



Model no.:	Stock no.:
Serial no.:	
Purchased from:	
Date purchased:	Date in service:

# Operating Instructions and Parts Manual PTW-A Series Pallet Trucks



**Part No. M-141170**  
Edition 2 04/2020  
Copyright © 2019 JET



## 1.0 IMPORTANT SAFETY INSTRUCTIONS

### **WARNING – To reduce risk of injury:**

- Read and understand the entire owner's manual before using the pallet truck.
- Read and understand all warning and instruction labels on the 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.
- Do not transport persons with a pallet truck.
- Failure to comply with these warnings may result in personal injury and/or property damage.
- Replace warning labels if they become obscured or removed.

## 2.0 Table of contents

Section	Page
1.0 IMPORTANT SAFETY INSTRUCTIONS .....	2
2.0 Table of contents .....	3
3.0 Introduction .....	3
4.0 Specifications .....	4
5.0 Assembly (for crate quantity purchases only) .....	5
6.0 Operation .....	6
7.0 Maintenance .....	6
7.1 Lubrication .....	6
7.2 Cleaning relief valve .....	6
7.3 Adjusting relief cam .....	6
7.4 O-Ring and seal replacements .....	6
8.0 Troubleshooting PTW-A Series Pallet Trucks .....	8
9.0 Replacement Parts .....	8
9.1 PTW-A Series Pallet Trucks – Exploded View .....	9
9.2 PTW-A Series Pallet Trucks – Parts List .....	10

## 3.0 Introduction

Your JET Pallet Truck is designed with most efficient features for warehouse or dock.


The 2.95 inch lowered height, tapered fork tips and wide polyurethane entry/exit rollers combine for easy entry and exit of pallets. The 200° turning radius allows maneuverability in confined spaces. Ball bearings on steer and load wheels are lifetime lubricated, double-sealed, and promote smooth, quiet travel.

The cast iron pump features top-of-the-stroke and overload by-pass valve systems, and single point valve service for easy replacement.

The chassis is heavy gauge steel, reinforced with cross-welded plates to prevent forks from bending; solid steel push rods provide additional strength. Paint finish is powder-coated for superior protection of the underlying steel.

In summary, your JET Pallet Truck is designed to offer consistent, long-term operation with minimal maintenance and service attention.

Retain this manual for future reference. If the pallet truck transfers ownership, the manual should accompany it.

** **WARNING**** Read and understand the entire contents of this manual before attempting assembly or operation. Failure to comply may cause serious injury.

# 4.0 Specifications

Table 1

Model number		PTW-2036A	PTW-2042A	PTW-2048A	PTW-2742A	PTW-2748A
Stock number		141170	141171	141172	141174	141175
Load Capacity		6,600 lbs. (2994 kg)				
Turning Radius		200 deg.				
Overall Fork Length	L <sub>1</sub>	36 in. (914 mm)	42 in. (1067 mm)	48 in. (1219 mm)	42 in. (1067 mm)	48 in. (1219 mm)
Overall Forks Width	W <sub>1</sub>	20-1/2 in. (521 mm)			27 in. (686 mm)	
Fork Width	W <sub>2</sub>	6-1/4 in. (159 mm)				
Lowered Height	H <sub>2</sub>	2.95 in. (75 mm)				
Maximum Height	H <sub>1</sub>	7-1/2 in. (190.5 mm)				
Number of Strokes to Reach Maximum Height		13				
Force Required to Pump at Maximum Load		88 lbs. (40 kg)				
Steer Wheel Size (Dia. x W)	A	7 x 2 in. (180 x 50.8 mm)				
Load Wheel Size (Dia. x W)	B	2-7/8 x 3-11/16 in. (73 x 93.7 mm)				
Force Required to Move Maximum Load		150 lbs. (68 kg)				
Overall Height	C	48 in. (1219 mm)				
Overall Length	L <sub>2</sub>	51 in. (1295 mm)	57 in. (1448 mm)	63 in. (1600 mm)	57 in. (1448 mm)	63 in. (1600 mm)
Overall Width	W <sub>1</sub>	20-1/2 in. (521 mm)			27 in. (686 mm)	
Net Weight		122 lbs. (55 kg)	132 lbs. (60 kg)	140 lbs. (63.5 kg)	145 lbs. (66 kg)	151 lbs. (68.5 kg)
Gross Weight		133 lbs. (60 kg)	142 lbs. (64.5 kg)	151 lbs. (68.5 kg)	156 lbs. (70.8 kg)	162 lbs. (73.5 kg)
Pump Type		Integrated				
Materials	Pump Housing	Cast iron				
	Forks	Sheet steel, 11 ga. (3.2 mm)				
	Chassis	Sheet steel, 11 ga. (3.2 mm)				
	Wheels	Polyurethane				

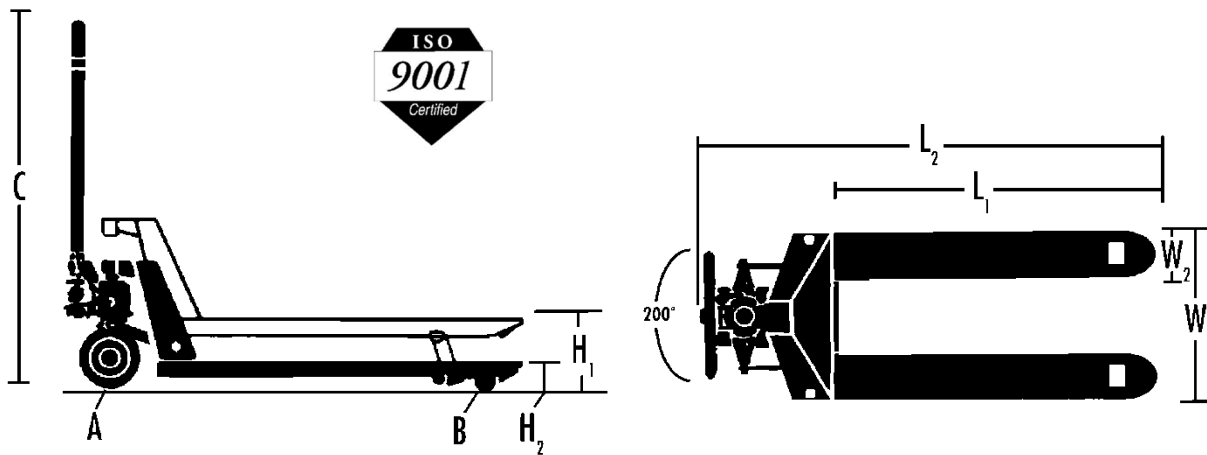


Figure 4-1

The specifications in this manual were current at the time this manual was published, 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.

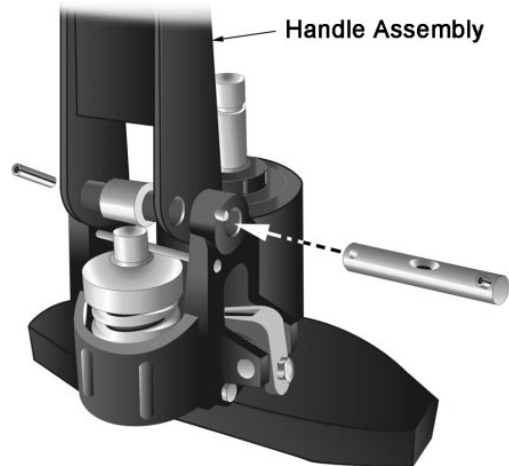
## 5.0 Assembly (for crate quantity purchases only)

Note: The following illustrations may not show your exact model.

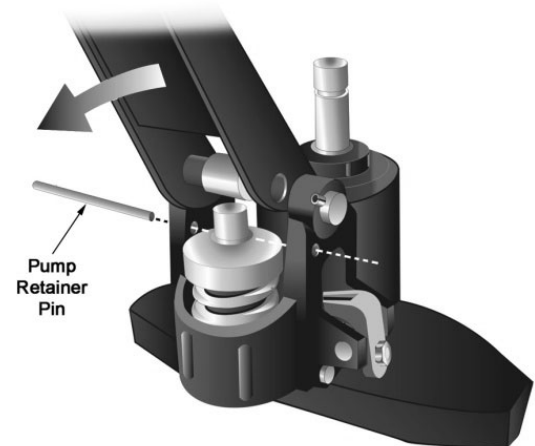
Individual pallet trucks are assembled and ready to use. Pallet trucks purchased in crate quantities (6 units to a crate) require some assembly. A hammer and pliers are required. *Match the "letter" label on the handle assembly to the "letter" label on the frame, prior to assembly.*

### To attach handle assembly to the frame:

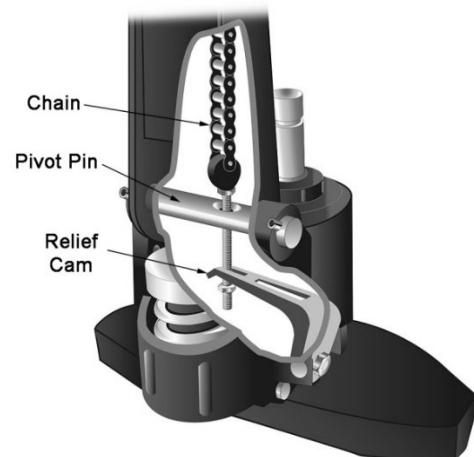
1. Align the holes in the handle with the holes in the pump body. Tap the pivot pin through the handle and pump bodies.
2. Using pliers, turn the pivot pin until spring pin holes line up.
3. Using a hammer, tap the spring pin into the pump body and pivot pin.



4. 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.)
5. Tap out the pump retainer pin and discard it.



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



## 6.0 Operation

### To lift a load:

1. Lower forks to lowest position.
2. Insert forks under load or into pallet.
3. Push the lever down.
4. Pump 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. (The lever is spring loaded and will return to neutral position when released.)
2. Pull forks away from load.

## 7.0 Maintenance

### 7.1 Lubrication

Check the oil level *annually* by unscrewing oil fill plug (Figure 7-1). Oil level should be near the bottom of the hole.

When adding oil, fill the reservoir through the plug hole with hydraulic jack oil, until oil comes to bottom of hole, or begins to slightly seep out of the fill hole. Do not overfill.

After filling, reinstall plug, then bleed the pump (see sect. 8.3).

Lubricate pivot points on load wheel frames, as needed. Do not get oil directly on load wheels.

Also lubricate pivot points on the yoke, such as the one shown in Figure 7-1.

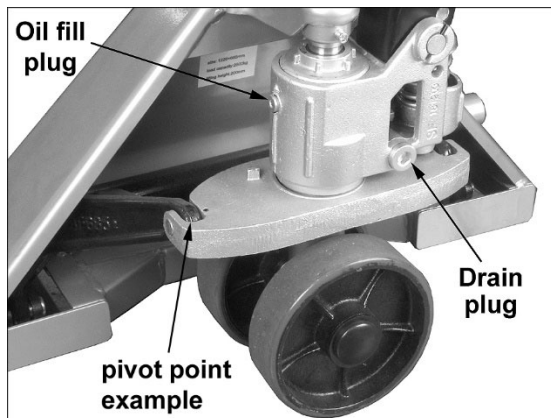


Figure 7-1

### 7.2 Cleaning relief valve

#### ("Bleeding the Pump")

Over time the relief valve assembly may become clogged with debris or develop air pockets. This can result in improper lifting, lifting only half-way, or similar symptoms.

To clean the relief valve:

1. Hold lever in raised position (fork lowering position) and pump handle quickly 10 to 12 times.
2. Move lever to lower position, and pump the handle to raise forks to fullest height.
3. Repeat if necessary.

### 7.3 Adjusting relief cam

1. Place handle lever in neutral position.
2. Loosen #424 hex nut.
3. Adjust #423 socket set screw while pumping the handle.
4. The cam is properly adjusted when pumping handle in neutral position causes no movement.
5. Re-tighten hex nut (#424) to secure the setting.

### 7.4 O-Ring and seal replacements

**IMPORTANT:** Repairs and seal ring replacements should be performed only by qualified personnel. Also, certain procedures may require specialized tools.

Numbers in parentheses refer to index numbers in the parts breakdowns, sect. 10.0.

#### 7.4.1 Ram piston and plunger piston

1. Raise the forks to maximum height by pumping handle.
2. Remove the socket head screw (#204) to release the piston assembly from the top of the frame.
3. Turn the pallet truck on its side. Remove the steer wheels and wheel shaft. Remove the Retaining Ring (#305). This will free the pump and handle assembly from the platform.
4. Turn the pallet truck upright. Remove drain plug (see Figure 7-1) and empty the oil into a suitable container. Pump handle until all oil has drained.

5. Pull out piston rod assembly (#414). If plunger piston (#401) 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. (Order appropriate JET seal kit.)
8. Re-assemble.
9. Refill oil to bottom of fill hole with hydraulic jack oil. Install oil fill plug.

#### **7.4.2 Valve cartridge**

1. Remove drain plug (see Figure 7-1), and empty the oil into a suitable container. Pump handle until all oil has drained.
2. Tap out roll pin (#422).
3. Remove relief cam (#421).
4. Unscrew and remove valve assembly (#418).
5. Install new valve assembly (see sect. 10.0 for part number) and tighten.
6. Install relief cam with roll pin.
7. Refill oil to bottom of fill hole with hydraulic jack oil. Install oil fill plug.

## 8.0 Troubleshooting PTW-A Series Pallet Trucks

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

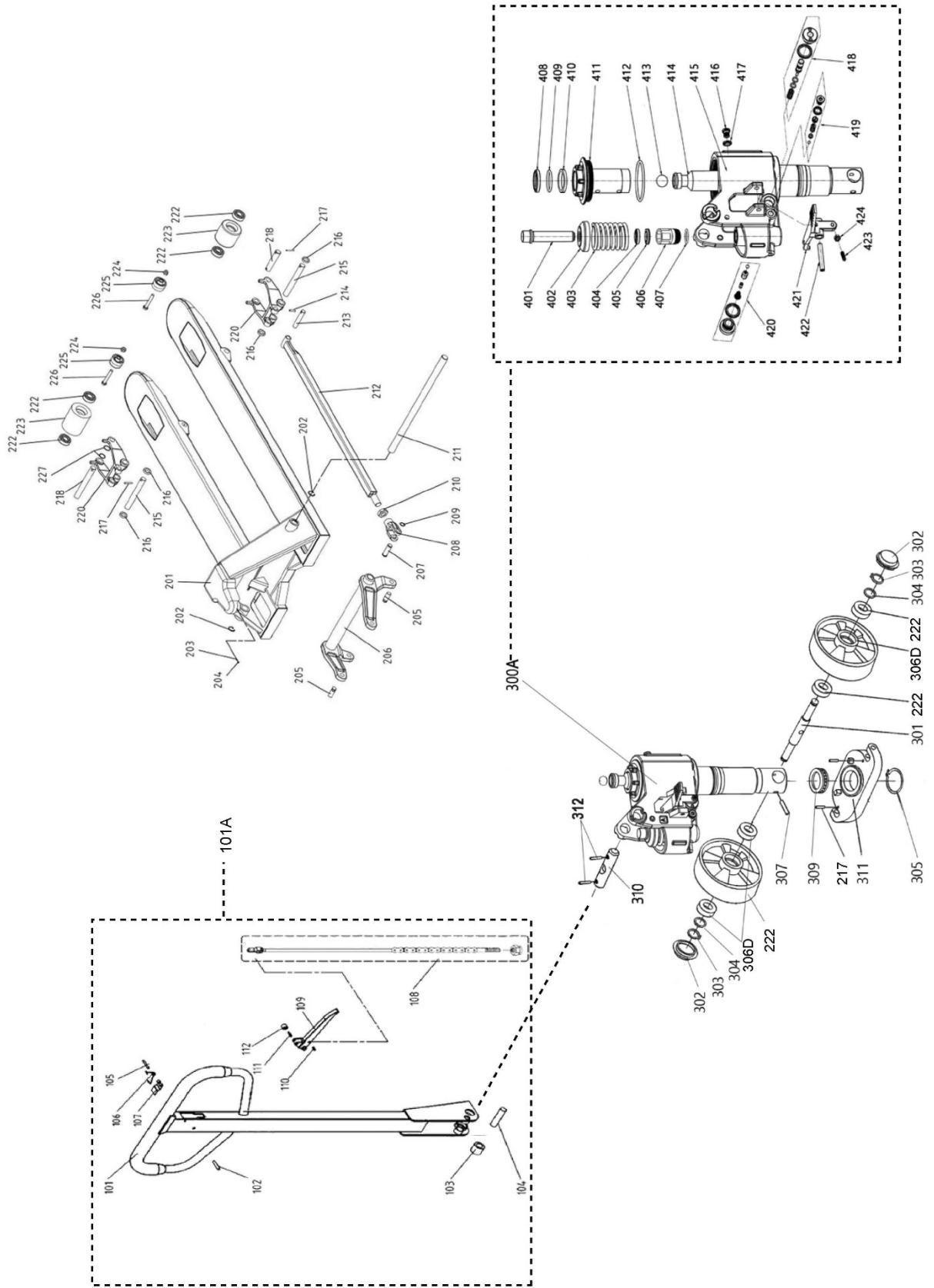
Trouble	Probable Cause	Remedy
Hydraulic unit does not lift.	Low oil level in reservoir.	Make sure there is no oil leakage from valve, and add oil.
	Steel ball not seated in hydraulic unit.	Place the lever in the down position and pump the handle repeatedly.
	Worn seal(s) in piston cylinder.	Have seal(s) replaced.
Once lifted, truck lowers by itself.	Steel ball not seated in hydraulic unit.	Bleed the pump.
	Worn seal in piston cylinder.	Have seal(s) replaced.
	Relief valve not seated properly.	Bleed the pump.
	Relief valve not adjusted properly.	Reload truck within load capacity and adjust valve using the set screw (#423).
	Oil leakage from each valve.	Tighten plug of each valve.
Forks will not lower.	Relief cam setscrew/nut out of adjustment.	Refer to "Adjusting Relief Cam."
	Relief cam or chain element broken.	Replace affected elements.
	Broken fork rods and linkage.	Inspect linkages for breaks or cracks. Replace elements as needed.
Lever does not set at neutral position	Relief cam nut on the chain (#108) is not positioned correctly.	Adjust the nut on the chain assembly.
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.

## 9.0 Replacement Parts

Non-proprietary parts, such as fasteners, can be found at local hardware stores, or may be ordered from JET. Some parts are shown for reference only, and may not be available individually.



# 9.1 PTW-A Series Pallet Trucks – Exploded View



## 9.2 PTW-A Series Pallet Trucks – Parts List

Index No.	Part No.	Description	Size	Qty
101A	PTWA101A	Handle Body Assembly (#101 to 112)		1
101	PTWA101	Handle Body		1
102	PS063000	Roll Pin	Ø6x30 mm	1
103	PTJA103	Pinch Roller		1
104	PTJA104	Pinch Roller Pin		1
105	1225126	Roll Pin	Ø4x30 mm	1
106	PTJA106	Torsion Spring		1
107	PTJA107	Hinge		1
108	PTWA108	Chain assembly		1
109	PTJA109	Finger Lever		1
110	PTJA110	Roll Pin	Ø4x13 mm	1
111	PTJA111	Roll Pin	Ø4x17 mm	1
112	PTJA112	Roller		1
201	PTJA201	Chassis		1
202	F006028	C-Retaining Ring, Int	Ø26 mm	2
203	PTJA203	Spring Gasket	Ø6 mm	1
204	TS-1503031	Socket Hd Cap Screw	M6x12 mm	1
205	PTWA205	Connecting Pin (BF Pump)	Ø15.8x41 mm	2
206	PTJA20627	Lifting Yoke for 685mm/27in		1
	PTJA206205	Lifting Yoke for 520mm/20-1/2in		1
207	PTJA207	Axle	Ø15.8x52 mm	2
208	PTJA208	Pushrod Fork		2
209	F006044	C-Retaining Ring, Ext	Ø16 mm	2
210	PTJA210	Hex Thin Nut, Fine	M22	2
211	PTJA211-27	Long Axle for 685mm/27in	Ø24.5x608 mm	1
	PTJA211-20	Long Axle for 520mm/20in	Ø24.5x390 mm	1
212	PTJA21248	Pushrod (1220mm/48in)		2
	PTJA21236	Pushrod (914mm/36in)		2
	PTJA21242	Pushrod (1066mm/42in)		2
213	PTJA213	Axle	Ø15.8x82 mm	2
214	F012099	Roll Pin	Ø5x26 mm	2
215	PTWA215	Load Wheel Frame Axle	Ø19.8x152 mm	2
216	PTJA216	Axle Sleeve		4
217	F012076	Roll Pin	Ø5x30 mm	4
218	PTWA218	Load Wheel Axle	Ø19.8x120 mm	2
220	PTWA220	Load Wheel Frame		2
222	BB-6204VV	Bearing	6204-2RS	8
223	PTWA223	Load Wheel PU 74x93 (includes #222)	Ø74x93 mm	2
224	TS-1541041	Nylon Lock Hex Nut	M10	2
225	PTJA225	Inner Roller		2
226	PTJA226	Hex Cap Screw, Grd C	M10x65	2
227	PTJA227	Nylon Washer		2
300A	PTWA300A	BF Pump Assembly (#401 to 424)		1
301	PTJA301	Wheel Axle		1
302	PTJA302	Dust Cap		1
303	F006047	C-Retaining Ring, Ext	Ø20 mm	1
304	PTJA304	Nylon Washer		1
305	F006082	C-Retaining Ring, Ext	Ø55 mm	1
306D	PTJA306D	Steer Wheel PU (includes #222)	160x50 mm	2
307	SR2024N-27	Roll Pin	Ø8x45 mm	1
309	BB-51111	Thrust Bearing 51111		1
310	PTWA310	Handle Axle	Ø19.8x98 mm	1
311	PTWA311	Steer Wheel Platform		1
312	GB879-5X35	Roll Pin	Ø5x35 mm	2
401	PTWA401	Small Pump Core		1
402	PTWA402	Spring Cap		1
403	PTWA403	Spring		1
404	PTWA404	Dust Ring *	Ø18x26x4.5/6 mm	1
405	PTWA405	Seal Washer *	Ø18x26x5 mm	1

406	PTWA406	Small Cylinder	1
407	PTWA407	Copper Gasket	1
408	PTWA408	Dust Ring *	Ø31.5 mm 1
409	PTWA409	O-Ring *	Ø31.5 mm 1
410	PTWA410	Seal Washer *	Ø31.5 mm 1
411	PTWA411	Slide Bushing	1
412	PTWA412	O-Ring *	Ø69 mm 1
413	SB-18MM	Steel Ball	Ø18 mm 1
414	PTWA414	Piston Rod	1
415	PTWA415	Pump Body	1
416	PTWA416	Bolt	2
417	PTWA417	Seal	2
418	PTWA418	Relief Valve Assembly	1
419	PTWA419	Safety Valve Assembly	1
420	PTWA420	Check Valve Assembly	1
421	PTWA421	Lever Plate	1
422	PTWA422	Roll Pin	1
423	PTWA423	Slotted Set Screw	1
424	PTWA424	Nut	1
	LM000413	Warning Label (not shown)	1
	PTW2036A-ID	I.D. Label, PTW-2036A (not shown)	1
	PTW2042A-ID	I.D. Label, PTW-2042A (not shown)	1
	PTW2048A-ID	I.D. Label, PTW-2048A (not shown)	1
	PTW2742A-ID	I.D. Label, PTW-2742A (not shown)	1
	PTW2748A-ID	I.D. Label, PTW-2748A (not shown)	1
	PTW2036A-SL	Specification Label, PTW-2036A (not shown)	1
	PTW2042A-SL	Specification Label, PTW-2042A (not shown)	1
	PTW2048A-SL	Specification Label, PTW-2048A (not shown)	1
	PTW2742A-SL	Specification Label, PTW-2742A (not shown)	1
	PTW2748A-SL	Specification Label, PTW-2748A (not shown)	1
	LM000414	JET Logo Label (not shown)	1
	LM000415	Label – Pallet Truck Instruction (not shown)	1
	LM000416	Label – Release Valve Cleaning (not shown)	1
	PTWA-SK	Seal Kit (includes items marked with *)	1