Instruction Manual ML966 to ML972 Hydraulic Hand Pallet Truck



ET(

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.
- 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.



З.

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.

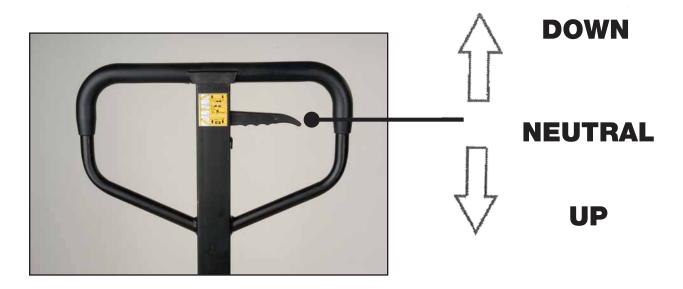


Figure 2

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.

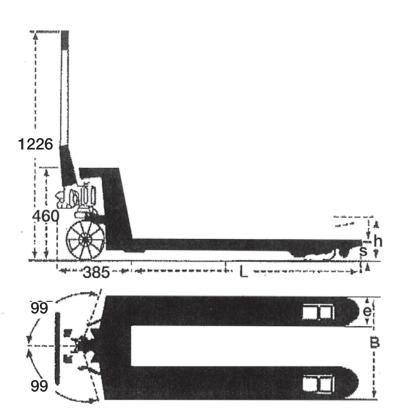
To move a load:

- 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.

TECHNICAL PARAMETER



Model No.	ML966	ML967	ML968	ML969	ML970	ML971	ML972
Capacity				5500 lbs.			
				2500 kg			
H - Maximum				7 3/4"			
Raised Height				195 mm			
C Lowered Height				3 1/4"			
S - Lowered Height				85 mm			
L. Fault Laurable	36"	42"	48"	36"	42"	48"	48"
L - Fork Length	915mm	1070mm	1220mm	915mm	1070mm	1220mm	1220mm
E - Fork Width	6 1/4"						
E - FORK WIGHT	160 mm						
B - Fork Outside	20 1/2" 27"						
Distance	520 mm 685 mm						
Dimensions of the	7" x 2"						
steer wheel	180 mm x 50 mm						
Dimensions of the	3 1/8" x 3 5/8"						
load wheel				80 mm x 93 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	
	Oil low in tank	Make sure there is no till leakage from valve and add oil.	
Hydraulic unit does	Relief valve not seated properly or air in the system	See "Cleaning Relief Valve" in this manual.	
not lift	Defective pressure seal in main cylinder Consult authorized service centre.		
	Relief valve not adjusted properly	Adjust valve by pressure adjustment screw	
	Relief valve not seated properly	See "Cleaning Relief Valve" in this manual.	
Once lifted truck	Defective pressure seal in main cylinder	Consult authorized service centre	
lowers by itself	Relief valve not adjusted properly	Adjust valve by pressure adjustment screw	
	Oil leakage	Consult authorized service centre	
	Cam chain broken	Replace cam chain.	
Fork does not lower	UP-DOWN cam nut out of adjustment	Refer to "Adjusting UP-DOWN Cam" in this manual.	
Fork does not lower	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

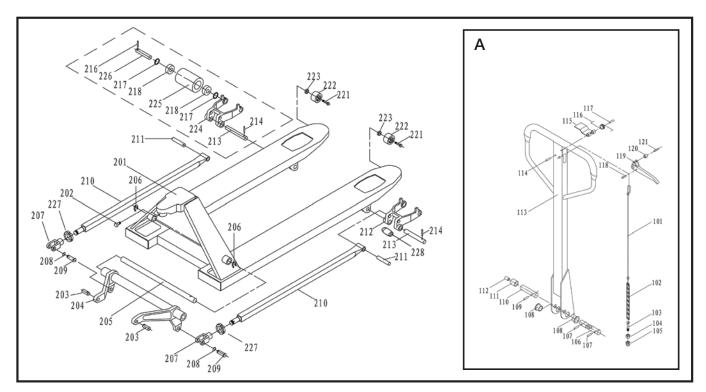


DO NOT adjust the up/down lever control using the lock nut at the end of the handle chain. If nylon locking threads are removed from the screw threads, rolling vibration will cause the nut to unscrew and fall off, leaving the up/down lever unusable.



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 AND PARTS LISTS



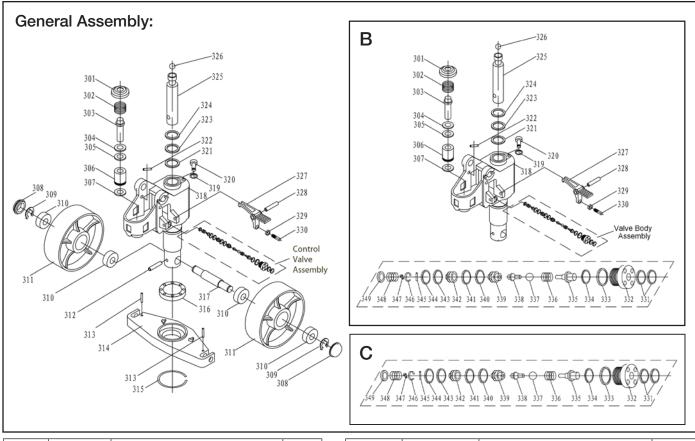
General Assembly

No.	Order No.	Description	Qty
201		BODY WELDMENT	1
202		INNER HEXAGONAL SCREW M6X14	1
203		CONNECTING SHAFT	2
204		LEVER FRAME (520/685)	1
205		LEVER SHAFT (520/685)	1
206		ELASTIC RING	2
207		PUSH ROD CONNECTOR	2
208	MN243	WASHER 016	2
209		CONNECTING SHAFT	2
210		PUSH ROD (915/1070/1220)	2
211		PUSH ROD CONNECTING SHAFT	2
212		ROLLER FRAME	2
213		POSITIONING SHAFT	2
214	MJ572	ELASTIC CYLINDRICAL PIN 5X30	4
216	MJ572	ELASTIC CYLINDRICAL PIN 5X30	2
217	- MK984	GASKET 20X28X2	
218	MK984	BEARING 6204	4
221	MN697	HEXAGONAL SCREW M6X45	2
222	MN246	CLIMBING WHEEL 50X25	2
223	MN698	METALLOID NUT M6	2
224		SINGLE LOAD WHEEL FRAME	2
225	MN251	SINGLE PU LOAD WHEEL	2
225	ML368	SINGLE NYLON LOAD WHEEL	2
226	MP608	SINGLE LOAD WHEEL SHAFT	2
227		HEXAGONE THIN NUT	2
228	MN244	NYLON EXIT ROLLER	2
		•	

Handle Assembly

,				
No.	Order No.	Description	Qty	
101		PULLING ROD	1	
102		CHAIN	1	
103	MN465	DROP BOLT M5X30	1	
104		HEXAGONAL NUT M5	1	
105		LOCK NUT M5	1	
106	MN235	HANDLE LOCATING SHAFT	1	
107	MN236	ELASTIC CYLINDRICAL PIN 5x35	2	
108		SPACER BUSH	2	
109		ELASTIC CYLINDRICAL PIN 4X20	1	
110	MN237	ROLLER SHAFT	1	
111		ROLLER	1	
112		ROLLER BUSH	1	
113		HANDLE WELDMENT	1	
114		ELASTIC CYLINDRICAL PIN 6X30	1	
115		LOCATING SPRING STRIP	1	
116	MN238	HANDLE SPRING	1	
117		ELASTIC CYLINDRICAL PIN 4X30	1	
118	MN239	ELASTIC CYLINDRICAL PIN 4x10	1	
119	MN241	CONTROL HANDLE	1	
120	MN242	ROLLER HANDLE	1	
121		ELASTIC CYLINDRICAL PIN 4X16	1	
А	MN231	HANDLE ASSEMBLY		

PUMP ASSEMBLY AND PARTS LISTS



No.	Order No.	Description	Qty
301		SPRING GLAND	1
302	MJ575	SPRING	1
303		PUMP PLUNGER	1
304	MJ577	ANTI-DUST RING DHS18	1
305	MJ576	SEALING RING UHS18	1
306		SMALL PUMP	1
307		COPPER SHEET	1
308	MN120	DUST COVER	2
309	MN526	RAND	2
310	MK984	BEARING 6204	4
311	MN256	PU STEER WHEEL	2
311	ML367	NYLON STEER WHEEL	2
312	MN259	ELASTIC PIN 8X50	1
313		ELASTIC PIN 5X30	2
314		RETAINING PLATE	1
315		CHECK RING FOR BEARING 55	1
316		BALL BEARING 51111	1
317	MN257	WHEEL SHAFT	1
318		PUMP BODY	1
319		BONDED WASHER	1
320		INNER HEXAGONAL SCREW M8X10	1
321		SEALING RING UHS35	1
322		GAG LEVER POST	1
323		"0" SEALING RING 35X3.55	1
324		DUST RING DHS35	1
325		PISTON ROD 35	1

No.	Order No.	Description	Qty
326	MN260	STEEL BALL 19	1
327		PEDAL CONTROL ARM	1
328		ELASTIC CYLINDRICAL PIN 8X50	1
329	MN258	NUT M8	1
330		FASTEN SCREW M8X20	1
331		"O"RING 8X1.8	2
332		COPPER NUT	1
333		"O"RING 26X2.4	1
334		"O" RING 10X1 8	1
335		ROD	1
336		SPRING	1
337		STEEL BALL 7	1
338		VALVE CORE	1
339		CONNECTING SHAFT	1
340		NOTCHED RING 16X20X1.5	1
341		"O" RING 20X2.4	1
342		VALVE BODY	1
343		NOTCHED RING 14X18X1.5	1
344		"O" RING 18X2.4	1
345		ELASTIC CYLINDRICAL PIN 2.5X4	2
346		LEAF RING	1
347		CROSS RECESS HEAD SCREW M2	1
348		SPRING	1
349		GLAND	1
В	MN253	PUMP ASSEMBLY	1
С	MN651	CONTROL VALVE ASSEMBLY	1
0	IVIINOUT		