

700 Dartmouth Lane Buffalo Grove, IL 60089 Phone 847 325-2930 Fax 847 325-2959 Toll Free 800 837-6540

## LIFTOMATIC OWNERS MANUAL

### LIFTOMATIC "PARROT-BEAK®" DRUM HANDLING EQUIPMENT

# PORTABLE UNIT SERIES THE "ERGO-MATIC®" COUNTER BALANCE DRUM TRANSPORT FOR SINGLE DRUM MOVEMENT

WARNING: Do not install, operate or service this product unless you have read and understand the safety practices, warnings, and operation and service instructions contained in this manual. Failure to follow these guidelines may result in less than efficient drum handling routines. Please consult Liftomatic if you require additional information or if you have questions. (PH: 800.837.6540 or FAX: 847.325.2959 or email: <a href="mailto:info@liftomatic.com">info@liftomatic.com</a>). Thank you very much for your business.



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### OPERATIONS OVERVIEW ERGO-MATIC® DRUM TRANSPORTER MODEL ERGO650-CB-PL

The Ergo-Matic product line was developed in 1994 for customers having applications to lift, lower, transport and position drums without the use of a forklift truck. Certain applications, including laboratories, pilot plants, research facilities and testing sites have physically restricted areas that are not conducive to the long load centers of forklifts, stackers and attachments. Thus, the Ergo-Matic was conceived, designed and brought to market.

Today, several thousand Ergo-Matic units are at work around the world. Perfect for operations requiring male and female operators to manipulate drums in tight spaces, the line has been expanded to include over 20 models with various features and options to suit nearly any applications.

#### I. ERGO650-CB-PL OPERATING INSTRUCTIONS:

Your new Ergo-Matic unit arrives shrink wrapped and strapped to a pallet. To begin, remove the shrink-wrap, cut the banding and use a forklift or other lifting device to remove the unit from the pallet. With a pallet ramp, the unit can also be wheeled from the pallet manually. Follow the ensuing steps.

- 1) Check the unit to see that no visible damage has occurred in the shipping process. Inspect wheels, corners, the parrot-beak® clamping mechanism, all buttons, fittings, and fasteners.
- 2) The unit is shipped to you with the batteries fully charged. However, we recommend that prior to use, you charge the batteries in the event of any drainage in electrical charge during shipment. To charge, simply open the box containing the charger, THEN ENSURE THAT THE CHARGER SWITCHES (ON THE FRONT OF THE CHARGER) ARE SET TO 24VOLT AND AUTOMATIC SETTINGS PRIOR TO CHARGING! When you are ready to charge, simply plug the charging receptacle into the front of the unit (this receptacle is on the front face of the control panel opposite the user and is marked "Charge"). Push the plug into any 110v wall outlet and begin charging. Allow 6-8 hours for full charge. A charge indicator is located on the battery charger and will give you the status of the current charge.
- 3) When the batteries are fully charged you and you are ready to begin using the unit, proceed by moving the unit in position so the parrot-beak clamp is lowered to a point where the jaw assembly is below the top rim of the drum to be engaged. Push the unit so the parrot-beak makes contact with the drum. Holding the unit against the drum (use manual force to keep the "Parrot-Beak" against the drum or by setting the floor lock), press the "UP" button and the actuator will begin to lift and the parrot-beak will begin moving vertically. Automatically, the jaws will engage (grab) the drum as the actuator continues to lift.
- 4) In the event that the drum is to be moved to a different area prior to placement, do not lift the drum more than six (6") inches from the floor during transport. DO NOT TRANSPORT THE UNIT WHILE DRUM IS LIFTED MORE THAN A FEW INCHES OFF THE GROUND. DOING SO MAY CAUSE DAMAGE TO THE UNIT AND/OR INJURY TO EMPLOYEES. ALWAYS TRANSPORT THE DRUM(S) IN THE LOWEST POSITION POSSIBLE (LIFTOMATIC SUGGESTS JUST 2-3 INCHES OFF THE GROUND).



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#### ERGO650-CB-PL OPERATION INSTRUCTIONS- CONT'D.

5) When you are ready to position the drum for placement at the new location, position the unit head-on to the drum's destination and raise or lower (using up/down push buttons) accordingly until the drum clears the surface to be set on. When the bottom of the drum is clear of the end destination surface, push the unit forward until the drum bottom is fully over that surface. Lower the drum (pushing the lower button) until the Parrot-Beak mechanism releases the drum (upper and lower jaws of the Parrot-Beak must be disengaged completely or the drum will not release). When the drum is released, simply move the unit away from the drum and the procedure can repeat as necessary.

IMPORTANT!!! There are three (3) capacity adjustment settings on the lower chassis of the unit along the middle braces that allow the unit to "telescope". These adjustment holes have a bolt and nylock nut going through the frame and outer-most portion of the chassis leg. If the bolts on both sides were to be removed, the chassis could be separated into two pieces. The shortest adjustment (both pieces of the chassis pushed closest together) is a 500-pound capacity setting. The middle adjustment hole is a 650-pound capacity setting and is the standard setting. The outermost adjustment setting is for the 800-pound capacity upgrade. Please adjust the setting to the required capacity. This adjustment allows the user to shorten or lengthen the unit for workspace confinement and provides a range of operating capacities. \*\*Liftomatic always ships the unit in the correct capacity setting agreed on your companies order.

NOTE: IF ANY EMPLOYEE MODIFIES THE CHASSIS POSITION, TESTING THE UNIT FOR PROPER LIFTING CAPACITY IS NEEDED BEFORE PUTTING THE UNIT INTO SERVICE. NEVER USE THE ERGOMATIC ON DRUMS THAT ARE HEAVIER THAN THE RATED CAPACITY OF THE UNIT.

Useful charge on the batteries will depend on several factors including environment in which the unit is used (cold rooms will deplete more power from the batteries for instance), weights being lifted and overall extension of the linear actuator with each lift/lower cycle. While these factors vary, you can expect at least one full shift of use on a single charge of the battery with almost continual usage.



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#### II. MAINTENANCE INSTRUCTIONS- ERGO650-CB-PL

- 1) The Ergo650-CB-PL unit requires little in the way of routine maintenance. Four main components are to be considered. They are:
  - A) Batteries. The power cells on the units are non-memory. You don't need to run the batteries all the way to full drain prior to charging. If you utilize a routine daily charging station or MRP program for charging in your operations, feel free to charge the batteries on the unit daily. If not, charging them based on your usage factors should be sufficient. The batteries are enclosed in a sealed case under the front top cover of the unit closest to the operators position and do not require either service or routine inspection.
  - B) Linear Actuator. The lifting mechanism is a linear actuator "worm-gear" drive and does not require maintenance. In fact it is a sealed unit and should not be tampered with. As it is electrical in operation, it does not require hydraulic fluid, breathing or similar maintenance required of hydraulic cylinders.
  - C) Parrot-Beak clamping mechanism. The Parrot-Beak mechanism is designed to handle a complete range of steel, fiber and plastic drums. The mechanism is automatic and mechanical and does not require adjustment. The components that make up the clamping mechanism are both machined and cast. All are heat-treated and critical components are surface hardened. The only maintenance required is an occasional application of light grade oil (WD-40 or similar) sprayed into the inner moving parts of the clamp assembly to keep it free of debris and to allow the workings of the upper and lower jaw to move freely. Inspect the clamp to be sure springs are in place and no parts or fasteners are broken or missing. Liftomatic recommends changing springs and links within the "Parrot-Beak" clamp at least once a year (more often in high use, caustic, or other heavy-duty handling environments).
  - D) Wheels. The wheels on the Ergo650-CB-PL are full bearing wheels and are a polyurethane derivative which is intended to handle a variety of surfaces and still be non-marking. Inspect wheels for wear and inordinate tread wear as regular maintenance is performed. Wheels can be replaced by contacting the factory or your authorized Liftomatic distributor. Check wheels, bearings, and connecting hardware periodically to ensure good handling performance.

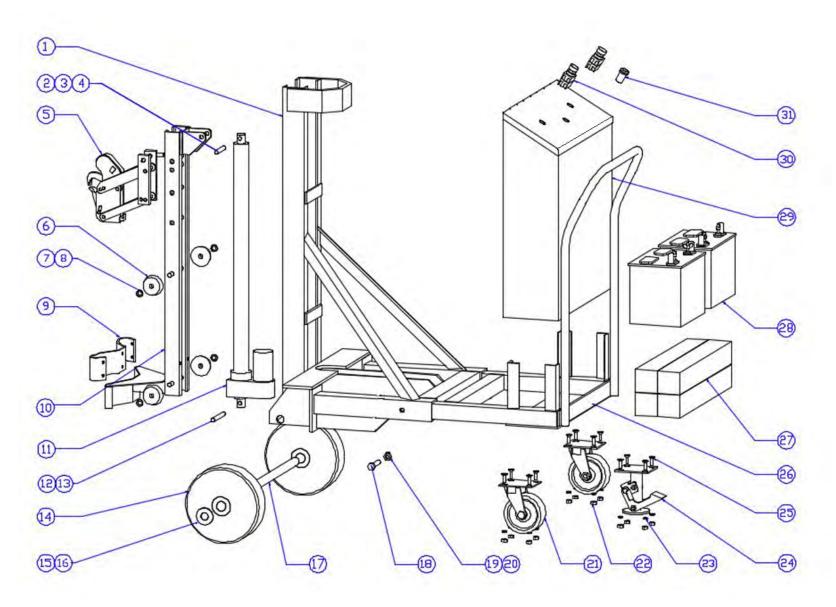
Should you have operating, maintenance or service questions please contact Liftomatic by phone at 1-800-837-6540 or via the Internet at <a href="www.liftomatic.com">www.liftomatic.com</a> or email us at <a href="Sales@liftomatic.com">Sales@liftomatic.com</a> and let us help. We look forward to your contact and as always, we thank you for your business!



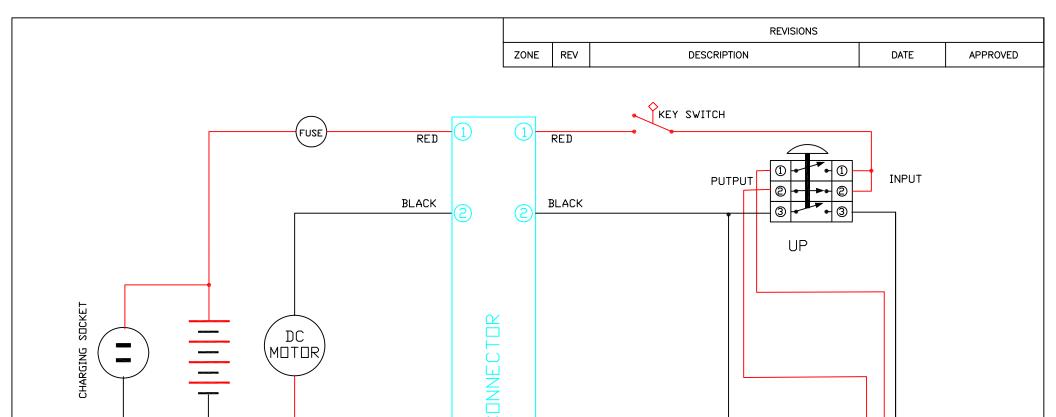
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#### PART LIST ERGO-650-CB-PL #5077-CB/P

No.	Part Number	Quantity	Description
1	2218	1	Front Frame
2	16091	1	Clevis Pin Upper
3	6387	2	Bushing
4	6063	1	Circular Cotter Pin
5	4066-E	1	Single Clamp Head
	4066-ES		Single Clamp Head Spark-Resistant
	4083		Double Head Clamp
	4083-SRJ		Double Head Clamp Spark-Resistant
6	8004-1	4	Tapered Roller
7	6015/6016	8	Round Shim
8	6009	4	Cotter Pin
9	6151	1	Protective Belt
10	2193-E	1	Inner Carrier
11	6288	1	Electrical Actuator
12	16092	1	Clevis Pin Lower
13	6063	1	Circular Cotter Pin
14	6177	2	Front Wheel
15	6071	2	Flat Washer
16	6061	2	Cotter Pin
17	16059	1	Wheel Axle
18	6301	2	Hex Bolt, Frame
19	6094	2	Hex Nut, Frame
20	6078	2	Lock Washer, Frame
21	6174	2	Swivel Caster
22	6092	12	Hex Nut, Caster
23	6079	12	Lock Washer, Caster
24	6176	1	Floor Lock
25	6303	12	Flat Head Screw, Caster
26	2217	1	Rear Frame
27	52016	4	Counter Weight
28	6289	2	Battery
29	2226	1	Enclosure
30	6415/6416	2	Push Button Switch
31	6392	1	Key Switch
32	8223	1	Main Fuse (not shown)
33	8224	1	Fuse Holder (not shown)







PUSH BUTTON: C3 Controls 22PBNC-X QTY = 2 CONTACT BLOCK: C3 Controls 22CB2NO QTY = 2

□R:

PUSH BUTTON: C3 Controls 22PBNC-XXGN QTY = 1
PUSH BUTTON: C3 Controls 22PBNC-XXYW QTY = 1
CONTACT BLOCK: C3 Controls 22CB2NO QTY = 2

CONNECTOR PLUG: 69295K53 CONNECTOR PIN: 69295K21 CONNECOTR RECEPTACLE: 69295K43 CONNECOTR SOCKET: 69295K31

BT⊕ <del></del> C1	C1 U/I-1	U/I-1 U/I-2	U/O-1 D/I-2
BT⊝ <del></del> C4	C2 <del></del> U/□-3	U/D-3 D/D-1	U/O-2- D/I-1
MT⊚ <del></del> C3	C3 <del></del> D/□-3	D/O-3 D/O-2	
MT@ C2	C4 D/I-3	D/I-3 — U/I-3	

DIMENSIONS ARE IN INCHES

DO NOT SCALE DRAWING

USE OF PROPRIETARY INFORMATION
LIMITED TO WRITTEN AGREEMENT
WITH LIFTOMATIC MTL. HDL., INC.

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LIFTOMATIC MATERIAL HANDLING, INC. 700 DARTMOUTH LN. BUFFALO GROVE, IL 60089

INPUT

DRAWN DATE

CHECKED

DESIGN

WIRING ERGO-CB-PL

DOWN

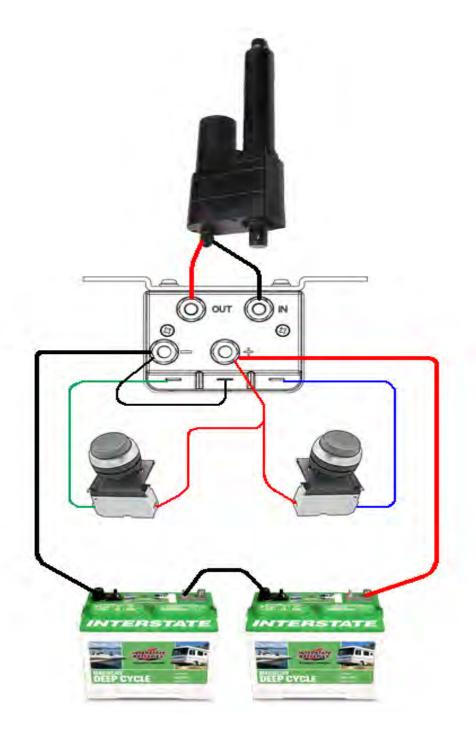
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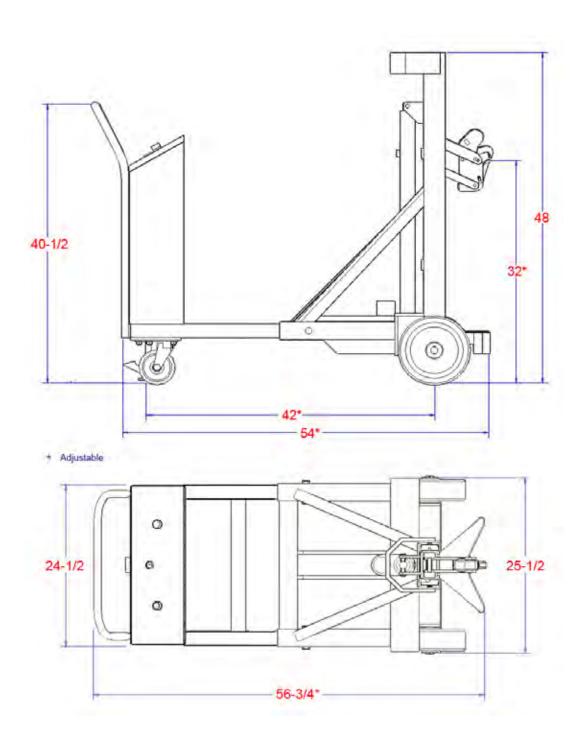
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Wiring Diagram for ERGO-CB-PL



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