



Owners Manual, Operating Instructions Manual, and Replacement Parts Manual

**Lift-Rite Titan Series Hand Pallet Trucks
Models LCM50, LCU50, and Four-Way Versions**





This publication, 1149374A, applies to the Lift-Rite Titan Series Hand Pallet Trucks, Models LCM50, LCU50, and Four-Way versions, and to all subsequent releases of this product until otherwise indicated in new editions. Changes occur periodically to the information in this publication.

To order additional copies of this manual, part number 1149374A, contact your local authorized Lift-Rite Sales and Service Center.

If you need assistance with your lift truck, contact your local authorized Lift-Rite Sales and Service Center.

To locate your Sales and Service Center, go to www.liftrite.com

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SAFETY SHOES

Always wear safety shoes when working with hand pallet trucks.



PROTECTIVE GLASSES

When assembling or dismantling a hand pallet truck, protective glasses *must* be worn to avoid personal injury.

OPERATOR'S RESPONSIBILITY

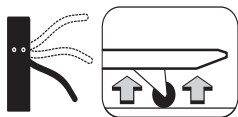
While operating a hand pallet truck, *always* wear safety equipment and operate in a responsible manner to ensure a safe work area.

DELIVERY INSPECTION

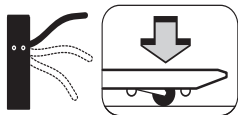
Visually inspect hand pallet truck frame components and hydraulic unit for damage during shipment by carrier. If damage is evident, notify delivering carrier immediately and file necessary claims. Test the hand pallet truck pump for proper operation. **If the hydraulic pump does not respond to movement of the handle, an air lock may have developed during shipping. To remedy this, go to the user friendly TROUBLESHOOTING guide in this manual.**

OPERATING INSTRUCTIONS

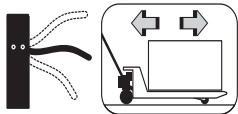
(Read and understand prior to using this product)



→ To raise the load, push down on the fingertip control. Pump the handle to raise the load from the floor.



→ To lower the load, pull up on the fingertip control.



→ For free handle movement, place the fingertip control in the neutral position.

NOTE:

The neutral position disengages the pump from the lifting mechanism. This frees the handle, which makes pulling loads easier. In addition, the pump is not subject to shock pressures while the truck is in motion.



SAFETY PROCEDURES

(Read and understand prior to using this product)

- Read and obey all labels on this product. If you have any questions about these, ask your supervisor.
- Do *not* operate this hand pallet truck unless you are authorized and trained to do so.
- *Never* overload your hand pallet truck. Stay within its rated capacity.
- Do *not* operate this truck if damaged or not in proper working order.
- Distribute the load evenly on the forks. Do *not* concentrate loads at one point or load one fork more than the other.
- When the load impairs visibility, the hand pallet lift truck should be pulled and not pushed.
- *Always* look where you are operating. Keep a clear view.
- Only handle loads on flat level surfaces. Do *not* use a loaded truck on inclines or declines.
- *Never* carry passengers.
- *Never* put your feet, hands, or any other body part under the frame assembly.
- *Always* yield right of way to pedestrians.
- Do *not* allow your hand pallet truck to drop from one level to another. Even a drop of 1 in. (25 mm) more than doubles the effective load momentarily and results in a loading that can bend or break components.
- Move loads only with the hand pallet truck in its lowest position.
- *Always* make sure that the load is stable before moving to eliminate the opportunity for load shift.
- Use extreme care when rounding corners. Too fast a speed could cause a hand pallet lift truck to tip. If loaded, the load could shift and fall.
- When not in use, fully lower the forks.

DAILY INSPECTION

At the start of your shift, check the items listed below. Report any malfunctions or unsafe conditions to your supervisor. Do not use this product until it is repaired.

| CHECK POINTS | Steering | Hydraulic System | Wheels | Chassis/ Handle | Lifting/ Lowering | Labels |
|---------------|---------------------|--|---|------------------------------------|--------------------|-----------------------|
| ACTION | Check full rotation | Check for excessive oil on exterior and check for function | Check for wear, damage, and remove debris | Check for damage and remove debris | Check for function | Check for readability |



MAINTENANCE

LUBRICATION

All pivot points are equipped with permanently lubricated bushings and bearings. To increase bearing life, it is recommended that a few drops of light machine oil be applied at each pivot point every 6 months. The thrust plate is equipped with three grease fittings. Apply grease under normal conditions every 6 months.

PUSH BAR LINKAGE ADJUSTMENT

If the forks do *not* rise evenly at the tips, or the roller levers begin to drag on the floor, the following adjustment is necessary:

LCM/LCU MODELS

- Turn the hand pallet truck over so that the underside of the forks are accessible.
- Remove one split pin (PL-20269) with 3/16 in. punch.
- Remove pin (PL-20227) from bracket.
- Adjust eyebolts (PL-20226). Turn counterclockwise to raise fork tips and clockwise to lower fork tips.
- Replace pin (PL-20227) through eyebolt and replace split pin (PL-20269).
- When adjusted properly, the forks should be 2 in. (LCM)/1-3/4 in. (LCU) low height from ground level in the lowered position.

HYDRAULIC SYSTEM

Your hydraulic system is maintenance free. Do *not* add hydraulic oil unless there is, or has been, a leak. Use Premium HVI hydraulic oil or equal. Other oils, fluids, or solvents may damage your hydraulic system. If you suspect additional oil is required, follow these steps:

1. Check for and fix any possible oil leaks.
2. Lower the truck and load with 600 lbs. (approximate).
3. Pump the truck to its maximum lift height.
4. Measure the vertical height of the exposed piston (215030) and refer to the chart below.

| | | | | | | | | |
|----------------------|-----------|-----------|-----------|-------|-----------|-----------|-----------|-----------|
| Distance (inches) | 5-1/8 in. | 4-3/4 in. | 4-3/8 in. | 4 in. | 3-1/2 in. | 3-1/8 in. | 2-3/4 in. | 2-3/8 in. |
| Oil to add (Fl. Oz.) | 0 | 2.7 | 3.0 | 3.4 | 3.7 | 4.0 | 4.4 | 4.7 |



MAINTENANCE (CONT.)

ADDING OIL (IF REQUIRED)

1. Place and secure the truck on its right side (release valve facing the floor).
2. Pull up on the release lever (PL-40274BDM) and extend the lift piston fully.
3. Remove screw (221586) and add the amount of oil determined by the chart in step 4.
4. Reinstall screw (221586) but do not tighten. Leave a 1/32 in. gap.
5. Pull up on the release lever (PL-40274BDM) and collapse the lift piston until oil starts to ooze from the screw.



CAUTION! - It is extremely important that step 5 is performed. Otherwise, air in the pump can force out the wiper seal (20066). Take care when adding oil not to introduce impurities into the hydraulic system.

6. Tighten the screw (221586) fully and return the truck upright.

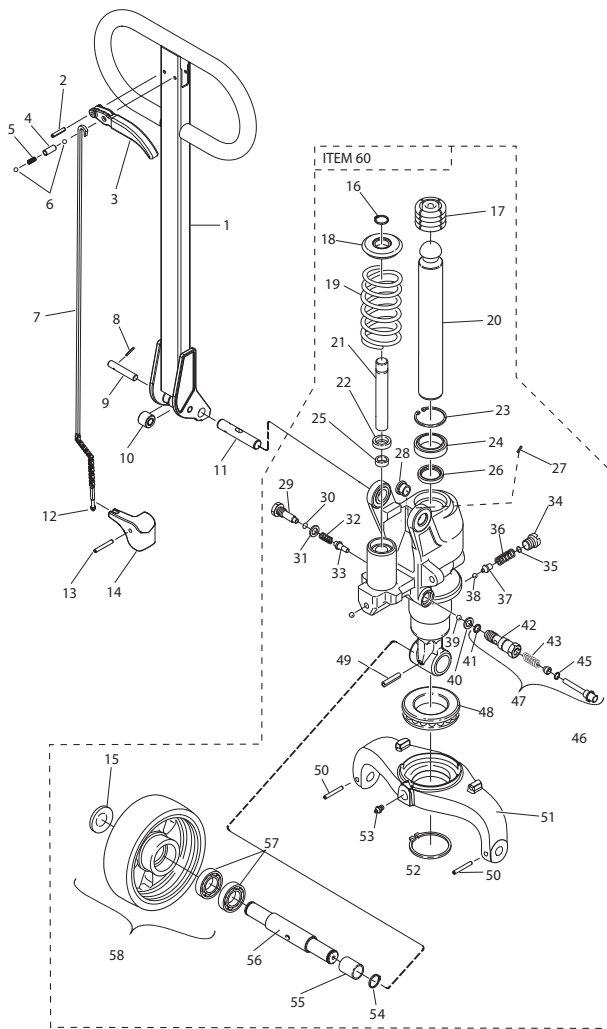


TROUBLESHOOTING

| CONDITION | POSSIBLE CAUSE | ACTION |
|--|---|--|
| Pump does not lift load. | An air lock in the hydraulic system. | Pull up on fingertip control and hold while pumping the handle 8 to 10 times to bleed air from the system. |
| Lifting, neutral, and lowering do not function properly. | Chain anchor out of adjustment. | Turn nut (21094) on chain anchor clockwise until pumping action, while in neutral, does not raise forks. |
| Forks raise and sink with pump action. | Dirt or foreign particle caught in cone valve seat. | Pull up on fingertip control and hold while pumping the handle 8 to 10 times to purge the valve system. |
| Pump does not lift load to complete raised height. | Pump is low on oil. | Check for and fix any leaks. Then add oil as instructed in the MAINTENANCE section. |
| Forks are not lowering completely. | Push jam nut loose. Push bars require adjustment. | Refer to Push Bar Linkage Adjustment in the MAINTENANCE section. |



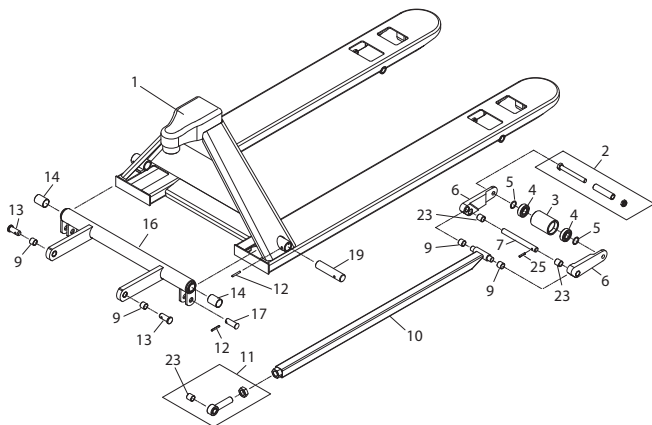
COMPLETE HYDRAULIC ASSEMBLY (PM-30277BN)



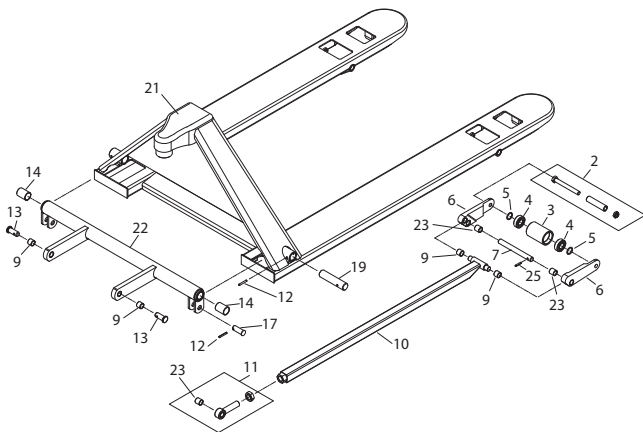
| ITEM | DESCRIPTION | QTY | PART NO. |
|-------------------------------|------------------------------|-----|-------------|
| 1 | COMPLETE HANDLE (ITEMS 2-10) | 1 | PL-40276M |
| 2 | SPLIT PIN | 1 | 20105 |
| 3 | CONTROL LEVER | 1 | PL-40274BDM |
| 4 | CONTROL LEVER SLEEVE | 1 | 54140BT |
| 5 | CONTROL LEVER SPRING | 1 | 218182 |
| 6 | CHROME BALL | 2 | 20065 |
| 7 | CONTROL ROD ASSEMBLY | 1 | 215775 |
| 8 | SPLIT PIN | 1 | 20461 |
| 9 | AXLE | 1 | 47930 |
| 10 | ROLLER W/BUSHING | 1 | 202755 |
| 11 | AXLE | 1 | 7500086 |
| 12 | ADJUSTING NUT | 1 | 21094 |
| 13 | LOCKING PIN | 1 | 220312 |
| 14 | LOWERING ARM | 1 | 215128 |
| 15 | COVER | 2 | 156623BT |
| 16 | LOCKING RING | 1 | 20043 |
| 17 | SLEEVE | 1 | 215803 |
| 18 | WASHER | 1 | 215282 |
| 19 | SPRING | 1 | 215156 |
| 20 | PISTON | 1 | 215030 |
| 21 | PISTON | 1 | 215286 |
| 22 | SEALING RING | 1 | 21060 |
| 23 | LOCKING RING | 1 | 20642 |
| 24 | SEALING | 1 | 20066 |
| 25 | SEALING | 1 | 215866 |
| 26 | SEALING | 1 | 215867 |
| 27 | LOCKING PIN | 1 | 20014 |
| 28 | BUSHING | 2 | 215913 |
| 29 | SCREW | 1 | 221586 |
| 30 | O-RING | 1 | 24213 |
| 31 | WASHER | 1 | 219201 |
| 32 | SPRING | 1 | 39106 |
| 33 | VALVE CONE | 1 | 223935 |
| 34 | SCREW (OVERLOAD) | 1 | 221232 |
| 35 | O-RING (OVERLOAD) | 1 | 22032 |
| 36 | SPRING (OVERLOAD) | 1 | 221227 |
| 37 | GUIDE PIN (OVERLOAD) | 1 | 221231 |
| 38 | BALL (OVERLOAD) | 1 | 22055 |
| 39 | BALL | 1 | 20065 |
| 40 | WASHER | 1 | 215288 |
| 41 | O-RING | 1 | 22032 |
| 42 | VALVE BODY | 1 | 7500112 |
| 43 | SPRING | 1 | 47071 |
| 45 | U-RING | 1 | 7500100 |
| 46 | PISTON | 1 | 7500116 |
| 47 | LOWERING VALVE (COMPLETE) | 1 | 7518604 |
| 48 | BALL BEARING | 1 | 213056 |
| 49 | LOCKING PIN | 1 | 220312 |
| 50 | LOCKING PIN | 2 | PL-20269 |
| 51 | THRUST PLATE | 1 | 245552 |
| 52 | LOCKING PIN | 1 | 21737 |
| 53 | GREASE NIPPLE | 1 | 27662 |
| 54 | LOCKING RING | 2 | 20019 |
| 55 | SPACER | 2 | 161637 |
| (REQUIRED WITH 200965BT ONLY) | | | |
| 56 | AXLE | 1 | 220310 |
| 57 | BEARING | 4 | 22226 |
| 58 | WHEEL COMPLETE | | |
| | NYLON | 2 | 251189 |
| | POLY | 2 | 160422BT |
| | POLY/STEEL | 2 | 200965BT |
| | STEEL | 2 | 160433 |
| 60 | HYDRAULIC UNIT | 1 | PM-30277BN |
| | REBUILD KIT | 1 | 243772 |



MODELS LCM50 AND LCU50 CHASSIS DIAGRAM



MODELS LCM4W AND LCU4W CHASSIS DIAGRAM



| ITEM | DESCRIPTION | QTY | PART NO. |
|------|---|-----|---------------------------------|
| 1 | CHASSIS (SPECIFY LENGTH AND WIDTH) | | |
| | - FOR LCM50 | | |
| | (2 IN. LOW PROFILE) | 1 | PM-30200 |
| | - FOR LCU50 | | |
| | (1.75 IN. ULTRALOW PROFILE) | 1 | PM-30200U |
| 2 | AXLE | | |
| | (INCLUDES BOLT SLEEVE & NUT) | 2 | PM-10215 |
| 3 | LOAD ROLLER (LCM50 & LCM4W) | | |
| | - STEEL | | |
| | (W/BEARING & SLEEVE) | 2 | PM-10210S-B |
| | POLYURETHANE | | |
| | (W/BEARING & SLEEVE) | 2 | PM-10210P-B |
| | LOAD ROLLER (LCU50 & LCU4W) | | |
| | - STEEL | | |
| | (W/BEARING & SLEEVE) | 2 | PM-10210U-B |
| 4 | BEARING (LCM50 & LCM4W) | | |
| | - FOR STEEL & POLYURETHANE | | |
| | LOAD ROLLER | 4 | PM-10214S |
| | BEARING (LCU50 & LCU4W) | | |
| | - FOR STEEL LOAD ROLLER | 4 | PM-10214P |
| 5 | SPACER WASHER | 4 | PL-10216 |
| 6 | LEVER ARM ASSEMBLY (INCLUDES BUSHINGS) | | |
| | - FOR LCM50 & LCM4W | 2 | PM-30212 |
| | - FOR LCU50 & LCU4W | 2 | PM-30212U |
| 7 | FORK PIN | 2 | PM-10219 |
| 9 | BUSHING | 6 | PL-20206 |
| 10 | PUSH BAR | | |
| | - FOR LCM50 & LCM4W | | |
| | (SPECIFY LENGTH) | 2 | PM-20224X_ and 1125308- _ |
| | - FOR (LCU50 & LCU4W) | | |
| | (SPECIFY LENGTH) | 2 | 1125142- _ |
| 11 | EYE BOLT | | |
| | (INCLUDES NUT & BUSHING) | 2 | PL-20226 |
| 12 | SPLIT PIN | 6 | PL-20269 |
| 13 | THRUST PLATE SHOULDER PIN | 2 | PL-30207 |
| 14 | BUSHING | 2 | PL-20203A |
| 16 | TORSION BAR | | |
| | - 20.5 IN. WIDE (LCM50 & LCU50) | 1 | PM-30201 |
| | - 27 IN. WIDE (LCM50 & LCU50) | 1 | PM-30202 |
| 17 | EYE BOLT PIN | 2 | PL-20227 |
| 19 | BULKHEAD PIN | 2 | PL-20204 |
| 21 | CHASSIS (SPECIFY LENGTH & WIDTH) | | |
| | - FOR LCM4W | | |
| | (2 IN. LOW PROFILE) | 1 | PF-30200 |
| | - FOR LCU4W | | |
| | (1.75 IN. ULTRALOW PROFILE) | 1 | PF-30200U |
| 22 | TORSION BAR | | |
| | - 33 IN. WIDE (LCM4W & LCU4W) | 1 | PF-30203 |
| 23 | BUSHING | 6 | PL-20226A |
| 25 | SPLIT PIN | 2 | PM-20269 |



RECYCLING YOUR OLD LIFT-RITE PARTS



| | |
|-----------------------|---|
| Chassis | Steel |
| Roller suspension | Steel and cast iron |
| Bushings | Brass |
| Grease fittings | Steel |
| Rollers | Nylon, polyurethane, steel |
| Hydraulic body | Cast iron |
| Thrust plate | Cast iron |
| Handle | Steel |
| Wheel | Nylon, polyurethane, steel |
| Bushings | Brass |
| Hydraulic oil | Disposal in accordance with local regulations |
| Assembly parts | Steel, brass, nylon |



HAND PALLET TRUCK WARRANTY

The Lift-Rite Titan Series Hand Pallet Trucks, Models LCM50 and LCU50 versions, are warranted against defects in materials and workmanship for a period of two (2) years for the hydraulic pump, one (1) year for the truck chassis, and six (6) months for wearable components. All periods begin from date of installation.

Wearable Components include but are not limited to:

- Wheels, Rollers, and Bearings
- Oilite Bearings and Bushings

Components found to be defective by an authorized Lift-Rite Sales and Service Center during the warranty period will be replaced or repaired as indicated above. Replacement components installed during the defined period set forth above, are warranted for the balance of the applicable truck warranty period, or 90 days, whichever is longer. Additionally, freight charges for parts involved in the replacement or repair of a defective component will be paid by Lift-Rite, provided that the replacement or repair is made by an authorized Lift-Rite Sales and Service Center. Labor or miscellaneous costs involved in the replacement of any components determined to be defected are not covered. Local taxes, if any, are excluded.

This warranty is void in the event of defects or damage caused by misuse, abuse, or accident. Any truck used under adverse conditions, such as fish, meat or poultry processing plants, tanneries, freezer applications, or any other application where the unit is operating in water or subjected to fluid or chemicals is NOT covered under any warranty.

This warranty does not cover oil leaks, adjustments, or loose hardware.

Lift-Rite reserves the right to make changes and improvements in design without making changes to previously manufactured vehicles.

Notwithstanding any other language contained herein, this warranty is expressly voided without any further notice if any modification is made to the Lift-Rite equipment, or if additional components or devices are added to the Lift-Rite equipment, without prior approval having been granted in writing by Lift-Rite.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, IMPLIED, OR STATUTORY. THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event shall Lift-Rite be liable for incidental, special, or consequential damages.

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