
Instruction Manual

Standard (MJ484-MJ489 & ML372) and Heavy Duty (MJ490-MJ495 and ML373) Hydraulic Hand Pallet Truck



KLETON

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.
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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.

***** IMPORTANT - 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.

OPERATING PALLET TRUCK

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

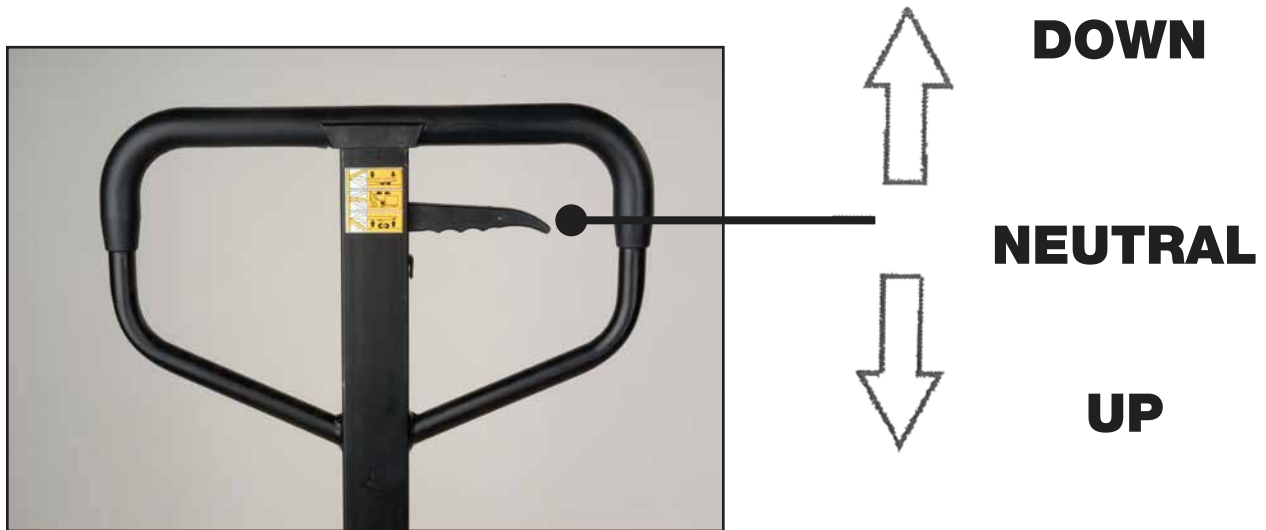


Figure 2

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.
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| | Standard | | | | | | | Heavy -Duty | | | | | | |
|-----------------------------|----------------|--------|--------|--------|--------|--------|--------|----------------|--------|--------|--------|--------|--------|--------|
| Model No. | MJ484 | MJ485 | MJ486 | MJ487 | MJ488 | MJ489 | ML372 | MJ490 | MJ491 | MJ492 | MJ493 | MJ494 | MJ495 | ML373 |
| Capacity | 5500 lbs. | | | | | | | 6600 lbs. | | | | | | |
| | 2500 kg | | | | | | | 3000 kg | | | | | | |
| H - Maximum Raised Height | 7 1/2" | | | | | | | 7 1/2" | | | | | | |
| | 190 mm | | | | | | | 190 mm | | | | | | |
| S - Lowered Height | 3" | | | | | | | 3" | | | | | | |
| | 75 mm | | | | | | | 75mm | | | | | | |
| L - Fork Length | 36" | 42" | 48" | 36" | 42" | 48" | 48" | 36" | 42" | 48" | 36" | 42" | 48" | 48" |
| | 915mm | 1070mm | 1220mm | 915mm | 1070mm | 1220mm | 1220mm | 915mm | 1070mm | 1220mm | 915mm | 1070mm | 1220mm | 1220mm |
| E - Fork Width | 6 1/4" | | | | | | | 6 1/4" | | | | | | |
| | 160 mm | | | | | | | 160 mm | | | | | | |
| B - Fork Outside Distance | 20 1/2" | | | 27" | | | | 20 1/2" | | | 27" | | | |
| | 520 mm | | | 685 mm | | | | 520 mm | | | 685 mm | | | |
| Diameter of the steer wheel | 7" x 2" | | | | | | | 7" x 2" | | | | | | |
| | 180 mm x 50 mm | | | | | | | 180 mm x 50 mm | | | | | | |
| Diameter of the load wheel | 3" x 3 5/8" | | | | | | | 3" x 2 3/4" | | | | | | |
| | 74 mm x 93 mm | | | | | | | 74 mm x 70 mm | | | | | | |

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 |
|---|---|--|
| Hydraulic unit does not lift | Oil low in tank | Make sure there is no till leakage from valve and add oil. |
| | Relief valve not seated properly or air in the system | See "Cleaning Relief Valve" in this manual. |
| | Defective pressure seal in main cylinder | Consult authorized service centre. |
| | Relief valve not adjusted properly | Adjust valve by pressure adjustment screw |
| Once lifted truck lowers by itself | Relief valve not seated properly | See "Cleaning Relief Valve" in this manual. |
| | Defective pressure seal in main cylinder | Consult authorized service centre |
| | Relief valve not adjusted properly | Adjust valve by pressure adjustment screw |
| | Oil leakage | Consult authorized service centre |
| Fork does not lower | Cam chain broken | Replace cam chain. |
| | UP-DOWN cam nut out of adjustment | Refer to "Adjusting UP-DOWN Cam" in this manual. |
| | Broken fork rods and linkage | Consult authorized service centre |
| | Cam chain lock-nut fallen off | Replace cam chain lock-nut |
| Lever does not set at NEUTRAL position | Relief valve not adjusted properly | Adjust valve by pressure adjustment screw |

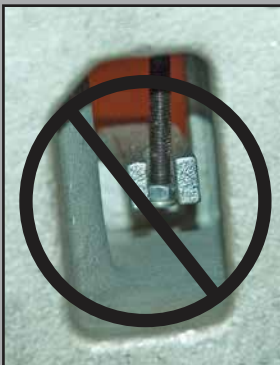
Cleaning Relief Valve

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

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

Hold the UP/DOWN lever to the DOWN position and move the handles up and down several times.

Adjusting UP-DOWN Cam

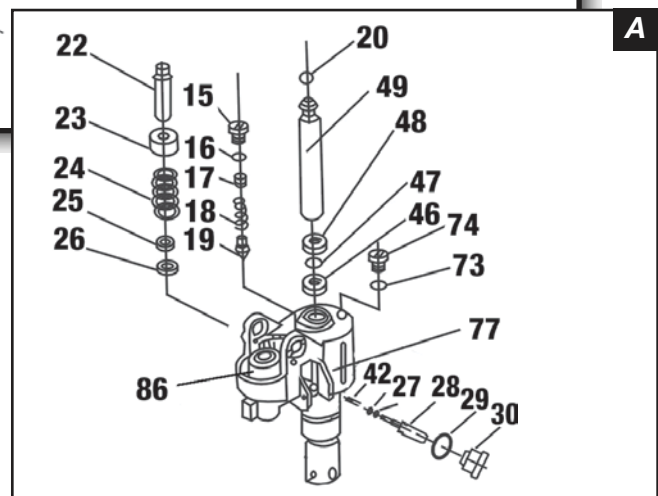
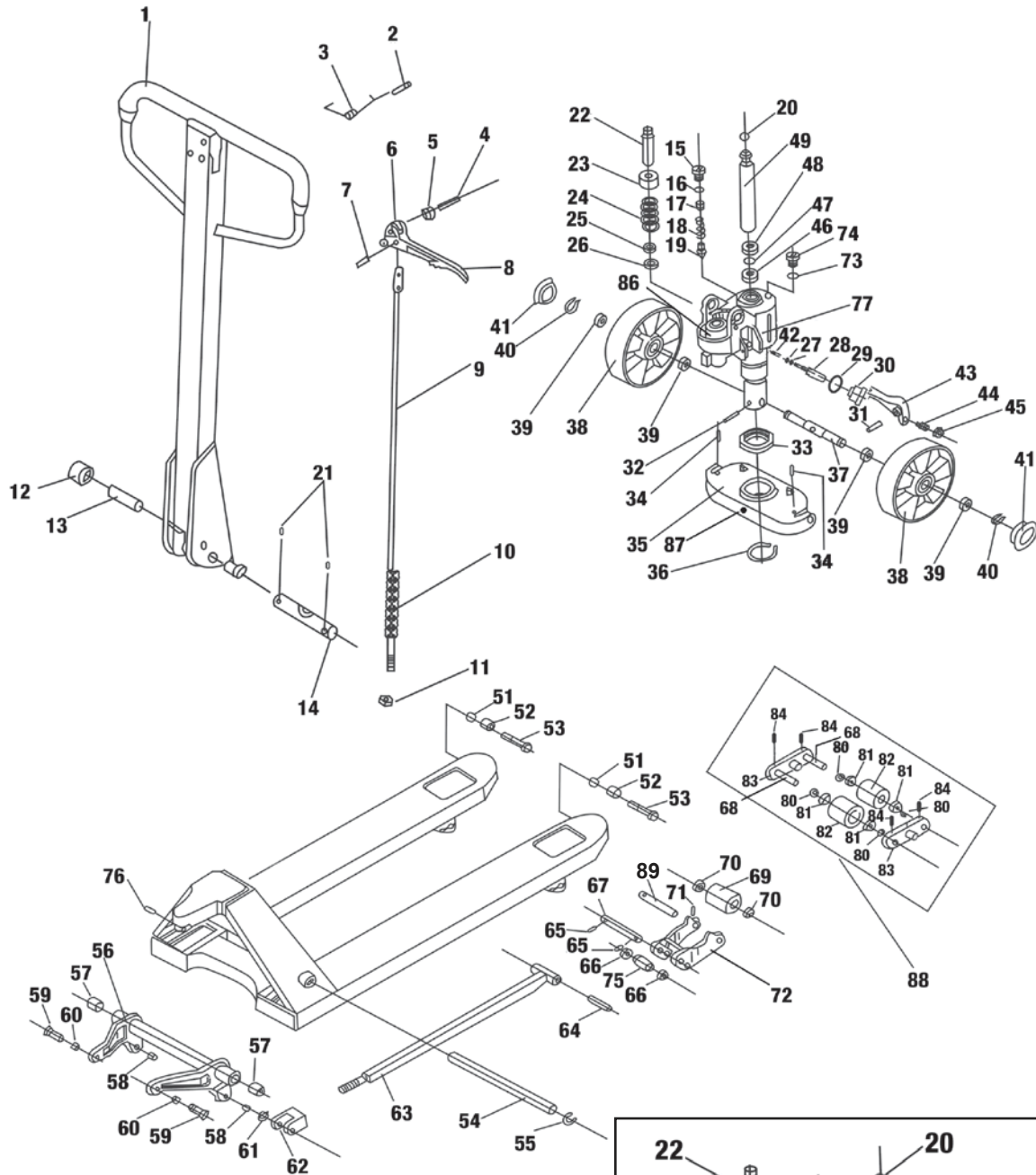


DO NOT adjust the up/down lever control using the lock nut at the end of the handle chain. If nylon locking threads are removed from the screw threads, rolling vibration will cause the nut to unscrew and fall off, leaving the up/down lever unusable.



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.

HYDRAULIC HAND PALLET TRUCK ASSEMBLY



Parts list for Standard and Heavy-Duty Models

| No. | Order No. | Description | Qty |
|-----|------------|------------------------------|-----|
| 1 | MJ552 | Handle | 1 |
| 2 | MJ553 | Spring Pin 4x30 | 2 |
| 3 | MJ554 | Blocking Spring | 1 |
| 4 | MJ555 | Spring Pin 4x20 | 1 |
| 5 | MJ556 | Roller | 1 |
| 6 | MJ557 | Spring Pin 6x30 | 1 |
| 7 | MJ558 | Spring Pin 4x20 | 1 |
| 8 | MJ559 | Control Lever | 1 |
| 9 | MJ560 | Control Rod | 1 |
| 10 | MJ561 | Chain | 1 |
| 11 | MJ562 | Chain Lock-Nut | 1 |
| 12 | MJ563 | Roller | 1 |
| 13 | MJ564 | Roller Pin | 1 |
| 14 | MJ565 | Handle Pin | 1 |
| 15 | MJ566 | Oil Plug | 1 |
| 16 | MJ567 | Oil Plug O-ring | 1 |
| 17 | MJ568 | Relief Screw | 1 |
| 18 | MJ569 | Spring | 1 |
| 19 | MJ570 | Relief Valve | 1 |
| 20 | MJ571 | Steel Ball | 1 |
| 21 | MJ572 | Spring Pin 5 x 35 | 1 |
| 22 | MJ573 | Rear Pump Piston | 1 |
| 23 | MJ574 | Spring Cap | 1 |
| 24 | MJ575 | Spring | 1 |
| 25 | MJ576 | Dust Seal | 1 |
| 26 | MJ577 | U-Ring | 1 |
| 27 | MJ578 | Control Stem O-Ring | 2 |
| 28 | MJ579 | Control Stem with Spring | 1 |
| 29 | MK798 | Brass Nut O-Ring | 1 |
| 30 | MJ581 | Brass Nut | 1 |
| 31 | MJ582 | Spring Pin 8x50 | 1 |
| 32 | MJ583 | Spring Pin 8x45 | 1 |
| 33 | MJ584 | Thrust Bearing | 1 |
| 34 | MJ585 | Spring Pin 5x30 | 2 |
| 35 | MJ586 | Thrust Plate | 1 |
| 36 | MJ587 | Retaining Ring | 1 |
| 37 | MJ588 | Wheel Shaft | 1 |
| 38 | MN256 | PU Steer Wheel | 2 |
| 38 | ML367 | Nylon Steer Wheel | 2 |
| 39 | MK984 | Ball Bearing | 4 |
| 40 | MJ591 | Retaining Ring | 2 |
| 41 | MJ592 | Dust Cap | 2 |
| 42* | MJ593 | Control Valve Assembly | 1 |
| 43 | FT0005-043 | Lever | 1 |
| 44 | MJ595 | Control Adjustment Set Screw | 1 |
| 45 | MJ596 | Nut | 1 |
| 46 | MJ597 | U-Ring | 1 |
| 47 | MJ598 | O-Ring | 1 |
| 48 | MJ599 | Dust Seal | 1 |

*Includes parts: 27/28/29/30/42

| No. | Order No. | Description | Qty |
|-----|-----------|--|-----|
| 49 | MJ600 | Main Lift Piston | 1 |
| 51 | MJ613 | Lock-Nut | 2 |
| 52 | MJ614 | Guide Roller | 2 |
| 53 | MJ615 | Bolt | 2 |
| 54 | MJ616 | 19" Shaft for 20.5" W pallet trucks | 1 |
| 54 | MK704 | 24" Shaft for 27" W pallet trucks | 1 |
| 55 | MJ617 | Retaining Ring | 2 |
| 56 | MJ618 | Lifting Yoke, 20.5" W, Orange Std | 1 |
| 56 | MJ619 | Lifting Yoke, 27" W, Orange Std | 1 |
| 56 | MJ620 | Lifting Yoke, 20.5" W, Blue HD | 1 |
| 56 | MJ621 | Lifting Yoke, 27" W, Blue HD | 1 |
| 57 | MJ622 | Bushing | 2 |
| 58 | MJ623 | Retaining ring | 2 |
| 59 | MJ624 | Thrust Plate Pin | 2 |
| 60 | MJ625 | Bushing | 2 |
| 61 | MJ585 | Spring Pin 5x30 | 2 |
| 62 | MJ627 | Clevis | 2 |
| 63 | MJ628 | Rod, 36" Length, Std | 2 |
| 63 | MJ629 | Rod, 42" Length, Std | 2 |
| 63 | MJ630 | Rod, 48" Length, Std | 2 |
| 63 | ML048 | Rod, 36" Length, HD | 2 |
| 63 | ML049 | Rod, 42" Length, HD | 2 |
| 63 | ML050 | Rod, 48" Length, HD | 2 |
| 64 | MN300 | Tandem Wheel Shaft | 2 |
| 65 | MJ585 | Spring Pin 5x30 | 4 |
| 66 | MJ633 | Washer | 4 |
| 67 | MJ634 | Arm Pin | 2 |
| 68 | MJ635 | Load Wheel Shaft | 2 |
| 69 | MJ636 | PU Load Wheel for Orange Models | 2 |
| 69 | ML368 | Nylon Load Wheel for Orange Models | 2 |
| 70 | MK984 | Ball Bearing | 4 |
| 71 | MJ585 | Spring Pin 5x30 | 2 |
| 72 | MJ639 | Wheel Lever Bracket | 2 |
| 73 | MJ640 | Washer | 1 |
| 74 | MJ641 | Oil Plug | 1 |
| 75 | MJ642 | Exit Roller | 1 |
| 76 | MJ643 | Spring Pin 5x50 | 1 |
| 76B | MN447 | Bolt 6x12 mm | 1 |
| 77 | MN602 | Cylinder Housing | 1 |
| 80 | MK983 | Washer | 8 |
| 81 | MK984 | Ball Bearing | 8 |
| 82 | MK985 | PU Load Wheels for Blue Models | 4 |
| 82 | ML369 | Nylon Load Wheels for Blue Models | 4 |
| 83 | MK986 | Tandem Plate | 2 |
| 84 | MK987 | Spring Pin 5 x 40 | 8 |
| 86 | ML037 | Pump Cylinder Assembly | 1 |
| 87 | ML042 | Grease Nipple Valve | 1 |
| 88 | ML047 | Load Wheel Assembly for Blue Models (PU) | 1 |
| 89 | MP608 | Load Wheel Shaft | 1 |
| A | MK801 | Cylinder Housing Assembly | 1 |