

# Owner's Manual, Operating Instructions Manual, and Replacement Parts Manual

Lift-Rite Hand Pallet Trucks Model SS45





This publication, 1188027B, applies to the Lift-Rite Hand Pallet Truck, Model SS45 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 1188027B, 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.

For more information please visit www.liftrite.com

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# **TABLE OF CONTENTS**

BEFORE YOU BEGIN	2
DELIVERY INSPECTION	2
OPERATING INSTRUCTIONS	2
SAFETY PROCEDURES	3
DAILY INSPECTION	3
MAINTENANCE	4
TROUBLESHOOTING	6
COMPLETE HYDRAULIC ASSEMBLY	8
MODEL SS45 CHASSIS DIAGRAM	10
RECYCLE YOUR OLD LIFT-RITE PARTS	12
HAND PALLET TRUCK WARRANTY	13
SELECTED OSHA REGULATIONS FOR LIFT TRUCKS	14



## **BEFORE YOU BEGIN**

Always follow your facility's rules regarding wearing Personal Protective Equipment such as safety shoes and protective glasses whenever operating, working with, or assembling or dismantling hand pallet trucks.

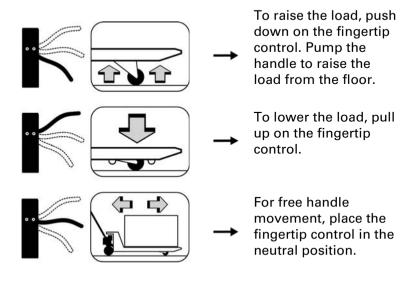
## **DELIVERY INSPECTION**

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 quide in this manual.

### OPERATING INSTRUCTIONS

#### (Read and understand prior to using this product)



#### 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 malfunction 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 3 months. The thrust plate is equipped with three grease fittings. Apply grease under normal conditions every 3 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:

#### SS45 MODEL

- Turn the hand pallet truck over so that the underside of the forks are accessible.
- Remove one locking pin (179415) with a 3/16 in. punch.
- Remove the bushing (179335) from the bracket.
- Adjust the bolts (179328). Turn counterclockwise to raise the fork tips and clockwise to lower the fork tips.
- Replace the bushing (17933), through the bolt, and replace the locking pin (179415).
- When adjusted properly, the forks should be 3 in. low height from ground level in the lowered position.



## **MAINTENANCE (CONT.)**

#### **HYDRAULIC SYSTEM**

Your hydraulic system is maintenance free. Do not add hydraulic oil unless there is, or was, a leak. Use ISO VG 15 grade hydraulic oil or equal for SS45 model trucks. 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. (272 kg) (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

#### 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 (173754) and extend the lift piston fully.
- 3. Remove screw (176223) and add the amount of oil determined by the chart in step 4.
- 4. Reinstall screw (176223) but do not tighten. Leave a 1/32 in. gap.
- 5. Pull up on the release lever (173754) 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 (176223) fully and return the truck upright.



# **TROUBLESHOOTING**

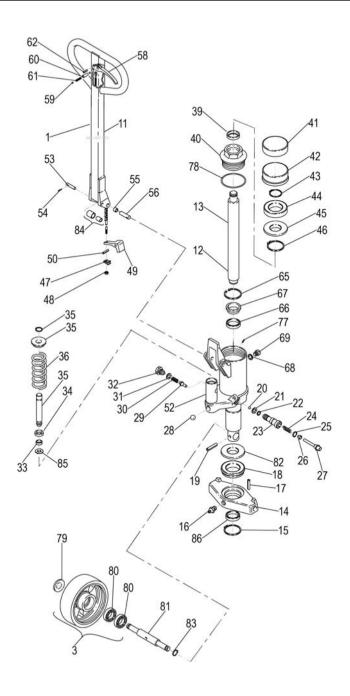
CONDITION	POSSIBLE CAUSE	ACTION
Pump does not lift load.	An air lock in the hydraulic system.	Pull up on the lift/lower lever and hold while pumping the handle 8 to 10 times to bleed air from the system.
Lifting, neutral, and lowering do not function properly.	Chain anchor out of adjustment.	Turn the nut on the chain anchor clockwise until the pumping action, while in neutral, does not raise forks.
Forks raise and sink with pump action.	Dirt or foreign particle is caught in the cone valve seat.	Pull up on the lift/lower lever and hold while pumping the handle 8 to 10 times to purge the valve system.
Pump does not lift load to the 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 is loose. Push bars require adjustment.	Refer to Push Bar Linkage Adjustment in the MAINTENANCE section.



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# **COMPLETE HYDRAULIC ASSEMBLY**



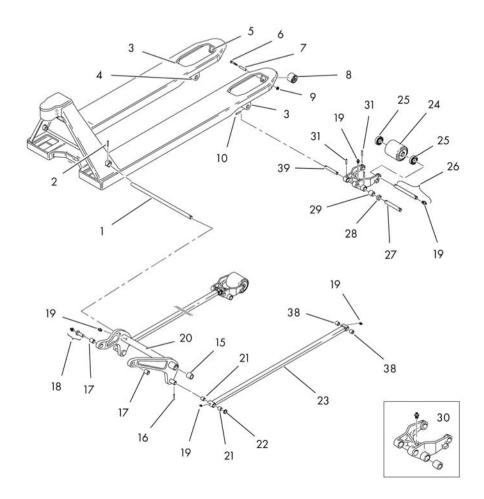


			PART
ITEM	DESCRIPTION	QTY	NO.
1	HANDLE COMPLETE	1	175769
2	PACKING SET (INCLUDES:	1	129882
	ITEMS 21, 22, AND 25)		
3	WHEEL, NYLON	2	161804
	(COMPLETE)		
	WHEEL, POLY	2	161806
	(COMPLETE)		
11	HANDLE	1	177115
12	HYDRAULIC UNIT	1	180852
	(COMPLETE)		
13	PISTON	1	7575615
14	PLATE, PRESSURE	1	179346
15	RING, LOCKING	1	179666
16	FITTING, GREASE	1	179334
17	PIN, LOCKING	2	179414
18	BEARING, BALL	1	179345
19	PIN, LOCKING	1	166246
20	BALL	1	20065
21	WASHER	1	47050
22	O-RING	1	22032
23	BODY, VALVE	1	179384
24	SPRING	1	47071
25	U-RING	1	22318
26	GUIDE	1	49513
27	PISTON	1	179385
28	BALL	1	179383
29	CONE, VALVE	1	47049
30	SPRING	1	39106
31	WASHER	1	37218
32	SCREW	1	176223
33	U-RING	1	21065
34	RING, SEALING	1	7500105
35	PISTON (COMPLETE)	1	209911
36	SPRING	1	166241
39	SEALING	1	20066
40	NUT	1	49918
41	INSERT	1	47997
42	HOUSING	1	164675
43	RING, LOCKING	1	179412
44	BEARING, BALL	1	166257
45	WASHER	1	47995
46	RING, LOCKING	1	28571
47	NUT, CLIP	1	165197
48	NUT	1	158452
49	ARM, LOWERING	1	165198
50	PIN, LOCKING	1	166246
51	BUSHING	1	182768
52	CYLINDER, PUMP	1	179379
53	AXLE	1	129208
54	PIN, LOCKING	1	28578

	D-0001071011	O=1/	PART
ITEM	DESCRIPTION	QTY	NO.
55	BUSHING	2	182769
56	AXLE	2	49886
58	LEVER	1	173754
59	BALL	2	166272
60	SLEEVE	1	165194
61	SPRING	1	165195
62	PIN, LOCKING	1	7508787
65	PIN, LOCKING	1	20101
66	U-RING	1	22034
67	GUIDE	1	47039
68	WASHER	1	153487
69	SCREW	1	179381
70	BAR, VALVE (COMPLETE)	1	129206
77	PIN, LOCKING	2	28572
78	O-RING	1	21024
79	CAP, HUB	2	156623
80	BEARING	4	210062
81	AXLE	1	179347
82	WASHER	1	179342
83	RING, LOCKING	2	158809
84	ROLLER	1	165196
85	RING	1	137020
86	BUSHING	1	209932



# **MODEL SS45 CHASSIS DIAGRAM**

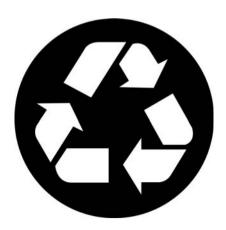




ITEM	DESCRIPTION	QTY	PART NO.
1	AXLE, TORSION TUBE (20.5 IN. WIDE TRUCK)	1	49882
	AXLE, TORSION TUBE (27 IN. WIDE TRUCK)	1	51501
2	PIN, LOCKING	1	179414
3	EAR - LEFT	2	179326
4	EAR - RIGHT	2	179325
5	CLAMP	2	179667
6	AXLE	2	179670
7	SPACER	2	172862
8	ROLLER, ENTRY	2	47150
9	NUT	2	179671
10	PIN, LOCKING	4	179416
15	BUSHING	2	47617
16	PIN, LOCKING	2	179415
17	BUSHING	2	179335
18	BOLT, ARM (COMPLETE)	2	179328
19	FITTING, GREASE	9	179334
20	TORSION TUBE (20.5 IN. WIDE TRUCK)	1	179324
	TORSION TUBE (27 IN. WIDE TRUCK)	1	179332
21	BUSHING	4	30023
22	WASHER	2	179327
23	PUSH ROD (48 IN. FORK)	2	179375-122
24	ROLLER, NYLON LOAD (COMPLETE)	2	167598
25	BEARING, BALL	4	210061
26	AXLE (COMPLETE)	2	179393
27	AXLE	2	131676
28	WHEEL	4	159280
29	BUSHING	4	51805
30	FORK, WHEEL	2	179387
31	PIN, LOCKING	4	179415
38	BUSHING	4	47117
39	AXLE	2	179329



## **RECYCLE YOUR OLD LIFT-RITE PARTS**



Chassis	Steel
Roller suspension	Steel
Bushings	Brass
Grease fittings	Steel
Rollers	Nylon, polyurethane
Hydraulic body	Steel
Thrust plate	Steel
Handle	Steel, nylon
Wheel	Nylon, polyurethane, rubber
Bushings	Brass
Hydraulic oil	Disposal in accordance with local regulations
Assembly parts	Steel, brass, nylon, rubber, polyurethane, polyamide



## HAND PALLET TRUCK WARRANTY

The Lift-Rite Hand Pallet Truck, Model SS45, is warranted against defects in materials and workmanship for a period of one (1) year for the hydraulic pump and truck chassis, and six (6) months for wearable components from date of installation

Wearable Components include but are not limited to:

- · Wheels, Rollers, Bearings and Brake Cable
- 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 defective 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 in an 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.



## SELECTED OSHA REGULATIONS FOR LIFT TRUCKS

*Note:* Some or all of the following may not be applicable to your hand pallet lift truck.

The use of forklift trucks in the workplace is governed by various regulations. In the United States, the Federal Occupational Safety and Health Administration (OSHA) has issued regulations which cover the majority of workplaces.

In addition, several states have implemented regulations which apply instead of the Federal regulations.

Check with your local OSHA office or provincial Labor Bureau to confirm which regulations govern your workplace.

Because of their wide applicability, this section of your manual lists several parts of the Federal OSHA regulations that might be of particular importance to your workplace.

The full text of the Federal regulations can be found in the Code of Federal Regulations at 29 CFR Section 1910.178.

The following citations are followed by a reference to the appropriate subparagraph of the regulations.

- Modifications and additions which affect capacity and safe operation shall not be performed by the customer or user without manufacturers prior written approval. Capacity, operation and maintenance instruction plates, tags or decals shall be changed accordingly. (a) (3)
- The user shall see that all nameplates and markings are in place and are maintained in a legible condition, (a) (6)
- The employer shall ensure that each powered industrial truck operator is competent to operate a powered industrial truck safely, as demonstrated by the successful completion of the training and evaluation specified in this paragraph. (I) (1) (i)
- Prior to permitting an employee to operate a powered industrial truck (except for training purposes), the employer shall ensure that each operator has successfully completed the training required by this paragraph. (I) (1) (ii)
- Trainees may operate a powered industrial truck only under the direct supervision of persons who have the knowledge, training, and experience to train operators and evaluate their competence and where such operation does not endanger the trainee or other employees. (l) (2) (i) (A) (B)
- Training shall consist of a combination of formal instruction (e.g. lecture, discussion, interactive computer learning, videotape, written material), practical training (demonstrations performed by the trainer and practical exercises performed by the trainee), and evaluation of the operator's performance in the workplace. (l) (2) (B) (ii) [Editorial Note: For required training program content, refer to (l) (3) (i) (A-M) and (l) (3) (ii) (A-I).]
- Refresher training, including an evaluation of the effectiveness of that training, shall be conducted as required by paragraph (l) (4) (ii) to ensure that the operator has the knowledge and skills needed to operate the powered industrial truck safely. (l) (4) (i)
- An evaluation of each powered industrial truck operator's performance shall be conducted at least once every three
  years. (l) (4) (iii)
- The employer shall certify that each operator has been trained and evaluated as required by this paragraph (l). The certification shall include the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation. (l) (6)
- The employer shall prohibit arms or legs from being placed between the uprights of the mast or outside the running lines of the truck. (m) (4)
- Brakes shall be set and wheel blocks shall be in place to prevent movement of trucks, trailers or railroad cars while loading or unloading. Fixed jacks may be necessary to support a semitrailer when the trailer is not coupled to a tractor. The flooring of trucks, trailers, and railroad cars shall be checked for breaks and weakness before they are driven onto. (m) (7)
- Only approved industrial trucks shall be used in hazardous locations. (m) (11)



- All traffic regulations shall be observed, including authorized plant speed limits. A safe distance shall be maintained approximately three truck lengths from the truck ahead, and the truck shall be kept under control at all times. (n) (1)
- The driver shall be required to slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing. (n) (4)
- Under all travel conditions the truck shall be operated at a speed that permits it to be brought to a stop in a safe manner. (n) (8)
- Stunt driving and horseplay shall not be permitted. (n) (9)
- If at any time a powered industrial truck is found to be in need of repair, defective, or in any way unsafe, the truck shall be taken out of service until it has been restored to safe operating condition. (p) (1)
- Any power-operated industrial truck not in safe operating condition shall be removed from service. All repairs shall be made by authorized personnel. (q) (1)
- All parts of any such industrial truck requiring replacement shall be replaced only by parts equivalent as to safety with those used in the original design. (q) (5)
- Industrial trucks shall be examined before being placed in service, and shall not be placed in service if the examination shows any condition adversely affecting the safety of the truck. Such examination shall be made at least daily. Where powered industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected. (q) (7)



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Part Kit Number

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