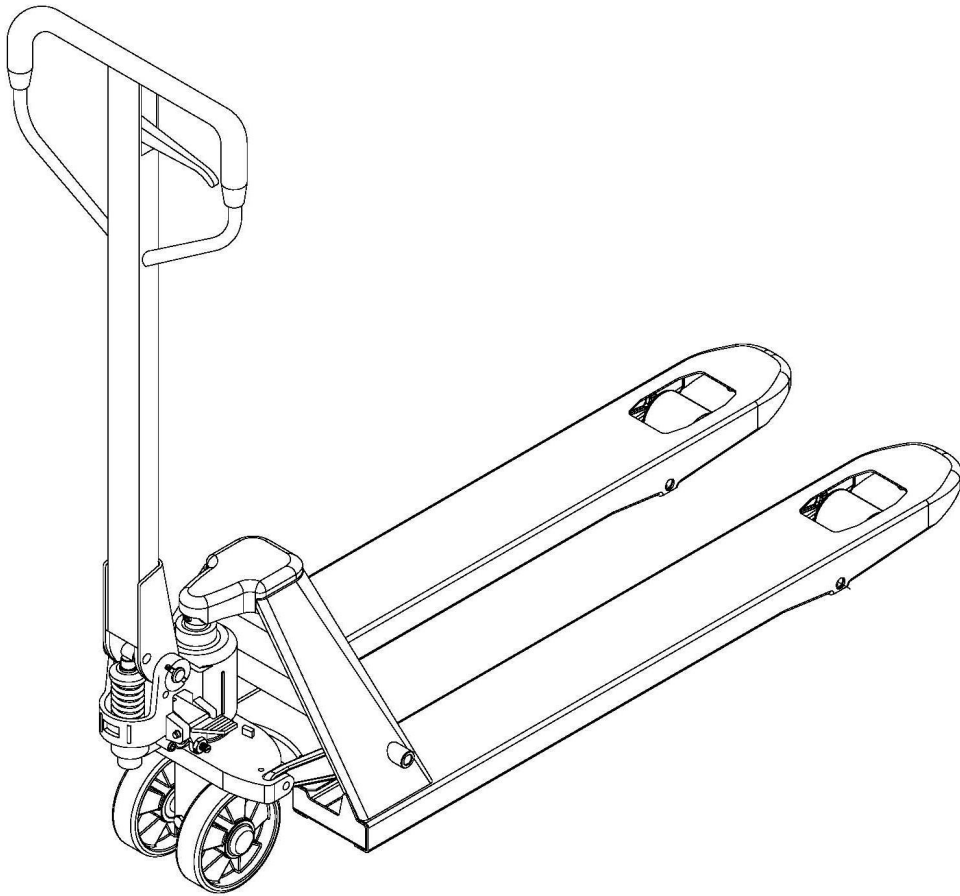


## Hand Pallet Truck

# Operation Manual



Thanks for your choice and using the high quality hand pallet truck that we offer for you.

It may be helpful if you can spare a little time to read this manual carefully before using.

Keep the book well, and it'll be more convenient for the truck maintenance and the contact with us in future.

We have to inform you in advance that, for the products' continuous evolution and improvement, we may do some appropriate improvements in the design of products, and there's maybe something not consistent with the objects. Here we thanks for your understanding.

Both the product technology and safety requirements of this product conform to the national and international standard, please be at ease when using.

## Operation Manual

### 1 Application Range

This product is suitable for using in rated load.

This product is good for handling palletized cargo, when you need other use, the load capacity can be taken according to 75% rated load.

This product is suitable for the hard and flat ground.

This product is limited to single operation.

### 2 Main parameters

The specifications in table 1 is our standard truck's main technical parameters, if need more details, please get from our agents.

We also produce pallet truck with special specifications to meet all requirements, such as extra-low, ultrahigh, super-wide, ultra narrow, over-length, exceed short or with brake, please contact with our sales engineer.

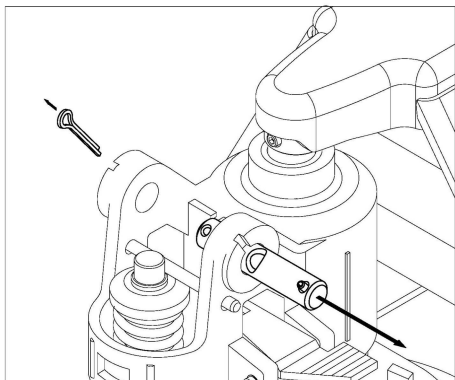
Table 1

Model	Rated load (kg)		2500KG	3000KG
550/ 685	Main specifications	Distance between fork-arms B (mm)	550/685	550/685
		Fork length L (mm)	1150/1220	1150/1220
		Fork lowered height H (mm)	85	85
	Overall dimensions	Length*width*height (mm)	(380+L)×B×1240	(380+L)×B×1240
	Steering wheel diameter (mm)		Φ200	Φ200
	Fork wheel diameter (mm)		Φ82	Φ82
	Weight (kg)		60KG	65KG

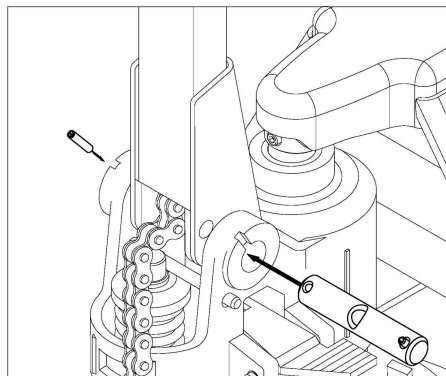
### 3 Assembly of hand pallet truck

For the transportation, the handle is disconnected with the complete machine when you get the product, which requires yourself assembling it. If conditions allow, you can also authorize our retailer to assemble.

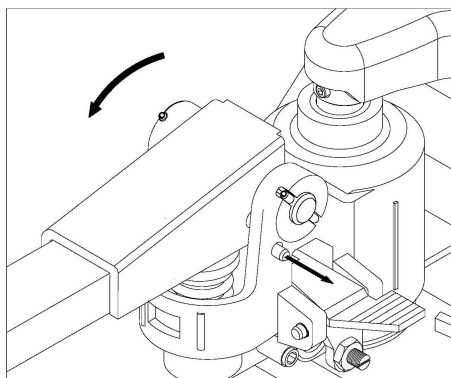
First please prepare some tools, such as: hammer, pliers, and so on.



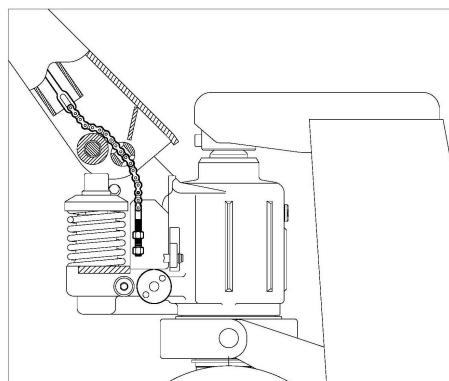
1. Pull out the split cotter pin from the pin roll with three holes, and then extract the pin roll.



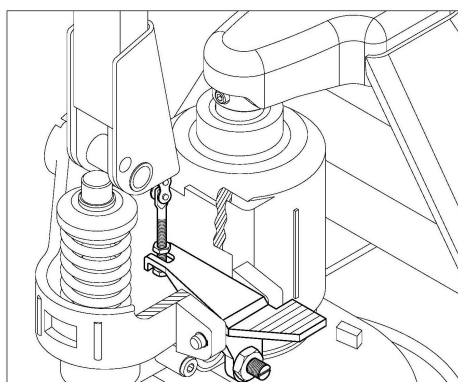
2. Move the hand grip into the pump place, and insert the pin roll back into the original place, then get the spring pins through the two end holes of the pin roll, and couple the hand grip and pump body. Here the two end spring pins of pin roll should be implanted into the slot of the layer board endface of the pump's both ends.



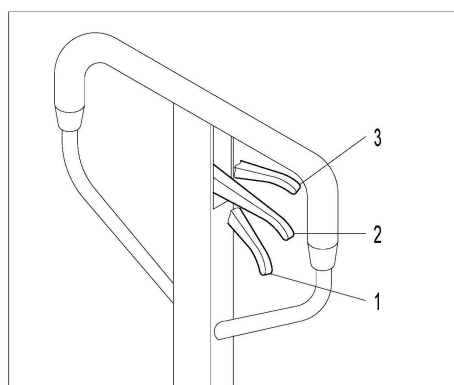
3. Pull down the hand grip, and remove the fixed pin from the big spring.



4. Put the chain of the hand grip get through the middle hole of pin roll. For the penetration convenient, you can pull the hand grip a little angle slightly, and this job needs a little patience.



5. Take the screw nut which is at the end of chain and hitch the groove of the lever board. Then unscrew the top nut slowly and leave a bit gap between the lever, generally 2-4mm, not too tight with the lever board, or it will damage the chain



6. After finishing assembling according to the above steps, it needs further commissioning work, and the method is as follows

:

After the truck is assembled, try to rock the hand grip and operate different positions of control handle knob to examine the lifting, free position and dropping and check that whether the different positions are normal or not.

The screw under the lever board is used to adjust the truck situation. When the truck body drops immediately after it is lifted, you should turn the screw a little counter-clockwise. And then try the truck again until truck body could lift normally. If the truck body couldn't drop after it is lifted, you should turn the screw a little clockwise. And then try to operate truck again until the truck body could drop normally. The external hexagon nut at screw plays the locking function in the truck. So you should undo the external hexagon nut before adjustment. And screw down the nut after you finish the adjustment.

#### **4 Operation Guide**

See above fig., when hand knob 1 is placed on the lift position, the truck will be in a state of lift. At this time, if you rock the hand grip, the truck will be lifted.

When hand knob 2 is placed on the free position, the truck will travel. At this time, if you rock the hand grip, the truck will neither lift nor drop. Then, you can use the truck move the cargo.

When the hand knob 3 is placed on the drop position, truck forks will drop. At this time, the truck forks will drop automatically.

#### **5 Inspection before use**

If the hand pallet truck has not been used or placed upside down for a long time, air may get into the hydraulic system, the trouble can be eliminated by the following method:

Turn the hand knob to the drop position and rock the handle for 4-6 times. Then release the operation knob. If necessary, the process can be repeated for several times until the hand pallet truck can be operated normally.

First check the truck when it's unloaded, you should be sure that the lift and drop is normal, the wheel is without defect, rolling is not blocked, and sundries on the wheel axle is cleared up.

#### **6 Loading type and rated weight**

Ideal cargo should be pallet type, and the gravity center of the cargo is just in the middle of the truck forks. The rated weight must be reduced when the cargo gravity center is not in the middle of

the truck forks. The rated weight is shown as the label.

When you choose a truck you should consider the rated load, and our suggestion is to buy one which the load capacity is 1.25 or 1.5 times of the actual use. Such the truck has rich quantity and it's safer to use for a long time.

## **7 Hydraulic oil**

Working liquid of the pump meets ISO standard's 32nd anti-wear hydraulic oil, and the needed capacity is about 250-300ml, which is according to the environment temperature -5~40°C. When the temperature is during -35~5°C, you choose the anti-wear hydraulic oil which is suitable for the low temperature environment, or declare when you order.

## **8 Maintenance**

1. Although this truck is designed and manufactured as a non-maintenance one, its performance will better if we make some necessary maintenance.

2. The routine check should be carried out daily and every abnormal phenomenon should be dealt with immediately. Please do not use faulty truck in order to prolong the service life.

3. Add 1-2 drops of oil in the rotary joints every three months. Generally the refueling point is at the socket of shaft and hole.

4. Replace the wheel bearing every 6-12 months.

5. Make an adjustment of the connecting rod under the fork every 6-12 months, or as the truck performance.

6. Replace the hydraulic oil in the pump every 12 months. The amount of hydraulic oil should not be too much or too little, generally 250-300ml, and its oil level should not exceed a maximum height of the filling hole next to the pump.

7. Make an adjustment of the screw on the lever plate every 6-12 months or depending on the truck performance, and the adjustment method is the same as the relevant section of the above assembling content.

8. The wheel life should depend on the wear and tear case, you should replace the wheel which wears much or loss of round.

9. Specially pay more attention to the place between wheel and axis. Make sure there's not any yarn or other rags in order to keep all wheels running with handiness.

## 9 Possible faults and trouble shooting

Table 2 is the main faults of hand pallet truck and its solution, for your reference:

Table 2

No.	Faults	Causes	Trouble shooting
1	The forks can't be lifted to the max. lift height.	hydraulic oil is not enough	Add appropriate filtrated working oil.
2	The forks can't return to the lowest position.	Too much hydraulic oil.	Take out appropriate working oil.
		Some parts are deformed or blocked.	Replace the parts or repair.
3	The forks can't drop after lifted.	The control valve is abnormal.	Readjust the unloading device.
		The parts are deformed or damaged.	replace the damaged and deformed parts.
4	Hydraulic oil leakage	The oil seal is unavailable.	Replace the oil seal
		The pump core and the surface of the plunger is damaged or worn.	Replace the core, plunger and the damaged parts
		The coupled places become loosen.	Fasten the loosened place again.
5	The fork can't be lifted.	The viscosity of the working oil is too high, or there's no working oil.	Check the hydraulic oil or replace it.
		There's impurity in the oil.	Clear up the impurity oil and add new working oil.
		The valve is abnormal.	Readjust the unloading device
6	The forks drop immediately after they are lifted; the handle returns or the forks drop markedly after they are lifted.	The valve of oil pump is blocked by abnormal matter.	Open the control valve and take out the parts. Then re-install the parts after they are cleaned.

## 10 Notes

1. Please read the operation instruction carefully before you operate the hand pallet truck and learn about all the features of this type of hand pallet truck.

2. If you want to let the truck down by controlling the hand knob, you should better lift the hand knob a little first, and then let the truck down slowly. It is forbidden to pull the hand knob with great force, because rapid dropping could cause some damages to both the hand pallet truck and cargo.

3. Don't rock the hand grip at a high speed and in a high frequency.

4. Don't load the cargo at a high speed.

5. Don't overload the forks. Overloading could keep the hand pallet truck from working normally.

6. The gravity center of cargo should be in the middle of truck forks. The offset of cargo could

make hand pallet truck out of balance.

7. Don't load loose or unstable goods!

8. Don't put the goods on the truck fork for a long time.

9. When the truck does not work, make sure that the truck forks are on the lowest position.

10. It is forbidden to load people and let them stand on the forks to slide. Don't put any part of body below the cargo.

11. The truck is suitable for flat and hard ground to use. If you have to use on the sloping ground, you can choose the truck with brake van.

12. Do not operate the unnamed position.

13. Do not try to repair without training!

## **11 Transportation and storage**

For the time not being in use, it should be stored in dry and well-ventilated room, without any corrosive environment.

The truck should be placed in level, and no weight on it for a long time.

Lubricate the joint hinge, and coat the anti-rust oil at the bare metal.

Repair the paint-off place timely!

Do not touch water, much less than being stored together with chemicals.

Product lifting and holding up, should be under the command of professionals.

The products should be fixed with carriage by rope in Long-distance transportation.

Pay attention to some parts of this product while moving or carrying, as that may wound human body.

## **12 Disposal of waste**

When the truck is out of its service life or the waste parts replaced down, please don't pour out anywhere. In case of damaging the environment, here's the disposal suggestion for your reference:

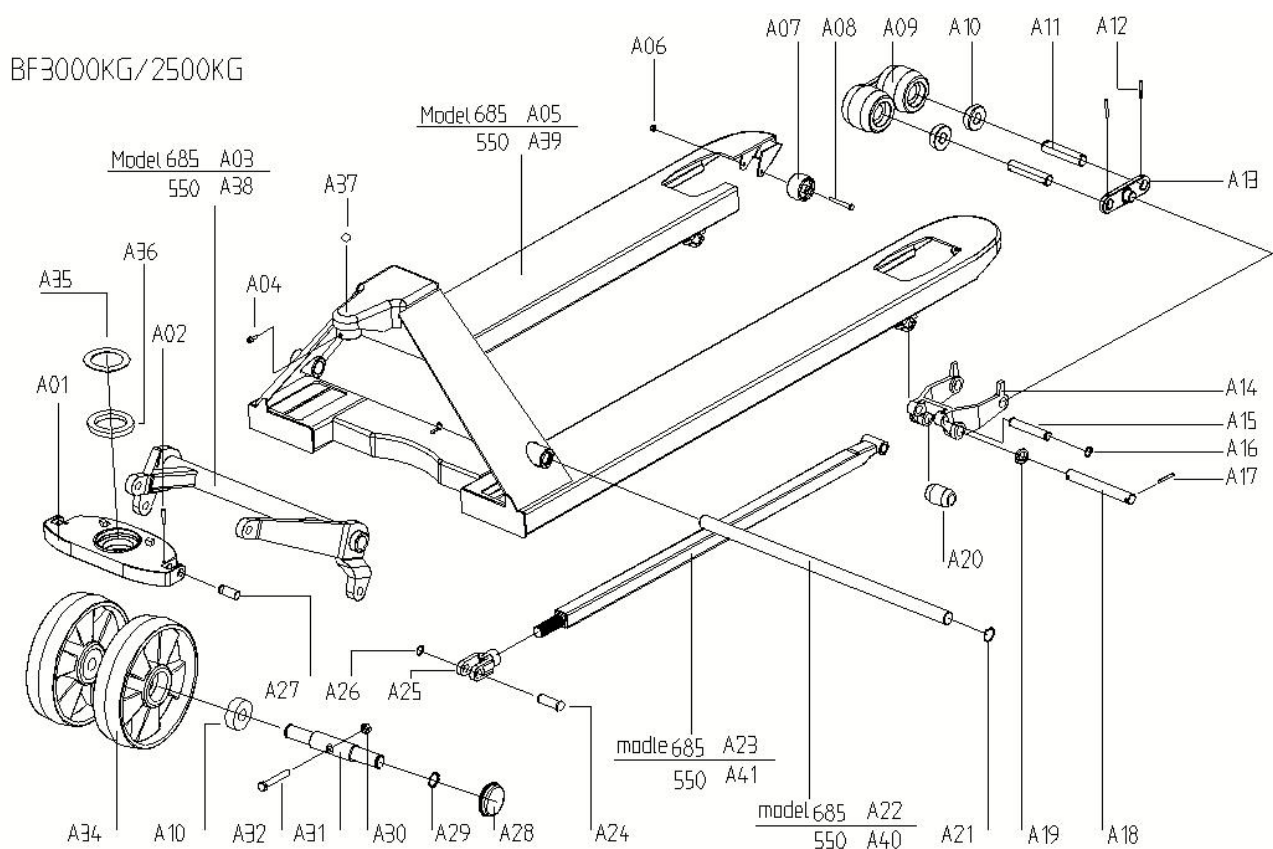
1. First of all, disassemble the products, pour out the hydraulic oil, and the metal parts and rubber parts should be classified.

2. Collect the waste hydraulic oil, and send it to the oil recovery site or burn it in terms of national safety standards method.

3. More than 99% parts of this product are made of steel materials, which can be delivered to scrap metal recycling unit to disposal.

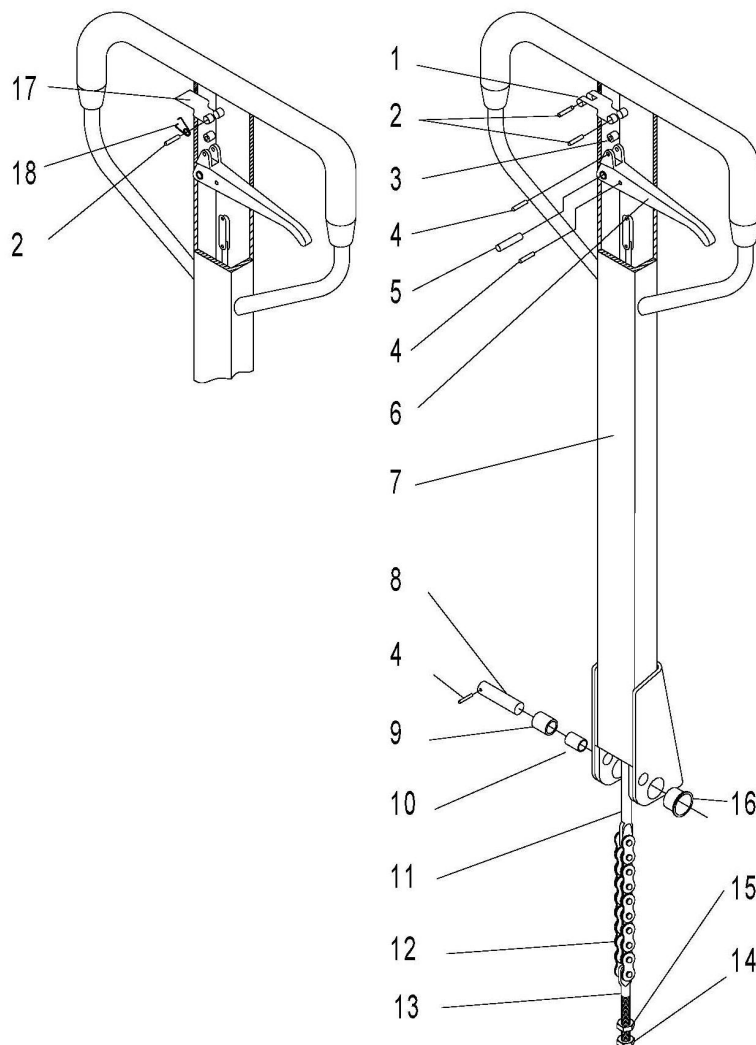
4. Only a few of rubber parts can also be sent to recycling site to process.





### Final Assembly

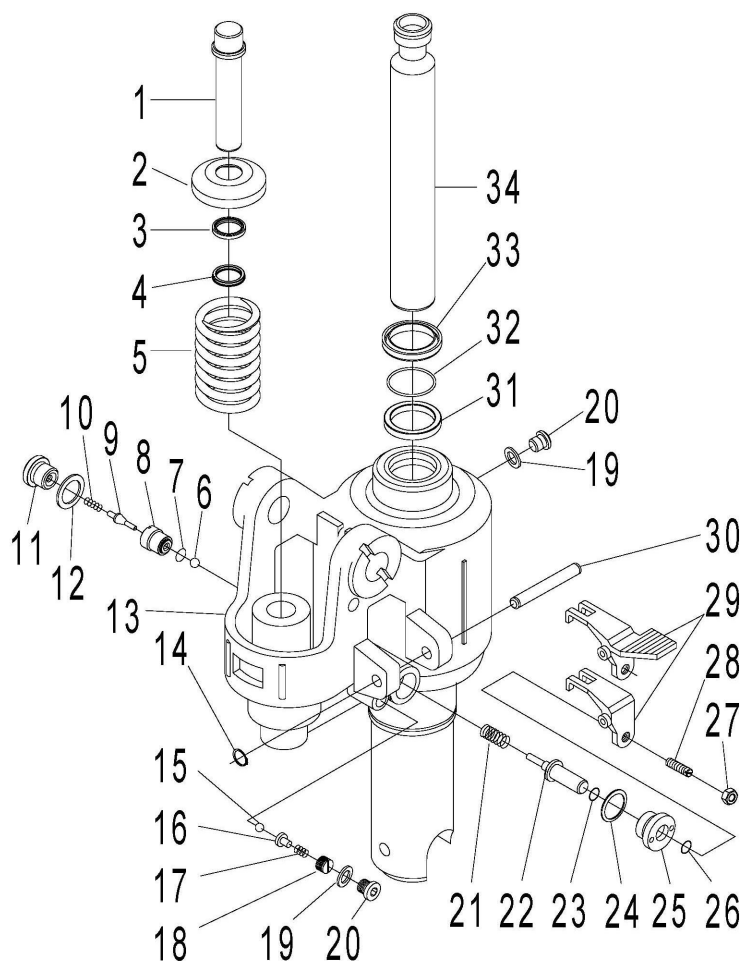
No.	Description	Qty.	No.	Description	Qty.
A01	Supporting base	1	A21	Circlip for hole	2
A02	Spring pin	2	A22	Long shaft	1
A03	Rock arm	1	A23	Pitman	2
A04	Inner hex. screw	1	A24	Shaft	2
A05	Fork frame	1	A25	Connector	2
A06	Locknut	2	A26	Circlip for shaft	2
A07	Steering wheel	2	A27	Shaft	2
A08	Hexagon bolt	2	A28	Dust-proof cover	2
A09	double wheel	4	A29	Circlip for shaft	2
A10	Deep channel bearings	12	A30	Locknut	1
A11	Shaft	4	A31	Front wheel shaft	1
A12	Spring pin	8	A32	Hexagon bolt	1
A13	Bracket plate	4	A34	Wheel	2
A14	Wheel frame	2	A35	Thrust ball bearing	1
A15	Shaft	2	A36	Circlip for shaft	1
A16	Circlip for shaft	4	A37	Steel ball	1
A17	Spring pin	2	A38	Rock arm	1
A18	Shaft	2	A39	Fork frame	1
A19	Shaft sleeve	4	A40	Long shaft	1
A20	Gasket	2	A41	Pitman	2



**Handle Assembly**

No.	Description	Qty.	No.	Description	Qty.
1	Locating plate	1	10	Shaft sleeve	1
2	Spring pin	2	11	Pull rod unit	1
3	Roller	1	12	Chain unit	1
4	Spring pin	3	13	Eyelet bolt	1
5	Spring pin	1	14	Locknut	1
6	Hand knob	1	15	Hexagon nut	1
7	Handle body	1	16	Shaft sleeve	2
8	Shaft	1	17	Locating plate	1
9	Pressure wheel	1	18	Torsional spring	1

PUMP



**Pump**

**Assemble**

No.	Description	Qty.	No.	Description	Qty.
1	Pump core 18×97	1	18	Screw for adjustment M10×1	1
2	Spring cap	1	19	Combined washer 10	2
3	Dust-proof ring 18	1	20	Seal bolt M10×1	2
4	Seal ring 18	1	21	Unloading spring 1.2×10×22	1
5	Big spring 5.5×48×110	1	22	Firing pin	1
6	Steel ball Φ7	1	23	O-ring 6.9×1.8	1
7	O-ring 10.6×1.8	1	24	Combined washer 20	1
8	Valve body	1	25	Firing pin seat	1
9	Valve needle	1	26	O-ring 8×2.65	1
10	Valve spring 0.5×4.8×21	1	27	Hexagon nut M6	1
11	Seal bolt M16×1.5	1	28	Screw for adjustment M6×20	1
12	Combined washer 16	1	29	Lever board	1
13	Oil pump shell	1	30	Shaft with double-groove 8×56	1
14	Circlip for shaft 8	2	31	Seal ring 32	1
15	Steel ball Φ5	1	32	O-ring 32×3.55	1
16	Ball seat	1	33	Dust-proof ring 32	1
17	Limit-load spring 2×8×16	1	34	Piston rod 32	1