

LIFFRITE®

MODEL: **ERGO 3000**
NOMIC

**OPERATORS MANUAL/INSTRUCTIONS/PARTS & SERVICE
FOR MANUAL & ELECTRIC**



LIFFRITE®

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SAFETY SHOES

Always wear safety shoes when working with the Ergonomic 3000.

PROTECTIVE GLASSES

When assembling or dismantling the Ergonomic 3000, protective glasses must be worn to avoid personal injury.

OPERATOR'S RESPONSIBILITY

While operating the Ergonomic 3000 always wear safety equipment and operate in a responsible manner to ensure a safe work area.

CAUTION!



- Always stay below the recommended load weight to ensure safe lift.
- Always ensure load is stable before moving to eliminate opportunity for load shift.
- Keep hands on inner handle during travel to protect hands from striking other objects causing injury.
- The ERGONOMIC 3000 is designed for moving goods, horseplay is not recommended and may result in injury.
- When not in use, forks should be fully lowered to avoid injury.
- The operator must be familiar with the operator's instructions and warnings in this manual prior to operating this equipment.
- The operator must be familiar with the safe operation and function of all controls prior to operating this equipment.

SAFETY

- Never overload the ERGONOMIC 3000. Stay within its rated capacity.
- Distribute the load evenly on the forks. Do not concentrate loads at one point or load one fork more than the other. Do not place the center of your load beyond the load center of the ERGONOMIC 3000.
- Never put your feet, hands or any other part of your body under the scissors or frame assembly.
- Do not allow the ERGONOMIC 3000 to drop from one level to another. Even a drop of 1" (25mm) more than doubles the effective load momentarily and results in a 'SHOCK' which can bend or break components.
- Move loads only with the ERGONOMIC 3000 in its lowest position.
- Electric ERGONOMIC 3000 must be charged in a well ventilated area. Always use the charger provided. Never use jumper cables as these can cause sparks which could ignite the explosive gases normally released by the battery during charging.
- Stabilizer engages to prevent movement in raised position and should not be tampered with.
- Operate only on level surfaces; maintain a safe distance from ramps, edge of platforms and other similar working surfaces.
- If this piece of equipment has been damaged or is in need of repair, please contact an authorized Lift-Rite dealer for service prior to operating.

DELIVERY INSPECTION

Visually inspect ERGONOMIC 3000 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 manual pump of ERGONOMIC 3000 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, pull and hold the release lever then operate the pump several times. If the manual pump still fails to respond see the trouble shooting guide on page 4.

Electric ERGONOMIC 3000

Operate the manual pump to raise the ERGONOMIC 3000 to its fully raised position. You can now access the battery compartment from between the scissor legs. Carefully connect the negative battery cable to the battery. Check to ensure the lift plug is connected into the battery connection on the side of battery box.

Lower the ERGONOMIC 3000 and then test the electric power pack by operating the raise button located near the top of the handle. If the pump fails to respond see the trouble shooting guide on page 4.

ERGONOMIC 3000 with Remote Control

The hand or foot operated remote control must be plugged into the receptacle on the top of the battery box for it to operate. Operate both the raise and lower push buttons or foot pedals to ensure the remote control functions correctly.

(note: If you purchased an electric ERGONOMIC 3000 without the remote control option it can be purchased separately from your Lift-Rite Dealer.)

OPERATION

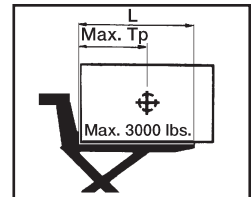
Your ERGONOMIC 3000 has been designed to lift skids, bins and other objects but not PALLETS. Pallets have bottom boards nailed to the stringers. These can damage your ERGONOMIC 3000 because they restrict the lifting action of the scissor legs.

The pump piston and lifting ram have a polished hard chrome finish to provide maximum seal life and minimum leakage. Do not allow these surfaces to be nicked or pitted by abuse. A slight oil wetting of the external parts of the pistons is normal in order to provide lubrication for the highly polished surfaces and the seals through which they pass. Do not be alarmed at a trace of oil even on new units. ERGONOMIC 3000 equipped with stabilizing rollers can be moved forward and backward in the fully raised position. They cannot be moved in any other direction because the steering wheels have been elevated by the stabilizers.

Load Center and Load Placement (Reference Layout) All loads must be placed to back of fork nearest to operator to avoid tipping of loads (see diagram). In any case, do not exceed load. Center indicated on the following chart.

*T.P. (Tipping Point)

L	Max T.P.*	Max Cap
60"	30"	2200 lbs.
48"	24"	3000 lbs.
42"	21"	3000 lbs.
36"	18"	3000 lbs.



Neutral Position A gentle pull on the handle will engage the neutral position and the handle can be moved without lifting of the forks. This will enable you to move the ERGONOMIC 3000 from one place to another without activating the pump.

Manual Lifting To raise the ERGONOMIC 3000 manually pump the handle. Your ERGONOMIC 3000 has an automatic neutral sensor which activates the pump cylinder when pumping action is detected.

Lowering To lower the ERGONOMIC 3000 pull on the finger tip control lever. By varying the position of the lever you can control the lowering speed.

Electric Lifting Raise the ERGONOMIC 3000 by pressing and holding the raise button located on the handle. To lower the ERGONOMIC 3000 pull on the finger tip control lever. By varying the position of the lever you can control the lowering speed. If your battery becomes discharged before you finish your work, you can operate an electric ERGONOMIC 3000 manually as described below.

Remote Control The remote control hand or foot operator must be plugged into the receptacle on the top of the battery box. The raise and lower buttons or pedals will now operate the ERGONOMIC 3000 as indicated.

Charging The 12 Volt Battery Move your ERGONOMIC 3000 to a well-ventilated area. Raise the ERGONOMIC 3000 manually and unwind the AC plug from the tie-down inside the bulkhead. Lower the ERGONOMIC 3000 completely and disconnect the lift plug from the battery connector (located on the side of the battery box). Insert the charge plug into the battery connector. The lights on the battery charger will indicate the current battery condition. Plug the AC plug into a 110 volt, 60 cycle receptacle. When your battery is fully charged, unplug the AC plug from its receptacle, then disconnect the charger plug from the battery plug and reinsert the lift plug. Carefully raise the ERGONOMIC 3000 and secure the AC cord and the charger plug to their respective tie-downs inside the bulkhead.

Store charger power cord in bracket at all times.

Electric hazard can occur if plug comes in contact with battery.

MAINTENANCE

Lubrication All pivot points in the ERGONOMIC 3000 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 main bearing in the thrust plate is equipped with a grease zerk. This should be greased every 6 months.

Hydraulic System Your hydraulic system is maintenance free. Do not add hydraulic oil unless there is, or has been a leak. Use Sunoco Sunvis 832 oil or equal. Any other oils, fluids or solvents can damage your hydraulic system. With the ERGONOMIC 3000 in its lowered position fill the reservoir through the oil plug hole until the oil is even with the plug hole.

Battery (12 Volt) Keep the battery water level 1/2" above the plates at all times. If it becomes necessary to add water use only distilled water.

If you suspect that your battery is not charging fully, you can check your battery acid using a hydrometer. A fully charged battery should read between 1270 and 1275.

TROUBLE SHOOTING

Manual Pump Fails To Raise ERGONOMIC 3000

There may be an air lock in the hydraulic system. Pull control lever and operate pump several times. Operate pump normally to raise ERGONOMIC 3000.

Check to see if the release lever on the pump base moves freely.

Loosen the high pressure adjusting screw (item # 21 on page 10).

Operate the pump several times then tighten the high pressure screw. A small amount may leak from the screw while it is loose.

ERGONOMIC 3000 Fails To Raise Completely

Check scissor legs and floor for obstructions.

Look for signs of an oil leak and top up hydraulic fluid.

Electric ERGONOMIC 3000 Does Not Respond To Raise Button

Manually raise the ERGONOMIC 3000 and check to see if the battery has been reconnected after shipping.

If the ERGONOMIC 3000 has been idle for a long period of time, the battery may have become discharged.

Connect the charger as described under 'OPERATION' and ensure the battery is fully charged.

Check all electrical connections.

Optional Remote control will not lower

Check to be sure the remote control is plugged in.

Check for damage to the hydraulic power pack. The solenoid may be damaged and need to be replaced.

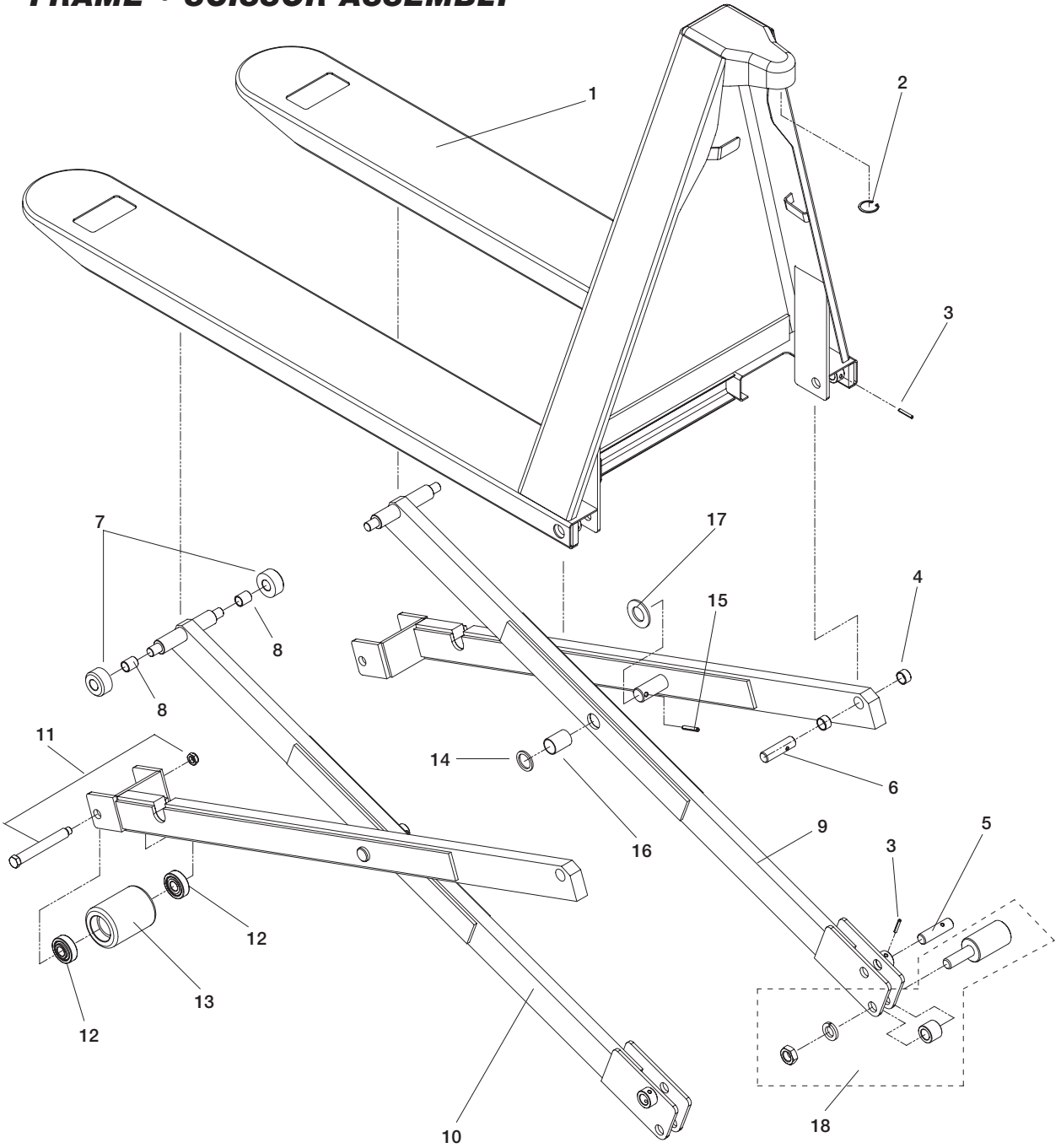
Neutral Position

If the pump has no neutral position turn the neutral valve (item # 23 on page 10 or 12) clockwise until the desired neutral action is achieved.

If the pump does not engage quick enough turn the neutral valve (item # 23 on page 10 or 12) counter clockwise until the pump action is satisfactory.

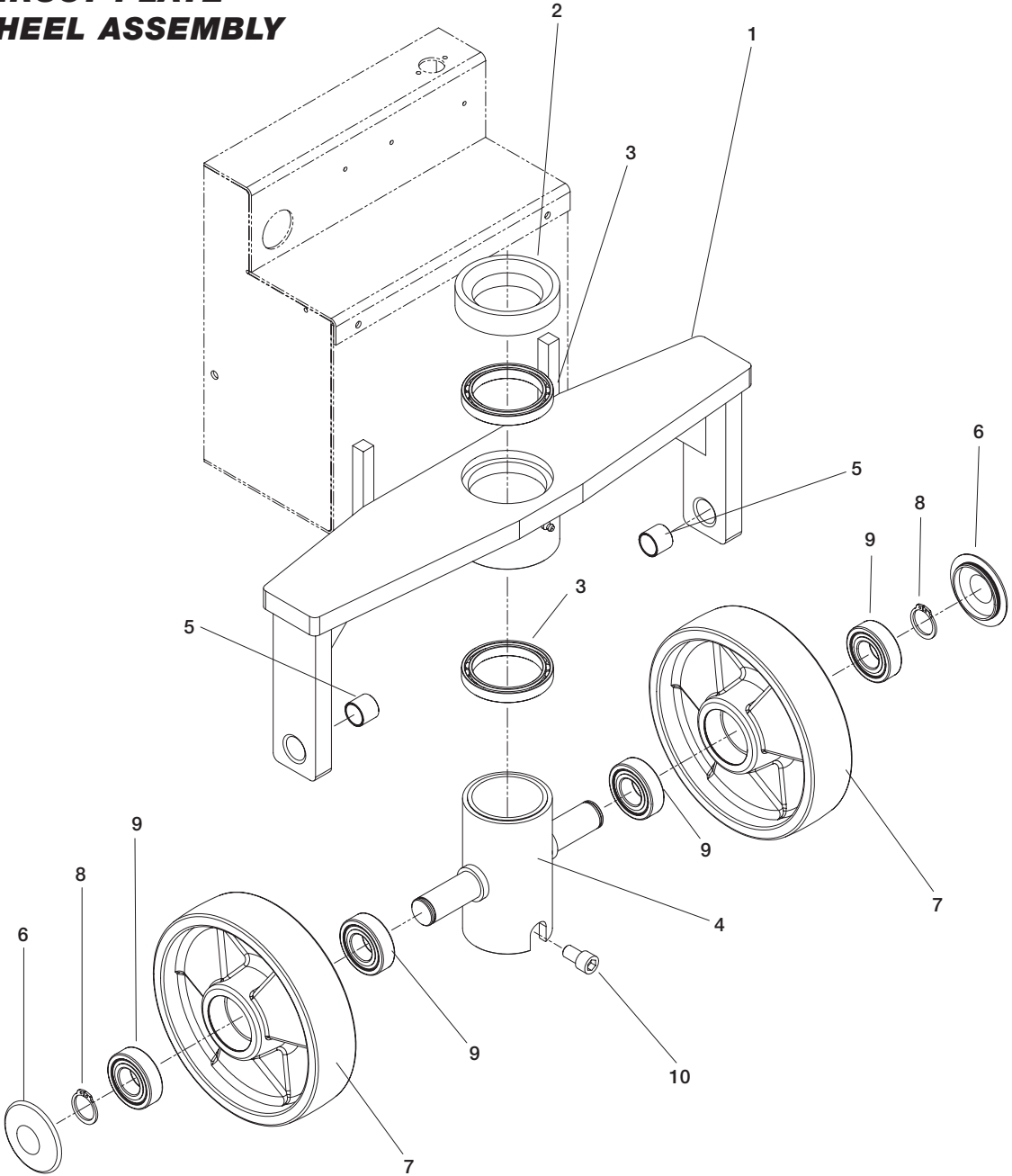
FOR THESE AND ALL OTHER TROUBLE SHOOTING QUESTIONS PLEASE CONTACT YOUR LOCAL AUTHORIZED LIFT-RITE DEALER.

FRAME • SCISSOR ASSEMBLY



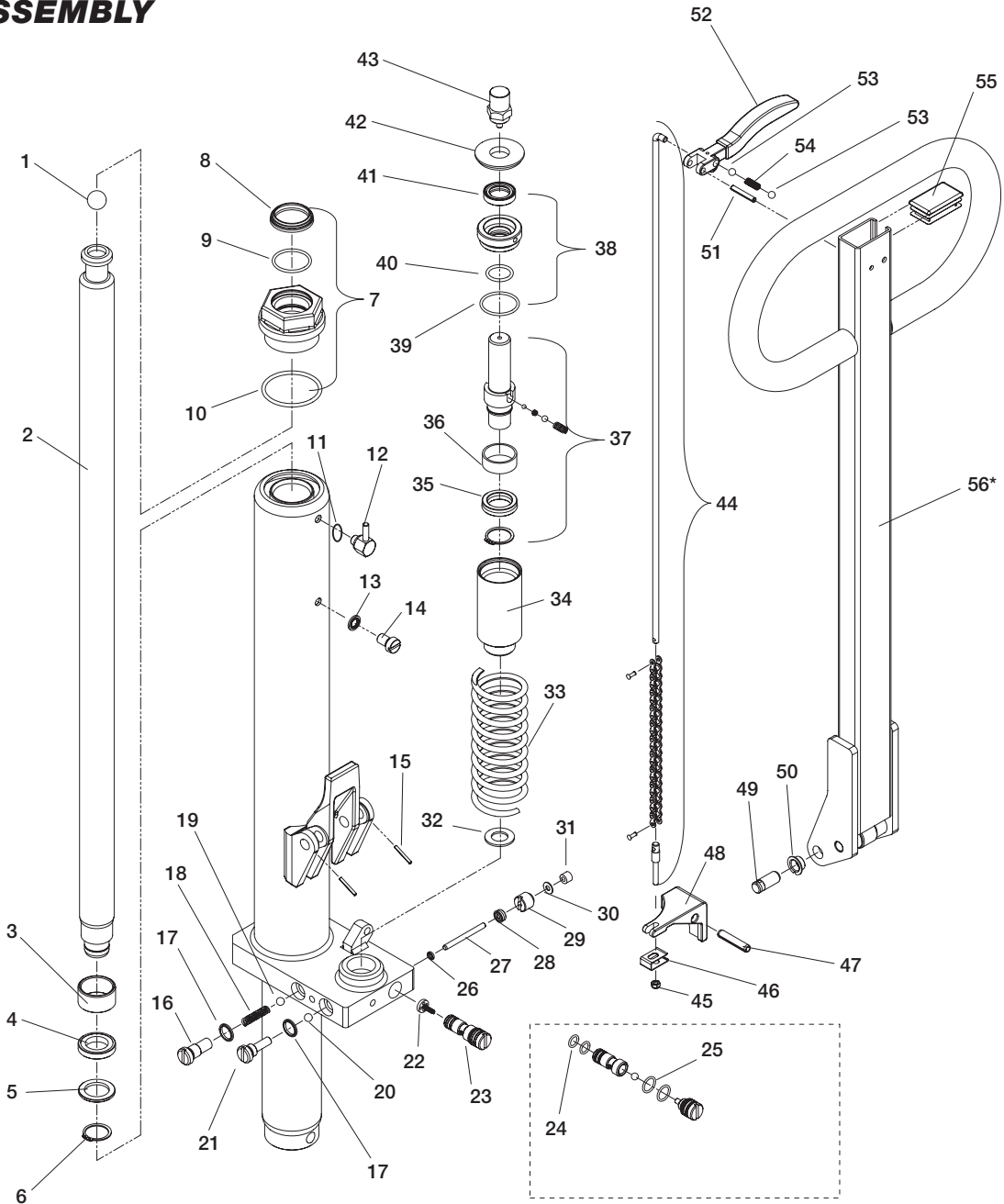
Item No.	DESCRIPTION	Part Number	Quantity
1	27 x 48 CHASSIS	PR-8021A 48	1
	20.5 X 48 CHASSIS	PR-8021B 48	1
2	SNAP RING	PL-20232	1
3	SPLIT PIN	PL-10269	4
4	BUSHING	PL-10203A	4
5	INNER. LEG CLEVIS PIN	PR-8012/8013	2
6	OUTER LEG CLEVIS PIN	PR-8012/8013	2
7	FORK ROLLER	PR-8007	4
8	BUSHING	PR-8007A	4
9	48" LEG ASSEMBLY RIGHT	PR-8002X48R	1
10	48" LEG ASSEMBLY LEFT	PR-8002X48L	1
11	AXLE ASSEMBLY	PL-20215	2
12	BEARING	PL-20214	4
13	NYLON ROLLER COMPLETE	PL-20210BN-B	2
	POLY ROLLER COMPLETE	PL-20210P-B	2
	STEEL ROLLER COMPLETE	PL-20210S-B	2
14	WASHER	PL-10239	4
15	SPLIT PIN	PL-10242	2
16	BUSHING	PR-8516	4
17	WASHER	PL-10241	2
18	STABILIZER ASSEMBLY	PR-8010	2

**THRUST PLATE
WHEEL ASSEMBLY**



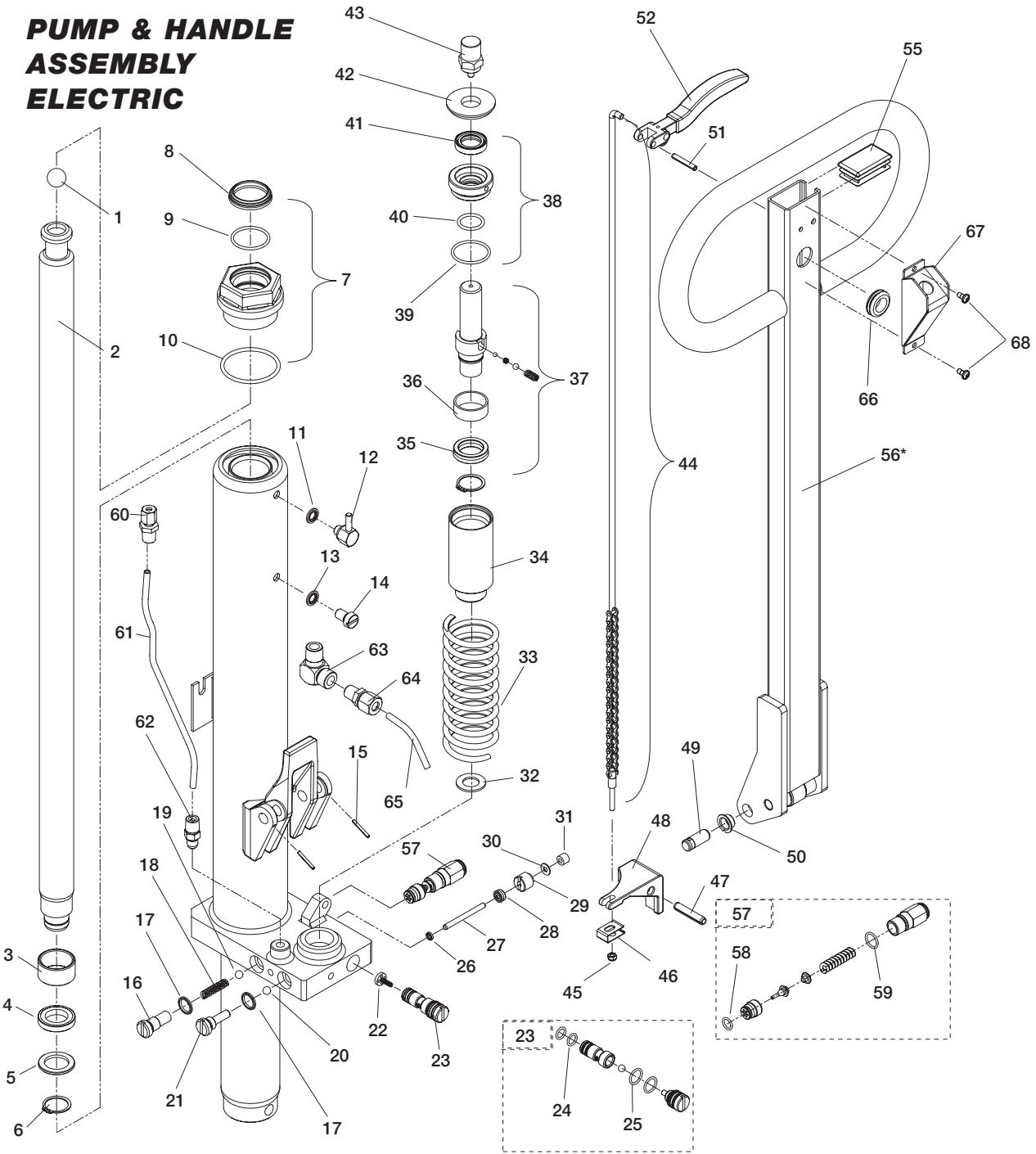
Item No.	DESCRIPTION	Part Number	Quantity
1	27" THRUST PLATE - MANUAL MODEL	PR-8024A	1
	27" THRUST PLATE - ELECTRIC MODEL	PR-8024EA	1
	20.5" THRUST PLATE - MANUAL MODEL	PR-8024B	1
	20.5" THRUST PLATE - ELECTRIC MODEL	PR-8024EB	1
2	PUMP COLLAR	PR-8030	1
3	THRUST PLATE BEARING	PR-8512	2
4	WHEEL MOUNT	PR-8431	1
5	BUSHING	PL-10203	2
6	HUB CAP	PL-10236C	2
7	STEER WHEEL		
	NYLON	PL-20236BN-B	2
	POLY	PL-20236B-B	2
	STEEL	PR-10236BS-B	2
8	SNAP RING	PL-10237	2
9	BEARING	PL-10238D	4
10	SOCKET HEAD CAP SCREW	PR-8518	2

PUMP & HANDLE ASSEMBLY



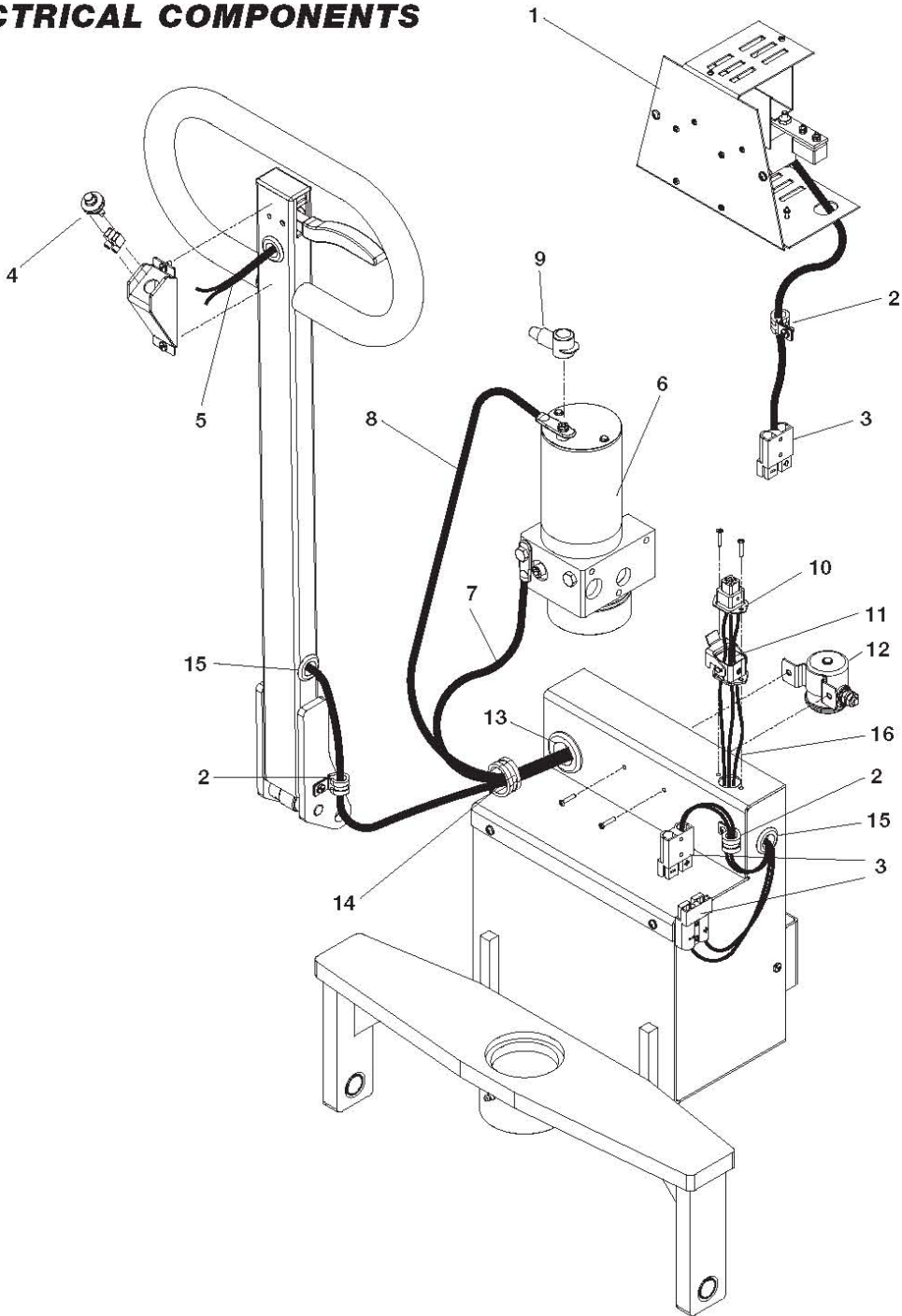
Item No.	DESCRIPTION	Part Number	Quantity
1	BALL	PL-10244	1
2	PISTON	PR-8530A	1
3	BUSHING	PR-8538	1
4	SEAL	PR-8539	1
5	RING	PR-8540	1
6	LOCK RING	PR-8541	1
7	TOP NUT COMPLETE	PR-8529	1
8	WIPER SEAL	PR-8529A	1
9	O-RING	PR-8529B	1
10	O-RING	PR-8529C	1
11	SEALON	PR-8582A	1
12	BREATHER	PR-8582	1
13	SEALON	PR-8528	1
14	FILLER SCREW	PR-8527	1
15	SPLIT PIN	PL-20274S	2
16	ADJUSTING SCREW	PR-8542	1
17	WASHER	PR-8543	2
18	SPRING	PR-8544	1
19	8mm BALL	PR-8545	1
20	9mm BALL	PR-8546	1
21	ADJUSTING SCREW	PR-8547	1
22	VALVE SEAT	PR-8549	1
23	NEUTRAL VALVE	PR-8548	1
24	O-RING	PR-8548B	2
25	O-RING	PR-8548A	2
26	O-RING	PR-8551	1
27	PIN	PR-8554	1
28	U-RING	PR-8552	1
29	VALVE SCREW	PR-8553	1
30	WASHER	PR-8555	1
31	BUSHING	PR-8556	1
32	WASHER	PR-8537	1
33	SPRING	PR-8533	1
34	PUMP CYLINDER	PR-8536	1
35	U-CUP	PR-8534B	1
36	RING	PR-8534A	1
37	COMPLETE QUICK LIFT PISTON	PR-8534	1
38	COMPLETE UNION NUT	PR-8535	1
39	UNION NUT O-RING (THREAD)	PR-8535C	1
40	UNION NUT O-RING	PR-8535B	1
41	UNION NUT SEAL	PR-8535A	1
42	WASHER	PR-8532	1
43	TOP SCREW	PR-8531	1
44	CONTROL ROD COMPLETE	PR-20274AC-M	1
45	LOCK NUT	PL-90571	1
46	LEVER CLIP	PR-8519	1
47	SPLIT PIN	PR-8559	1
48	LOWERING ARM	PR-8558	1
49	PIN	PL-20275	2
50	BUSHING	PL-20306	2
51	SPLIT PIN	PL-90569E	1
52	CONTROL LEVER	PL-20274BD-M	1
53	BALL	PL-10254-M	2
54	SPRING	PL-20274C-M	1
55	CAP	PL-20274E	1
56*	COMPLETE HANDLE	PR-20276M-M	1

PUMP & HANDLE ASSEMBLY ELECTRIC



Item No.	DESCRIPTION	Part No.	Qty.
1	BALL	PL-10244	1
2	PISTON	PR-8530A	1
3	BUSHING	PR-8538	1
4	SEAL	PR-8539	1
5	RING	PR-8540	1
6	LOCK RING	PR-8541	1
7	TOP NUT COMPLETE	PR-8529	1
8	WIPER SEAL	PR-8529A	1
9	O-RING	PR-8529B	1
10	O-RING	PR-8529C	1
11	SEALON	PR-8582A	1
12	BREATHER	PR-8582	1
13	SEALON	PR-8528	1
14	FILLER SCREW	PR-8527	1
15	SPLIT PIN	PL-20274S	2
16	ADJUSTING SCREW	PR-8542	1
17	WASHER	PR-8543	2
18	SPRING	PR-8544	1
19	8mm BALL	PR-8545	1
20	9mm BALL	PR-8546	1
21	ADJUSTING SCREW	PR-8547	1
22	VALVE SEAT	PR-8549	1
23	NEUTRAL VALVE	PR-8548	1
24	O-RING	PR-8548B	2
25	O-RING	PR-8548A	2
26	O-RING	PR-8551	1
27	PIN	PR-8554	1
28	U-RING	PR-8552	1
29	VALVE SCREW	PR-8553	1
30	WASHER	PR-8555	1
31	BUSHING	PR-8556	1
32	WASHER	PR-8537	1
33	SPRING	PR-8533	1

Item No.	DESCRIPTION	Part No.	Qty.
34	PUMP CYLINDER	PR-8536	1
35	U-CUP	PR-8534B	1
36	RING	PR-8534A	1
37	COMPLETE QUICK LIFT PISTON	PR-8534	1
38	COMPLETE UNION NUT	PR-8535	1
39	UNION NUT O-RING (THREAD)	PR-8535C	1
40	UNION NUT O-RING	PR-8535B	1
41	UNION NUT SEAL	PR-8535A	1
42	WASHER	PR-8532	1
43	TOP SCREW	PR-8531	1
44	CONTROL ROD COMPLETE	PR-20274AC-M	1
45	LOCK NUT	PL-90571	1
46	LEVER CLIP	PR-8519	1
47	SPLIT PIN	PR-8559	1
48	LOWERING ARM	PR-8558	1
49	PIN	PL-20275	2
50	BUSHING	PL-20306	2
51	SPLIT PIN	PL-90569E	1
52	CONTROL LEVER	PL-20274BD-M	1
55	CAP	PL-20274E	1
56*	COMPLETE HANDLE	PR-20276M-E	1
57	RELIEF VALVE	PR-8557	1
58	O-RING	PR-8557B	1
59	O-RING	PR-8557A	1
60	6MM ADAPTER	PR-8513	1
61	SUCTION LINE	PR-8049	1
62	FITTING	PR-8563	1
63	ELBOW FITTING	PR-8515	1
64	10MM ADAPTER	PR-8514	1
65	RETURN LINE	PR-8048	1
66	GROMMET	PC-9066A	1
67	BUTTON HOUSING	PR-20275	1
68	MACHINE SCREWS	MI-SCW10-375	2

ELECTRICAL COMPONENTS

Item No.	DESCRIPTION	Part Number	Quantity
1	BATTERY CHARGER	PR-8503	1
2	CABLE CLAMP	PR-8506	3
3	CONNECTOR COMPLETE WITH LUGS	PR-8501B	3
4	LIFT BUTTON	PC-3017	1
5	HANDLE CABLE	PR-8042	1
6	HYDRAULIC POWER PACK	PR-8500	1
7	18" BATTERY CABLE	PR-8510	1
8	30" BATTERY CABLE	PR-8509	1
9	TERMINAL COVER	PR-8511	1
10	REMOTE INPUT CONNECTOR	PR-8521	1
11	CONNECTOR HOUSING	PR-8524	1
12	ELECTRIC SOLENOID	PR-8525	1
13	GROMMET	PC-9066	1
14	CABLE CLAMP	PR-8505	1
15	GROMMET	PC-9066A	2
16	REMOTE WIRE SET	PR-8521A	1

LIFT-RITE®

HAND PALLET TRUCKS • STACKERS • ERGONOMIC 3000

Matching of people and Machinery Requirements

WARRANTY

Lift-Rite Inc. guarantees all parts to be free from manufacturing defects for a period of 12 months from date of purchase, provided the ERGONOMIC 3000 has not been abused and is used under normal conditions. Wearable components are guaranteed for 3 months from date of purchase. In case of premature failure of the hydraulic pump or any other components, Lift-Rite will replace the defective parts, free of charge. Labor, however, is not covered.

Due to LIFT-RITE'S continuing product development program, specifications are subject to change without notice.
Contact your authorized LIFT-RITE dealer to confirm the most recent specifications.