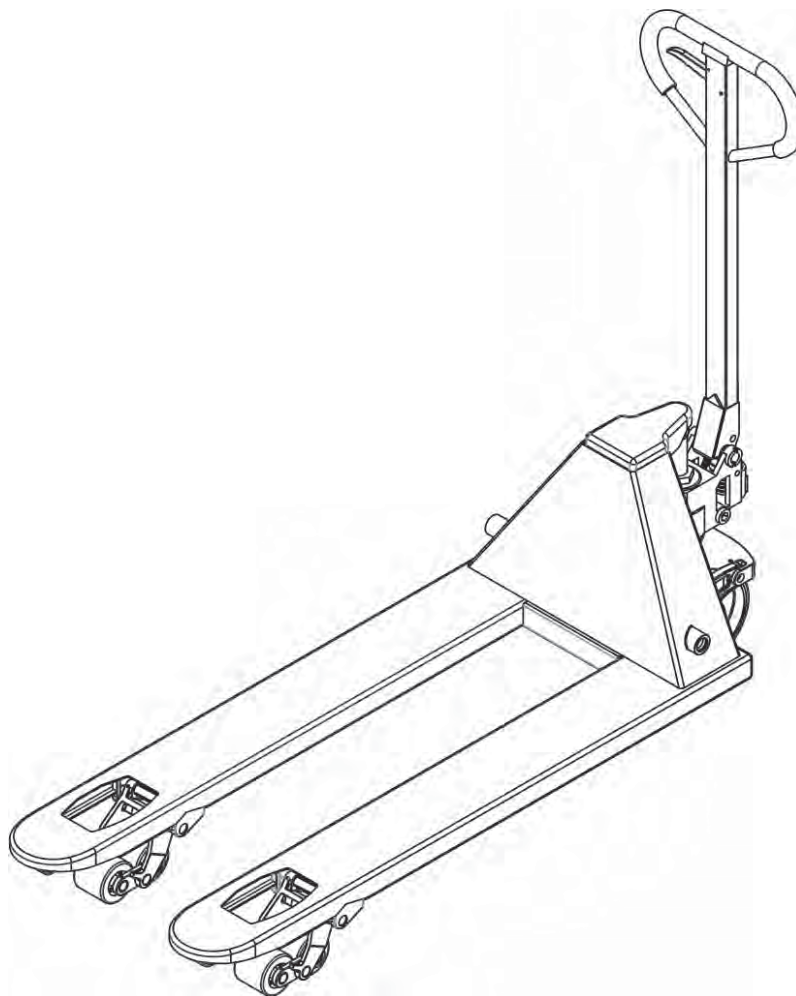


# HAND PALLET TRUCK

## INSTRUCTION MANUAL

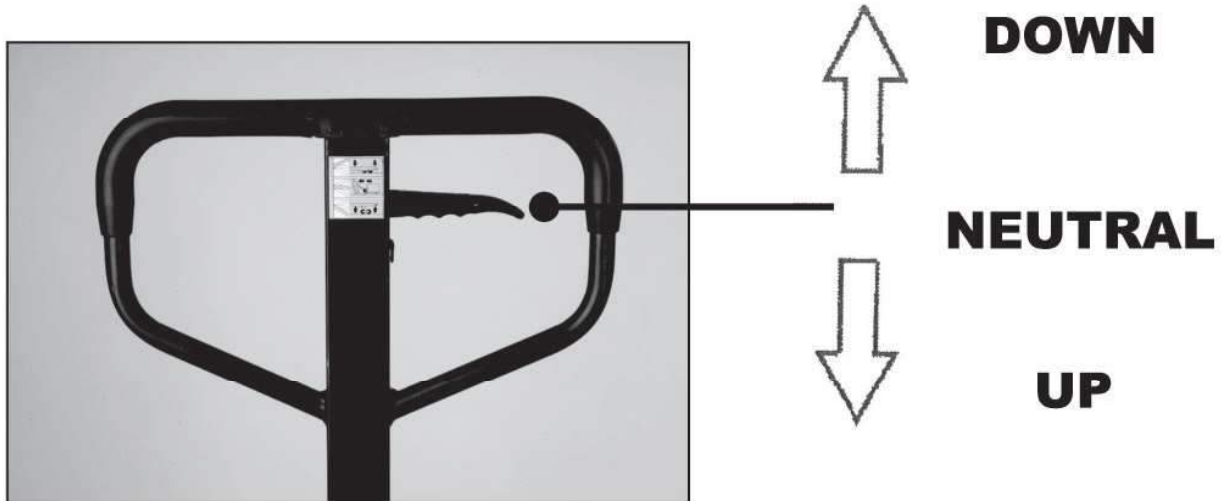
XN20/XN25



Please read this manual carefully before using your machine

# OPERATING PALLET TRUCK

To raise the forks, place handle lever in UP position (bottom part of the handle slot).  
See Figure 2.



**Figure 2**

To lower forks, pull lever to DOWN position (upper part of the slot).  
To freely move the handle, set the lever in NEUTRAL (center notch of the slot).

## **To lift a load:**

1. Lower forks to lowest position.
2. Insert forks under load or into pallet.
3. Place lever in UP position (bottom part of the slot).
4. Move handles up and down until forks reach desired height.

To move a load:

1. Place lever in NEUTRAL position (center notch of the slot).
2. Pull or push to desired location.

## **To lower a load:**

1. Pull lever to the DOWN position (upper part of the slot).
2. Pull forks away from load.

## **Cleaning Relief Valve**

Over time, relief valve may become clogged with debris and will not work properly.

To clean relief valve, flush our hydraulic system as follows:

Pump handle quickly, raising pallet truck to full extent.

Then, quickly release pumping action.

# TROUBLESHOOTING

Possible problems could arise in the operation of your hydraulic pallet truck. Their probable cause(s) and corrective action(s) follow:

Condition	Probable Causes	Corrective Action
<b>Hydraulic unit does not lift</b>	<i>Oil low in tank</i>	<i>Make sure there is no till leakage from valve and add oil.</i>
	<i>Steel ball not seated in hydraulic unit</i>	<i>See "Cleaning Relief Valve" in this manual.</i>
	<i>Worn O-ring in ram cylinder</i>	<i>Consult authorized service centre.</i>
<b>Once lifted truck lowers by itself</b>	<i>Steel ball not seated in hydraulic unit</i>	<i>See "Cleaning Relief Valve" in this manual.</i>
	<i>Worn O-ring in ram cylinder</i>	<i>See "Cleaning Relief Valve" in this manual.</i>
	<i>Relief valve not seated properly</i>	<i>See "Cleaning Relief Valve" in this manual.</i>
	<i>Relief valve not adjusted properly</i>	<i>Reload truck within load capacity and adjust valve by pressure adjustment screw.</i>
	<i>Oil leakage from each valve</i>	<i>Tighten plug of each valve.</i>
<b>Fork does not lower</b>	<i>Cam broken</i>	<i>Replace cam chain.</i>
	<i>UP-DOWN cam nut out of adjustment</i>	<i>Refer to "Adjusting UP-DOWN Cam" in this manual.</i>
	<i>Broken fork rods and linkage</i>	<i>Replace broken parts.</i>
<b>Lever does not set at NEUTRAL position</b>	<i>UP-DOWN cam nut out of adjustment</i>	<i>Refer to "Adjusting UP-DOWN Cam" in this manual.</i>

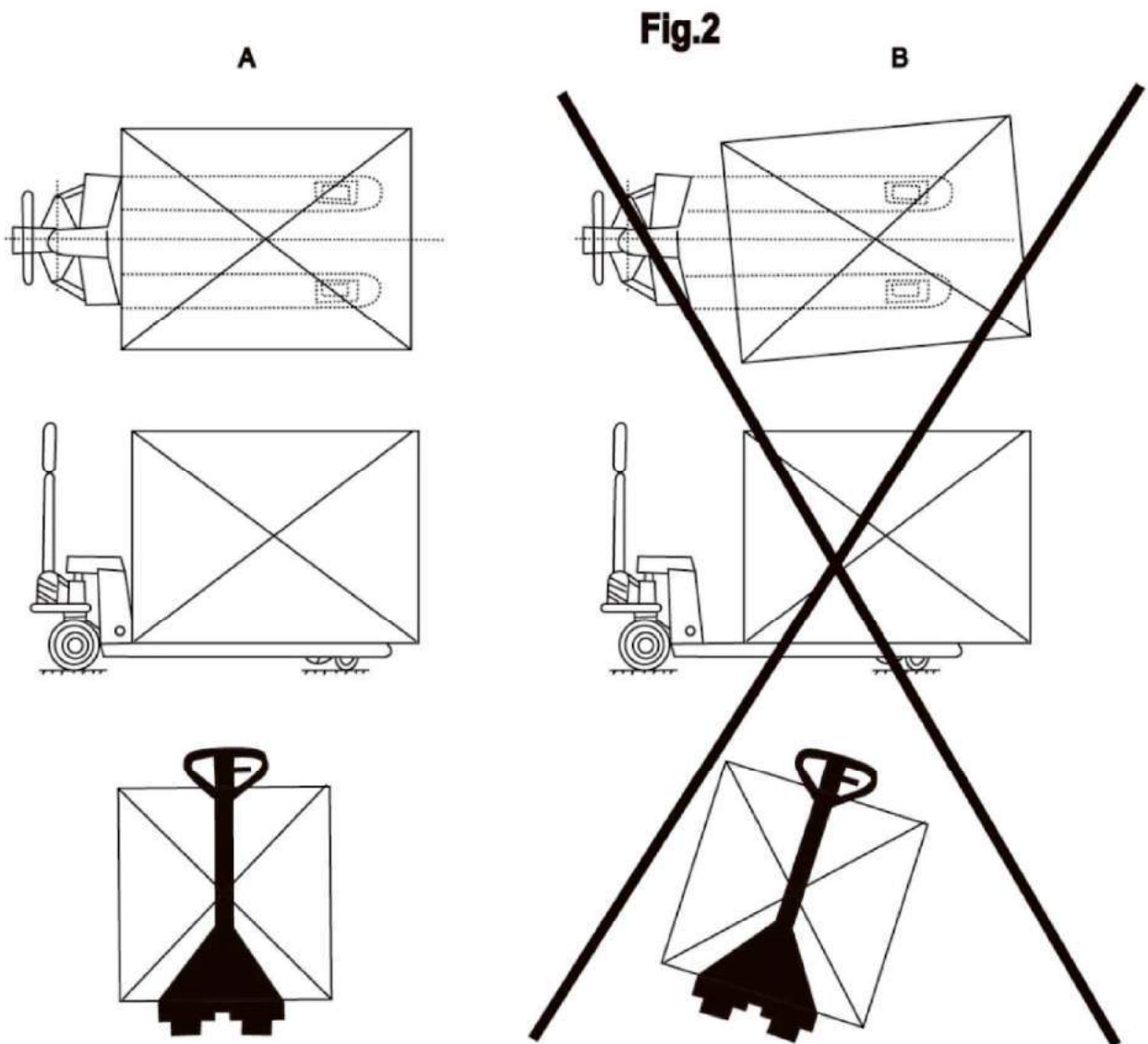
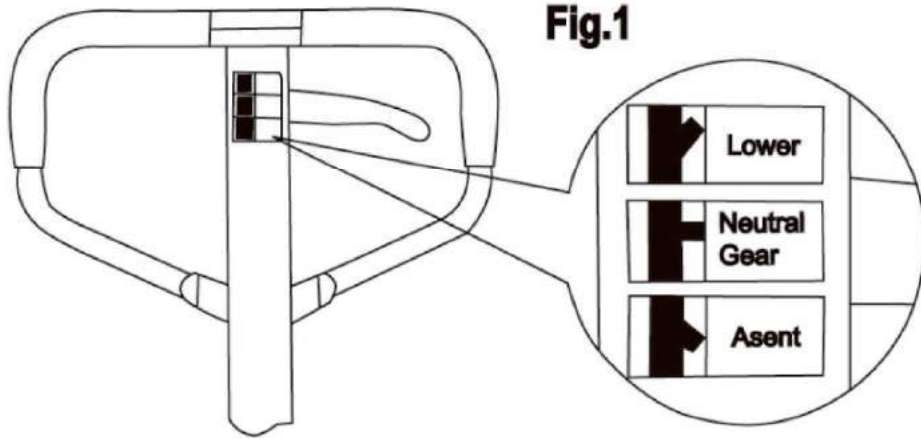
## Adjusting UP-DOWN Cam



*DO NOT* adjust the up/down lever control using the lock nut at the end of the handle chain. If nylon locking threads are removed from the screw threads, rolling vibration will cause the nut to unscrew and fall off, leaving the up/down lever unusable.



Use proper set screw and lock nut adjustment located on the side of the pump. This feature was designed to ease the pallet truck adjustment. Tools required are: flat screwdriver and a 14mm wrench.



## WARNING!

- Read and understand the entire operator's manual before using the pallet truck.
- Don't load pallet truck beyond rated capacity of 5,500 lbs. for the standard models and 6,600 lbs. for heavy-duty models.
- Secure load before transporting.
- Keep the load centered on the pallet.
- Don't operate loaded pallet truck on ramps or inclines.
- Always wear appropriate safety shoes.
- Never leave a loaded pallet truck unattended in the raised position; always lower load to the floor.

## PALLET TRUCK ASSEMBLY

*Note: Individual trucks are assembled and ready to use. Pallet trucks purchased in crate quantities (6 units to a crate) require some assembly.*

*Tools needed for assembly: hammer, flat screwdriver, 14mm wrench*

### To attach handle assembly to the frame:



- 1.**  
**\*\*\* IMPORTANT - SAFETY \*\*\***  
Verify that spring safety pin is in place. The pin should be well rested in the holes situated on each side of the pump housing. If the safety pin is not rested properly in one of the holes, put pressure on the spring using a "C" clamp pushing down on the pump stem. Once pressure is relieved on the pin, reinsert properly and remove clamp slowly.



- 2 .**  
Insert handle pin into corresponding holes and using a hammer, drive in one spring pin on one side only.



- 3 .**  
Insert handle pin without the handle and verify that the center hole is facing you.



- 4.**  
If handle pin's center hole is facing away from you, insert pin from other side.  
**\*\*\* IMPORTANT - FACT \*\*\***  
The up/down lever's chain passes through this center hole. If left this way, the chain will have an "S" form and be under too much tension, making the up/down lever difficult to use accurately.



**5.**  
**\*\*\* IM PORTANT - CHAIN\*\*\***  
*Before this step, make sure to feed the chain on the outside of the piston stem roller (see yellow arrow). If left in its proper position, it will not be possible to insert the handle pin and chain, breakage may occur. Align handle holes with pump housing holes and push through handle pin (see red arrow)*



**6.**  
*Make sure that handle pin is completely through the handle and resting on the other side.*



**7.**  
*Pull down on the handle to release the tension on the safety pin. CAREFULLY remove the safety pin.*



**8.**  
*Feed the chain and nut first back inside the handle THROUGH the handle pin's center hole. \*\*\*IMPORTANT - TIP \*\*\* Release the up/down lever to its lowest position to make the process easier.*



**9.**  
*Once the chain is in the proper position, check to see that it moves freely and that it is not obstructed.*



**10.**  
*Using both hands, push on the valve cam to raise the hook inside the housing and feed the end of the chain in the cam. (see image at right)*

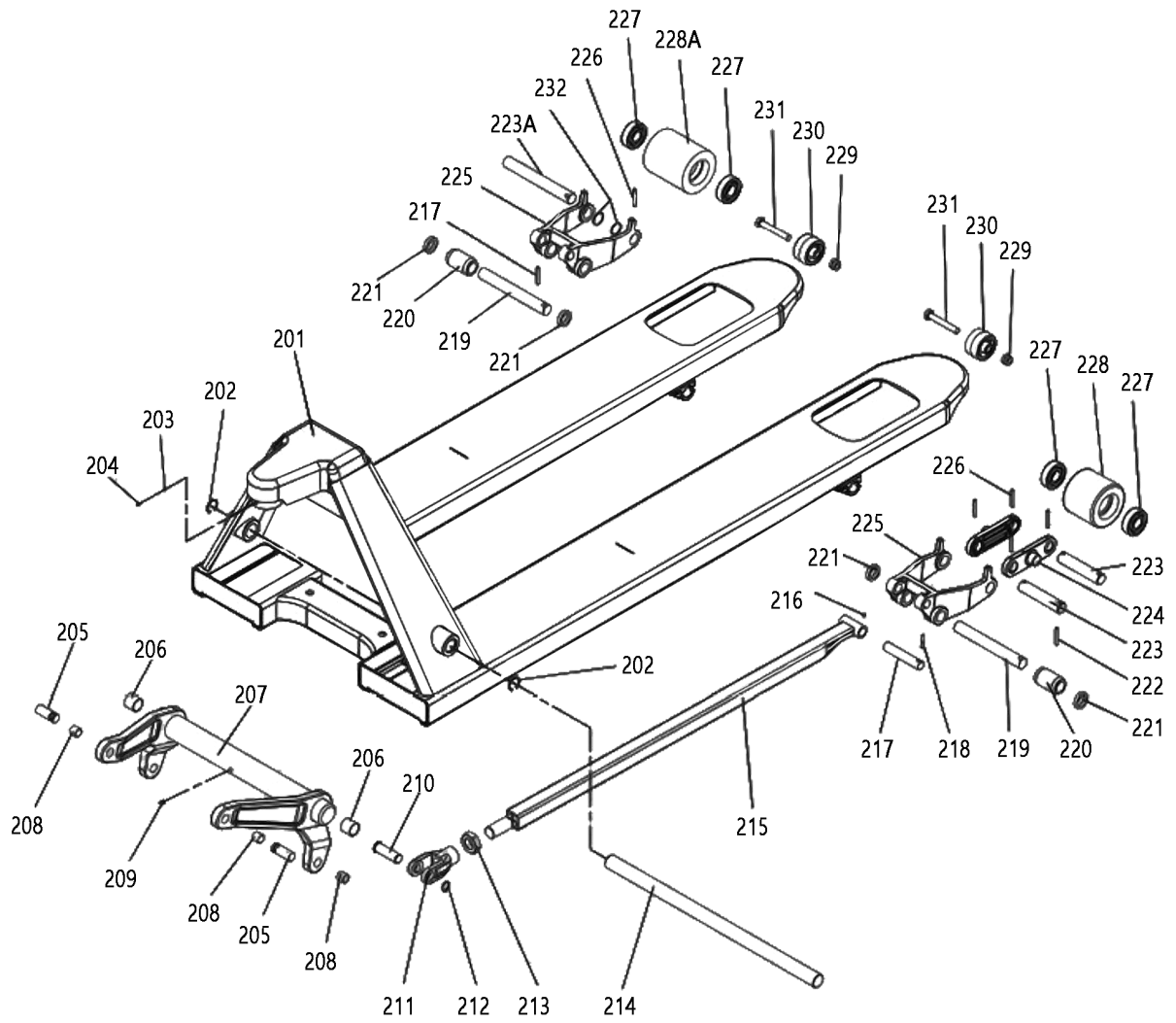


**11.**  
*Pump the lever a few times to raise the forks. Put the up/down lever to its NEUTRAL position. Using a 14mm wrench and a flat screwdriver, adjust the valve cam so that the forks don't lower or rise (if handle is pumped) at this position.*



**12.**  
**\*\*\* IMPORTANT - FINAL CHECK \*\*\***  
*Test all the features of the pallet truck before this step. The handle should be pumped with full strokes to prime and eliminate air in the system. The up/down lever should be checked at the handle's lowest position for this puts the most tension on the chain. Once the pallet truck is adjusted properly and is performing well, drive in the second spring pin using a hammer.*

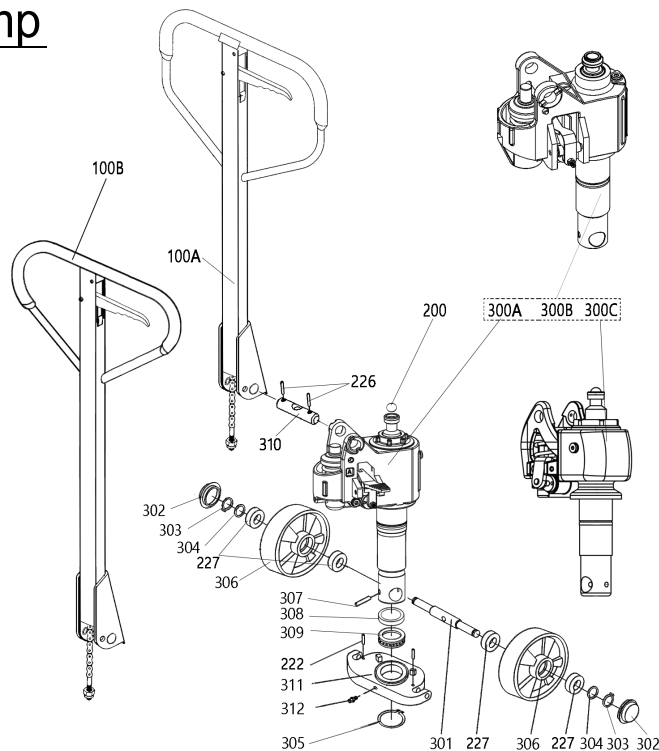
# Chassis



Item No.	Parts No.	Parts details	Qty.
201	10201	Chassis	1
202	10202	Circlip for hole Ø26	2
203	10203	Spring gasket	1
204	10204	Bolt M6*16	1
205	10205	Connecting pin	2
206	10206	Bushing	2
207	10207	Swing arm (Only 540)	1
208	10208	Bushing	4
209	10209	Grease nipple	1
210	10210	Axle	2
211	10211	Push rod fork	2
212	10212	Circlip for shaft Ø16	2
213	10213	Nut	2
214	10214	Long axle Φ24.5*490 (Only 540)	1
215	10215-1	Push rod (1150mm)	2
	10215-2	Push rod (800)	2
	10215-3	Push rod (900)	2
	10215-4	Push rod (950)	2
	10215-5	Push rod (1000)	2
	10215-6	Push rod (1500)	2
	10215-7	Push rod (1800)	2
	10215-8	Push rod (2000)	2
216	10216	Grease nipple	2
217	10217	Axle Ø15.8*105	2
	20217	Axle Ø15.8*82	2
218	10218	Spring pin Ø5×26	2
219	10219	Level block axle Ø19.8*161	2
	20219	Level block axle Ø19.8*152	2
220	10220	Exit roller	2
221	10221	Axle sleeve	4
	20221	Axle sleeve	4
222	10222	Spring pin Ø5×30	4
223	10223-1	Double loading wheel axle Ø19.8*94.5	4
223A	10223-2	Single loading wheel axle Ø19.8*130	2
224	10224	Tri-connect plate	4
225	10225	Level block	2
	20225	Level block	2
226	10226	Spring pin Ø5×35	8
227	10227	Bearing 6204-2RS	8or4
228	10228-1	PU double loading wheel Ø80*70	4
	10228-2	PA double loading wheel Ø80*70	4
228A	10228-3	PU single loading wheel Ø80*93	2
	10228-4	PA single loading wheel Ø80*93	2
229	10229	Nut M10	2
230	10230	Enter roller	2
231	10231	Bolt M10×65	2
232	10232	Axle adjusting gasket	4

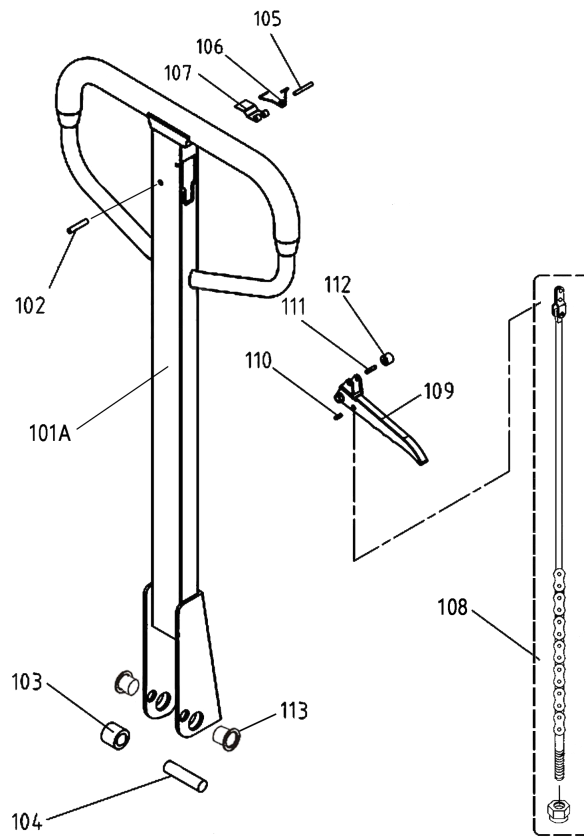


# Handle & Pump



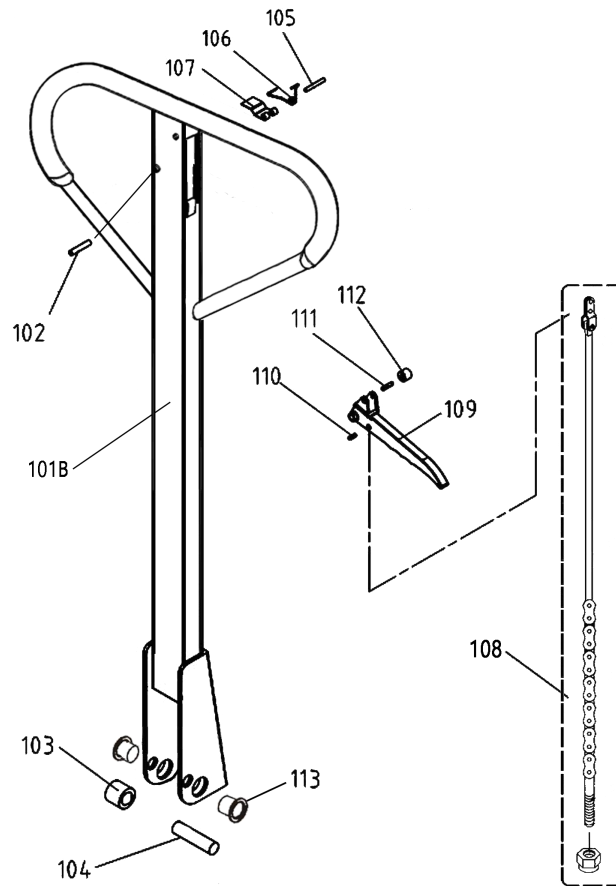
Item No.	Parts No.	Parts details	Qty.
100A	10100A-1	Handle assy ( <b>Square</b> ) For ACBF	1
	10100A-2	Handle assy ( <b>Square</b> ) For AC	1
100B	10100B	Handle assy ( <b>Triangle</b> )	(1)
200	10200	Steel ball Ø19	1
222	10222	Spring pin Ø5×30	2
226	10226	Spring pin Ø5×35	2
227	10227	Bearing 6204-2RS	4
300A	10300A	ACBF pump assy.	1
300B	10300B	AC pump assy.	(1)
301	10301	Wheel axle	1
302	10302	Dust ring	1
303	10303	Circlip for shaft Ø20	1
304	10304	Axle adjusting gasket	1
305	10305	Circlip for shaft Ø52	1
306	10306-1	PU steering Wheel Ø200*50	2
	10306-2	PA steering Wheel Ø200*50	2
	10306-3	Rubber steering Wheel Ø200*50	2
307	10307	Spring pin Ø8×45	1
308	10308	Bearing gap	1
309	10309	Pushing ball bearing 51111	1
310	10310-1	Handle axle Φ19.8*98 (For ACBF pump)	1
	10310-2	Handle axle Φ19.8*103 (For AC pump)	(1)
311	10311	Thrust strip	1
312	10312	Grease nipple	1

# Handle-A (Square with Rubber)



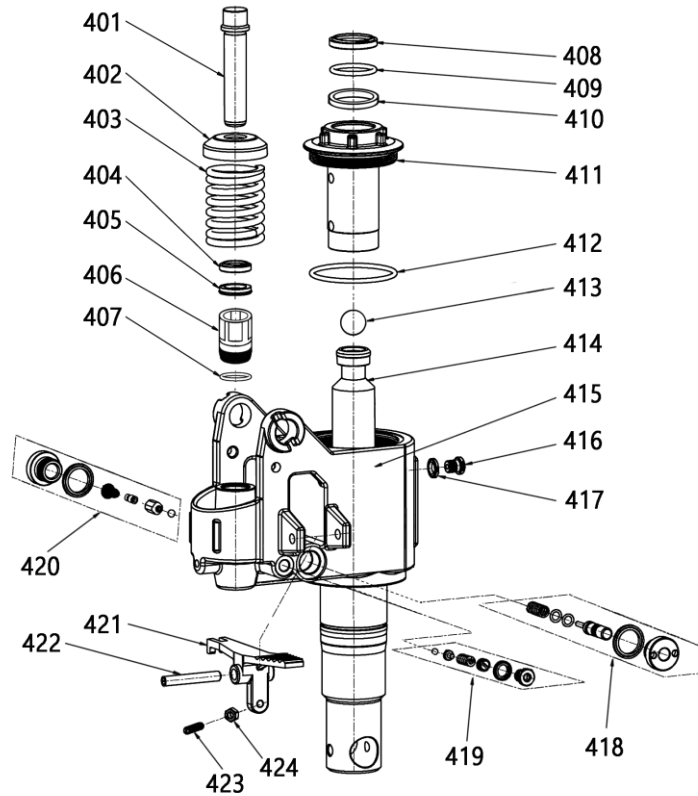
Item No.	Parts No.	Parts Details	QTY
101A	10101A	Handle body	1
102	10102	Spring pin/6x30	1
103	10103	Pinch roller	1
104	10104	Pinch roller pin	1
105	10105	Spring pin/4x30	1
106	10106	Torsional spring	1
107	10107	Hinge	1
108	10108	Connecting rod	1
		Chain	1
		Swing bolt/M5	1
		Nut/M5	1
		Connecting plate	1
		Rivet/Φ3×6	1
109	10109	Finger lever	1
110	10110	Spring pin/4x13	1
111	10111	Spring pin/4x17	1
112	10112	Roller	1
113	10113	Axle sleeve	2

# Handle-B (Triangle with Rubber)



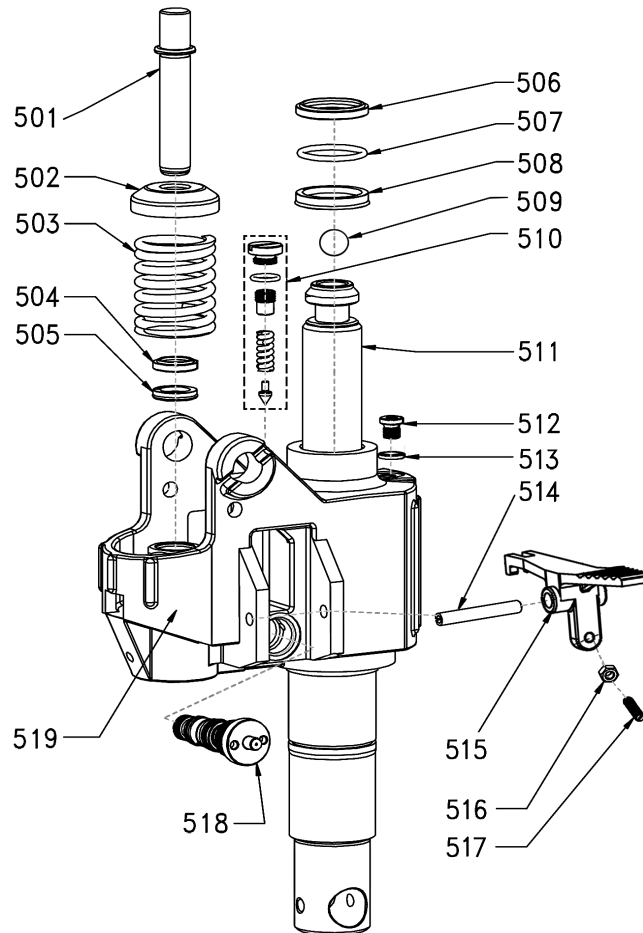
Item No.	Parts No.	Parts Details	QTY
101B	10101B	Handle body	1
102	10102	Spring pin/6x30	1
103	10103	Pinch roller	1
104	10104	Pinch roller pin	1
105	10105	Spring pin/4x30	1
106	10106	Torsional spring	1
107	10107	Hinge	1
108	10108	Connecting rod	1
		Chain	1
		Swing bolt/M5	1
		Nut/M5	1
		Connecting plate	1
		Rivet/ $\Phi$ 3×6	1
109	10109	Finger lever	1
110	10110	Spring pin/4x13	1
111	10111	Spring pin/4x17	2
112	10112	Roller	1
113	10113	Axle sleeve	2

# ACBF Pump



Item No.	Parts No.	Part Description	QTY
401	30401	Small pump core	1
402	30402	Cover of spring	1
403	30403	Big spring cap	1
404	30404	Dust ring $\text{Ø}18*26*4.5/6$	1
405	30405	Seal washer $\text{Ø}18*26*5$	1
406	30406	Small cylinder	1
407	30407	Copper gasket	1
408	30408	Dust ring $\text{Ø}35$	1
409	30409	O-ring $\text{Ø}35$	1
410	30410	Seal washer $\text{Ø}35$	1
411	30411	Slide bushing	1
412	30412	O-ring	1
413	30413	Steel ball $\text{Ø}19$	1
414	30414	Piston rod	1
415	30415	Pump body	1
416	30416	Bolt	2
417	30417	Seal	2
418	30418	Relief valve	1
419	30419	Safety valve	1
420	30420	Check valve	1
421	30421	Lever plate	1
422	30422	Spring pin	1
423	30423	Bolt	1
424	30424	Nut	1

## AC Pump



Item No.	Parts No.	Part Description	QTY
501	30501	Small pump core Ø18*105	1
502	30502	Spring cover	1
503	30503	Big spring	1
504	30504	Dust ring Ø18*26*4.5/6	1
505	30505	Seal washer Ø18*26*5	1
506	30506	Dust ring Ø35*45*5/6.5	1
507	30507	O-rings Ø35*3.55	1
508	30508	Seal washer Ø35*45*6	1
509	30509	Steel ball Ø19	1
510	30510	Safety valve	1
511	30511	Piston rod Ø35*278	1
512	30512	Plug M10*1*9.5	1
513	30513	Washer 10*2	1
514	30514	Spring pin Ø8*52	1
515	30515	Lever plate	1
516	30516	Nut M8	1
517	30517	Screw M8*25	1
518	30518	Integrated valve	1
519	30519	Pump Body	1