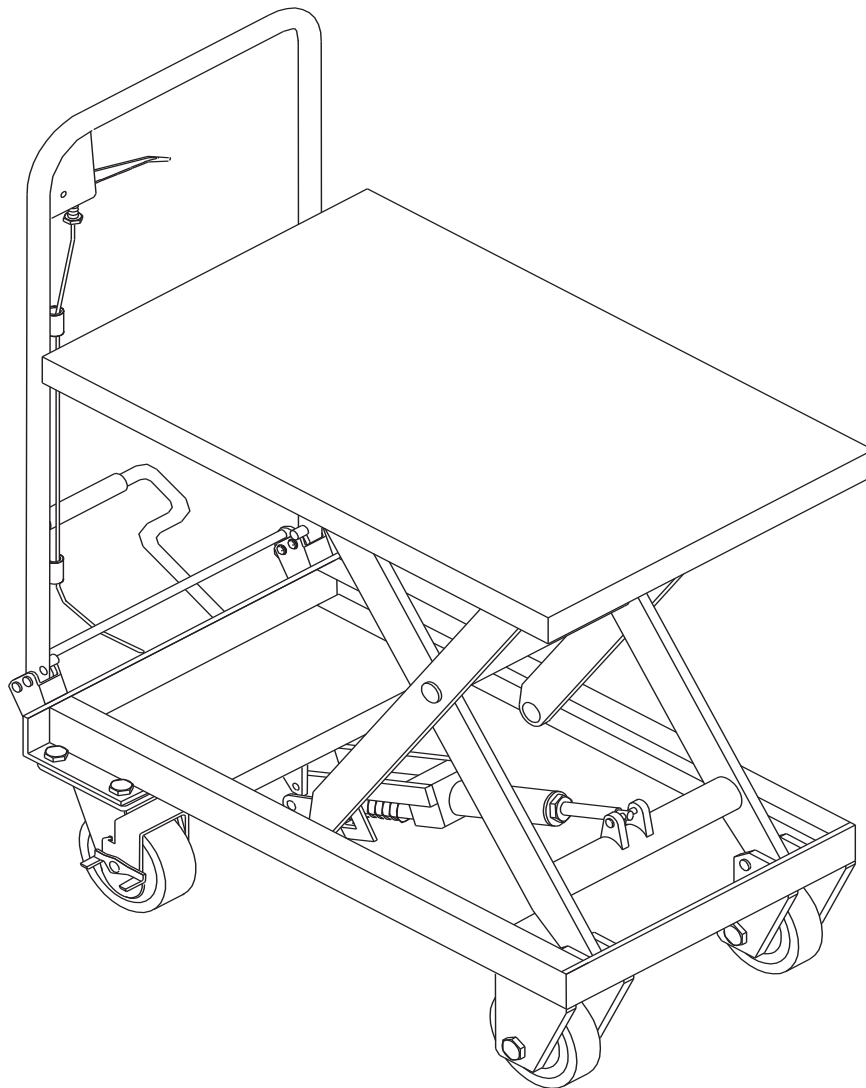


592580

SCISSOR LIFT 150KG

740MM LIFT HEIGHT

TOOLEX[®]
Industrial



INSTRUCTION MANUAL

CONSUMER SERVICE CENTRE
PO BOX 1012
HAMILTON NSW 2303 AUSTRALIA
Made in P.R.C.



EC Declaration of Conformity



According to the Machinery Directive 2006/42/EC

For the following equipment:

Product : Scissor Lifting Table
Type Designation /Trademark : 592580
Manufacturers Name : Ningbo Ruyi Joint Stock Co., Ltd.
Manufacturers Address : 656 North Taoyuan Road, Ninghai, Zhejiang 315600, P.R. China

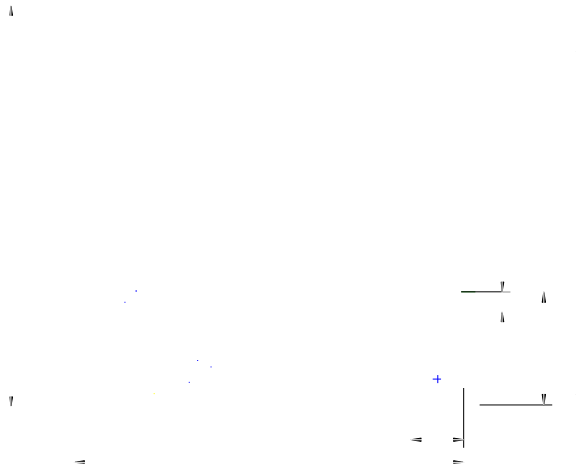
Refer to in this declaration conforms to the following directive(s):

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

I. Configuration diagram



□. Main technical parameters :

| Model | | 592580 | New Model |
|----------------------------------|----|------------|------------|
| Capacity | kg | 150 | 150 |
| Max. lift height H | mm | 740 | 740 |
| Min. height of table h | mm | 225 | 225 |
| Table size | mm | 700×450×35 | 740×450×35 |
| Handle height A | mm | 935 | 935 |
| Overall length B | mm | 770 | 830 |
| Foot pedal cycles to max. height | | ≤25 | ≤25 |
| Wheel diameter D | mm | 100 | 100 |
| Working volume of oil cylinder | ml | 115 | 115 |
| Oil capacity | ml | 220 | 220 |
| Service weight | kg | 42 | 44 |
| noise level | dB | <70 | <70 |

□. Scope of application :

SP 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 $-10\sim+40^{\circ}\text{C}$;
 - b) YCN32 is adaptive under the environment temperature of $-20\sim+40^{\circ}\text{C}$.
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 (referring to drawing 2)

| Faults | causes | Trouble shooting |
|--|---|--|
| The truck can not be raised or the lifting height is not enough. | 1) Steel ball (23) of the check-valve is not closed down. 2) Firing pin (28) withstands the steel ball (16). 3) Short of hydraulic oil. | 1) Clean the valve opening and change the steel ball (23). 2) 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) 3) Add enough hydraulic oil. |
| The table-board rises then descends. | 1) Steel ball (23)(24)(16) of the check-valve is not closed down. 2) Firing pin (28) withstands the steel ball (16). | 1) Clean the valve opening and change the steel ball (23) (24) (16). 2) 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) |

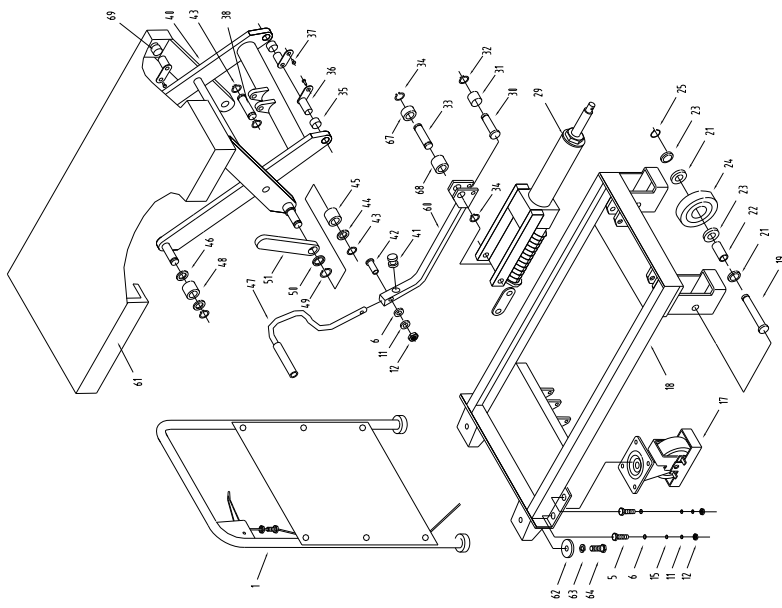
IX. Assembly method (referring to drawing 1) :

SP150, SP150A type trucks are folding type. Only if the handle is pulled up, this series truck can be operated.

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).

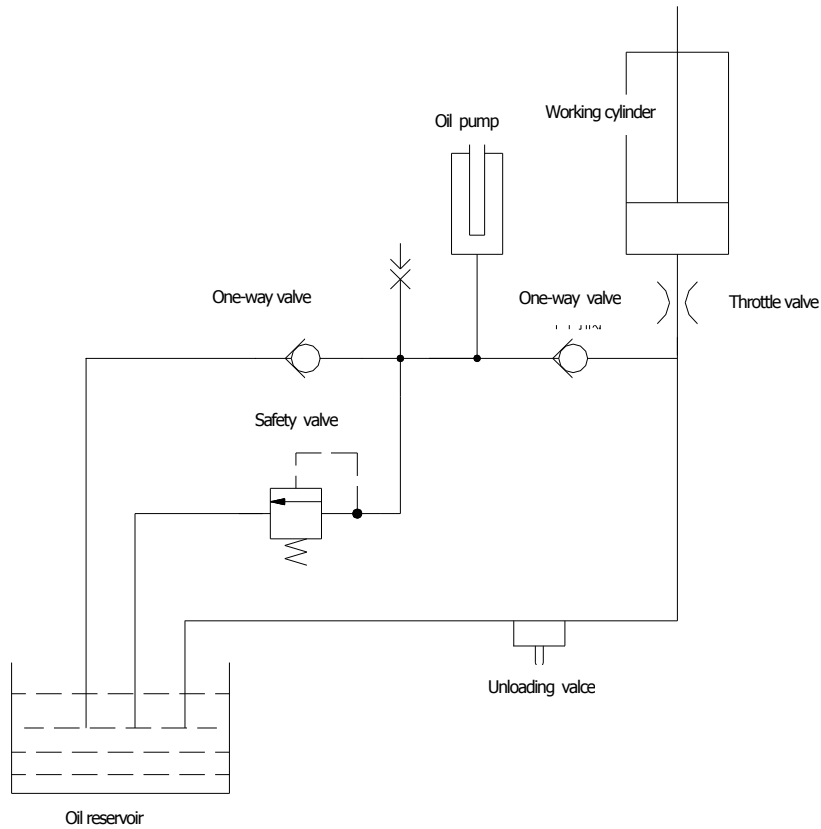
X. Structure diagram and principle diagram

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



Attached drawing (1)

Attached drawing (2)



Principle specification

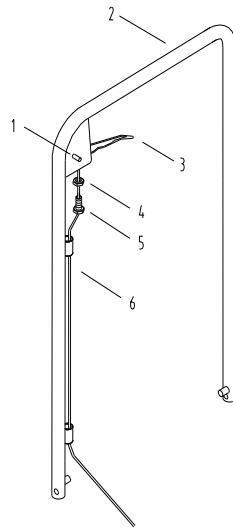
1. The restriction chock and the constant pressure overflow valve leak oil at the same when no-load, the no-load vehicle descend faster, and it can meet the customers the demand.
2. When the load is more than 50kg, the system pressure is 8MPa, the constant pressure overflow valve closes automatically,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

Attached drawing (3)

Spare parts catalogue

1. Explosive drawing and parts list of handle
2. Explosive drawing and parts list of 592580 pump
3. Explosive drawing and parts list of 592580 assembly
4. Explosive drawing and parts list of 592580 assembly

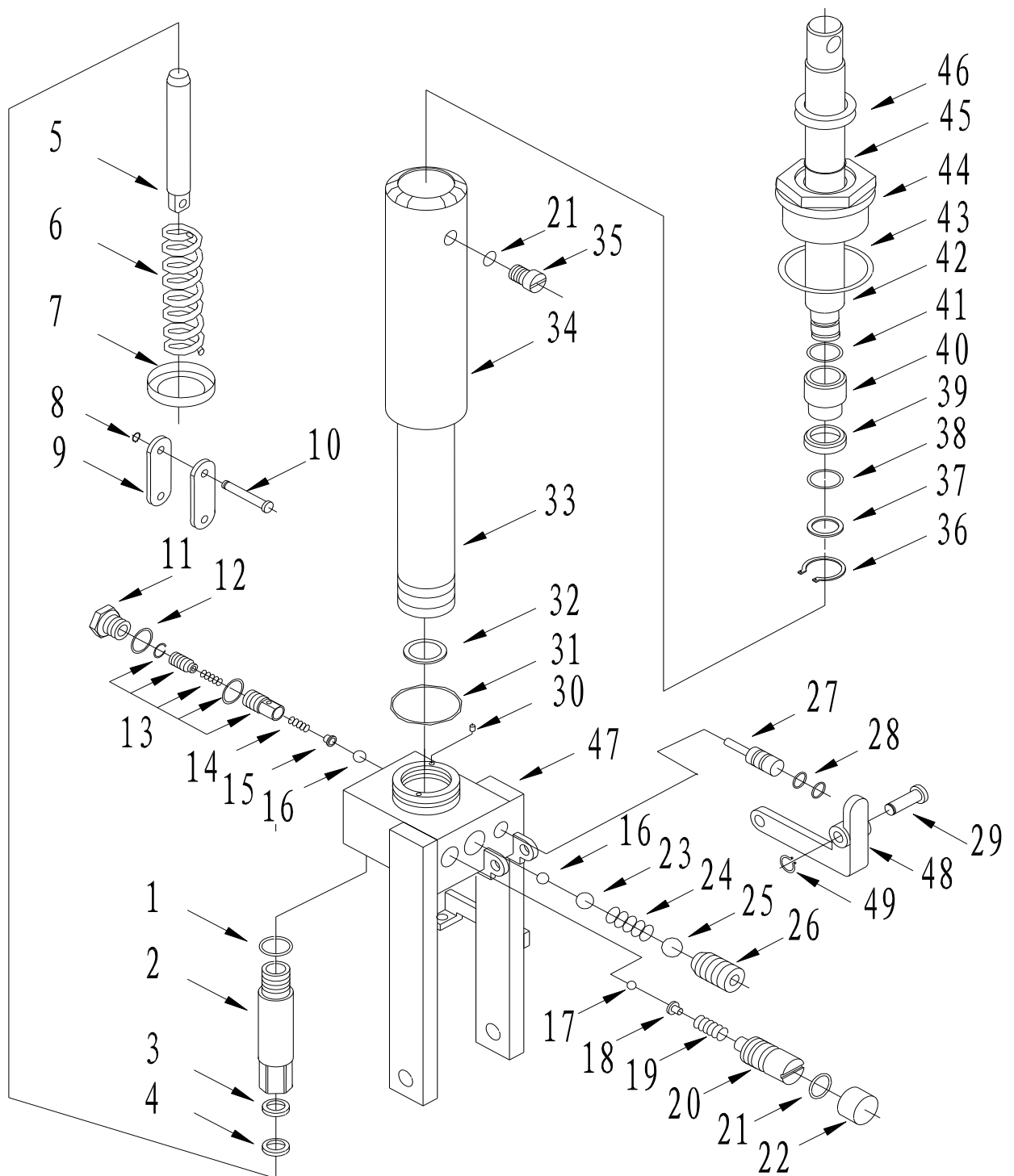
Explosive Drawing and Parts List of Handle



| No. | Drawing no. | Description | Qty. | Remark |
|-----|-------------|-----------------|------|--------|
| 1 | GB879-86 | Spring pin 6x30 | 1 | |
| 2 | SPAIII.1.01 | Handle bar | 1 | |
| | SPIII.1.02 | Knob | 1 | |
| 3 | GB6172-86 | Thin nut M8 | 1 | |
| 4 | SPIII.0-01 | Adjusting screw | 1 | |
| 5 | 1200(1020) | Pull rod | 1 | |

Remark: The handle of SP150A is with fender. See page 13.

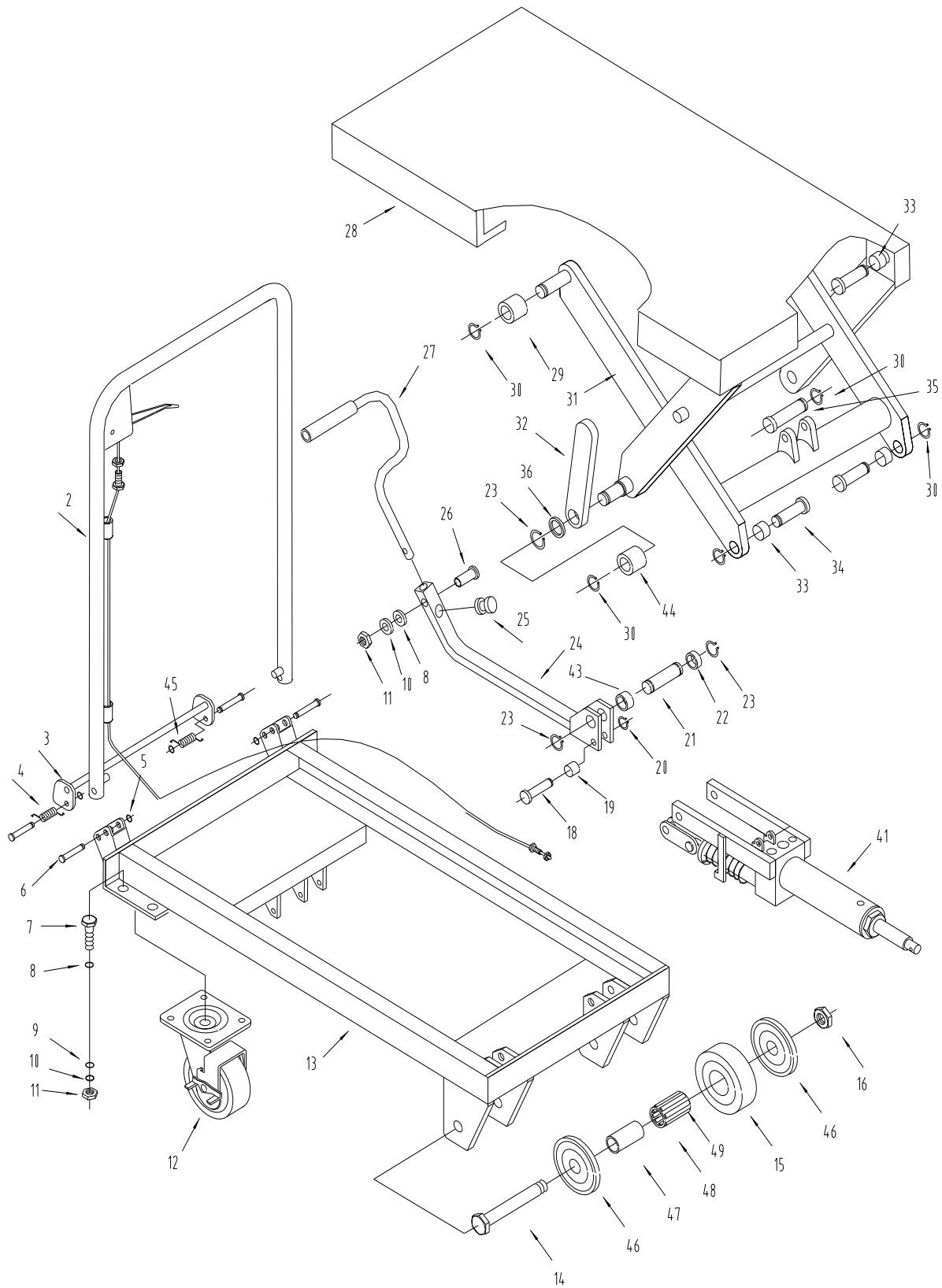
Explosive Drawing of 592580 pump



Parts List of 592580 pump

| No. | Drawing no. | Description | Qty | No. | Drawing no. | Description | Qty. |
|-----|-------------|----------------------|-----|-----|-------------|---|------|
| 1 | GB3452.1-86 | O-ring 22.4×2.65 | 1 | 26 | GB77-85 | Screw M16×18 | 1 |
| 2 | SP.8-11 | Pump cylinder | 1 | 27 | YQ-01 | Strike pin | 1 |
| 3 | UHS18 | YX-seal ring | 1 | 28 | GB3452.1-82 | O-ring 6.9×1.8 | 2 |
| 4 | DH18 | Dust ring | 1 | 29 | DF1.2-08 | Shaft | 1 |
| 5 | SP.8-10 | Pump plunger | 1 | 30 | | Filter | 1 |
| 6 | SP.8-09 | Spring | 1 | 31 | GB3452.1-82 | O-ring 65×3.55 | 1 |
| 7 | SP.8-08 | Spring seat | 1 | 32 | SP15.8-05 | Rectangular section ring | 1 |
| 8 | GB894.1-86 | Retaining ring | 1 | 33 | SP15.8-02 | Cylinder | 1 |
| 9 | SP15.0-10 | Joint plate | 2 | 34 | SP15.8-01 | Housing | 1 |
| 10 | SP.0-14 | Pin | 1 | 35 | SP.8-02 | Screw | 1 |
| 11 | JF.1-17 | Plug | 1 | 36 | GB894.1-86 | Retaining ring for axle 20 | 1 |
| 12 | JB982-77 | Copper washer | 1 | 37 | SP15.8-06 | Washer | 1 |
| 13 | 6W804.1-12 | Damp valve | 1 | 38 | GB3452.1-82 | O-ring 27×4 | 1 |
| 14 | YQ-03 | Spring | 1 | 39 | C01.02-20 | Cup packing | 1 |
| 15 | YQ-02 | Spring seat | 1 | 40 | SP15.8-04 | Bush | 1 |
| 16 | GB308-77 | Steel ball | 2 | 41 | GB3452.1-82 | O-ring 15×2.65 | 1 |
| 17 | GB308-77 | Steel ball | 1 | 42 | SP15.8-03 | Piston rod | 1 |
| 18 | SP.8-18 | Spring seat | 1 | 43 | C01.2-16 | Rectangular section sealing | 1 |
| 19 | SP.8-17 | Spring | 1 | 44 | C01.2-15 | Cylinder cap | |
| 20 | SP.8-16 | Adjusting screw | 1 | 45 | GB3452.1-82 | O-ring 31.5×3.55 | 1 |
| 21 | GB3452.1-86 | O-ring 7.5×2.65 | 2 | 46 | HG4-692-67 | J-shaped steel frame rubber sealing 32×45×6.5 | 1 |
| 22 | SP.8-15 | Cover ring | 1 | 47 | YQ.6-150 | Base | 1 |
| 23 | GB308-77 | Steel ball 9.5 | 1 | 48 | YQ-04 | Lever plate | 1 |
| 24 | SP.8-07 | Spring | 1 | 49 | GB894.1-86 | Retaining ring for axle 8 | 1 |
| 25 | GB308-77 | Steel ball 1/2(12.7) | 1 | | | | |

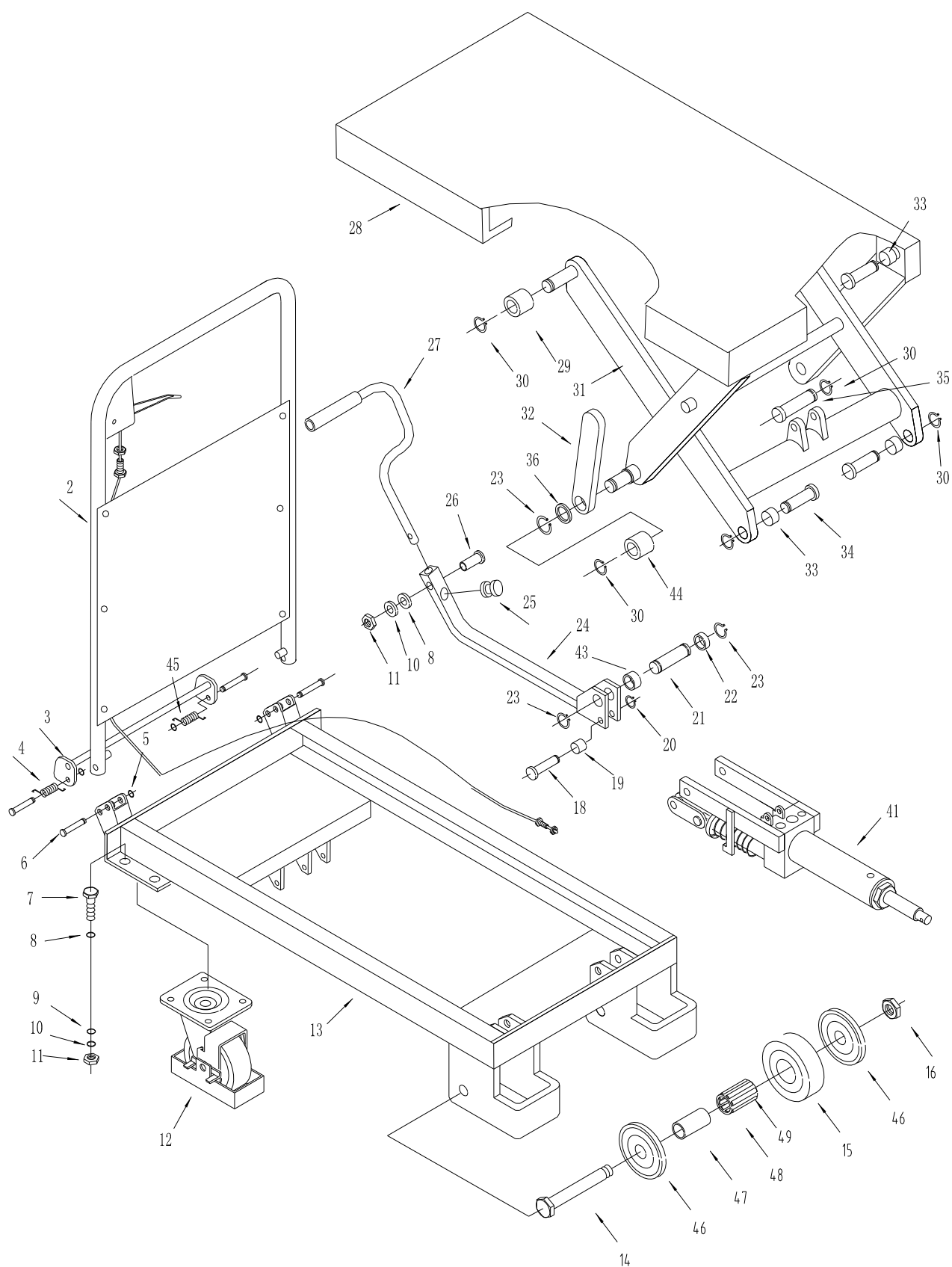
Explosive drawing of 592580 assembly



Parts List of 592580 assembly

| No. | Drawing No. | Description | Qty. | Remark |
|-----|---------------|----------------------------|------|--------------|
| 2 | SP□15.1.01 | Handle bar | 1 | |
| 3 | SP15.0.11 | Pressing buckle | 1 | |
| 4 | SP15.0-13 | Spring | 1 | |
| 5 | SP.1-02 | Retaining ring | 4 | |
| 6 | GB882-86 | Pin8×45-A | 4 | |
| 7 | GB5781-2000 | Bolt M8×20 | 8 | |
| 8 | GB96-85 | Washer 8 | 8 | |
| 9 | GB95-85 | Washer 8 | 9 | |
| 10 | GB93-87 | Washer 8 | 9 | |
| 11 | GB41-86 | Nut M8 | 9 | |
| 12 | | Universal Wheel 4" | 2 | SP15.4-00 |
| 13 | SP15.7-00 | Frame | 1 | |
| 14 | GB5780-2000 | Bolt M8x60 | 2 | |
| 15 | SP15.0-03 | Wheel 4" | 2 | |
| 16 | GB889-86 | Nut M8 | 2 | |
| 18 | SP.0-11 | Shaft | 1 | |
| 19 | SP.0-12 | Bush | 1 | |
| 20 | GB894.1-86 | Retaining ring for axle 10 | 1 | |
| 21 | SP15.0-09 | Shaft | 1 | |
| 22 | YQ-7-150 | Retaining ring | 1 | |
| 23 | GB894.1-86 | Retaining ring for axle 16 | 4 | |
| 24 | SP15.3.01B | Connecting rod | 1 | |
| 25 | SP.3-03 | Cushion | 1 | |
| 26 | GB5781-2000 | Bolt M8x30 | 1 | |
| 27 | SP15.3.02/.03 | Pedal bar | 1 | Rubber cover |
| 28 | SP15.5-00 | Table | 1 | |
| 29 | SP15.6-12 | Roller | 4 | |
| 30 | GB894.1-86 | Retaining ring for axle 12 | 9 | |
| 31 | SP15.6-00 | Arm | 1 | |
| 32 | SP15.6-07 | Support | 2 | |
| 33 | SF-1.1210 | Bush | 4 | |
| 34 | SP15.0-01 | Pin | 4 | |
| 35 | SP15.0-02 | Pin | 1 | |
| 36 | GB848-86 | Washer 16 | 2 | |
| 41 | YQ-00-150 | Pump unit | 1 | |
| 43 | YQ-8-150 | Retaining ring | 1 | |
| 44 | SP15.6-09 | Roller | 2 | |
| 45 | SP15.0-12 | Spring | 1 | |
| 46 | SP15.0-05 | Cover | 4 | |
| 47 | SP15.0-06 | Hollow shaft | 2 | |
| 48 | SP15.0-07 | Needle roller and frame | 2 | |

Explosive drawing of 592580 assembly



Parts list of 592580 assembly

| No. | Drawing No. | Description | Qty. | Remark |
|-----|---------------|----------------------------|------|--------------|
| 2 | SP□15.1.01 | Handle bar | 1 | With baffle |
| 3 | SP15.0.11 | Pressing buckle | 1 | |
| 4 | SP15.0-13 | Spring | 1 | |
| 5 | SP.1-02 | Retaining ring | 4 | |
| 6 | GB882-86 | Pin 8×45-A | 4 | |
| 7 | GB5781-2000 | Bolt M8x20 | 8 | |
| 8 | GB96-85 | Washer 8 | 8 | |
| 9 | GB95-85 | Washer 8 | 9 | |
| 10 | GB93-87 | Washer 8 | 9 | |
| 11 | GB41-86 | Nut M8 | 9 | |
| 12 | | Universal wheel 4" | 2 | |
| 13 | SPA15.4-00 | Frame | 1 | |
| 14 | GB5780-2000 | Bolt M8x60 | 2 | |
| 15 | SP15.0-03 | Wheel 4" | 2 | |
| 16 | GB889-86 | Nut M8 | 2 | |
| 18 | SP.0-11 | Shaft | 1 | |
| 19 | SP.0-12 | Bush | 1 | |
| 20 | GB894.1-86 | Retaining ring for axle 10 | 1 | |
| 21 | SP15.0-09 | Shaft | 1 | |
| 22 | YQ-7-150 | Retaining ring | 1 | |
| 23 | GB894.1-86 | Retaining ring for axle 16 | 4 | |
| 24 | SP15.3.01B | Connecting rod | 1 | |
| 25 | SP.3-03 | Cushion | 1 | |
| 26 | GB5781-2000 | Bolt M8x30 | 1 | |
| 27 | SP15.3.02/.03 | Pedal bar | 1 | Rubber cover |
| 28 | SPA15.2-00 | Table | 1 | |
| 29 | SP15.6-12 | Roller | 4 | |
| 30 | GB894.1-86 | Retaining ring for axle 12 | 9 | |
| 31 | SPA15.3-00 | Arm | 1 | |
| 32 | SP15.6-07 | Support | 2 | |
| 33 | SF-1.1210 | Bush | 4 | |
| 34 | SP15.0-01 | Pin | 4 | |
| 35 | SP15.0-02 | Pin | 1 | |
| 36 | GB848-86 | Washer 16 | 2 | |
| 41 | YQ-00-150 | Pump unit | 1 | |
| 43 | YQ-8-150 | Retaining ring | 1 | |
| 44 | SP15.6-09 | Roller | 2 | |
| 45 | SP15.0-12 | Spring | 1 | |
| 46 | SP15.0-05 | Cover | 4 | |
| 47 | SP15.0-06 | Hollow shaft | 2 | |
| 48 | SP15.0-07 | Rack of bearing | 2 | |
| 49 | GB309-77 | Bearing | 16 | |