	4	78	Internal hexagonal fastening bolt	Half flat and half pointed M12×20	8
66	Chain lock 2T	16A	4	126	Fork adjusting screw	Φ59×M12×10	2
66	Chain lock 1.5T	12A	4				
66	Chain lock 0.5/1T	10A	4				

SYG-I/II Hydraulic control assembly



NO	Name	SPEC	QTY	NO	Name	SPEC	QTY
1	Oil valve plate	155×80×50	1	30	Lift cylinder 1.6m	Φ45×Φ35×838	1
2	Steel ball GCr6	SΦ6	6	30	Lift cylinder 2.0m	Φ45×Φ35×1225	1
3	Internal hexagonal top screw	M8×10	3	30	Lift cylinder 2.5 meters	Φ45×Φ35×1475	1
4	A seal	Φ18×12.4×2	1	31	J-ring nylon	Φ66×Φ72×5	2
5	Valve spool group	Φ17.7×42	1	32	O-ring	Φ60×3.55	1
6	Sucker	Φ22×16	1	33	Cylinder barrel 1.6m	Φ73×Φ63×840	1
7	Stem	Φ19.2×65	1	33	Cylinder barrel 2.0m	Φ73×Φ63×1221	1
8	O-ring	Φ12×2.55	2	33	Cylinder barrel 2.5 meters	Φ73×Φ63×1471	1
9	Bronze pad 0.5	Φ32×Φ25×0.5	2	35	Cylinder nut	Φ80×48	1
10	Copper pad 1.5	Φ32×Φ25×1.5	1	36	O-ring	Φ31.5×3.55	1
11	Sealing nut	Φ32×39	1	37	Rubber skeleton oil seal	Φ32×45×7	1
12	Oil discharge pedal	Steel castings	1	38	O-ring	Φ7.65×1.78	1
13	Shim	Φ8	1	39	Sealing screw for filling hole	Φ12×10	1
14	Bolt	M8×20	1	40	Pedal spring	Φ18×Φ2.5×135	1
15	Compression Cylinder Filter Pad	Φ28×4.5	1	41	Handle Spring	Φ16×Φ2.5×200	1
16	Compression cylinder 1.5/2T	Φ34×100	1	42	bushing	Φ14×Φ12×30	1
17	Y-ring 1.5/2T	Φ16×22×8	1	43	Press Wheel Shaft	Φ12×40	1
18	Dust-proof ring 1.5T/2T	Φ16×24×4.5	1	44	Tread lever	Steel castings	1
19	Compression rod 1.5/2T	Φ16×117	1	45	Cylindrical pin	Φ5×40	1
19	Compression cylinder 0.5/1T	Φ35×95	1	46	Elastic pin	Φ8×40	1
17	Y-ring 0.5/1T	Φ18×24×8	1	47	Pedal pole	Steel castings	1
18	Dust-proof ring 0.5T/1T	Φ18×26×4.5	1	48	Rubber sleeve	Φ38×Φ16.5×98	1
19	Compression rod 0.5/1T	Φ18×112	1	49	Elastic cylindrical pin	Φ4×30	1
20	Cylindrical pin	Φ5×30	1	50	bushing	Φ14×Φ12×18	1
21	Conical spring	D46×d5×156	1	51	Pressing wheel	Φ40×19	1
22	Spring cushion	Φ40×8	1	52	bushing	Φ14×Φ12×10	2
23	Oil intake nozzle	Φ6×10	1	53	Handle pin	Φ12×84	1
24	Lift cylinder filter pad	Φ40×4.2	1	54	Circlip	Φ9	2
25	Circlip	Φ12	1	55	Handle assembly	Φ30×Φ2 Welded pipe	1
26	Shim	Φ30×Φ16.5×1.5	1	119	Pressure regulating spring seat	Φ12×13	1
27	Y-type sealing ring	D35×27×10	1	120	Pressure regulating spring	D10×d3×26 Pitch distance 4.3	1
28	Stopper ring	Φ35×Φ27×10	1	121	Pressure regulating screw	M14×1.5×6.5	1
29	Lifting pole 1.6m	Φ32×900	1	122	O-ring	Φ11.2×2.65	1
29	Lifting pole 2.0 meters	Φ32×1290	1	123	Pressure regulating valve sealing screw	Φ20×13.5	1
29	Lifting pole 2.5 meters	Φ32×1540	1	124	Guide belt	Φ35×32×5.4	1
			1	125	Inner hexagonal bolt	M6×10	1

SYG-Door Post Explosion Diagram (Channel Steel)



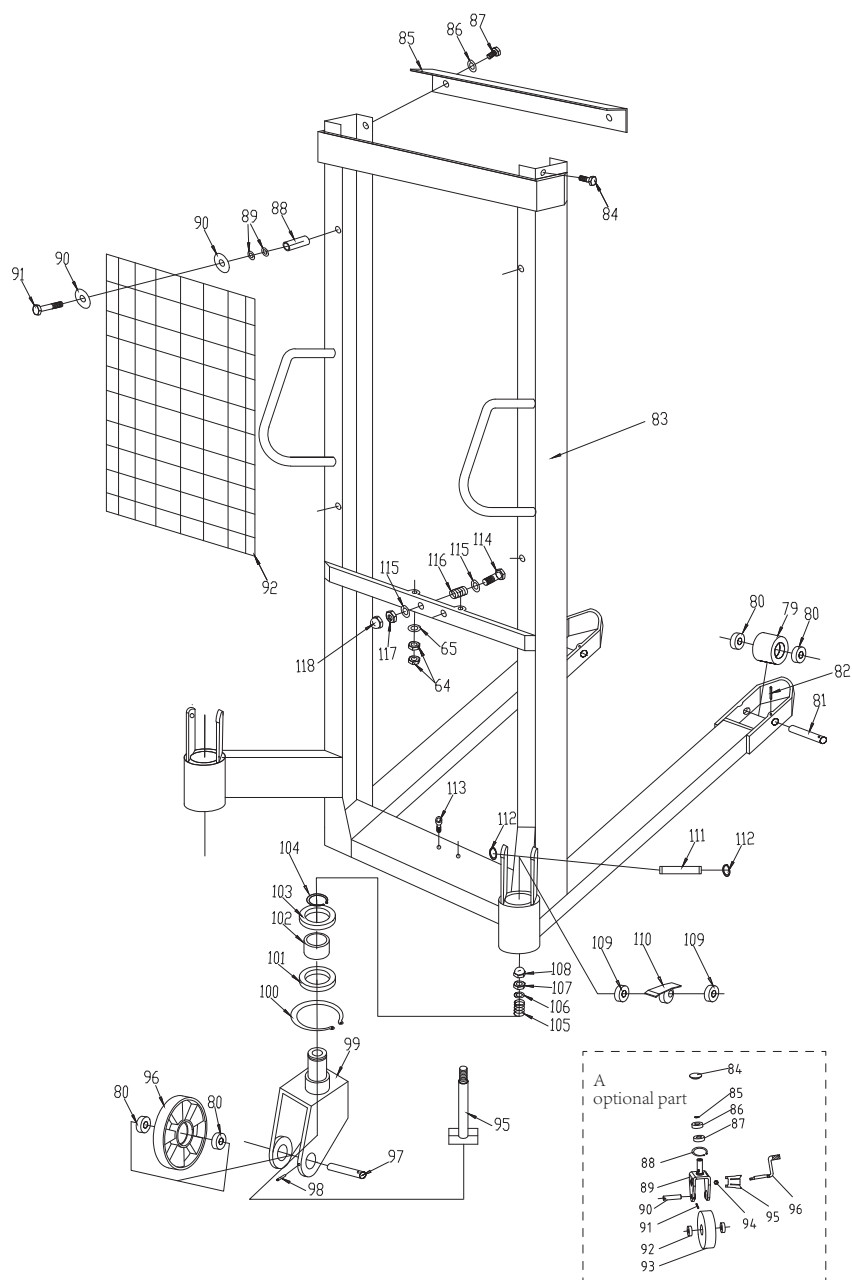
SYG-Door post list (channel steel)

NO	Name	SPEC	QTY
79	Front wheel NL1T-2T	Φ80×60	2
79	Front wheel NL0.5T	Φ75×42	2
80	Bearing	6204	8
81	Front axle 1T-2T	Φ20×92	2
81	Front axle 0.5T	Φ20×68	2
82	Elastic cylindrical pin	Φ5×40	4
83	Frame 2T2016	SYG-2016	1
83	Frame 1.5T1516	SYG-1516	1
83	Frame 1T1016	SYG-1016	1
83	Frame 0.5T0516	SYG-0516	1
84	Outer hexagonal bolt	M10×35	2
85	Upper connection plate	4 # Angle Length: 614	1
86	Shim	Φ10	2
87	Outer hexagonal bolt	M10×35	2
88	Aluminum tube	Φ10×Φ8.1×42	4
89	Small gasket	Φ10	8
90	Large gasket	Φ10	8
91	Inner hexagonal bolt	M8×60	4
92	Mesh 1.6 m 1-2T	549×900	1
92	Mesh 1.6 m 0.5T	460×840	1
95	Brake pad seat	4×23×60	2
96	Rear wheel NL	Φ180×50	2
97	Rear axle	Φ20×86	2
98	Elastic cylindrical pin	Φ5×40	2
99	Rear fork	Steel castings	2
100	Hole retaining ring	Φ52	2
101	Bearing	6205	2
102	Steering axle bushing	Φ35×Φ24×25	2
103	Bearing	6005	2
104	Shaft ring	Φ25	2
105	Spring	D17×d2×25	2
106	Shim	Φ10	2
107	Nut	M10	2
108	hex domed cap nut	M10	2
109	Brake axle sleeve	Φ25×Φ15×10	4
110	Brake pedal	120×40×5	2
111	Brake pin	Φ12×64	2
112	Shaft ring	Φ12	4
113	Inner hexagonal bolt	M10×45	2
114	Outer hexagonal bolt	M12×60	2
115	Shim	Φ12	2
116	Spring	D18×d2.5×25	2
117	Nut	M12	2
118	Cap nut 12	M12	2

NO	Name	SPEC	QTY
84	Dust cover		2
85	Shaft ring	25	2
86	Bearing	6204	2
87	Bearing	6205	2
88	Hole retaining ring	52	2
89	Rear fork	casting	2
90	Rear axle	Φ20×86	2
91	Elastic cylindrical pin	Φ5×50	2
92	Bearing	6204	4
93	rear wheel	Φ180×50	2
94	Brake rod self-locking nut	M8	2
95	Brake pads		2
96	Brake lever	casting	2

A
optional part

SYG-Door post explosion diagram (C-section steel)

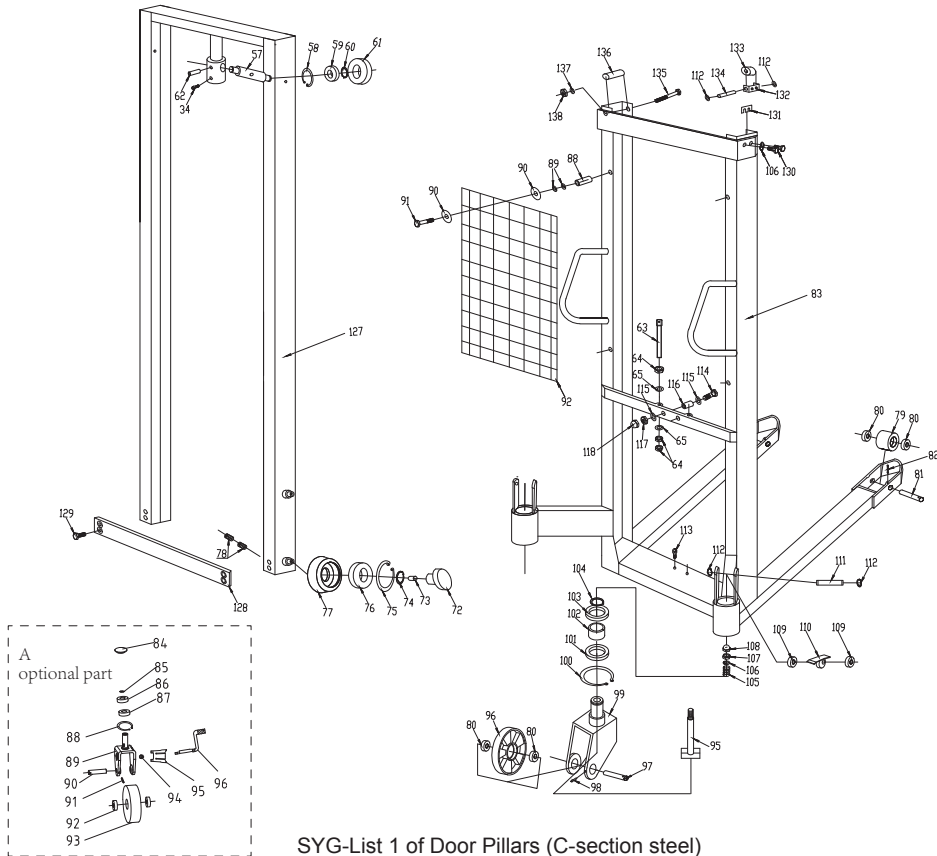


SYG-Door post list (C-section steel)

NO	Name	SPEC	QTY
79	Front wheel NL1T-2T	Φ80×60	2
79	Front wheel NL0.5T	Φ75×42	2
80	Bearing	6204	8
81	Front axle 1T-2T	Φ20×92	2
81	Front axle 0.5T	Φ20×68	2
82	Elastic cylindrical pin	Φ5×40	4
83	Frame 2T2016	SYG-2016	1
83	Frame 1.5T1516	SYG-1516	1
83	Frame 1T1016	SYG-1016	1
83	Frame 0.5T0516	SYG-0516	1
84	Outer hexagonal bolt	M10×35	2
85	Upper connection plate	4 # Angle Steel Length: 614	1
86	Shim	Φ10	2
87	Outer hexagonal bolt	M10×35	2
88	Aluminum tube	Φ10×Φ8.1×42	4
89	Small gasket	Φ10	8
90	Large gasket	Φ10	8
91	Inner hexagonal bolt	M8×60	4
92	Mesh 1.6 m 2T	549×900	1
92	Mesh 1.6 m 0.5T	460×840	1
95	Brake pad seat	4×23×60	2
96	Rear wheel NL	Φ180×50	2
97	Rear axle	Φ20×86	2
98	Elastic cylindrical pin	Φ5×40	2
99	Rear fork	Steel castings	2
100	Hole retaining ring	Φ52	2
101	Bearing	6205	2
102	Steering axle bushing	Φ35×Φ24×25	2
103	Bearing	6005	2
104	Shaft ring	Φ25	2
105	Spring	D17×d2×25	2
106	Shim	Φ10	2
107	Nut	M10	2
108	hex domed cap nut	M10	2
109	Brake axle sleeve	Φ25×Φ15×10	4
110	Brake pedal	120×40×5	2
111	Brake pin	Φ12×64	2
112	Shaft ring	Φ12	4
113	Inner hexagonal bolt	M10×45	2
114	Outer hexagonal bolt	M12×60	2
115	Shim	Φ12	2
116	Spring	D18×d2.5×25	2
117	Nut	M12	2
118	Cap nut 12	M12	2

NO	Name	SPEC	QTY
84	Dust cover		2
85	Shaft ring	25	2
86	Bearing	6204	2
87	Bearing	6205	2
88	Hole retaining ring	52	2
89	Rear fork	casting	2
90	Rear axle	Φ20×86	2
91	Elastic cylindrical pin	Φ5×50	2
92	Bearing	6204	4
93	rear wheel	Φ180×50	2
94	Brake rod self-locking nut	M8	2
95	Brake pads		2
96	Brake lever	casting	2

SYG-Pillar Explosion Map (Double Door Frame)



SYG-List 1 of Door Pillars (C-section steel)

NO	Name	SPEC	QTY	NO	Name	SPEC	QTY
34	Inner hexagonal bolt	M8×16	1	97	Rear axle	Φ20×86	2
56	Lift rod joint	See List 2 for details (optional components)		98	Elastic cylindrical pin	Φ5×40	2
57	Sprocket shaft	See List 2 for details (optional components)		99	Rear fork	Steel castings	2
58	Hole retaining ring	See List 2 for details (optional components)		100	Hole retaining ring	Φ52	2
59	Bearing	See List 2 for details (optional components)		101	Bearing	6205	2
60	Shaft ring	See List 2 for details (optional components)		102	Steering axle bushing	Φ35×Φ24×25	2
61	Sprocket wheel	See List 2 for details (optional components)		103	Bearing	6005	2
63	Connecting bolt	See List 2 for details (optional components)		104	Shaft ring	Φ25	2
64	Nut	See List 2 for details (optional components)		105	Spring	D17×d2×25	2
65	Flat pad	See List 2 for details (optional components)		106	Flat pad	Φ10	2
72	Nylon adjusting pad for general use	50*22	4	107	Nut	M10	2
73	General purpose of adjusting iron block	10*12	4	108	hex domed cap nut	M10	2
74	Shaft ring	See List 2 for details (optional components)		109	Brake axle sleeve	Φ25×Φ15×10	4
75	Hole retaining ring	See List 2 for details (optional components)		110	Brake pedal	120×40×5	2
76	Bearing	See List 2 for details (optional components)		111	Brake pin	Φ12×64	2

A optional part	NO	Name	SPEC	QTY
	84	Dust cover		2
	85	Shaft ring	25	2
	86	Bearing	6204	2
	87	Bearing	6205	2
	88	Hole retaining ring	52	2
	89	Rear fork	casting	2
	90	Rear axle	Φ20×86	2
	91	Elastic cylindrical pin	Φ5×50	2
	92	Bearing	6204	4
	93	rear wheel	Φ180×50	2
	94	Brake rod self-locking nut	M8	2
	95	Brake pads		2
	96	Brake lever	casting	2

NO	Name	Specifications	QTY	NO	Name	SPEC	QTY
77	Roller	See List 2 for details (optional components)		112	Shaft ring	Φ12	8
78	Internal hexagonal fastening bolt	Flat tip half M12 x 20	8	113	Inner hexagonal bolt	M10×45	2
79	front wheel	See List 2 for details (optional components)		114	Outer hexagonal bolt	M12×65	2
80	Front and rear wheel bearings	Six thousand two hundred and four	8	115	Flat pad	Φ12	2
81	Front axle	See List 2 for details (optional components)		116	Spring	D18×d2.5×25	2
82	Elastic cylindrical pin	5*40	4	117	Nut	M12	2
83	Outer Door Frame	See List 2 for details (optional components)		118	Cap nut 12	M12	2
84	Outer hexagonal bolt	M10*35	2	128	Lower connecting plate of inner gantry	490×50×12	1
85	Upper connection plate	4 # Angle Steel Length: 614	1	129	Inside Hexagonal Flat Base Bolts	M10×20	4
86	Shim	Phi 10	2	130	Outer hexagonal bolt	M10×30	4
87	Outer hexagonal bolt	M10*35	2	131	Guide wheel insert	52×32×60.8	2
88	Aluminum tube	10*8.1*42	4	132	Guide wheel frame	5×30×130	2
89	Small gasket	Phi 10	8	133	Guide wheel	Φ38×Φ13×36	2
90	Large gasket	Phi 10	8	134	Guide axle	Φ12×60	2
91	Inner hexagonal bolt	M8 * 60	4	135	Safety Screw for Outer Door Frame	M12×140	2
92	Mesh	See List 2 for details (optional components)		136	Safety Screw Sleeve for Outer Portal Frame	Φ25×Φ15×105	2
95	Brake pad seat	4 x 23 x 60	2	137	Flat pad	Φ12	2
96	rear wheel	180*50	2	138	Nut	M12	2
127	Inner door frame	See List 2 for details (optional components)					

SYG-List 2 of Door Post (Optional Components)

NO	Name	SPEC	QTY	NO	Name	SPEC	QTY
56	Lift rod joint 1.5/2T	Φ55×95	1	74	Axis retaining ring 1.5/2T	Φ25	4
56	Lift rod joint 0.5/1T	Φ50×90	1	74	Shaft retaining ring 0.5/1T	Φ20	4
57	Sprocket Shaft 2T	Φ35×208	1	75	Hole retaining ring 1.5/2T	Φ80	4
57	Sprocket Shaft 1.5T	Φ35×202	1	75	Hole retaining ring 0.5/1T	Φ62	4
57	Sprocket Shaft 0.5/1T	Φ35×201	1	76	Bearing 1.5/2T	6307	4
58	Hole retaining ring 2T	Φ72	2	76	Bearing 0.5/1T	6206	4
58	Hole retaining ring 1.5T	Φ52	2	77	Roller 1.5/2T	Φ100×Φ40×36	4
58	Hole retaining ring 0.5/1T	Φ47	2	77	Roller 0.5/1T	Φ85×Φ40×36	4
59	Bearing 2T	6306	2	79	Front wheel NL1T-2T	Φ80×60	2
59	Bearing 1.5T	6205	2	79	Front wheel NL0.5T	Φ75×42	2
59	Bearing 0.5/1T	6204	2	81	Front axle 1T-2T	Φ20×92	2
60	Axle retainer 2T	Φ30	2	81	Front axle 0.5T	Φ20×68	2
60	Axis retaining ring 1.5T	Φ25	2	83	Outer Door Frame	2020	1
60	Shaft retaining ring 0.5/1T	Φ20	2	83	Outer Door Frame	1525	1
61	Sprocket 2T	Φ100×36	2	83	Outer Door Frame	1520	1
61	Sprocket 1.5T	Φ90×33	2	83	Outer Door Frame	1025	1
61	Sprocket 0.5/1T	Φ80×32	2	83	Outer Door Frame	1020	1
63	Connection bolt 2T	Φ25×160	2	92	Mesh	2米	1
63	Connection bolt 1.5T	Φ20×160	2	92	Mesh	2.5米	1
63	Connection bolt 0.5/1T	Φ16×160	2	127	Inner door frame	2020	1
64	Nut 2T	M20×1.5	6	127	Inner door frame	1525	1
64	Nut 1.5T	M16×1.5	6	127	Inner door frame	1520	1
64	Nut 0.5/1T	M14×1.5	6	127	Inner door frame	1025	1
65	Flat cushion 2T	Φ20	4	127	Inner door frame	1020	1
65	Flat cushion 1.5T	Φ16	4				
65	Flat cushion 0.5/1T	Φ14	4				