

Please read and save these instructions. Read carefully before attempting to assemble, install, operate, or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

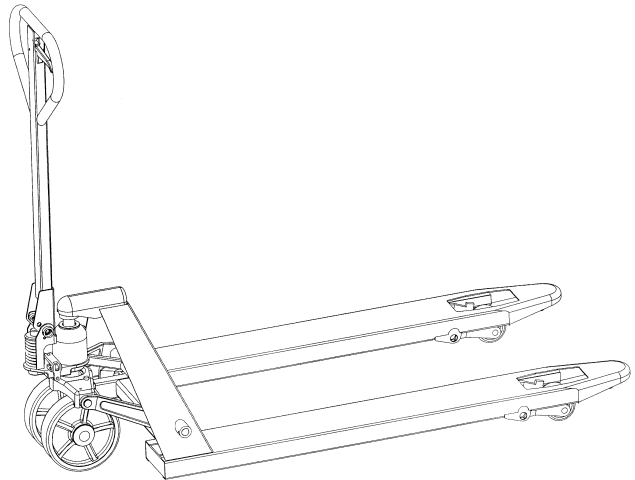
# Hydraulic Hand Pallet Trucks

## Description

The hydraulic hand pallet truck is a manually operated general duty pallet truck designed to lift and move a 3800 Lb maximum palletized load.

## Unpacking

Refer to Replacement Parts Illustration and Replacement Parts List to verify all parts are accounted for. If damage is evident, notify delivering carrier immediately and file necessary claims.



## Specifications

Up/Down Control:	Hand Actuated
Front Wheels per Fork:	Entry, Load, Exit
Strokes to Raised Height:	14
Push Rods:	Square Tube
Steering radius:	200 degrees
Load Wheel:	2.9" x 2-3/4" (Polyurethane)
Main Wheel:	7-1/4" x 2" (Polyurethane)

## Specifications

Model	Load Cap. (Lbs)	Max Fork Height	Min Fork Height	Fork Length	Width Across Forks	Fork Width	Overall Length	Weight
12U124	3800*	7 3/4"	2 7/8"	48"	27"	6"	63"	125 lbs.

\*Warning: Maximum load capacity rating is for evenly distributed and centered load.

## General Safety Information

In order to have a trouble free pallet truck, it is important to take caution during usage to ensure a long service life.

### **CAUTION**

- 1 Inspect the pallet truck for transit damage before operation. Carefully read this manual **before** putting into service. Be thoroughly familiar with the controls and the proper use of the pallet truck.
- 2 Never overload the pallet truck. Stay within the rated capacity of the truck.
- 3 Distribute the load evenly on the forks – do not concentrate loads at one point, or load one fork more than

other.

4 The pump's piston rod and lifting ram are polished with a hardened chrome-plate finish to provide maximum seal life and minimize oil leakage. Do not allow these surfaces to be nicked or pitted by abuse. Slight oil wetting of the external part of the piston is normal, as in all hydraulic systems. This oil film provides lubrication between the polished surfaces and the seals through which they pass. Do not be alarmed at a trace of oil, even on new units.

### **▲ DANGER**

5 Be especially cautious when using the pallet truck to move or set machinery. It is very easy to make the mistake of lifting at points that will develop concentrated or unbalanced loads that can damage the pallet truck.

6 Do not allow loaded pallet truck to drop from one floor level to another. Even a drop of one inch results in a "shock", which can bend or break components.

7 Always remove load before making repairs. Completely immobilize pallet truck before working on components that might pinch fingers or hands if movement were allowed.

### **▲ WARNING**

8 Never allow anyone to ride a pallet truck "scooter style". All heavy material handling equipment should be operated with the utmost regard for the safety of oneself and others.

9 Never leave a loaded pallet truck unattended.

10 Always lower forks when trucking is completed.

11 Avoid abrasive or corrosive environments.

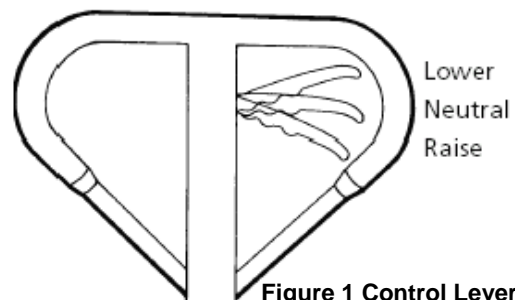
## **Handle Assembly**

(Refer to figure 2 and 4)

1. Insert the draw-bar onto the pump piston (60), then use a hammer to insert the axle with hole (66) into the hydraulic pump and draw-bar.
2. Let control handle(8) to the '**LOWER**' position, then pass the adjusting nut(15), adjusting bolt(14) and chain(12) through the hole of axle(66) with your hand.
3. Press the draw-bar (10) down, take away the pin, which fix the spring.
4. Let the control handle (8) on '**RAISE**' position, then raise the lever plate (46) with the pin and insert the adjusting bolt(14) into the front slot of lever plate (46), note to keep the adjusting nut (15) on the under side of the lever plate.
5. Use a hammer to tap the elastic pin (106) into the axle with hole (66).

## **Control Lever Adjustment**

The control lever, located on the right side of the handle, has three operating positions (See figure 1).



**Figure 1 Control Lever**

1. Push the control lever (fig 1) down to the "Raise" position. When the control lever is in the "Raise" position and

the handle is “pumped” up and down the pallet truck forks should rise. If the forks do not rise, first loosen the lock nut (15 fig 2) and then loosen the setscrew (14 fig 2) CCW 1/2 turn and retry the fork operation. Continue adjusting until satisfactory operation is obtained. Then tighten lock nut (15 fig 2).

2. Move the control lever (8 fig 2) into the middle to the “Neutral” position. When the control lever is in the “Neutral” position and the handle is pumped up and down the pallet forks should not move. This is the position the control lever should be in when the pallet truck is being rolled, pushed or pulled to a desired location.

3. Squeeze the control lever (fig 1) to lower the pallet truck forks. When the forks are in a raised position and the control lever is squeezed the forks should slowly lower down. If the forks do not lower, first loosen the lock nut (15 fig 2) and then tighten the setscrew (14 fig 2) CW 1/2 turn and retry the fork operation. Continue adjusting until the forks lower when the control lever is squeezed.

## **Operation**

1. Push the pallet truck so as to insert the forks into the desired pallet/load to be moved. Push the control lever down (into the raise position). With an up/down motion, pump the handle until the pallet load is at the desired height.

2. When finished raising the pallet to the desired height, move the control lever into the center (neutral) position. Move the pallet truck/load to the desired location.

3. To lower the pallet load. First make sure that the area around the pallet is free and clear of debris. Before lowering check that people are not standing nearby and that their feet are not under the load. Gently squeeze the control lever until the load has been lowered to the floor. Pull out the pallet truck from under the pallet/load.

## **Maintenance**

All bushings and bearings have been lubricated at the factory. To increase their life, it is suggested that regular maintenance be performed. Using the appropriate grease for the environment, lubricate the grease fittings every 6 months (refer to D119 and D202 on parts lists). Harsh environments may require more frequent maintenance.

### **DAILY**

Visually check and do not use if any of the following are visible:

1. Oil leaks.
2. Structural deformation of arms, forks, or any other component.
3. Unusual noise or binding of the lifting mechanism.

### **MONTHLY**

1. Check hydraulic oil level (more frequently for high use applications). See “Adding Hydraulic Oil” section.
2. Verify that all labels are in place and in good condition.
3. Clean off dirt and debris.

### **YEARLY**

Change oil (more frequently if color has been substantially darkened or if the oil feels gritty).

**NOTE:** If hydraulic oil is milky white in color, water is in the hydraulic system. Change the hydraulic oil immediately.

### **ADDING HYDRAULIC OIL TO PUMP RESERVOR**

**NOTE:** Use standard hydraulic oil / jack oil, SAE grade 10 (ISO Viscosity grade 32).

1. Ensure forks are in lowered position.
2. Remove drain plug.
3. Add hydraulic oil until level of oil is at bottom of hole.
4. Replace drain plug.

**“Bleeding” air from the hydraulic system**

When the unit is new, recently serviced or transported over a bumpy surface, air may get entrapped in the hydraulic system. To remove (bleed) air from the system:

1. Squeeze and hold the control lever.
2. While squeezing the control lever, pump the handle several times.
3. Repeat the procedure as necessary.

### Troubleshooting Chart

Symptom(s)	Possible Cause(s)	Corrective Action(s)
Forks will not rise when handle is pumped	<ol style="list-style-type: none"> <li>1. When load exceeds rated capacity the safety valve will prevent the unit from lifting.</li> <li>2. Control lever is not pushed down into the "RAISE" position</li> <li>3. Air has entered the hydraulic system</li> <li>4. Up/Down control assembly out of adjustment</li> <li>5. Up/Down control assembly broken</li> <li>6. Lowering lever out of adjustment</li> <li>7. Low oil level</li> <li>8. Pump valve has failed</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce load. Load weight cannot exceed 3800 pounds.</li> <li>2. Move the control lever down into the "RAISE" position and pump the handle</li> <li>3. Bleed air from system, see maintenance section</li> <li>4. Adjust, see control lever adjustment section</li> <li>5. Replace Up/Down control assembly. See pump assembly parts lists</li> <li>6. Adjust lowering lever set screw, see control lever adjustment section</li> <li>7. Add hydraulic oil, see maintenance section</li> <li>8. Replace pump valve assembly, see pump assembly parts</li> </ol>
Forks drop immediately after pumping up	<ol style="list-style-type: none"> <li>1. Pump valve components have failed Example: Spring has fatigued / cracked or valve seat / spindle has lost sealing ability</li> <li>2. The hydraulic oil has impurities that have clogged the control valve seat</li> <li>3. Up/Down control assembly out of adjustment</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace valve assembly, see pump assembly parts list</li> <li>2. Drain oil, flush and clean control valve and refill with clean / new hydraulic oil.</li> <li>3. Adjust, see control lever adjustment section</li> </ol>
Leaks	<ol style="list-style-type: none"> <li>1. Worn or damaged seals (oil leak will be evident)</li> <li>2. Pump unit is damaged or crack</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace seals, see pump assembly parts list</li> <li>2. Replace pump assembly</li> </ol>
Forks rise when control lever is in the NEUTRAL or "center" position	<ol style="list-style-type: none"> <li>1. Control lever is not in "Neutral" or center position</li> <li>2. Neutral position adjustment required</li> </ol>	<ol style="list-style-type: none"> <li>1. Move control lever into the Neutral" or center position</li> <li>2. Adjust, see control lever adjustment section</li> </ol>
Forks cannot be lowered to the minimum height	<ol style="list-style-type: none"> <li>1. Too much hydraulic oil</li> <li>2. Push rods damaged</li> <li>3. Frame is damaged / bent</li> </ol>	<ol style="list-style-type: none"> <li>1. Drain small amount of hydraulic oil and retry.</li> <li>2. Replace push rods, see frame assembly parts list</li> <li>3. Replace frame assembly / pallet truck</li> </ol>

# For Repair Parts, call 1-800-323-0620

24 hours a day – 365 days a year

Please provide the following information:

-Model Number

-Part description and number as shown on parts list

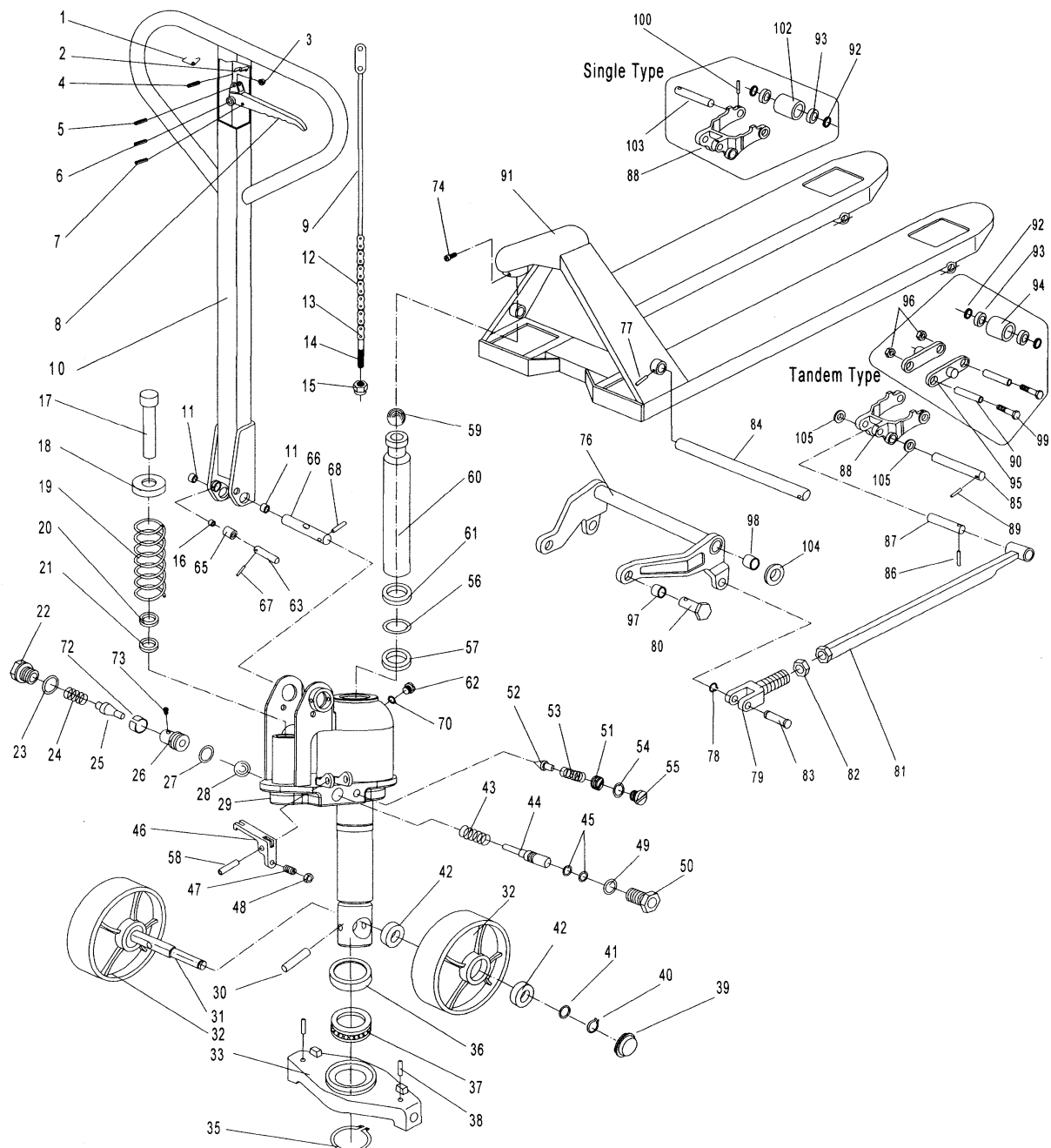


Figure 2 – Parts Illustration

No.	Description	Qty.	No.	Description	Qty.		
1	D601	Spring	1	12	D612	Chain	1
2	D602	Blade Spring	1	13	D613	Pin	1
3	D603	Roller	1	14	D614	Adjusting Bolt	1
4	D604	Elastic Pin	1	15	D615	Adjusting Nut	1
5	D605	Elastic Pin	1	16	D156	Bushing	1
6	D606	Elastic Pin	1	63	D150E	Shaft	1
7	D607	Elastic Pin	1	65	D152	Pressure Roller	1
8	D608	Control Handle	1	66	D153E	Shaft	1
9	D609	Pull Board	1	67	D154E	Elastic Pin	1
10	D610E	Handle	1	68	D155E	Elastic Pin	1
11	D611E	Bushing	2				
17	D101	Pump Piston Rod	1	42	D127	Bearing	4
18	D102	Washer	1	43	D129	Spring	1
19	D103	Spring	1	44	D130	Strike Pin	1
20	D104	Dust Ring	1	45	D131	O – Ring	2
21	D105	Y – Seal	1	46	D132	Lever Plat	1
22	D106	Screw	1	47	D133	Adjusting Screw	1
23	D107	O – Ring	1	48	D134	Nut	1
24	D108	Spring	1	49	D135	O – Ring	1
25	D109	Spindle of Pumping Valve	1	50	D136	Axle Sleeve	1
26	D110	Seat of Pumping Valve	1	51	D137	Adjusting Bolt	1
27	D111	O – Ring	1	52	D139	Spindle of Safety Valve	1
28	D112	Steel Ball	1	53	D140	Spring	1
29	D113E	Base of Pump	1	54	D141	O – Ring	1
30	D115	Elastic Pin	1	55	D142	Screw	1
31	D116	Main (Steering) Wheels(Polyurethane)	2	56	D143E	O – Ring	1
32	D117	Main (Steering) Wheels Shaft	1	57	D144E	Y – Seal	1
33	D118E	Thrust Plate	1	58	D145	Elastic Pin	1
35	D120E	Retaining Ring	1	59	D146	Steel Ball	1
36	D121E	Cover of Bearing	1	60	D147E	Piston Rod	1
37	D122E	Bearing	1	61	D148E	Dust Ring	1
38	D123E	Elastic Pin	2	62	D149	Screw	1
39	D124	Dust Cover	2	70	D157	Seal Washer	1
40	D125	Retaining ring	2	72	D159B	Sleeve	1
41	D126	Tab Washer	2	73	D160B	Screw	1
74	D201E	Screw	1	90	D217E#	Shaft sleeve for Roller	4
75				91	D218E	Fork Frame	1
76	D203E	Rock – arm	1	92	D219	Washer	8 or 4
77	D204E	Elastic Pin	1	93	D220	Bearing	8 or 4
78	D205E	Retaining Ring	2	94	D221E#	Loading Roller	4
79	D206E	Joint	2	95	D222E#	Linking Plate	4
80	D207E	Shaft	2	96	D223E#	Nut	4
81	D208E	Pushing Rod	2	97	D224	Bushing	2
82	D209E	Nut	2	98	D225E	Bushing	2
83	D210E	Pin	2	99	D226E#	Bolt	4
84	D211E	Shaft	1	100*	D227E	Elastic Pin	2
85	D212E	Shaft	2	101			
86	D213E	Elastic Pin	2	102	D229E*	Loading Roller	2
87	D214E	Shaft	2	103	D230E*	Shaft for Roller	2
88	D215E	Frame of Roller	2	104	D231E	Washer	2
89	D216E	Elastic Pin	2	105	D232E	Washer	4

(Note # --For Tandem wheel, \* --For single wheel)