

# 75T Air/Manual Hydraulic Shop Press



## Operation Manual

## 1. Important Information

### 1.1 Safety Information

#### 1.1.1 Hazard Symbols Used in the Manuals

This manual includes the hazard symbols defined below when the operations or maintenance job involves a potential danger. These symbols describe the level of danger involved in performing a job on the tool and the precautions to take to avoid the hazard.

Term	Sign	Description
Danger Label		Danger Labels indicate an imminently hazardous situation that if not avoided, <b>WILL</b> result in death or serious injury.
Warning Label		Warning Labels indicate a potentially hazardous situation, which if not avoided, <b>COULD</b> result in death or serious injury.
Caution Label		Caution Labels indicate a potentially hazardous situation, which if not avoided, <b>MAY</b> result in minor or moderate injury.
Note	<b>NOTE:</b>	Short piece of additional information with the purpose of adding or emphasizing important points in the text.

#### 1.1.2 Safety Requirements

##### Important

Make sure to read, understand, and strictly follow all safety related instructions before operation or maintenance of this equipment.

##### Intended Users

This manual is to be made available to all persons who are required to install, configure or service equipment described herein, or any other associated operation.

##### Application Area

The machinery described is intended for machinery production and assembling spare parts. It is used to press, size, assemble, rivet small parts in process and not for other use.

##### Personnel

Installation, operation and maintenance of the equipment should be carried out by qualified personnel. A qualified person is someone who is technically competent and familiar with all safety information and established safety practices with the installation process, operation and maintenance of this equipment; and with all the hazards involved.

#### 1.1.3 Hazards



Personnel safety must have top priority. Thoroughly read the operation manuals to

completely understand proper procedures before maintenance or inspection work.

### Basic Safety Instructions



Failure to comply with the following could result in serious injury or death.

1. Periodic inspections or maintenance work must be carried out by two or more persons.
2. Read and understand the safety manual.
3. Read and understand all the attached manuals.
4. Attach visible signs on the equipment so that anyone recognizes and understands that maintenance or inspection is on going.
5. Post a list with emergency phone numbers nearby the working area.
6. Should be aware of what to do in case of an emergency (refer to the Procedures for Emergency Situations); know the location of the first-aid-kit, and the location of the fire extinguisher. Also learn how to use a fire extinguisher.
7. Alert anyone around the Tool whenever planning to operate it during maintenance or inspection work.
8. Always use proper hand tools and jigs during maintenance or inspections. Before operating the machine, check for any hand tools or jigs left inside it. For your own safety, **NEVER** try to remove them with the machine under operation. Consider **SAFETY FIRST**.
9. Please make sure that the operator must wear protective cloth, gloves, safety helmet, shoes and ear protector during operating.
10. To prevent back injury, heavy parts (or units), must be moved by two persons or more.
11. Before powering the machine, alert the persons around it.
12. Be careful not to be pinched by motion parts.
13. Use **ONLY CARRIER** specified for the tool, and set it in a correct position.
14. To avoid accidents, always be aware of any on-going work on the machine. Also, always stay focused on the job to be done.

#### 1.1.4 Safety Instruction



1. Before maintenance pressured parts in the machine, you **MUST** release the pressure in the pressured system. At the same time, **DO NOT** stand in the direction facing the charger, the operator should on the opposite side and remember **DO NOT** strike, press or transfer until it is discharged.

2. When it is necessary to exchange die after running, operators should wear glove or use tools to operate avoid being hurt.

**NOTE:** Immediately stop operating the equipment if not working properly. Contact a certified technical support engineers for repair. The equipment must not be operated without approval from the certified technical support engineer.



Be careful when you are near the caution signs.

Safety for material used in the machine

The MSDS (Material Safety Data Sheet) information document of lubricant oils offered by supplier should be placed at the convenient place.



### 1.1.5 Prohibited Dangerous Actions

This section describes examples of dangerous actions not only during equipment operation, but also during maintenance and inspections. To avoid accidents, thoroughly read and understand the instructions below regarding dangers related to each mechanism prior to any maintenance or inspection work.

### 1.1.6 Environmental Pollution

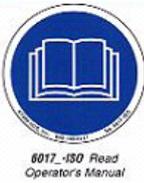
If the substances you use come under the ordinances concerning environmental pollution, follow the ordinances to discharge and dispose of such substances. If you commission industrial waste companies, you should confirm the way of final processing.



Check for the security of people working around the Tool, before powering it back.

### 1.2 Warning Label

Below drawing show warning labels attached on the machine.

1		Hand crush force from above /
2		Read operator's manual /
3		Consult technical manual for proper service procedures /
4		Must wear protective clothes
5		Must wear protective gloves

6		Must wear safety helmet
7		Must wear protective shoes
8		Must wear ear protector

## 2.Specification

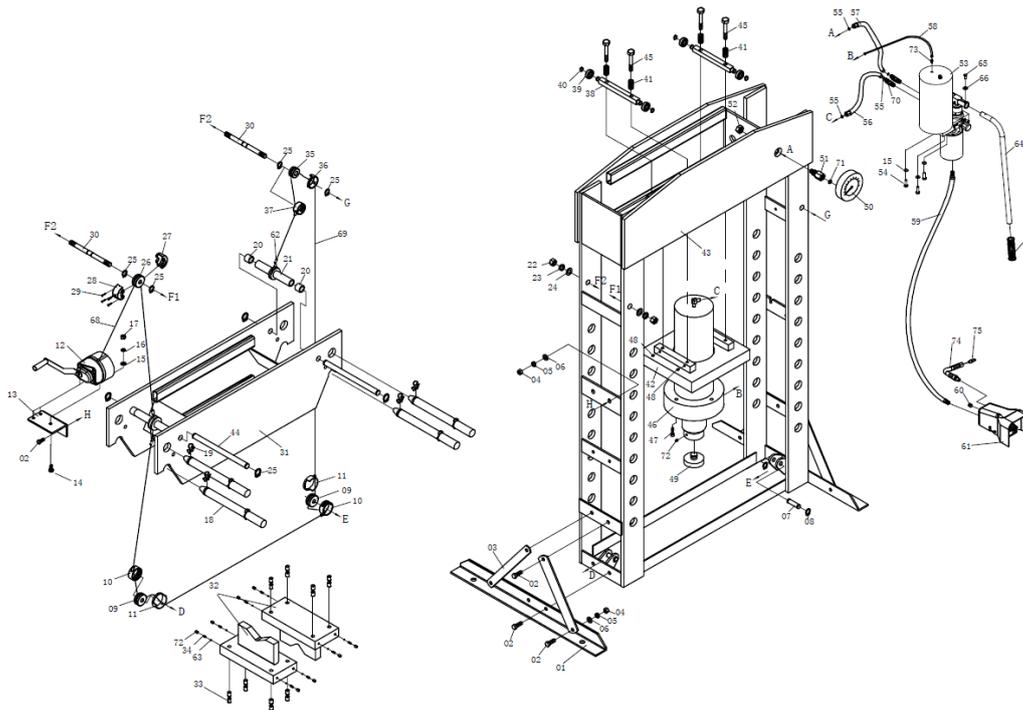
### 2.1 Application Area

The machinery described is intended for machinery production and assembling spare parts. It is used to press, size, assemble, rivet small parts in process and not for other use.

### 2.2 Mechanical part

No.	Item		Unit	Value
1	Capacity		Ton	75
2	Stroke		mm	250
3	Pressure of Hydraulic System		MPa	59.92
4	Working Range		mm	170-884
5	Air Inert Fitting		NPT	1/4"
6	Air Pressure		MPa	0.75-0.85
7	Bed Size	Width	mm	279
8	speed		mm/s	1.2
9	Height above floor		mm	1920
10	Covered area	Width	mm	800
		Length	mm	1450
11	Gross weight		Kg	498

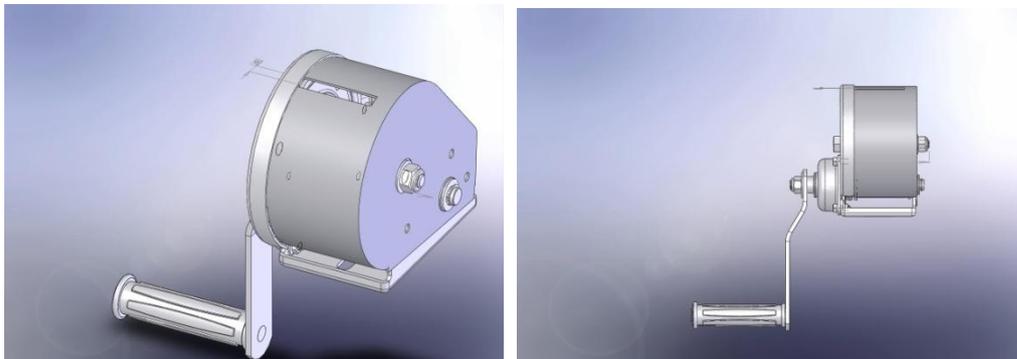
### 2.5 Mechanical construction



NO.	DESCRIPTION	Q'TY	NO.	DESCRIPTION	Q'TY
01	Base section	2	39	Ball bearing	4
02	Bolt	14	40	Circlip	4
03	Support	4	41	Spring	4
04	Nut	14	42	Under plate	1
05	Lock washer	14	43	Frame	1
06	Washer	14	44	Lifting pin	2
07	Pin 2	2	45	Bolt	4
08	Circlip	4	46	Ram assy'	1
09	Roller	2	47	Screw	4
10	Shield	2	48	Screw	4
11	Shield	2	49	Serrated saddle	1
12	Hand winch	1	50	75T Pressure gauge	1
13	Fixed plate	1	51	Gauge fitting	1
14	Bolt	3	52	Nut	1
15	Washer	7	53	Pump assy'	1
16	Lock washer	3	54	Bolt	4
17	Nut	3	55	O-ring	4
18	Pin	4	56	Hydraulic hose 1	1
19	Circlip	8	57	Hydraulic hose 2	1
20	Bushing	4	58	Oil hose	1
21	Sleeve	2	59	Air hose	1
22	Bolt	4	60	Screw	1

23	Lock washer	4	61	Air valve with shield	1
24	Washer	4	62	Cable sheath	3
25	Circlip	8	63	Steel ball	8
26	Roller	1	64	Handle	1
27	Shield	1	65	Bolt	1
28	Shield	1	66	Washer	1
29	Screw	4	67	Cover for handle	1
30	Roller Pin	2	68	Cabler	1
31	Bed frame	1	69	Cabler	1
32	Heel block	2	70	Elbow	2
33	Limited screw	8	71	Nylon ring	1
34	Spring	8	72	Screw	9
35	Small roller	1	73	Connect fitting	1
36	Shield	1	74	Air hose	1
37	Shield	1	75	American standard air hose fitting	1
38	Connecting rod	2			

## 2.6 Fixed guards



## 3. Prepare before using

### 3.1 Transport



The units are generally too heavy to be moved by hand. Therefore, use the correct transport and lifting equipment. The weights and dimensions of this machine (unit) are shown on the label in clause 2.

During moving the machine, please make sure to use the proper lifting equipment and follow the instructions as follows.

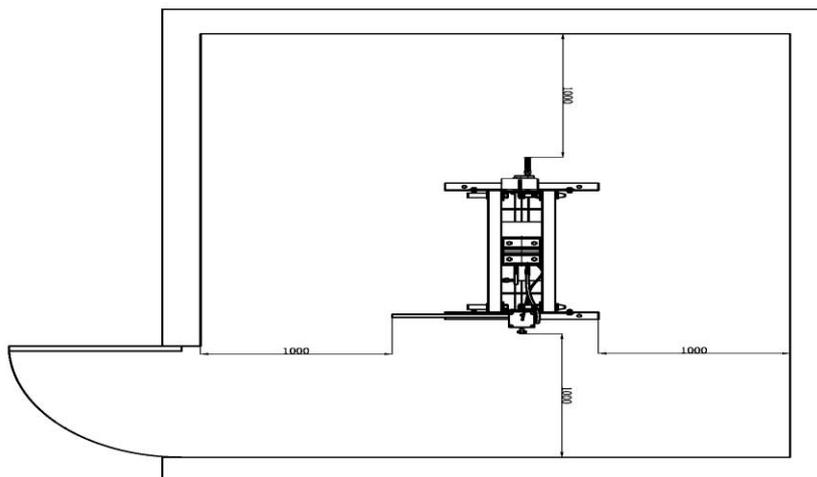
### Hydraulic part

### 3.2 Working Area Conditions

Users should provide enough space for the equipment and the environment should be clean, non-flammable, corrosive and dust free.

### **CAUTION**

A working area of 1,000mm is to be kept free both in front of and behind the machine while it is in operation so that it is always easily accessible.



### **3.3 Unpacking & Check**

#### **CAUTION**

When open the packing, please make sure to use the proper tools, wear protective cloth, gloves, safety helmet

Make sure that the product and parts in box should be complete and identical with the part list. If not, please contact with the manufacturer in time.

### **3.4 Disposal of the packaging**

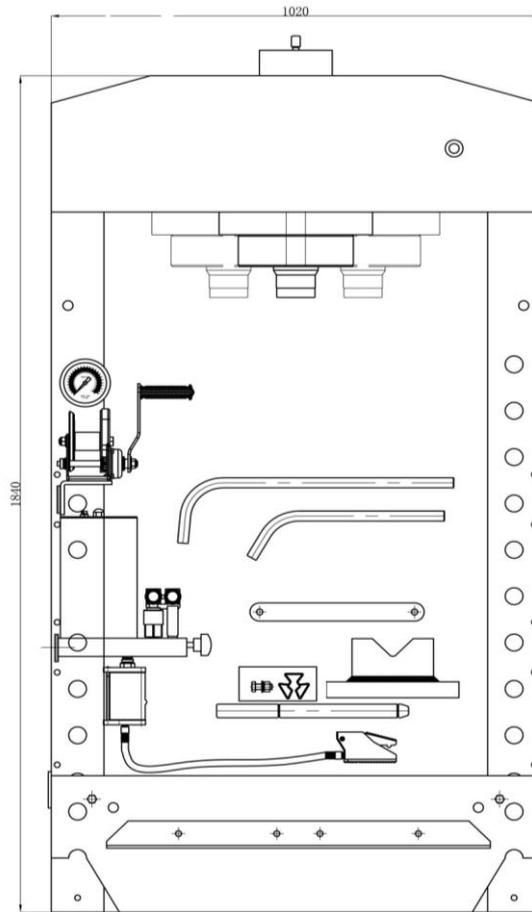
The packaging of these machines consists of PVC film and polywood case. The proper disposal of the packaging is the responsibility of the customer.

### **3.5 Installation**

#### **CAUTION**

The machine must only be installed and commissioned by qualified personnel!

All relevant safety regulations must be strictly adhered to!



### Packing Condition

- The bed frame(31) is put in the bottom in order to convenient for package and transport, then fixed on the frame by two bolts M12.
- Attach the base section (01) and support (03) to left and right post using bolt (02), washer (06), lock washer (05) and nut (04).

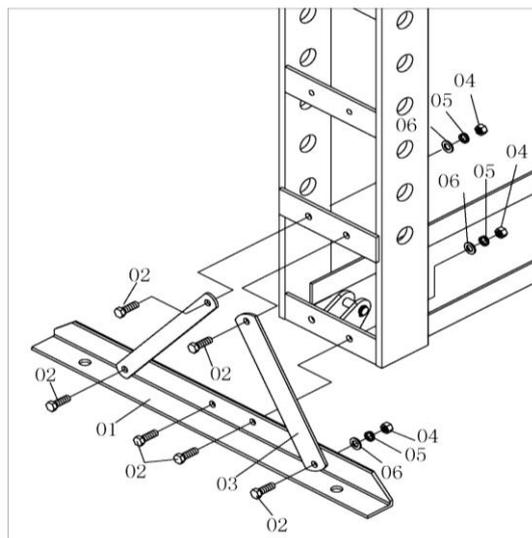
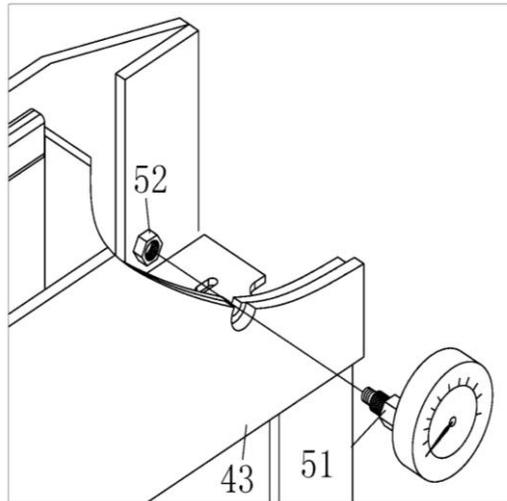


Figure 1

- Assemble the nylon ring (71) to gauge fitting (51), then put the pressure gauge (50) and twist tight. Remark: twist as tight as possible, otherwise it will be leak. Attach the gauge fitting to the suitable upper cross beam and twist nut (52)



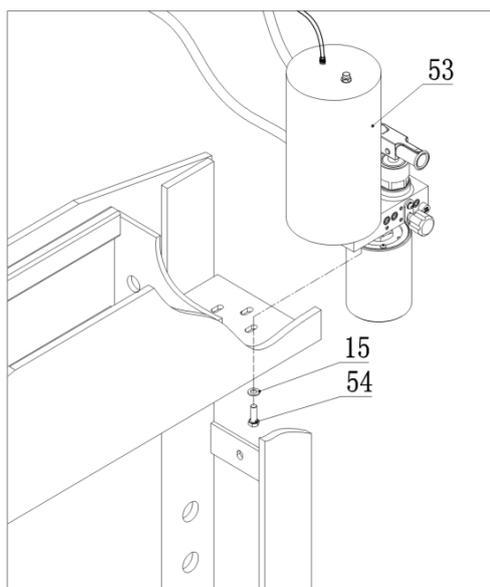
**Figure 2**

- Pump assemble: attach the pump assy' (53) to frame by using washer (15) and bolt (54) and twist tight.

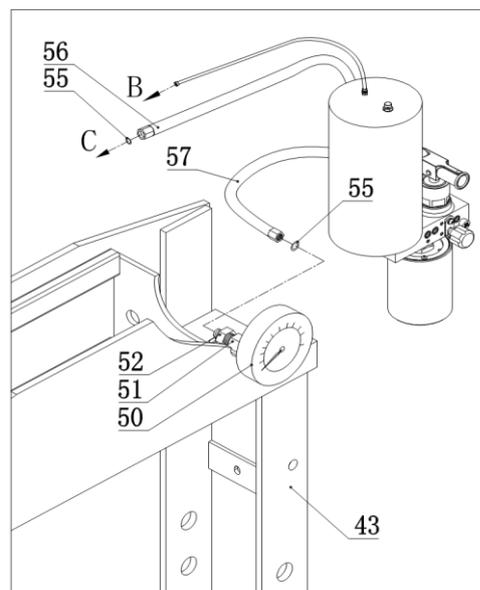
Hydraulic hose 1 assemble: dismantle the plug from Hydraulic hose 1 (57) then assemble the o-ring(55), also dismantle the plug from ram assy'(46), connect the Hydraulic hose 1 (56) to ram assy'(46) and twist tight.

Hydraulic hose 2 assemble: attach the o-ring (55) to gauge fitting (51), then put the Hydraulic hose 2(57) into the gauge fitting (51) and twist tight, connect the PU pipe (A-A). Attach the handle (64) to the pump pin by using bolt (65) and twist tight..

Remark: before assemble, open the breather valve first which is on the cylinder (pull up the breather valve).

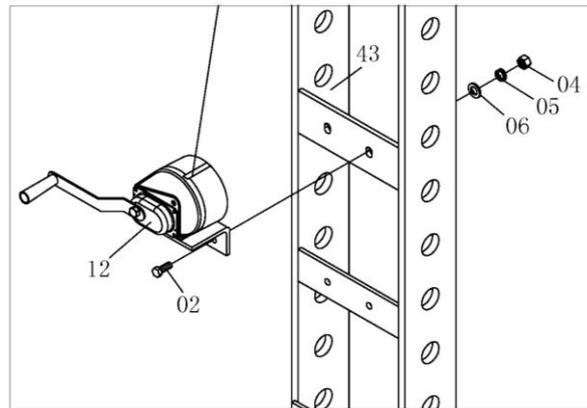


**Figure3**



**Figure 4**

- Move the hand winch (12) to the outside of the post, then use bolt (02), washer (06), lock washer (05), and nut (04) which were dismantled just now to twist tight and fix to the relevant roller.



**Figure 5**

### 3.6 Commissioning the machine



#### Before the commissioning

Before the first use, please fix the machine to the floor by anchor bole. It must be ensured that the standing surface of the machine site is firm and horizontal, and that sufficient lighting is provided for.

- Clean the machine thoroughly
- Before first use of this product, pour a teaspoon of good quality, air tool lubricant into the air supply inlet of the lift control valve, connect to air supply to air supply and operate for 3 seconds to evenly distribute lubricant.
- Purge away air from the hydraulic system.
- Manual operation system: open the release valve on the pump by turning it counterclockwise. Pump several full stokes to eliminate any air in the system.
- Air operating system: open the release valve on the pump by turning it counterclockwise. Connect the quick coupler-male into the air supply hose quick coupler-female, then turn on the air valve with shield (61) letting the pump work for several times to eliminate any air in the system.
- Check all parts and conditions, if there is any part broken, stop using it and contact your supplier immediately.

## 4. Maintenance

Maintenance should be acted before daily working every day.

Clean the outside of the press with dry, clean and soft cloth and periodically lubricate the hoist, wheel shaft assembly, the joints and all moving parts with a light oil in

normal service.

DO NOT allow lubricant to heel block nor frame of shop press.

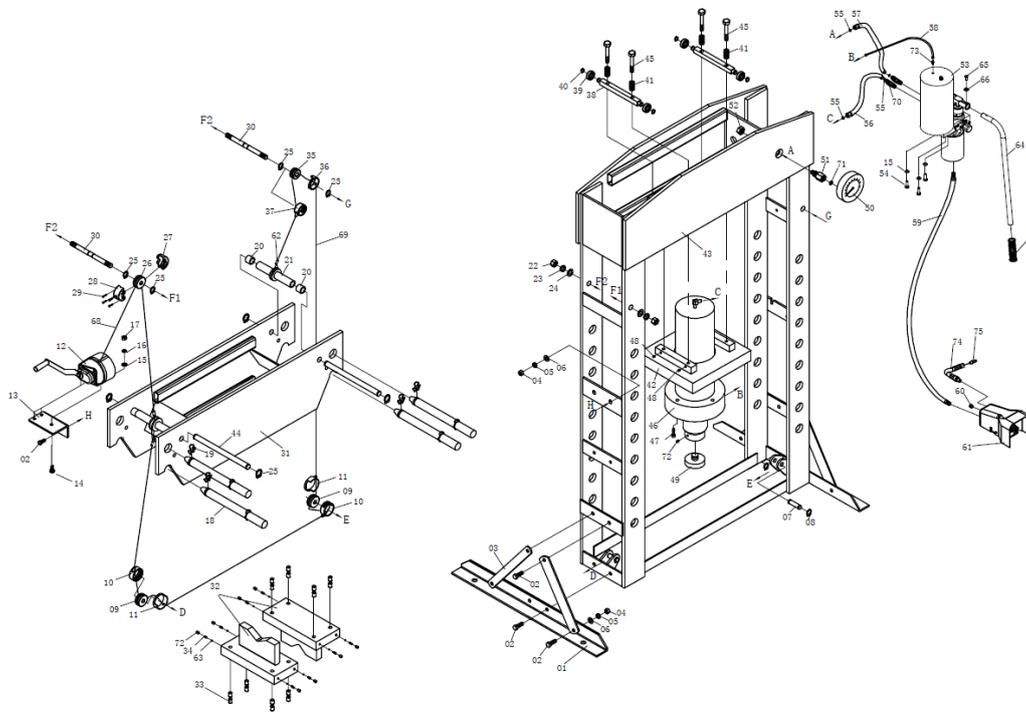
When not in use, store the press in a dry location with ram and piston fully retracted.

When press efficiency drops, purge away air from the hydraulic system as described before.

Check the hydraulic oil: remove the oil filler nut (on the top of the reservoir, if the oil is not adequate, fill with 22 # (ISO6743) hydraulic jack oil as necessary, then replace the oil filler nut, purge away air from the hydraulic system as described before.

The equipment must not be repaired or changed spare parts by whom without approval from the certified technical support engineer.

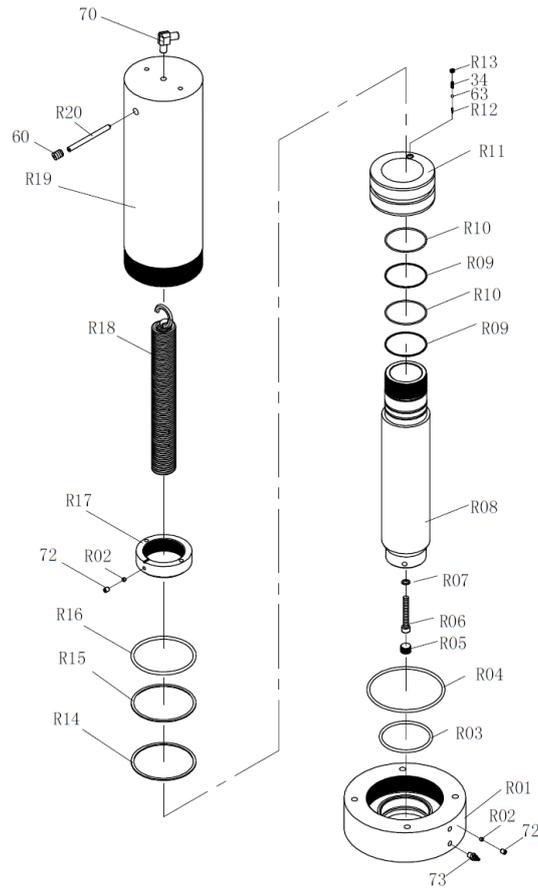
DRAWING:



NO.	DESCRIPTION	Q'TY	NO.	DESCRIPTION	Q'TY
01	Base section	2	39	Ball bearing	4
02	Bolt	14	40	Circlip	4
03	Support	4	41	Spring	4
04	Nut	14	42	Under plate	1
05	Lock washer	14	43	Frame	1
06	Washer	14	44	Lifting pin	2
07	Pin 2	2	45	Bolt	4
08	Circlip	4	46	Ram assy'	1
09	Roller	2	47	Screw	4

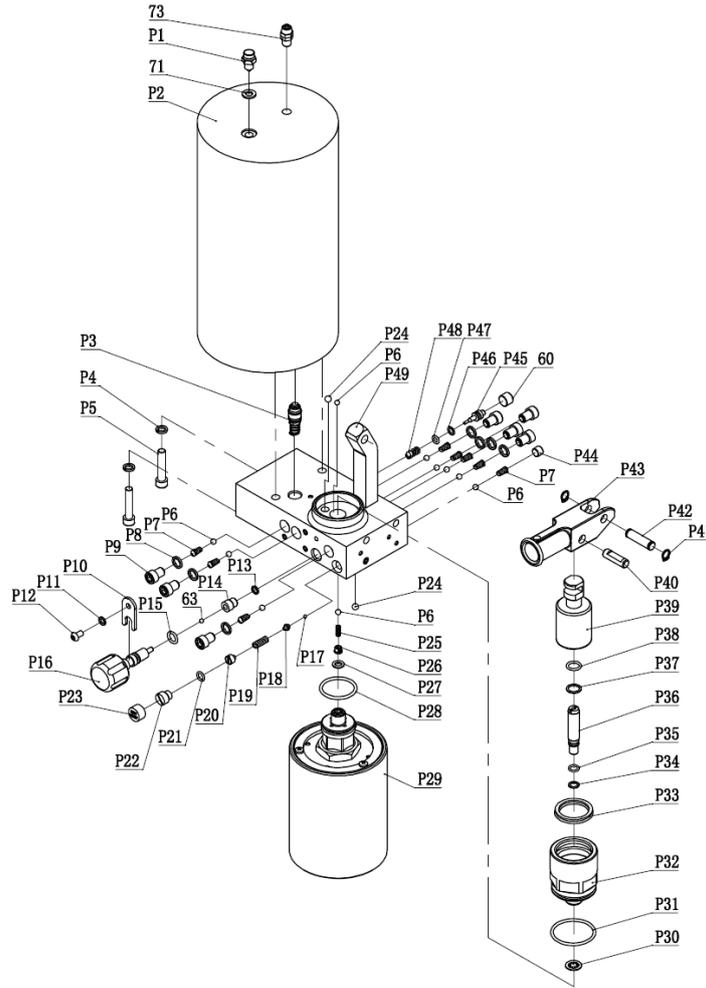
10	Shield	2	48	Screw	4
11	Shield	2	49	Serrated saddle	1
12	Hand winch	1	50	75T Pressure gauge	1
13	Fixed plate	1	51	Gauge fitting	1
14	Bolt	3	52	Nut	1
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35	Small roller	1	73	Connect fitting	1
36	Shield	1	74	Air hose	1
37	Shield	1	75	American standard air hose fitting	1
38	Connecting rod	2			

### Main cylinders



## Parts List

Part No.	Description	Qty	Part No.	Description	Qty
R01	Cap fight	1	R14	Nylon ring	1
R02	Nylon ring	2	R15	Retaining ring	1
R03	O-ring	1	R16	O-ring	1
R04	O-ring	1	R17	Nut	1
R05	Plug	1	R18	Spring	1
R06	Screw	1	R19	Cylinder	1
R07	Copper ring	1	R20	Pin	1
R08	Piston	1	34	Spring	1
R09	F4 ring	2	60	Plug	1
R10	O-ring	2	63	Steel ball	1
R11	Piston head	1	71	Elbow	1
R12	Valve core	1	73	Screw	2
R13	Screw	1	74	Connecting fitting	1



## Pump

NO.	DESCRIPTION	Q'TY	NO.	DESCRIPTION	Q'TY
P01	Vent screw	1	P28	O-ring	1
P02	Reservoir	1	P29	Air motor	1
P03	Adapter assembly	1	P30	Copper ring	1
P04	Lock washer	2	P31	O-ring	1
P05	Screw	2	P32	Pump core base for manual	1
P06	Steel ball	10	P33	U-ring	1
P07	Spring	8	P34	O-ring	1
P08	Copper ring	7	P35	F4 ring	1
P09	Screw	7	P36	Manual pump core	1
P10	U-ring	1	P37	F4 ring	1
P11	Lock washer	1	P38	O-ring	1
P12	Screw	1	P39	Manual pump core	1
P13	Washer	1	P40	Pin	1
P14	Release Valve seat	1	P41	Circlip	1

P15	O-ring	1	P42	Pin	2
P16	Release valve	1	P43	Hand press	1
P17	Steel ball	1	P44	Plug	1
P18	Adjust ball seat	1	P45	Valve plug	1
P19	Spring	1	P46	O-ring	1
P20	Screw	1	P47	F4 ring	1
P21	O-ring	1	P48	Spring	1
P22	Screw	1	P49	Weld assembly	1
P23	Cap	1	60	Plug	1
P24	Steel ball	2	63	Steel ball	1
P25	Spring	1	71	Nylon ring	1
P26	Spring seat	1	73	Connect fitting	1
P27	Copper ring	1			