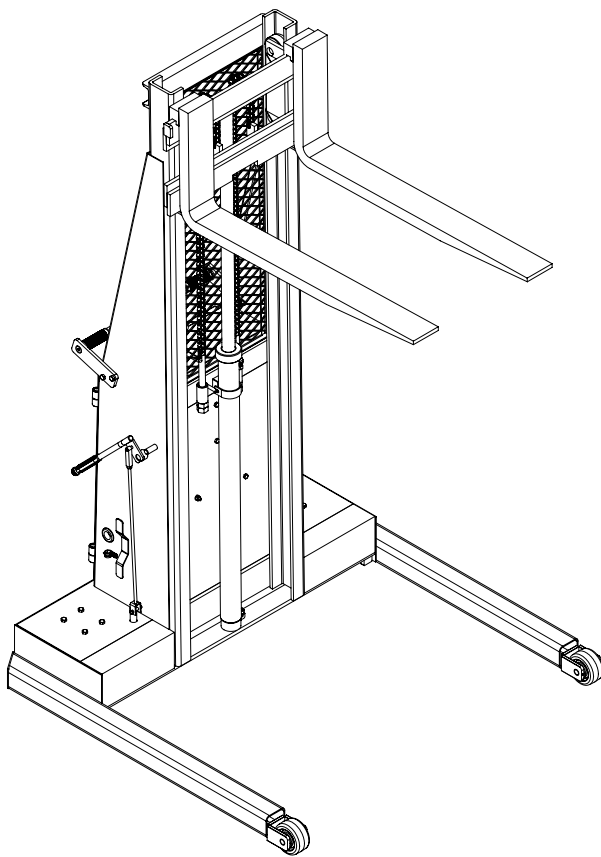


LIFT-RITE® Manual Pallet Stacker

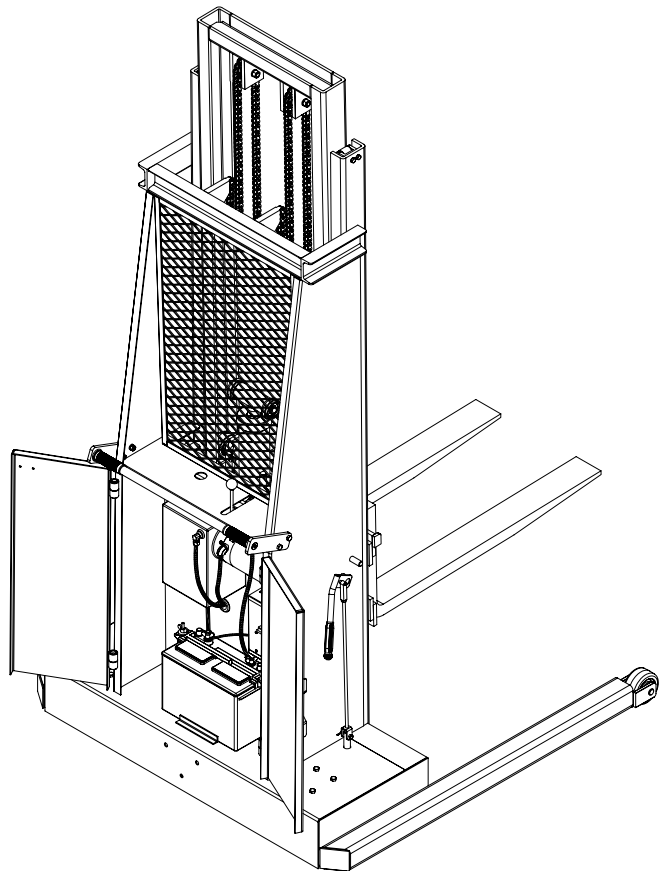
Operating Instructions, Safety, Maintenance & Replacement
Parts for Lift-Rite Pallet Stackers

Model: LL and LT Models

Aug 2008 – Rev. E



**LL Series
(Single Stage)**



**LT Series
(Double Stage)**

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Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

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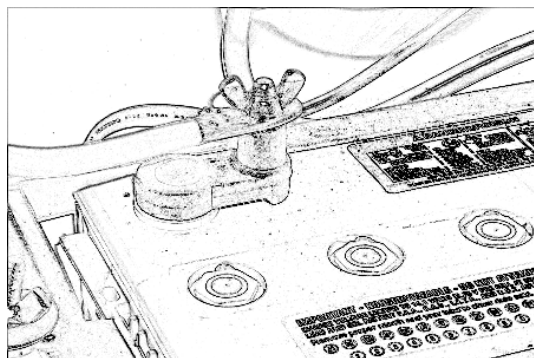
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Delivery Inspection

Visually inspect stacker frame components and hydraulic unit for damage during shipment by carrier. If damage is evident, notify delivering carrier immediately and file necessary claims.

Stacker Battery Connection

All Lift-rite Stackers are shipped from the factory with the battery disconnected at the negative post. This is for safety purposes and prevents unanticipated actuation of the lift cylinder while the product is in transit. Before attempting to use the stacker for the first time, connect the two black wires to the negative battery post shown in the illustration. One wire is a “14 Ga.” black wire lead with a ring terminal end from the battery charger. The second is a larger “4 Ga.” Black wire lead with ring terminal end coming from the frame. Connect both wires to the negative battery post and tighten the butterfly nut.



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SAFETY SHOES

Always wear safety shoes when working with Manual Pallet Stackers.

PROTECTIVE GLASSES

When assembling or dismantling a Manual Pallet Stacker, protective glasses must be worn to avoid personal injury.

OPERATOR'S RESPONSIBILITY

While operating a Manual Pallet Stacker always wear safety equipment and operate in a responsible manner to ensure a safe work area.

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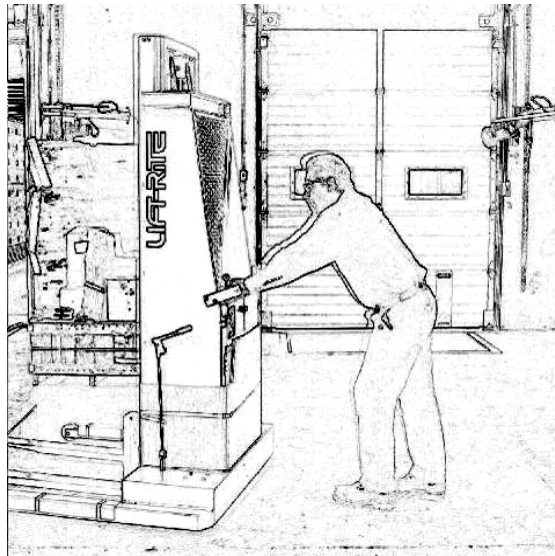
Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Operator Safety and Safe Practices

- Safe operation is the responsibility of the operator.
- The operator must develop safe working habits and be aware of hazardous conditions in order to protect himself, other personnel, the stacker, and other material.
- The operator must be familiar with the operator instructions and warnings in this manual.
- The operator must be familiar with the operation and function of all controls before using this piece of equipment.
- Keep feet clear of the stacker. Foot protection is recommended.
- Never put any part of the body into the mast structure, lifting mechanism, or carriage.

General Operation

- Before starting to operate the stacker, the operator must be in the operating position. In front of the control lever, behind the safety mesh, opposite the fork carriage.



- Do not operate the stacker, or any of its functions and attachments from any location other than the operator's position.
- Raise the fork carriage and forks a minimum distance above the floor.
- Release the floor locks (both sides).
- Understand stacker limitations and operate the stacker in a safe manner so as not to cause injury to personnel. Do not maneuver a stacker up to anyone standing in front of an object. Exercise care in locations where pedestrians may step into the path of travel of the stacker.
- Do not allow anyone to stand or pass under the elevated portion of the stacker, empty or loaded.
- Do not permit passengers to ride on the carriage or forks.



Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

- Maintain a safe distance from ramps, edge of platforms, and other similar working surfaces.
- When using this stacker on and off trucks and trailers, the brakes on the truck or trailer must be applied and wheel chock(s) or positive mechanical restraints must be used to prevent movement of the truck or trailer while loading or unloading.
- Care shall be taken not to contact overhead lights, wiring, pipes, sprinkler systems, etc.
- Good judgment and care must be used when handling loads that extend above the mast. A load backrest option would be recommended in this case.
- Do not use this stacker in areas classified as hazardous.
- Do not add to or modify this stacker.
- Do not block access to fire aisles, stairways, or fire equipment.

Traveling

- Observe all traffic regulations; maintain a safe distance from the stacker and pedestrians. Keep the stacker under control at all times.
- Keep both hands and feet directly behind the operator's designated area with both hands on the push handle.
- Yield the right of way to pedestrians, emergency vehicles, and powered industrial trucks.
- Do not pass another truck traveling in the same direction at intersections, blind spots, or other dangerous locations.
- Slow down or stop at locations where vision is obstructed.
- Do not travel on ramps or inclines.
- Always operate the stacker in a manner that will permit full control at all times and will permit stopping in a safe manner.
- Travel with the forks in the lowest position possible.
- Make starts, stops, turns, and direction reversals in a smooth manner so as not to shift load and/or overturn the stacker.
- Do not use the stacker for stunt handling or horseplay.
- Travel cautiously on wet or slippery floors.
- Avoid traveling over debris on floors.
- Before traveling over a dock-board or bridge plate, be sure that it is properly secured and level. Verify that the combined weight of the stacker and load being transported on the stacker does not exceed the capacity of the dock-board or bridge plate.
- Do not operate stacker on elevators.
- Avoid traveling over openings in the floor.

Loading

- Handle only stable and safely arranged loads within the capacity of the stacker.
- Completely engage the load, fork length should be at least 2/3 of the load length.

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Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

- Use extreme caution when the lifting mechanism is elevated. Always keep forward, backing, and turning movement to a minimum when tiering.

Parking the Stacker

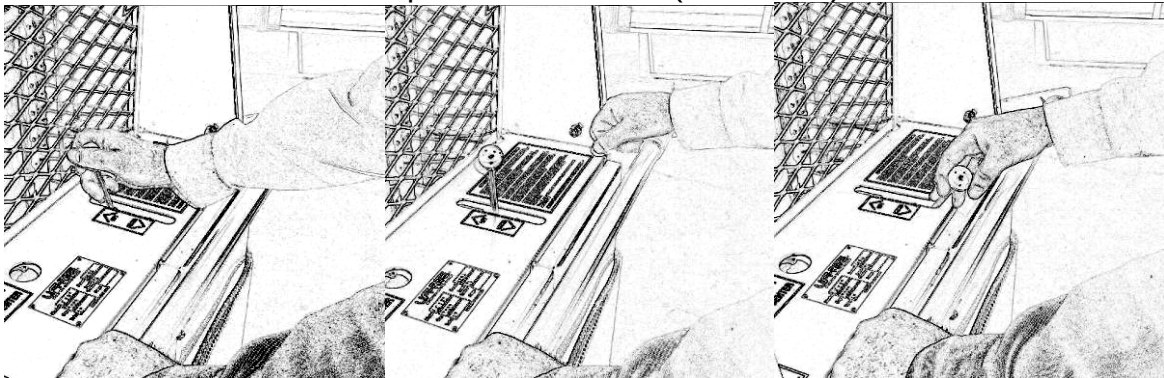
- Bring the stacker to a complete stop.
- Lower the forks fully
- Apply the floor locks. Never park this stacker on an incline/ decline.

Operator Care and inspection

- Before operating this stacker, check its condition with attention to:
 1. Wheels and casters
 2. Guards
 3. Battery
 4. Controls
 5. Lifting system including forks and chains.
 6. Floor locks
 7. Steering mechanism (5th wheel option)
- If the stacker is found to be in need of repair or is in any way unsafe, the matter should be reported immediately to the user's supervisor. The stacker should not be operated until an authorized Lift-Rite dealer has restored it to safe operating condition.

Controls

Refer to the illustrations below for operation of control (Lift/ Lower) lever.



Push and hold lever forward to raised forks.

Release lever slowly to cease lifting or lowering

Pull back lever slowly to lower load. Use the lever to achieve a safe speed of decent.



Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Battery Charging

- Park the stacker with forks lowered and floor locks engaged, in a well-ventilated location.
- Do not leave the stacker in an area where it will obstruct emergency exits, aisles, etc.
- Open battery compartment and leave battery compartment open during charging to allow proper airflow.
- Plug charger cord into 110 volt AC/ 60 cycle outlet.
- Do not operate lift mechanism while charger is operating.
- The charging rate is controlled automatically to avoid battery from being overcharged.
- Once the battery is fully charged, a “Charge Complete” LED on the charger will illuminate.
- Unplug charger cord from outlet and store properly.
- Close battery compartment

Maintenance Instructions

Battery

- Always wear eye protection when inspecting battery.
- Keep battery water level approximately $\frac{1}{2}$ " above plates at all times.
- Use a hydrometer to check your battery acid. A fully charged battery should read 1265 to 1275 (specific gravity).
- When adding water to battery, use distilled water only.
- Keep outside of battery clean and dry to avoid corrosion of terminals and connectors.

Hydraulic System

- Do not add hydraulic oil unless there has been a leak.
- Use only BP-SHF32 or equivalent hydraulic oil.
- The oil level should be approximately $\frac{3}{4}$ " below the top of the tank.
- Check oil level only with fork (carriage) in lowered position.

Lubrication

- Clean lifting chains and inside of channels periodically and lubricate lightly with light oil or multi-lube.
- Do not lube tapered surface of channels in order to avoid rollers from sliding instead of rolling.
- On telescopic models, the guide rollers mounted on top and inside of the outer channels must be lubricated periodically.
- Swivel casters are equipped with grease fittings for lubrication.
- Straddle load rollers should be removed twice yearly and bearings cleaned and packed with grease.



Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Warranty

Lift-Rite Inc. guarantees all stackers to be free of any defects in material, components, or workmanship for a period of six months from date of delivery. The hydraulic unit and battery carry a full year warranty, which will be subject to approval by supplier*. Lift-Rite Inc. will not cover the cost of labor or be responsible for any damage incurred in transit or caused by overloading or any other misuse or tampering of the stacker. All warranty work must be approved and authorized by the factory prior to repairs.

* Battery warranty should be directed to the Battery supplier. Batteries are labeled with a 1-800 number to contact for battery warranty.



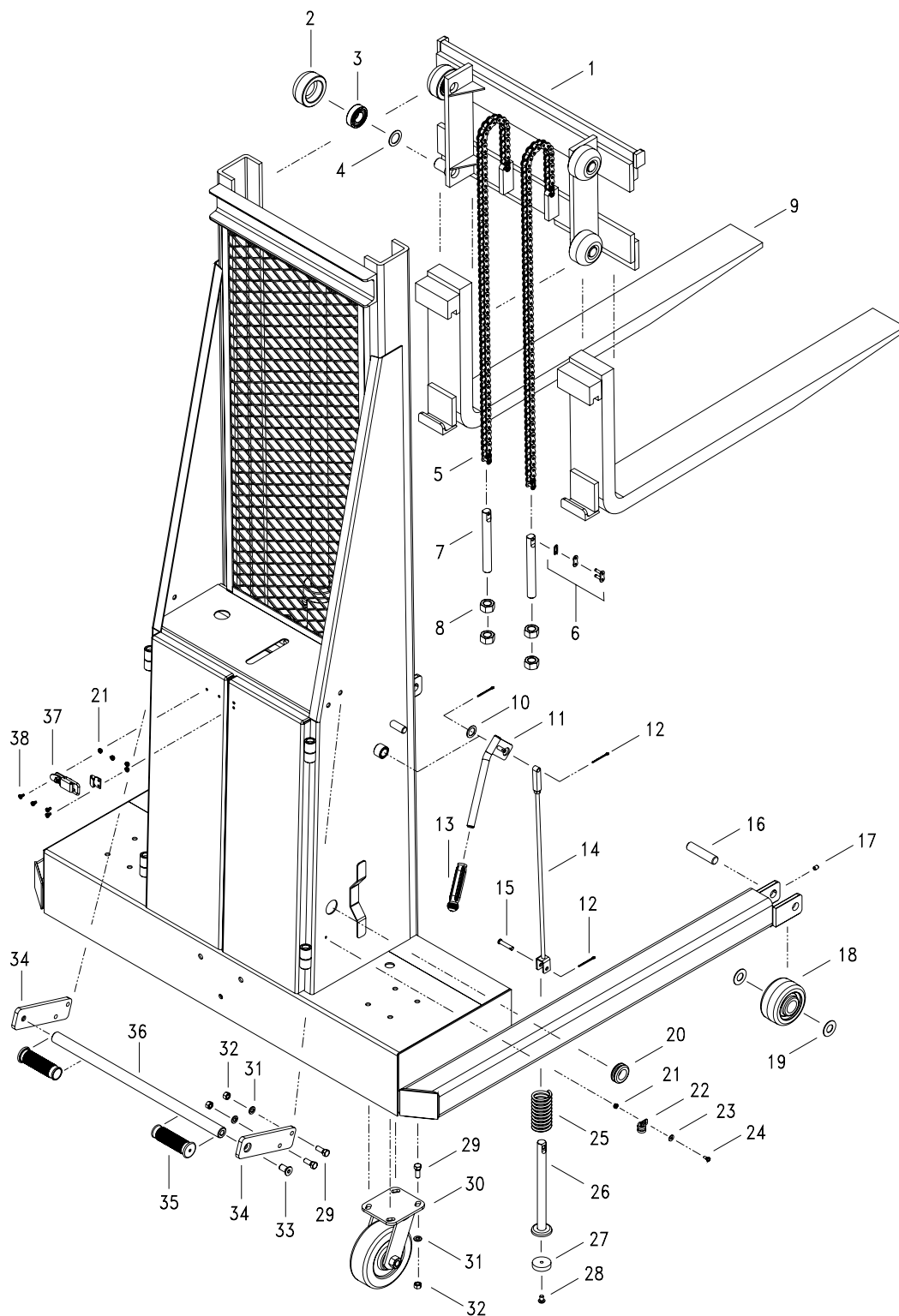
Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite
Pallet Stackers

Replacement Parts Diagrams and Tables



Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Parts Listing – Frame Components





Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Table – Frame Components

Item No.	DESCRIPTION	Part Number	Quantity
1	Apron (Carriage)		
	LL Series 1500lb capacity	AC-A9039-15	1
	LL Series 2000lb capacity	AC-A9039-20	1
	LL Series 2500lb capacity	AC-A9039-25	1
	LT Series 2000lb capacity	AC-A9039T-15/20	1
	LT Series 2500lb capacity	AC-A9039T-25	1
2	Mast Roller	PC-9036	4
3	Mast Roller Bearing	PL-10238D	4
4	Spacer Washer	MI-1.04X1.38	4
5	Apron Chain		
	LL68 1500lb capacity	MI-ASA50R	44.5"x2
	LL68 2000lb & 2500lb capacity	MI-ASA60R	44.5"x2
	LT132 2000lb capacity	MI-ASA60R	84.5"x2
	LT132 2500lb capacity	MI-ASA60R	94"x2
	LT144 2000lb capacity	MI-ASA60R	96"x2
6	Chain Link		
	1500lb capacity - 50 gauge	PC-9035-M-5	4
	2000lb & 2500lb cap. - 60 gauge	PC-9035-M-6	4
7	Chain Anchor		
	1500lb capacity - 50 gauge	PC-9034-50	2
	2000lb & 2500lb cap. - 60 gauge	PC-9034-60	2
8	Hex Nut	PC-9033	4
9	Fork		
	36" Long	PC-9040PH36	2
	42" Long	PC-9040PH42	2
	48" Long	PC-9040PH48	2
10	Spacer Washer	PL-10219A	2
11	Brake Handle		
	Left	PC-9069-L	1
	Right	PC-9069-R	1
12	Cotter Pin	MI-CPIN1.5Z	6
13	Handle Grip	PC-9068	2
14	Brake Rod Complete	PC-9075C	2
15	Clevis Pin	MI-CLEVIS1.5	2
16	Roller Axle	PC-9085	2
17	Set Screw	PC-9086	2
18	Roller Assembly	PC-9084	2
19	Flat Washer	MI-FLATLA	4
20	Grommet	PC-9066	1
21	Nut w/ Lock	MI-NUT10LKZ	5



Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Item No.	DESCRIPTION	Part Number	Quantity
22	Cable Clip	PR-8506	1
23	Flat Washer	MI-FLAT10	1
24	Machine Screw	MI-SCW10.5Z	1
25	Return Spring	PL-20253	2
26	Plunger Assembly	PC-9077	2
27	Brake Pad	PC-9078	2
28	Machine Screw	PL-10267	2
29	Hex Bolt	MI-HFC1Z	12
30	Caster	PC-9079	2
31	Lock Washer	MI-LOCKFZ	12
32	Hex Nut	MI-NUTFCZ	12
33	Flat Head Machine Screw	MI-FHF1	2
34	Handle Bar Bracket		
	Left	PC-9057BL	1
	Right	PC-9057BR	1
35	Handle Bar Grip	PC-9058	2
36	Handle Bar		
	LL Series 1500lb & 2000lb capacity	PC-9059	1
	LL Series 2500lb capacity	PC-9059L25	1
	LT Series 2000lb & 2500lb capacity	PC-9059T	1
37	Door Lock	PC-9061	1
38	Machine Screw	MI-SCW10.5Z	4

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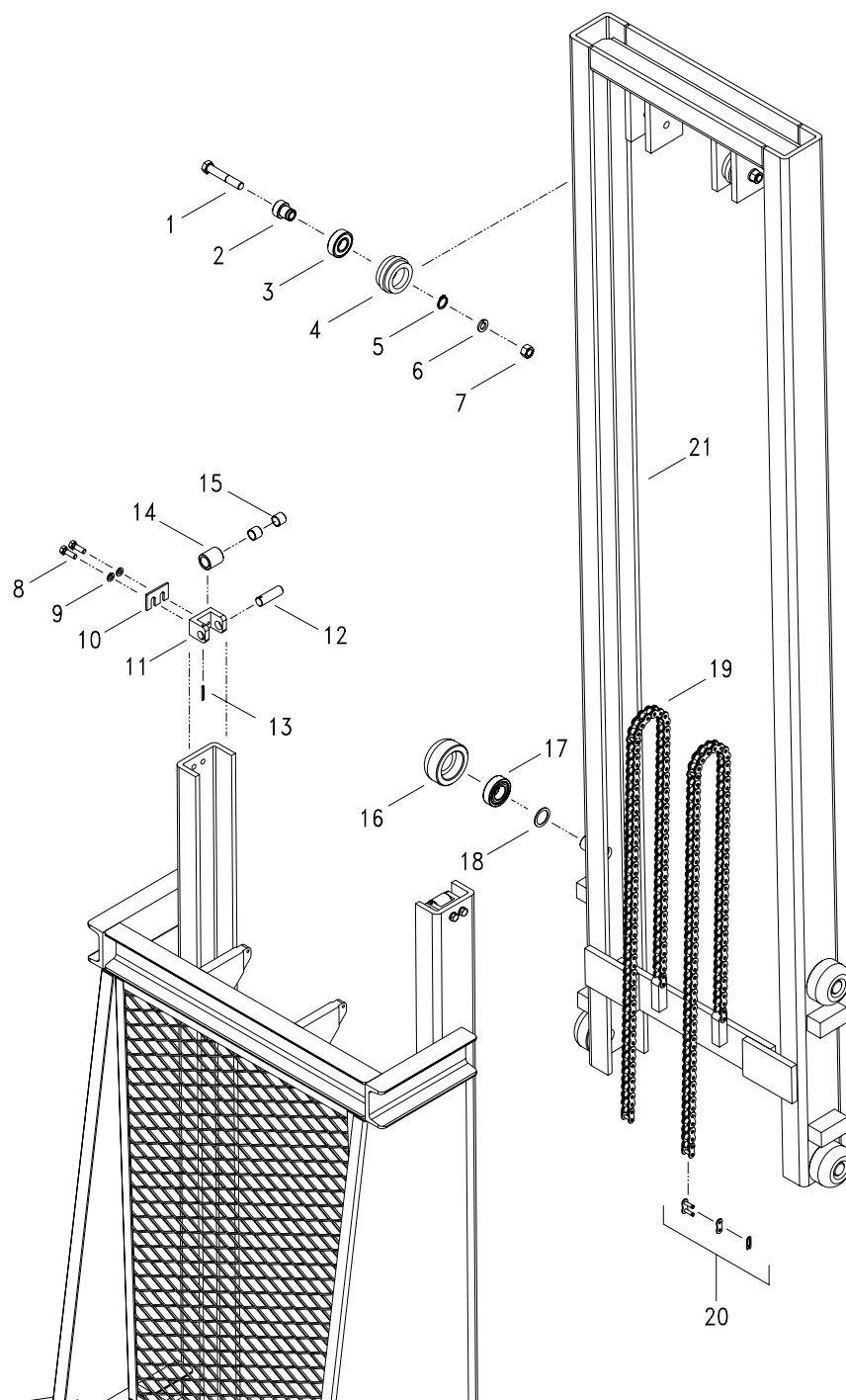
Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite
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Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Parts Listing – Inner Mast Components

LT Series Only





Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

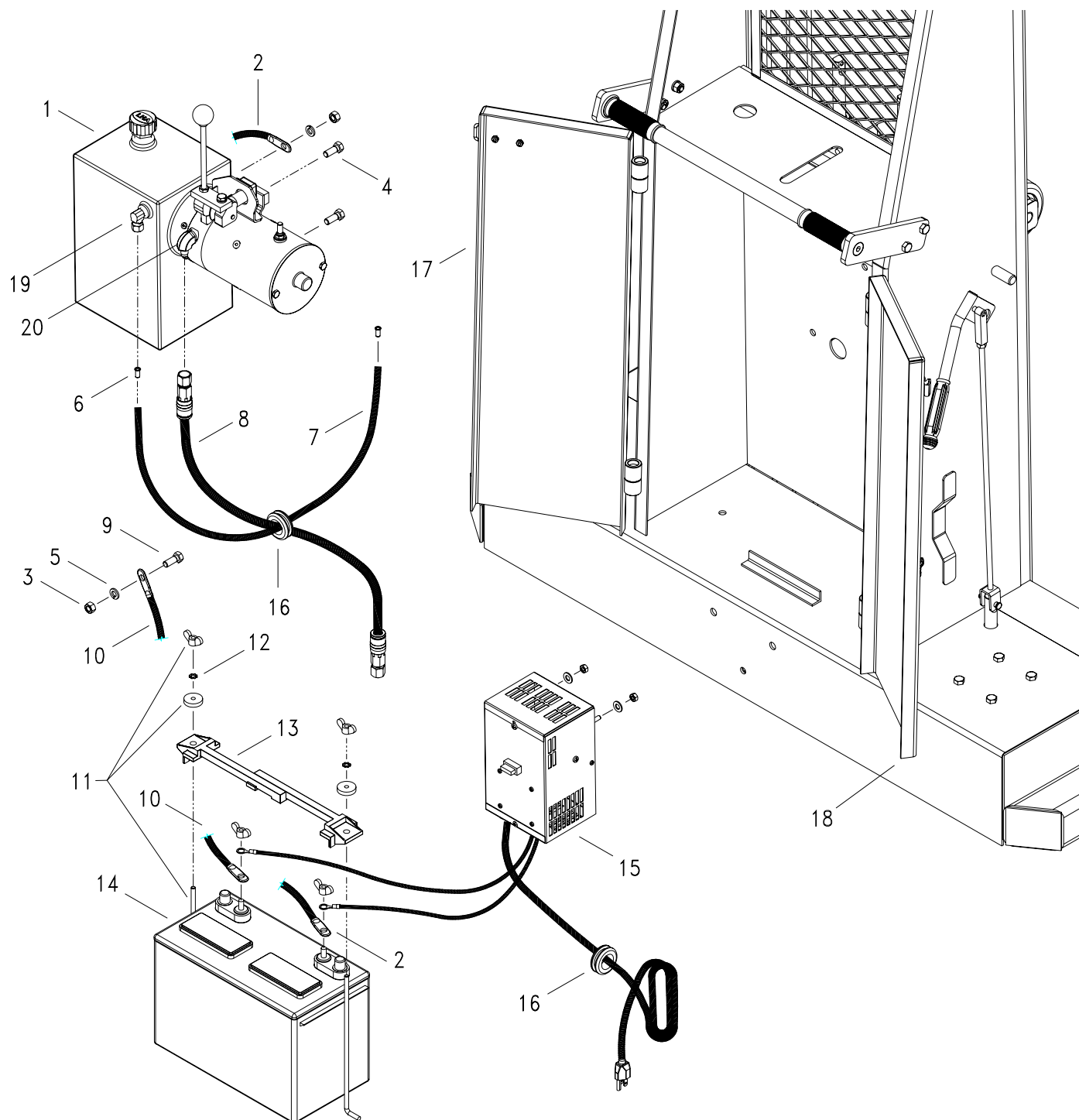
Table – Inner Mast Components

Item No.	DESCRIPTION	Part Number	Quantity
1	Hex Head Cap Screw	MI-HHF3Z	2
2	Sleeve	PC-9094T	2
3	Bearing	PL-10214	2
4	Mast Chain Roller	PC-9096T-5	2
5	Snap Ring	PL-10250C	2
6	Lock Washer	MI-LOCKHZ	2
7	Hex Nut	MI-NUTFZ	2
8	Hex Head Cap Screw	MI-HEC1Z	4
9	Lock Washer	PL-10232A	4
10	Shim	PC-9092T	2
11	Bracket	PC-9089T	2
12	Roller Pin	PC-9091T	2
13	Split Pin	PL-10228	2
14	Guide Roller	PC-9090T	2
15	Bushing	PL-10206	4
16	Mast Roller	PC-9036	4
17	Bearing	PL-10236D	4
18	Spacer Washer	MI-1.04X1.38	4
19	Inner Mast Chain		
	LT132 2000lb & 2500lb capacity	MI-ASA60R	47.5"x2
	LT144 2000lb capacity	MI-ASA60R	53.5"x2
20	Chain Link - 60 Gauge	PC-9035-M-5	4
21	Inner Mast		
	LT132 2000lb capacity	PC-9106T-132	1
	LT132 2500lb capacity	PC-9106T-132-25	1
	LT144 2000lb capacity	PC-9106T-144	1



Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Parts Listing – Internal Components





Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

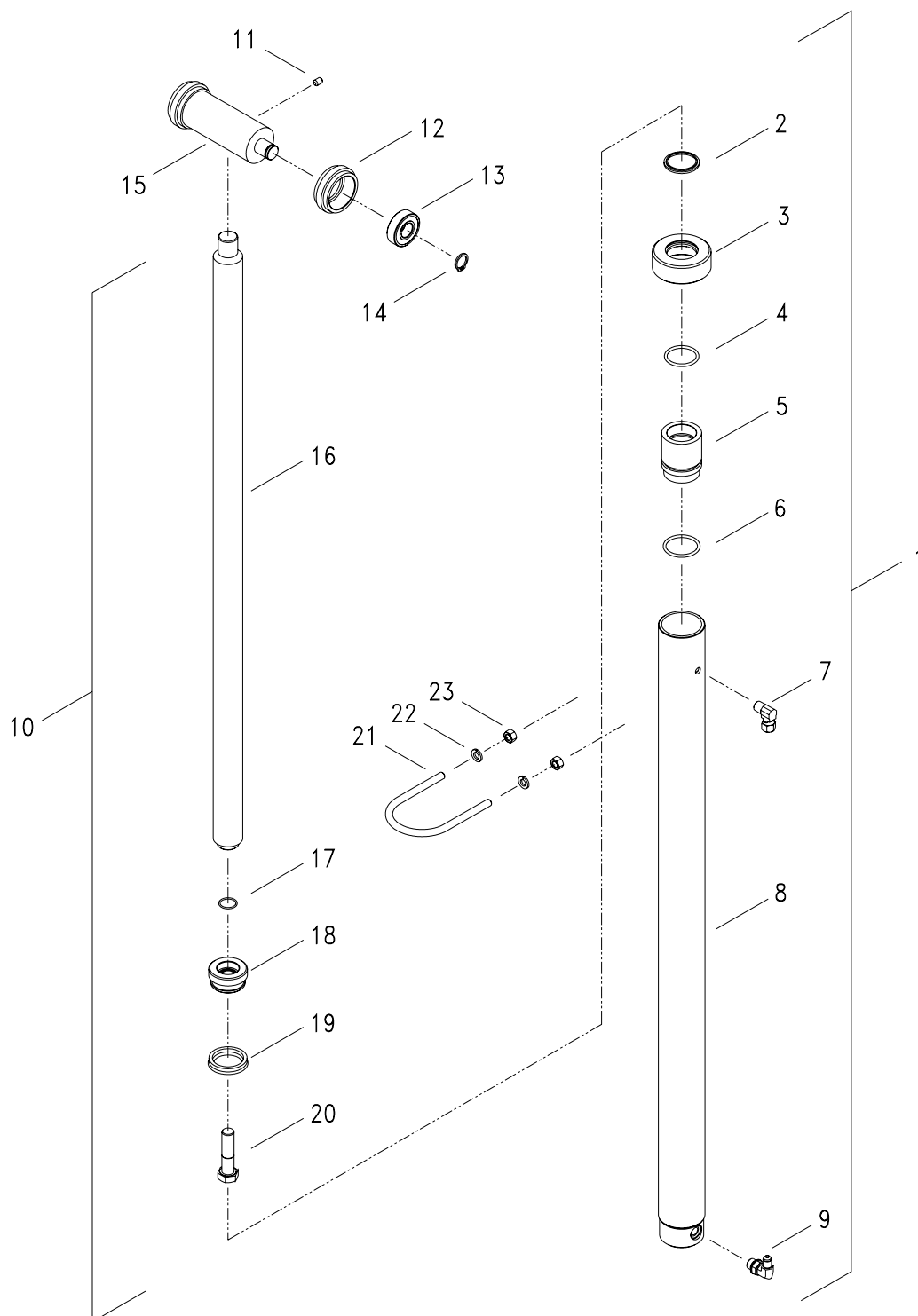
Table – Internal Components

Item No.	DESCRIPTION	Part Number	Quantity
1	Power Pack		
	12V DC Lever Operated - Std	PC-9048	1
	12V DC Remote Operated	PC-9048S	1
	12V DC Lever Key Switch	PC-9048S1	1
	110V AC Lever Operated	PC-9048110VM	1
	110V AC Remote Operated	PC-9048110VS	1
	Air Operated	PC-9048AIR	1
1A	Power Pack - Components		
	Motor	PC-4807M	1
	Breather	PC-4808A	1
	Starter Switch	PC-4812A	1
	Relief Valve	PC-4813A	1
	Check Valve Assembly	PC-4814A	1
	Cam Box Complete	PC-4815A	1
	Return Spring	PC-4817A	1
	Lever	PC-4819A	1
	Lever Knob	PC-4820A	1
	Down Valve Assembly	PC-4821A	1
2	Battery Cable - Red	PC-9049	1
3	Hex Nut	MI-NUTECZ	1
4	Hex Bolt	MI-HEC1Z	2
5	Lock Washer	PL-10232A	1
6	Adapter	PC-9001A	2
7	Return Line	PC-9001	1
8	Hose Assembly	PC-9009	1
9	Hex Bolt	MI-HEC.75Z	1
10	Battery Cable - Black	PC-9050	1
11	Battery Hold Down Rod (set of 2)	PC-9054PA	1
12	Star Lock Washer	PC-9054PB	2
13	Battery Hold Down	PC-9054P	1
14	Battery		
	12V HD Battery - Std	PC-9053	1
	12V Gel Battery	PC-9053GEL	1
	12V Extra HD Battery	PC-9053H	1
15	Charger	PC-9055	1
16	Grommet	PC-9066	2
17	Left Door		
	LL Series	PC-9000-DL	1
	LT Series	PC-9000T-DL	1
	LL Series w/ 5th Wheel	PC-3000-DL	1
	LT Series w/ 5th Wheel	PC-3000T-DL	1
18	Right Door		
	LL Series	PC-9000-DR	1
	LT Series	PC-9000T-DR	1
	LL Series w/ 5th Wheel	PC-3000-DR	1
	LT Series w/ 5th Wheel	PC-3000T-DR	1
19	Brass Elbow	PC-9002	1
20	Brass Elbow	PC-9008	1



Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Parts Listing – Hydraulic Lift Cylinder Components





Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Table – Hydraulic Lift Cylinder Components

Item No.	DESCRIPTION	Part Number	Quantity
1	Cylinder Assembly (doesn't include item 21, 22 & 23)		
	LL68 Series 1500lb capacity	AC-9103A-2-L68	1
	LL68 Series 2000lb capacity	AC-9103A-2.5-L68	1
	LL68 Series 2500lb capacity	AC-9103A-3-L68	1
	LT132 2000lb & 2500lb capacity	AC-9103A-3-LT132	1
	LT144 Series 2000lb capacity	AC-9103A-3-LT144	1
2	Wiper Ring	PL-10245	1
3	Cylinder Nut		
	LL68 Series 1500lb capacity	PC-9025-2	1
	LL68 Series 2000lb capacity	PC-9025-2.5	1
	LL68 Series 2500lb capacity	PC-9025-3	1
	LT132 2000lb & 2500lb capacity	PC-9025-3	1
	LT144 Series 2000lb capacity	PC-9025-3	1
4	O-Ring	PC-9023	1
5	Piston Rod Guide		
	LL68 Series 1500lb capacity	PC-9021-2	1
	LL68 Series 2000lb capacity	PC-9021-2.5	1
	LL68 Series 2500lb capacity	PC-9021-3	1
	LT132 2000lb & 2500lb capacity	PC-9021-3	1
	LT144 Series 2000lb capacity	PC-9021-3	1
6	O-Ring		
	LL68 Series 1500lb capacity	PC-9024-2	1
	LL68 Series 2000lb capacity	PC-9024-2.5	1
	LL68 Series 2500lb capacity	PC-9024-3	1
	LT132 2000lb & 2500lb capacity	PC-9024-3	1
	LT144 Series 2000lb capacity	PC-9024-3	1
7	Brass Adapter	PC-9011	1
8	Cylinder Weldment		
	LL68 Series 1500lb capacity	AC-9104-2-L68	1
	LL68 Series 2000lb capacity	AC-9104-2.5-L68	1
	LL68 Series 2500lb capacity	AC-9104-3-L68	1
	LT132 2000lb & 2500lb capacity	AC-9104-3-LT132	1
	LT144 Series 2000lb capacity	AC-9104-3-LT144	1
9	Brass Elbow	PC-9010	1
10	Piston Assembly (doesn't include item 11, 12, 13, 14 & 15)		
	LL68 Series 1500lb capacity	PC-9020A-2-L68	1
	LL68 Series 2000lb capacity	PC-9020A-2.5-L68	1
	LL68 Series 2500lb capacity	PC-9020A-3-L68	1
	LT132 2000lb & 2500lb capacity	PC-9020A-3-LT132	1
	LT144 Series 2000lb capacity	PC-9020A-3-LT144	1
11	Set Screw	MI-SETEC.375	1
12	Chain Roller	PC-9030-5	2
13	Bearing	PL-10214	2
14	Snap Ring	PL-10250C	2
15	Cross Head	PC-9028	1
16	Piston Rod		
	LL68 Series	PC-9020-L68	1
	LT132 Series	PC-9020A-LT132	1
	LT144 Series	PC-9020A-LT144	1



Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Item No.	DESCRIPTION	Part Number	Quantity
17	O-Ring	PC-9019	1
18	Piston Guide		
	LL68 Series 1500lb capacity	PC-9018-2	1
	LL68 Series 2000lb capacity	PC-9018-2.5	1
	LL68 Series 2500lb capacity	PC-9018-3	1
	LT132 2000lb & 2500lb capacity	PC-9018-3	1
	LT144 Series 2000lb capacity	PC-9018-3	1
19	U-Cup Seal		
	LL68 Series 1500lb capacity	PC-9017-2	1
	LL68 Series 2000lb capacity	PC-9017-2.5	1
	LL68 Series 2500lb capacity	PC-9017-3	1
	LT132 2000lb & 2500lb capacity	PC-9017-3	1
	LT144 Series 2000lb capacity	PC-9017-3	1
20	Hex Bolt	MI-HJF2.5Z	1
21	Cylinder Clamp		
	LL68 Series 1500lb capacity	BC-9026-2	1
	LL68 Series 2000lb capacity	BC-9026-2.5	1
	LL68 Series 2500lb capacity	BC-9026-3	1
	LT132 2000lb & 2500lb capacity	BC-9026-3	1
	LT144 Series 2000lb capacity	BC-9026-3	1
22	Lock washer	MI-LOCKFZ	2
23	Hex Nut	MI-NUTFCZ	2
24	Seal Kits (includes # 2, 4, 6, 17 & 19)		
	LL68 Series 1500lb capacity	PC-9102	
	LL68 Series 2000lb capacity	PC-9103	
	LL68 Series 2500lb capacity	PC-9104	
	LT132 2000lb & 2500lb capacity	PC-9104	
	LT144 Series 2000lb capacity	PC-9104	

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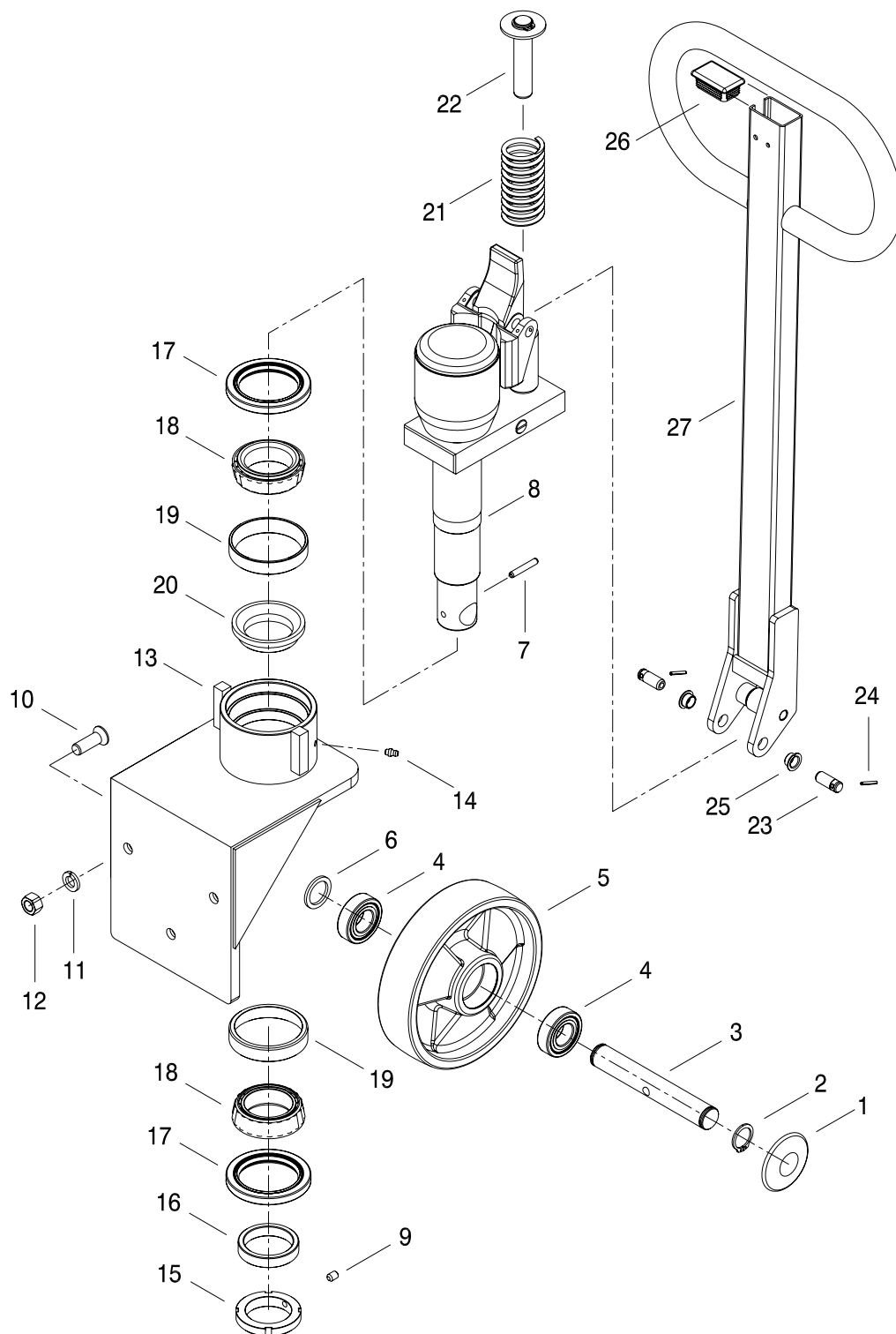


Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite
Pallet Stackers



Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Parts Listing – 5th Wheel Accessory Components





Operating Instructions, Safety, Maintenance & Replacement Parts for Lift-Rite Pallet Stackers

Table – 5th Wheel Accessory Components

Item No.	DESCRIPTION	Part Number	Quantity
1	Hub Cap - Black	PL-10236C	2
2	Snap Ring	PL-10237	2
3	Axle	PL-10240E	1
4	Bearing	PL-10238D	4
5	Wheel with Bearing	PL-20236BN-B	2
6	Spacer Washer	PL-10239	2
7	Split Pin	PL-10242	1
8	Pump Weldment	AC-20277J	1
9	Set Screw	TR-7112	1
10	Machine Screw	MI-FHF1.5	3
11	Lock Washer	MI-LOCKHZ	3
12	Hex Nut	MI-NUTHFZ	3
13	Angle Support	BC-3001-2	1
14	Grease Fitting	PL-10236PRES	1
15	Threaded Ring	AC-3065	1
16	Pump Spacer	TR-7108	1
17	Oil Seal	PI-3061	2
18	Bearing Cone	PI-3062	2
19	Bearing Cup	PI-3063	2
20	Top Spacer Ring	TR-7109	1
21	Return Spring	PL-20253	1
22	Pump Piston	PL-10250	1
23	Handle Pin	PL-20275	2
24	Split Pin	PL-20274S	2
25	Bushing	PL-20306	2
26	Handle Cap	PL-20274M	1
27	Handle Complete (incl items 25-26)	PC-20276M	1
28	5th Wheel Complete (incl all of above)	PC-5TH-WHEEL-2	1