



# Operating Instructions and Parts Manual PTW Series Premium Pallet Trucks



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## IMPORTANT SAFETY INSTRUCTIONS

### WARNING – To reduce risk of injury:

- Read and understand the entire owner's manual before using the pallet truck.
- Do not place hands or feet under the pallet truck at any time.
- Do not operate a loaded pallet truck on ramps or inclines.
- Do not tip load pallet truck forks. This may cause damage to the forks and personal injury if the rear of the pallet truck suddenly “pops up.”
- Never leave a loaded pallet truck unattended in the raised position. Always lower load to the floor.
- Do not load pallet truck beyond its rated capacity.
- Secure load before transporting.
- To prevent accidental tipping, make sure load is centered on the forks.
- Do not move a loaded pallet truck by other than manual force.
- Failure to comply with these warnings may result in personal injury and/or property damage.
- Replace warning labels if they become obscured or removed.
- **⚠️WARNING:** This product can expose you to chemicals including lead and cadmium which are known to the State of California to cause cancer and birth defects or other reproductive harm, and phthalates which are known to the State of California to cause birth defects or other reproductive harm.

## Introduction

To better understand the proper use and safe operation of your JET PTW Series Premium Pallet Truck, please take a few minutes to carefully read and follow the instructions contained in this manual. When finished reading and understanding the manual, please file in a safe and convenient location for the life of the pallet truck.

You will notice several important features about your JET Premium Pallet Truck. It features a 2-7/8” lowered height, rounded fork tips and nylon entry/exit rollers to provide easy entry and exit of pallets.

A large, easy-to-use ergonomic handle with a 200° turning radius allows maximum maneuverability. The articulated steer wheel axle helps maintain floor contact on uneven surfaces.

The cast iron pump design features top-of-the-stroke and overload by-pass systems, hardened and chromed ram and piston, and a single point valve service for easy replacement. A special lowering valve allows you to control the rate of descent and prevent “shock” loads.

Your JET Premium Pallet Truck is designed and built to offer consistent, long-term operation with minimal maintenance and service attention.

# Specifications

Model	Stock No.	W1 (in.)	W2 (in.)	L1 (in.)	L2 (in.)	H1 (in.)	H2 (in.)	A (DxW) (in.)	B (D x W)/in.	C (in.)	Max. Load (lbs.)	Net Wt. (lbs.)	Ship Wt. (lbs.)
PTW-2036	140170	20.5	6.25	36	51	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	6,000	143	152
PTW-2042	140171	20.5	6.25	42	57	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	6,000	152	161
PTW-2048	140172	20.5	6.25	48	63	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	6,000	161	169
PTW-2742	140174	27	6.25	42	57	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	6,000	158	167
PTW-2748	140175	27	6.25	48	63	7-3/4	2-7/8	7 x 2	2-7/8 x 3-11/16	47	6,000	172	180

All models –

Force required to pump @ maximum load: 78 lbs.

Force required to move @ maximum load: 110 lbs.

Handle cycles to maximum height: 12

Ram/Pump piston outside diameter: 1.24 / 0.71 in.

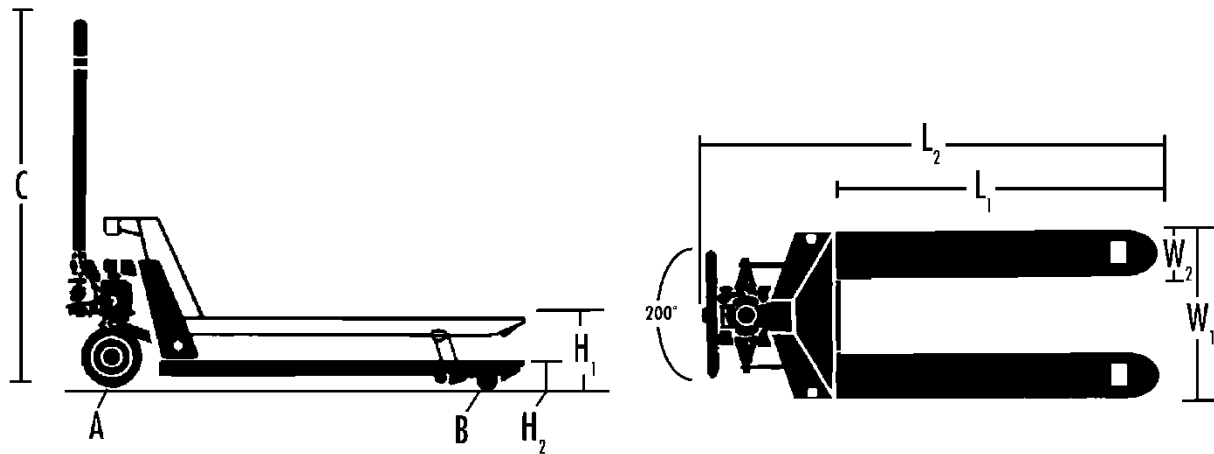


Figure 1

The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, JET reserves the right to change specifications at any time and without prior notice, without incurring obligations.

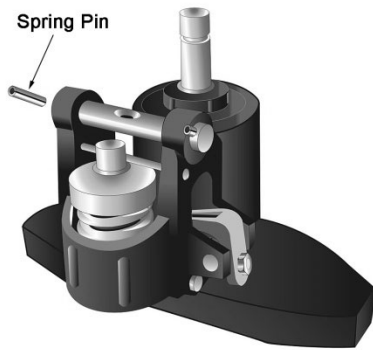
# Assembly

**Note:** Individual pallet trucks are assembled and ready to use. Pallet trucks purchased in crate quantities (6 units to a crate) require some assembly. Match the “letter” label on the handle assembly to the “letter” label on the frame, prior to assembly.

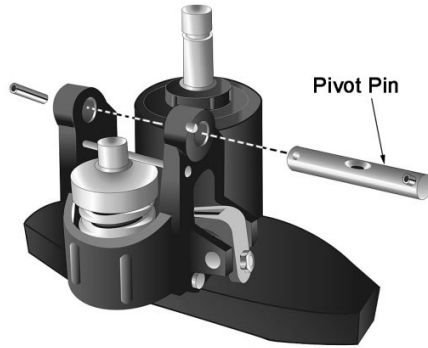
## Tools required for assembly:

Hammer  
Pliers

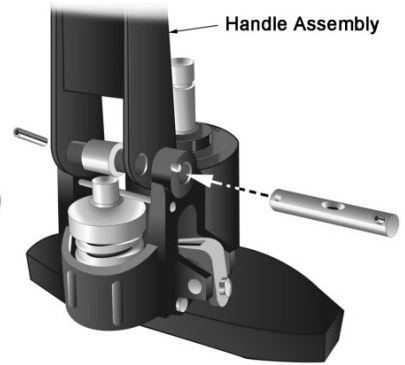
## To attach handle assembly to the frame (Figures 2-6):



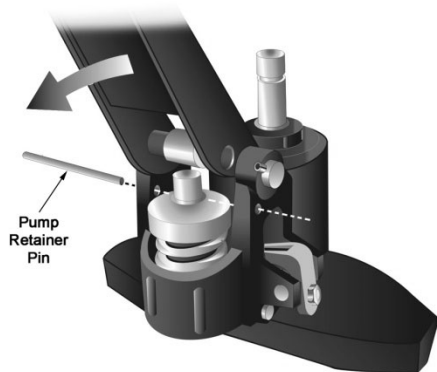
1. Remove the spring pin.



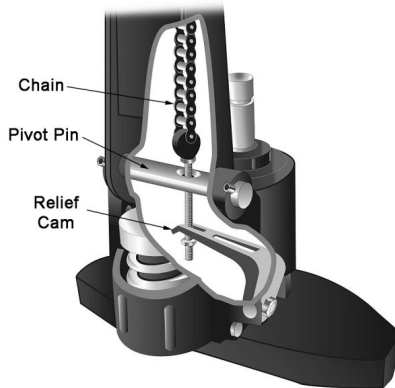
2. Tap out the pivot pin.



3. Align the holes in the handle with the holes in the pump body. Tap the pivot pin into the handle and pump body.
4. Using pliers, turn the pivot pin until spring pin holes line up.
5. Using a hammer, tap the spring pin into the pump body and pivot pin.



6. Lower the handle until the spring cap is contacted. (This will reduce some of the pressure on the pump retainer pin, making it easier to remove.)
7. Tap out the pump retainer pin and discard it.



8. Feed the chain anchor through the hole in the pivot pin.
9. Position the chain anchor through the fork of the relief cam, with the lock nut below the fork.

## Operation

To raise the forks, push lever down and pump the handle until desired height is reached.

To lower forks, pull lever up. The lever is spring loaded and will return to the neutral position when released.

To freely move the handle, set the lever in the center neutral position.

### To lift a load:

1. Lower forks to lowest position.
2. Insert forks under load or into pallet.
3. Push the lever down.
4. Move handle up and down until forks reach desired height.

### To move a load:

1. Place lever in center neutral position.
2. Pull or push to desired location.

### To lower a load:

1. Pull lever up, and allow load to settle.
2. Pull forks away from load.

## Lubrication

Check the oil level *annually* by unscrewing oil fill plug (Figure 7). When changing or adding oil, fill the reservoir through the plug hole to 80% capacity (approximately 2 inches deep) with hydraulic jack oil. Do not overfill.

After filling and re-installing plug, bleed the pump. (See page 8 for procedure).

There are nine grease nipples at the locations listed below. These should be greased on a *semi-annual basis*.

See Figures 8 and 9.

- A – Pressure plate (qty. 1)
- B – Lift arm assembly (qty. 2)
- C – Inside shaft holders of the frame (qty. 2)
- D – Load wheel frame (qty. 4: two each frame)

In addition, lightly oil all moving parts.

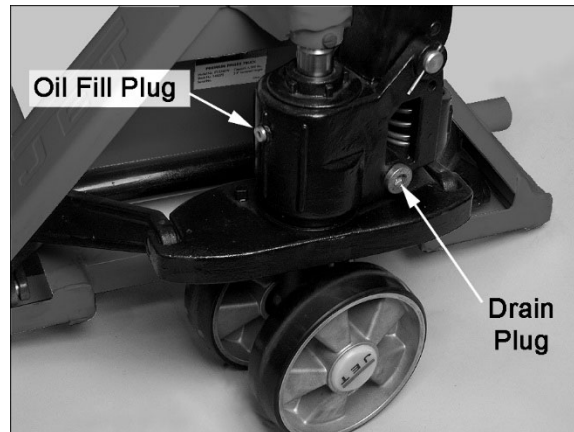


Figure 7

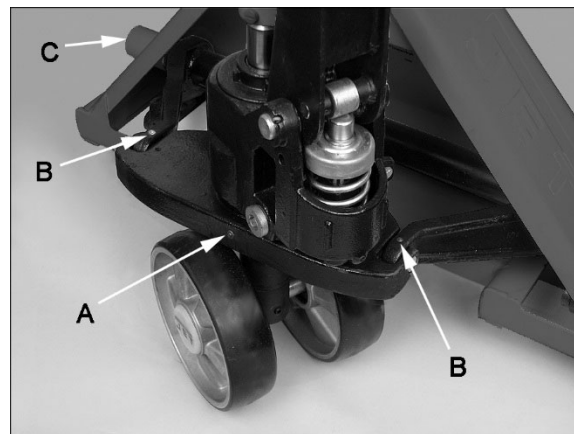


Figure 8

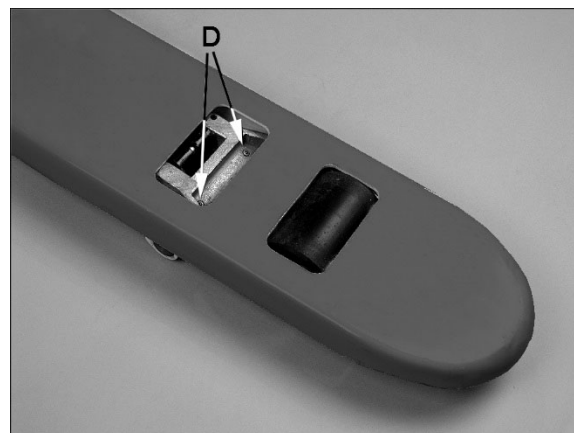


Figure 9

## Maintenance

**IMPORTANT:** Repairs and seal ring replacements should be performed only by qualified personnel. Also, certain procedures may require specialized tools. You can locate the nearest authorized JET Service Center on our website: [www.jettools.com](http://www.jettools.com).

Numbers in parentheses refer to index numbers in the parts breakdowns, pages 10-12.

### O-Ring and Seal Replacement for Ram Piston and Plunger Piston

1. Raise the pallet truck to maximum height by pumping handle.
2. Unscrew the set screw (#69) to release the ram shaft from the top of the frame.
3. Turn the pallet truck on its side. Remove the wheels and wheel shaft. Remove the C-clip (#25). This will free the pump and handle assembly from the main truck body.
4. Turn the pallet truck upright. Remove drain plug (see Figure 7) and empty the oil into a suitable container. Pump handle until all oil has drained.
5. Pull out piston rod (#57). If plunger piston (#61) is to be pulled out, remove handle assembly to access.
6. Remove all O-Rings & Seals.
7. Insert new O-Ring or Seal one at a time making sure to replace with the same size that was removed.
8. Re-assemble.
9. Refill oil to correct level (80% capacity or approximately 2 inches deep in reservoir), and install oil fill plug.

### O-Ring and Seal Replacement for Valve Cartridge

1. Remove drain plug (see Figure 7), and empty the oil into a suitable container. Pump handle until all oil has drained.
2. Tap out spring pin (#19).
3. Remove the relief cam (#18).
4. Unscrew the valve cartridge (#41).
5. Remove all O-Rings & Seals.

6. Insert new O-Ring or Seal one at a time making sure to replace with the same size that was removed.
7. Re-assemble the valve cartridge, and install relief cam with spring pin.
8. Refill oil to correct level (80% capacity or approximately 2 inches deep in reservoir), and install oil fill plug.

### Cleaning the Release Valve (Bleeding the Pump)

Over time the release valve assembly may become clogged with debris. To clean the release valve:

1. Pump handle quickly raising pallet truck to full extent. While continuing pump action, pull lever to down position.
2. When forks reach total down position, valve is flushed. Repeat if necessary.

### Adjusting Relief Cam

1. Place handle lever in the neutral position.
2. Loosen #20 hex nut.
3. Adjust #21 socket set screw while pumping the handle.
4. The cam is properly adjusted when pumping the handle in the neutral position causes no movement.
5. Re-tighten hex nut (#20) to secure the setting.

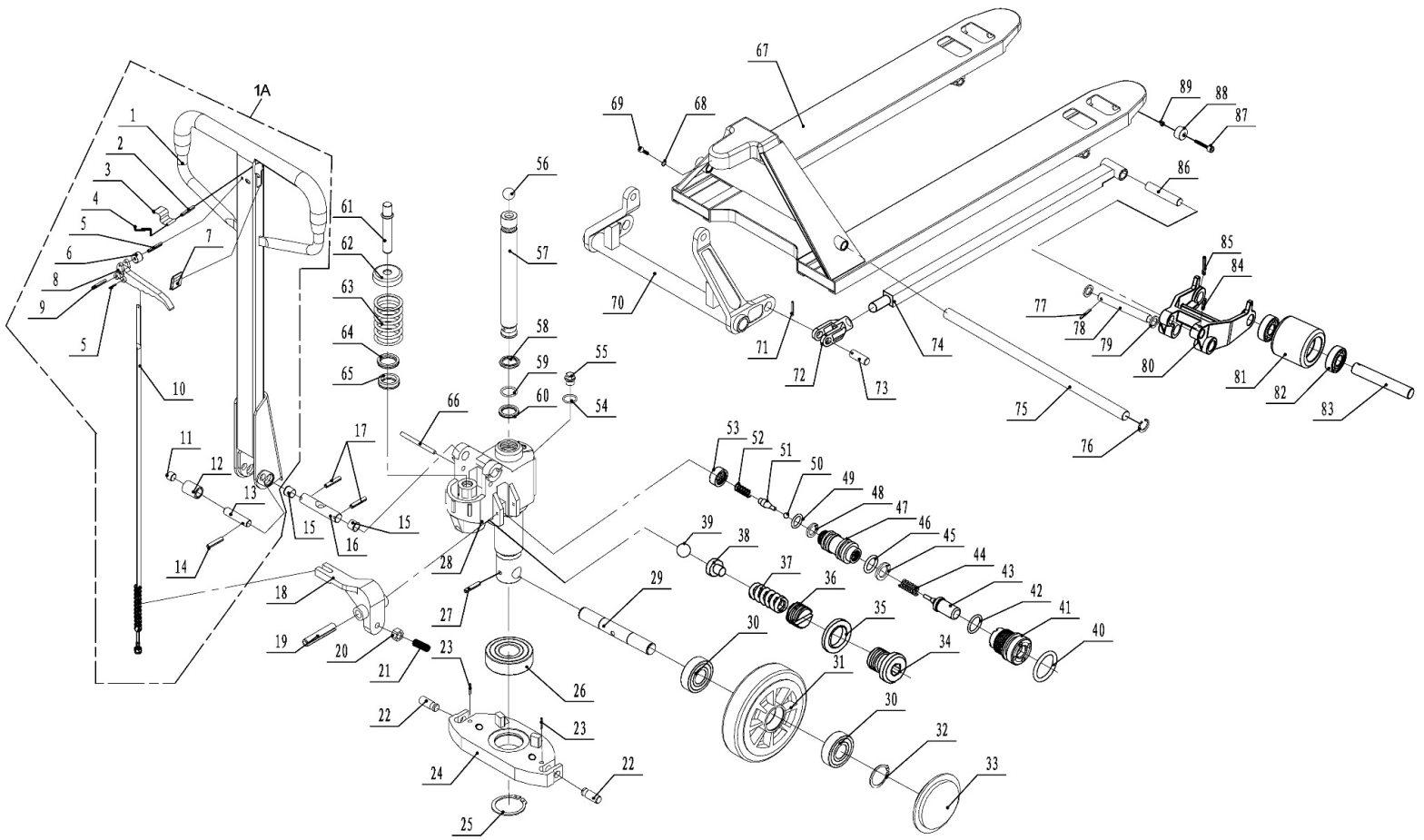
# Troubleshooting the PTW Series Pallet Trucks

Any disassembly of the pallet truck should be done by qualified personnel. Contact Jet technical service if further assistance is needed.

Trouble	Probable Cause	Remedy
Hydraulic unit does not lift.	Low oil level in reservoir.	Make sure there is no oil leakage from valve, and add oil.
	Steel ball not seated in hydraulic unit.	Place the lever in the down position and pump the handle repeatedly.
	Worn U-packing in ram cylinder.	Consult authorized service center.
Once lifted, truck lowers by itself.	Steel ball not seated in hydraulic unit.	Bleed the pump.
	Worn seal in ram cylinder.	Have seal(s) replaced.
	Release valve not seated properly.	Bleed the pump.
	Release valve not adjusted properly.	Reload truck within load capacity and adjust valve by pressure adjustment screw.
	Oil leakage from each valve.	Tighten plug of each valve.
Fork does not lower.	Relief cam or chain element broken.	Replace affected elements.
	Relief cam nut out of adjustment.	Refer to "Adjusting Relief Cam."
	Broken fork rods and linkage.	Inspect linkages for breaks or cracks. Replace elements as needed.
Lever does not set at Up-down.	Relief cam nut out of adjustment.	Refer to "Adjusting Relief Cam."
Truck doesn't roll smoothly or evenly.	Wheels have debris embedded, or out of round due to wear.	Inspect and remove debris. If worn, replace wheels. NOTE: Always replace wheels in pairs.



# Parts Breakdown for PTW Series Pallet Trucks



## Parts List for PTW Series Pallet Trucks

Index No.	Part No.	Description	Size	Qty
1A	PT2036-3-1	Handle Assembly (#1 thru 14)		1
1	PT2036-1-1	Handle		1
2	PTX2748-002	Spring Pin	Ø4×30mm	1
3	PTW-03	Spring for Lowering Lever		1
4	PTW-04	Spring		1
5	5301121	Spring Pin	Ø4×16mm	2
6	PT2036-1-5	Stop Rubber		1
7	PTW-07	Lever Mat		1
8	PT2036-1-6	Lowering Lever		1
9	JHPB20-8	Spring Pin	Ø6×30mm	1
10	PTW-10	Release Rod Assembly		1
11	PTW-11	Oil Lite Bushing		1
12	PT2036-1-15	Pressure Roller		1
13	PT2036-1-16	Pressure Roller Shaft		1
14	PT2036-1-17	Spring Pin	Ø3×20mm	1
15	PT2036-1-14	Oil Lite Bushing		2
16	PT2036-2-9	Pivot Pin		1
17	PT2036-3-27	Spring Pin	Ø5×30mm	2
18	PT2036-2-31	Relief Cam		1
19	JHS1100-61	Spring Pin	Ø8×50mm	1
20	PT2036-2-29	Adjust Nut M8	M8	1
21	PT2036-2-30	Adjust Screw M8	M8×25mm	1
22	PT2036-3-11	Arm Pin		2
23	PT2036-3-27	Spring Pin	Ø5×30mm	2
24	PTW-24	Pressure Plate		1
25	F006082	C-Retaining Ring, Ext	Ø55mm	1
26	BB-51111	Thrust Bearing	51111	1
27	PT2036-3-4	Spring Pin	Ø8x45 mm	1
28A	PTW-28A	Pump Assembly (#28,34 thru 66)		1
28	PTW-28	Pump Body		1
29	PT2036-3-3	Wheel Axle		1
30	BB-6204ZZ	Ball Bearing	6204ZZ	4
31	PT2036-3-6	Steering Wheel	Ø180×50mm	2
32	PT2036-3-9	C-Clip	Ø20mm	2
33	PT2036-3-10	Dust Cover		2
34	PTW-34	Screw Plug **	M10x1mm	1
35	PTW-35	Washer **	Ø10mm	1
36	PT2036-2-16	Set Screw **		1
37	PT2036-2-15	Spring **		1
38	PTW-38	Valve **		1
39	SB-6MM	Steel Ball **	Ø6mm	1
40	PT2036-2-22	O-Ring *	Ø28×3.5mm	1
41	PT2036-2-23	Copper Plug		1
42	PT2036-2-21	O-Ring *	Ø16×2.4mm	1
43	PT2036-2-20	Relief Nozzle		1
44	PT2036-2-19	Relief Nozzle Spring		1
45	PT2036-2-25	UN Seal *	Ø17mm	1
46	PT2036-2-26	O-Ring *	Ø16×2.5mm	1
47A	PTW-47A	Valve Assembly (#47, 50 thru 53)		1
47	PTW-47	Valve Body		1
48	PT2036-2-27	UN Seal *	Ø15mm	1
49	PT2036-2-28	O-Ring *	Ø14×2.4mm	1
50	SB-5MM	Steel Ball	Ø5mm	1
51	PTW-51	Taper Valve		1
52	PTW-52	Taper Spring		1
53	PTW-53	Valve Cap		1
54	PTW-54	O-Ring *	Ø10mm	1
55	PT2036-2-34	Screw Plug	M10x1	1

Index No.	Part No.	Description	Size	Qty
56	PT2036-2-41	Steel Ball	Ø19mm	1
57	PT2036-2-36	Piston Rod	Ø31.5mm	1
58	PTW2036-2-40	DHS Seal *	Ø31.5mm	1
59	PTW-59	O-Ring *	Ø31×3.55mm	1
60	PT2036-2-35	UHS Seal *	Ø31.5mm	1
61	PT2036-2-3	Plunger Piston	Ø18mm	1
62	PT2036-2-1	Spring Cap		1
63	PT2036-2-2	Plunger Spring		1
64	PT2036-2-5	DHS Seal *	Ø18mm	1
65	PT2036-2-6	UHS Seal *	Ø18mm	1
66	PTW-66	Pump Retainer Pin		1
67	PT2036-3-36G	Fork Frame for PTW-2036		1
	PT2042-3-36G	Fork Frame for PTW-2042		1
	PT2048-3-36G	Fork Frame for PTW-2048		1
	PT2742-3-36G	Fork Frame for PTW-2742		1
	PT2748-3-36G	Fork Frame for PTW-2748		1
68	TS-2361061	Spring Washer	Ø6mm	1
69	PTW-38	Screw	M6	1
70	PTW2036-70	Lift Arm for 20.5" Wide Frames		1
	PTW2736-70	Lift Arm for 27" Wide Frames		1
71	PT2036-3-27	Spring Pin	Ø5×30mm	2
72	PT2036-3-23	Joint		2
73	PT2036-3-21	Joint Pin		2
74	PTW2036-74	Push Rod for 36" Forks 30x30mm		2
	PTW2042-74	Push Rod for 42" Forks 30x30mm		2
	PTW2048-74	Push Rod for 48" Forks 30x30mm		2
75	PTW2036-75	Long Shaft for 20.5" Wide Frames		1
	PTW2736-75	Long Shaft for 27" Wide Frames		1
76	PT2036-3-19	C-Clip	Ø25mm	2
77	PT2036-3-27	Spring Pin	Ø5×30mm	2
78	PTW-78	Load Wheel Frame Shaft		2
79	PTW-79	Plastic Bushing		4
80	PT2036-3-26	Load Wheel Frame		2
81	PTW-81	Load Wheel with 2 bearings	Ø74×93mm	2
82	BB-6024ZZ	Ball Bearing 6024ZZ	6024	4
83	PT2036-3-30	Wheel Shaft		2
84	PS052500	Spring Pin Ø5x25	Ø5×25mm	2
85	PT2036-3-31	Spring Pin Ø5x35	Ø5×30mm	2
86	PT2036-3-35	Tappet Shaft		2
87	PTW-87	Entry Roller Shaft	M10×55mm	2
88	PTW-88	Entry Roller		2
89	TS-1540071	Hex Nut	M10	2
	PT2036-SK-1	O-Ring and Seal Kit *		1
	PT-2036RV-1	Relief Valve (Overload Valve Assembly) **		1

\* available only in the PT2036-SK-1, O-Ring and Seal Kit (Note: This kit may contain 3 additional seals/rings that are used only on pallet trucks previous to serial number 17020001.)

\*\* available only in the PT-2036RV-1, Relief Valve (Overload Valve Assembly)

