

INSTRUCTION MANUAL



EC Declaration of Conformity

According to the Machinery Directive 2006/42/EC

For the following equipment:						
Product : Scissor Lifting Table						
Type Designation /Trademark: 576157						
Manufacturers Name	: Toolex Industrial					
Manufacturers Address	: PO Box 1012 Hamilton NSW 2303 Australia					

Refer to in this declaration conforms to the following directive(s):

Machinery Directive 2006/42/EC

The company named above will keep on file for review the following technical documentation:

- Operating and maintenance instructions
- Technical drawings
- Risk assessment
- Description of measures designed to ensure conformity
- Other technical documentation ,e.g. quality assurance measures for design and production

Name and address of the person (established in the Community) compiled the technical file:

I. Configuration diagram

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Model 576157 Capacity 350 ka Max. lift height H 1300 mm Min. height of table h 350 mm Table size L×C×E 910×500×50 mm Handle height A 970 mm Overall length B 980 mm Foot pedal cycles to max. height ≤60 Wheel diameter D mm 127 Working volume of oil cylinder 164 ml Oil capacity 250 ml Service weight 105 kg noise level dB <70

II. Main technical parameters :

III. Scope of application :

SPS series table lift truck is a kind of high-lift transportation tool which is applicable for short-distance transportation as well as goods lifting and lowering. Besides, it can also be used as station facilities for workshop.

IV. Operation condition:

- 1. Lift table should be operated on solid and flat ground ;
- 2. Operation temperature: -20-40C°.

V. Notes (warning) :

- 1. Read the instruction carefully before operation and get to know the performance and operation requirements of the lift table. And the hydraulic lift table can't be used unless it is authorized.
- 2. Do not overload the hydraulic lift table and operate it within the rated load. Overloading will cause damage to the hydraulic lift table and human body.
- 3. It is forbidden for operators to stand or sit on the table to work.
- 4. Don't put the hands or feet under the lowering table.
- 5. Please brake the truck when loading goods to prevent it from moving.
- 6. Off-set loading is forbidden when loading goods, and the goods should be distributed uniformly on the whole table.
- 7. Loose or unstable goods are not permitted to be loaded.
- 8. Don't put goods on working table for a long time.
- 9. The truck can't be moved when goods are being lifted.
- 10. The truck can only be moved on flat and hard ground, it is forbidden to be used on sloping ground or rugged ground;
- 11. When putting goods on table which has been hoisted, the weight of goods should be within rated load, and the goods should be loaded lightly. (Safety valve only works in hoisting process, if the truck has been hoisted, and then put overweight goods on it, the safety valve can't work. In this way, the truck may be damaged.)
- 12. When loading and unloading goods on hoisted table, don't drag goods in cross direction, which may cause serious off-set loading and make truck turn over.
- 13. When maintaining and repairing truck, stand bar should be used to support fork arm in order to prevent table from falling (there should be no goods on table), and guarantee the safety in maintenance and repairing.
- 14. Please operate strictly according to "notes (warning)", otherwise it will bring damage to truck and human body.

VI. Operation methods :

- 1. Please step on the foot lever for several times to raise the working table.
- 2. Please lift the handle knob upward slowly, and open the one-way valve to make the working table descend slowly.
- 3. Please make the brake open before moving the truck.

VII. Maintenance and upkeep:

It is very important to conduct necessary maintenance and upkeep so as to prolong the service life and safety of the lift table. Please check the lift table before operation

according to the following items:

- 1. Whether there is any distortion and bending of various positions of the lift table.
- 2. Please check the brake of the truck and the wearing condition of the wheels.
- 3. Check oil leakage in the hydraulic system.
- 4. Please add or fill lubricant to each friction surface before daily operation.
- 5. If there is any failure, the lift table should be repaired at once, then it can be put into use again.
- 6. Change the hydraulic oil every twelve months, choose the following or close brand hydraulic oil according to the climate conditions of different areas:
 - a) YBN32 is adaptive under the environment temperature of -10~+40°C;
 - b) YCN32 is adaptive under the environment temperature of -20~+40°C.
- 7. Hydraulic oil change methods:
 - a) Screw out the sealing screw 11 of the attached drawing (2) with wrench;
 - b) Raise the hand knob;
 - c) Twist off screw 36 of the oil plug and fill in hydraulic oil.
- 8. No.1, no.3, no.4, no.21, no.29, no.32, no.40, no.43, no.47, no.48, no.33, no.41 and no.45 of attached drawing (2) are seal components of rubber, polyurethane and nylon. The general keeping time is two years. If exceeding the time limit, it will be aging and this will affect the service performance. If so, please change it in time.

VIII. Trouble shooting methods (refering to drawing 2):

Faults	causes	Trouble shooting		
The truck cannot be raised or the lifting height is not enough.	 Steel ball (23) of the check-valve is not closed down. Firing pin (28) withstands the steel ball (16). Short of hydraulic oil. 	 Clean the valve opening and change the steel ball (23). Adjust the tension rate of the steel wire rope to make firing pin at suitable place, and add or fill lubricant to the pin roll (30) Add enough hydraulic oil. 		
The table-board rises then descends.	 Steel ball (23)(24)(16) of the check-valve is not closed down. Firing pin (28) withstands the steel ball (16). 	 Clean the valve opening and change the steel ball (23) (24) (16). Adjust the tension rate of the steel wire rope to make firing pin at suitable place, and add or fill lubricant to the pin roll (30) 		
The table-board does not descend	The travel of the firing pin (28) is not enough to open the steel ball (16).	Adjust the tension rate of the steel wire rope to make firing pin at suitable place, and add or fill lubricant to the pin roll (30)		

Oil leakage at firing pin.	The O-ring (29) is damaged.	Change the o- ring (29).
Oil leakage at pump (2), pump core (5) and piston rod (44).	The seal ring (1) (3) (47) (48) are damaged.	Change the seal ring (1)(3)(47)(48)

IX. Assembly method :

The handle and foot lever of 576157 type lift table are dismantled when ex-factory, they might be fixed together by the users when using. The assembly methods are as follows (refering to drawing 2):

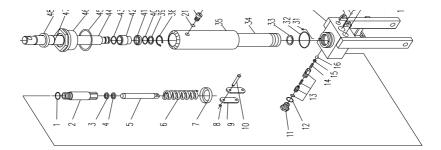
Handle installation method: according to the developed drawing, fix the handle (1) to mounting hole of the truck body (18) with bolt (64), spring

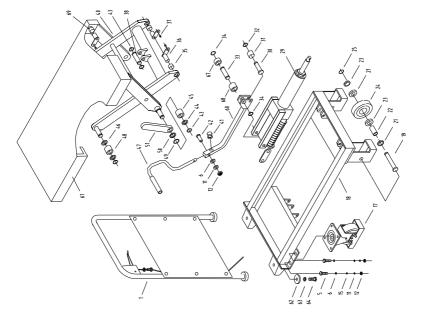
washer (63), flat washer (62), then screw down the bolt (64) with wrench.

Foot lever mounting: insert the foot lever (47) into the hole of the square bar (60), screw in the screw (42), then put in the plain washer (6) and the spring washer (11) respectively and screw down the nut (12).

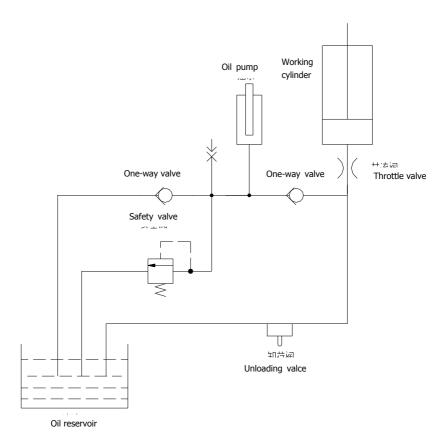
X. Structure diagram and principle diagram

See the principle diagram of the hydraulic system in the attached drawing (3)





Attached drawing (1)



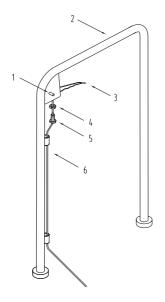
Attached drawing (3)

Principle specification

- 1. The restriction chock and the constant pressure overflow valve leak oil at the same when no-load, the no-load vehicle descend faster, and it can meet the customers the demand.
- 2. When the load is more than 50kg, the system pressure is 8MPa, the constant pressure overflow valve closes automatically, the hydraulic oil leaks through the restriction chock, the vehicle descend slowly, and this agrees with the safety standards.

Spare parts catalogue

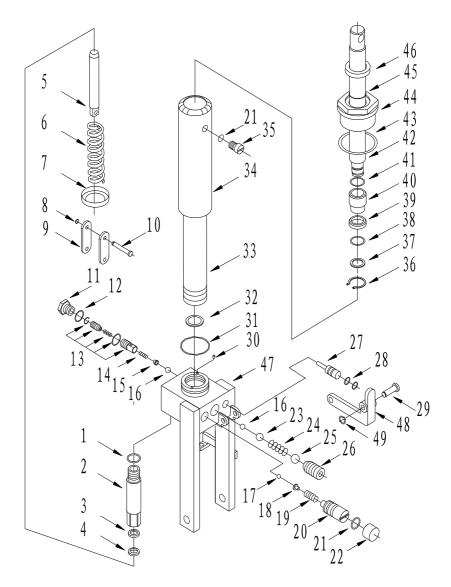
- 1. Explosive drawing and parts list of handle
- 2. Explosive drawing and parts list of 576157 pump
- 3. Explosive drawing and parts list of 576157 assembly
- 4. Explosive drawing and parts list of New Model assembly



No.	Drawing no.	Description	Qty.
1	GB879-86	Spring pin 6x30	1
4	SPAIII.1.01	Handle bar	1
5	SPIII.1.02	Knob	1
6	GB6172-86	Nut M8	1
7	SPIII.0-01	Screw	2
8	1340(1135)	Pull rod	4

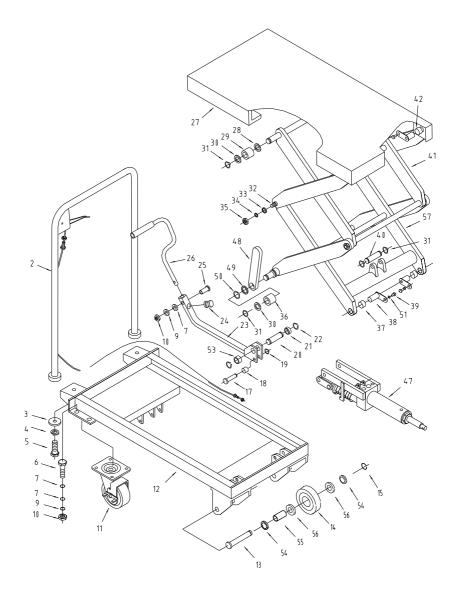
Remark: The handle of 576157 is with fender.

Explosive Drawing of 576157 pump



Parts List of 576157 pump

No.	Drawing no.	Description	Qty.
1	GB3452.1-86	0-ring 22.4×2.65	1
2	SP.8-11A	Pump cylinder	1
3	UHS14	Yx- seal ring	1
4	DH14	Dust ring	1
5	SP.8-10A	Pump plunger	1
6	SP.8-09	Spring	1
7	SP.8-08	Spring seat	1
8	GB894.1-86	Retaining ring for axle 10	1
9	SP.0-13B	Joint plate	2
10	SP.0-14	Pin	1
11	JF.1-17	Screw	1
12	JB982-77	Copper washer 20	1
13	6W804.1-12	Damp valve	1
14	YQ-03	Spring	1
15	YQ-02	Spring seat	1
16	GB308-77	Steel ball 6.35	2
17	GB308-77	Steel ball 4.5	1
18	SP.8-18	Spring seat	1
19	SP.8-17	Spring	1
20	SP.8-16	Adjusting screw	1
21	GB3452.1-86	O-ring 7.5×2.65	2
22	SP.8-15	Cover ring	1
23	GB308-77	Steel ball 9.5	1
24	SP.8-07	Spring	1
25	GB308-77	Steel ball 1/2(12.7)	1
26	GB77-85	Screw M16×18	1
27	YQ-01	Strike pin	1
28	GB3452.1-82	O-ring 6.9×1.8	2
29	DF1.2-08	Shaft	1
30		Filter	1
31	GB3452.1-82	O-ring 65×3.55	1
32	SP.8-12	Rectangular ring section	1
33	SP.8-04	Cylinder	1
34	SP.8-03	Housing	1
35	SP.8-02	Screw	1
36	GB894.1-86	Retaining ring for axle 25	1
37	SP.8-13	Washer	1
38	GB3452.1-82	O-ring 33.5×3.55	1
39	SP.8-14	Cup packing	1
40	SP.8-06	Bush	1
41	GB3452.1-82	O-ring 20×2.65	1
42	SP.8-05	Piston rod	1
43	CO1.2-16	Rectangular section sealing	1
44	SP.8-01	Cylinder cap	1
45	GB3452.1-82	O-ring 31.5×3.55	1
46	HG4-692-67	J Shaped steel frame rubber sealing 32×45×6.5	1
47	YQ.6-300	Base	1
48	YQ-04	Lever plate	1
49	GB894.1-86	Retaining ring for axle 8	1

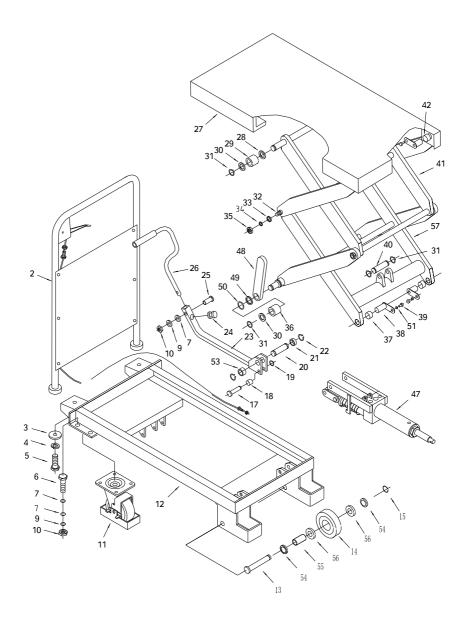


Parts List of 570157 assembly							
Drawing no.	Description	Qty.	No.	Drawing no.	Description	Qty.	
SPIII.1-00	Handle bar	1	29	SP.6-12	Roller	2	
SPA.0-02	Washer	2	30	GB848-86	Washer 16	4	
GB93-1987	Washer 12	6	31	GB894.1-86	Retaining ring for axle 16	6	
GB5781-2000	Bolt 12x30	2	32	SPS.0-01	Shaft	2	
GB5781-2000	Bolt M8×25	8	33	GB95-1985	Washer 16	4	
GB95-1985	Washer 8	17	34	GB95-1985	Washer 12	4	
GB93-1987	Washer 8	9	35	GB41-86	Nut M12	4	
GB41-86	Nut M8	9	36	SP.6-10	Roller	2	
	Universal wheel 5"	2	37	SP.6-01	Bush	2	
SPSC.3-00	Frame	1	38	SP.0.02	L-Pin	4	
SP.0-08	Shaft	2	39	GB70-85	Bolt 6x10	4	
SP.0-04	Wheel 5"	2	40	SP.0-03	Shaft	1	
GB894.1-86	Retaining ring for axle 12	2	41	SPS.4-00	Arm	1	
SP.0-11	Shaft	1	42	SF-1.1612	Bush	2	
SP.0-12	Bush	1	47	YQ-00-350	Pump unit	1	
GB894.1-86	Retaining ring for axle 10	1	48	SPC.6-07	Support	2	
SPS.0-03	Shaft	1	49	SPA.4-07	Washer	2	
YQ-7	Retaining ring	1	50	GB894.1-86	Retaining ring for axle 24	2	
GB894.1-86	Retaining ring for axle 20	2	51	GB93-1987	Washer 6	4	
SPS.2.01B	Connecting rod	1	53	YQ-8	Retaining ring	1	
SP.3-03	Cushion	1	54	SP.0-06	Bush	4	
GB5781-2000	Bolt M8x30	1	55	SP.0-07	Hollow shaft	2	
SP.3-02	Pedal bar	1	56	GB276-86	Bearing 6203	4	
SPSC.6-00	Table	1	57	SPS.5-00	Arm	1	
SP.6-11	Bush	2					
	SPIII.1-00 SPA.0-02 GB93-1987 GB5781-2000 GB5781-2000 GB93-1987 GB894.1-86 SP.0-04 GB894.1-86 SPS.0-03 YQ-7 GB894.1-86 SPS.2.01B SP.3-03 GB5781-2000 SP.3-02 SPSC.6-00	SPIII.1-00 Handle bar SPA.0-02 Washer GB93-1987 Washer 12 GB5781-2000 Bolt 12x30 GB5781-2000 Bolt M8×25 GB95-1985 Washer 8 GB93-1987 Washer 8 GB93-1987 Washer 8 GB93-1987 Washer 8 GB93-1987 Washer 8 GB41-86 Nut M8 Universal wheel 5" SPSC.3-00 Frame SP.0-08 Shaft SP.0-08 Shaft SP.0-04 Wheel 5" GB894.1-86 Retaining ring for axle 12 SP.0-11 Shaft SP.0-12 Bush GB894.1-86 Retaining ring for axle 10 SPS.0-03 Shaft YQ-7 Retaining ring for axle 20 SPS.2.01B Connecting rod SP.3-03 Cushion GB5781-2000 Bolt M8x30 SP.3-02 Pedal bar SPSC.6-00 Table	SPIII.1-00 Handle bar 1 SPA.0-02 Washer 2 GB93-1987 Washer 12 6 GB5781-2000 Bolt 12x30 2 GB5781-2000 Bolt M8×25 8 GB95-1985 Washer 8 17 GB93-1987 Washer 8 9 GB93-1987 Washer 8 9 GB93-1987 Washer 8 9 GB41-86 Nut M8 9 GB41-86 Nut M8 9 SPSC.3-00 Frame 1 SP.0-08 Shaft 2 SP.0-04 Wheel 5" 2 GB894.1-86 Retaining ring for axle 12 2 SP.0-11 Shaft 1 SP.0-12 Bush 1 GB894.1-86 Retaining ring for axle 10 1 SPS.0-03 Shaft 1 SPS.0-03 Shaft 1 SPS.2.01B Connecting ring for axle 20 2 SPS.2.01B Cushion 1	SPIII.1-00 Handle bar 1 29 SPA.0-02 Washer 2 30 GB93-1987 Washer 12 6 31 GB5781-2000 Bolt 12x30 2 32 GB5781-2000 Bolt M8×25 8 33 GB95-1985 Washer 8 9 35 GB41-86 Nut M8 9 36 GB41-86 Nut M8 9 36 SPSC.3-00 Frame 1 38 SP.0-08 Shaft 2 39 SP.0-08 Shaft 2 40 GB894.1-86 Retaining ring for axle 12 2 41 SP.0-11 Shaft 1 42 SP.0-12 Bush 1 42 SP.0-13 Shaft 1 43 SPS.0-03 Shaft 1 42 SPS.0-03 Shaft 1 43 SPS.2.01B Connecting ring ring for axle 20 1 50 GB894.1-86	SPIII.1-00 Handle bar 1 29 SP.6-12 SPA.0-02 Washer 2 30 GB848-86 GB93-1987 Washer 12 6 31 GB894.1-86 GB5781-2000 Bolt 12x30 2 32 SPS.0-01 GB5781-2000 Bolt 12x30 2 32 SPS.0-01 GB5781-2000 Bolt M8×25 8 33 GB95-1985 GB93-1987 Washer 8 9 35 GB41-86 GB93-1987 Washer 8 9 36 SP.6-10 Universal wheel 9 36 SP.6-10 SPSC.3-00 Frame 1 38 SP.0.02 SP.0-08 Shaft 2 39 GB70-85 SP.0-04 Wheel 5" 2 40 SP.0-03 GB894.1-86 Retaining ring for axle 12 1 42 SF-1.1612 SP.0-11 Shaft 1 47 YQ-00-350 GB894.1-86 Retaining ring for axle 10 1 48 <td< td=""><td>SPIII.1-00 Handle bar 1 29 SP.6-12 Roller SPA.0-02 Washer 2 30 GB848-86 Washer 16 GB93-1987 Washer 12 6 31 GB894.1-86 Retaining ring for axle 16 GB5781-2000 Bolt 12x30 2 32 SPS.0-01 Shaft GB5781-2000 Bolt M8×25 8 33 GB95-1985 Washer 16 GB95-1985 Washer 8 17 34 GB95-1985 Washer 12 GB93-1987 Washer 8 9 35 GB41-86 Nut M12 GB41-86 Nut M8 9 36 SP.6-10 Roller Universal wheel 2 37 SP.6-01 Bush SPSC.3-00 Frame 1 38 SP.0.02 L-Pin SP.0-04 Wheel 5" 2 40 SP.0-03 Shaft SP.0-11 Shaft 1 42 SF-1.1612 Bush SP.0-12 Bush 1 48 SPC.6-0</td></td<>	SPIII.1-00 Handle bar 1 29 SP.6-12 Roller SPA.0-02 Washer 2 30 GB848-86 Washer 16 GB93-1987 Washer 12 6 31 GB894.1-86 Retaining ring for axle 16 GB5781-2000 Bolt 12x30 2 32 SPS.0-01 Shaft GB5781-2000 Bolt M8×25 8 33 GB95-1985 Washer 16 GB95-1985 Washer 8 17 34 GB95-1985 Washer 12 GB93-1987 Washer 8 9 35 GB41-86 Nut M12 GB41-86 Nut M8 9 36 SP.6-10 Roller Universal wheel 2 37 SP.6-01 Bush SPSC.3-00 Frame 1 38 SP.0.02 L-Pin SP.0-04 Wheel 5" 2 40 SP.0-03 Shaft SP.0-11 Shaft 1 42 SF-1.1612 Bush SP.0-12 Bush 1 48 SPC.6-0	

Parts List of 576157 assembly

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Explosive drawing of New Model assembly



Parts List of New Model assembly

No.	Drawing no.	Description	Qty.	No.	Drawing no.	Description	Qty.
2	SPA .1.01	Handle bar with fender	1	29	SP.6-12	Roller	2
3	SPA.0-02	Washer	2	30	GB848-86	Washer 16	4
4	GB93-1987	Washer 12	6	31	GB894.1-86	Retaining ring for axle 16	6
5	GB5781-2000	Bolt 12x30	2	32	SPS.0-01	Shaft	2
6	GB5781-2000	Bolt M8x25	8	33	GB95-1985	Washer 16	4
7	GB95-1985	Washer 8	17	34	GB95-1985	Washer 12	4
9	GB93-1987	Washer 8	9	35	GB41-86	Nut M12	4
10	GB41-86	Nut M8	9	36	SP.6-10	Roller	2
11		Universal wheel 5"	2	37	SP.6-01	Bush	2
12	SPSA.1-00	Frame	1	38	SP.0.02	L-Pin	4
13	SP.0-08	Shaft	2	39	GB70-85	Screw 6×10	4
14	SP.0-04	Wheel 5"	2	40	SP.0-03	Shaft	1
15	GB894.1-86	Retaining ring for axle 12	2	41	SPSA.2-00	Arm	1
17	SP.0-11	Shaft	1	42	SF-1.1612	Bush	2
18	SP.0-12	Bush	1	47	YQ-00-350	Pump unit	1
19	GB894.1-86	Retaining ring for axle 10	1	48	SPC.6-07	Support	2
20	SPS.0-03	Shaft	1	49	SPA.4-07	Washer	2
21	YQ-7	Retaining ring	1	50	GB894.1-86	Retaining ring for axle 24	2
22	GB894.1-86	Retaining ring for axle 20	2	51	GB93-1987	Washer 6	4
23	SPS.2.01B	Connecting rod	1	53	YQ-8	Retaining ring	1
24	SP.3-03	Cushion	1	54	SP.0-06	Bush	4
25	GB5781-2000	Bolt M8x30	1	55	SP.0-07	Hollow shaft	2
26	SP.3-02	Pedal bar	1	56	GB276-86	Bearing 60203	4
27	SPSC.6-00	Table	1	57	SPSA.3-00	Arm	1
28	SP.6-11	Bush	2				