# THE ERGO-MATIC® DRUM TRANSPORT POWER DRIVE SERIES MODEL PWPL 750 OWNERS MANUAL

WARNING: Do not install, operate or service this product unless you have read and understand the safety practices, warnings, and operation/service instructions contained in this manual. Failure to follow these guidelines may result in personal injury and or property damage. Please contact Liftomatic should you require additional information (PH: 800-837-6540 FX: 847-325-2959). Thank you.

#### **ERGO-MATIC® 750-PWPL INTRODUCTION**

The Ergo-Matic® 750-PWPL powered drum transporter is designed for lifting and moving drums in a wide variety of industrial settings. It can be used for loading and unloading drums from conventional wooden pallets, containment or "spill" pallets, scales, platforms, or any surface up to 16 inches above ground level (optional models available for lifting up to 30"). The Ergo-Matic® Power Series is comprised of several models with standard capacities up to 750 pounds. Additional capacity is available, but requires hydraulic jack and chassis customizing. An assortment of other options to suit the customers' needs is also available (double "Parrot-Beak®" clamping assemblies, spark resistant packages, etc.). The power series Ergo-Matic® offers simple operation by ANY operator.

This manual contains information to acquaint you with the safe and proper use and upkeep of the Liftomatic Ergo-Matic® drum transport. The manual should be made available to all personnel working with the unit. Before operating the Ergo-Matic, read and understand this manual to become familiar with all operating procedures. Contact Liftomatic at PH: 800-837-6540 -- FX: 847-325-2959 for any additional information. Thank you.

#### **\*\* SAFETY PRACTICES \*\***

- 1. Be certain that the gross "drum load" weighs no more than the unit's maximum rated capacity (750 pounds is the standard PWPL model maximum load limit).
- 2. Do not transport a drum at the maximum lifting height when moving the Ergo-Matic® under load. See that the mast and "Parrot-Beak®" are lowered so the drum has only the needed floor clearance.
- 3. Keep hands and feet away from the area in front of the unit and/or under bottom of the drum during operation. Never try to adjust the Parrot-Beak® clamp while it is being lifted or lowered.
- 4. Do not use the unit on inclined floors with a grade of more than twelve (12) degrees. Consult your supervisor if you are unsure of this requirement. Further, always "back" the Ergomatic unit down inclined surfaces.
- 5. Keep hands or other objects clear of lifting mast, clamping head, wheels, and other movable parts during operation. \*\*Further, never RIDE on this unit. Always walk (and or stand) behind this unit when operating the controls on the control handle.
- 6. Be certain that all components are securely in place before lifting any drum. Regular inspections should be followed prior to any operator using the Ergo-Matic®. See maintenance section.
- 7. Never lay the unit down on its side. Severe damage can occur to the power system, drive wheel assembly, and or unit chassis.
- 8. Never operate the Ergo-Matic® while hooked up to the battery charger. Completely disconnect the unit from the charger before ANY operation. Turn OFF key switch on the unit when not in use.

#### SAFETY PRACTICES CONTINUED (ERGOMATIC 750-PWPL)

- 9. Never leave the unit plugged in under charge for more than twelve (12) hours.
- 10. Sharp turns should be <u>avoided at all times</u> with the Ergo-Matic® 750. Smooth, gradual turns with the unit will offer greater levels of safety and stability. Turn <u>only</u> on level surfaces never on inclines.
- **11.** Please consult the factory for all maintenance procedures, including the power drive assembly components.

#### **\*\* OPERATING INSTRUCTIONS \*\***

The Ergo-Matic® is designed to handle a wide variety of rimmed drums with different overall heights. The clamping head is pin-mounted on the inner mast and there are up to four adjustment holes (depending on the model) for handling drums of different sizes. The height of the clamping head can be adjusted by positioning it in different adjustment holes based on the height of drums. Units shipped from the factory are set to pick up a 35" tall <u>standard</u> 55-gallon drum. The Ergo-Matic® 750 utilizes Liftomatic's exclusive patented "Parrot-Beak®" clamping system. Jaws will engage or release the drum automatically when raising or lowering the clamping head on a drum.

- 1. Remove all packing materials, protective strapping, pallet, and wooden blocks used for shipping. Before usage, check that all springs, pins, casters and lifting components are in place and in good order. DO NOT OPERATE THIS EQUIPMENT IF ANY PART IS MISSING OR IN POOR CONDITION AS THIS WILL DIRECTLY AFFECT THE PERFORMANCE OF THE UNIT. All operators may also want to consult the enclosed "operation safety checklist."
- 2. To lift a drum: Turn on the power ignition key switch (located on the front left of the chassis) and lower steering handle to a 45 degree angle to allow power to release the stop brake. "Drive" the Ergo-Matic (using the black/grey forward/reverse drive levers located on the control handle) toward the drum until the clamping head makes full contact with the drum sidewall. Depress the "lift" button located on the control handle. The inner mast and "Parrot-Beak®" clamping assembly will rise and automatically grab the top chime on the upward lift. The drum will be lifted up off the ground/pallet/platform with further depression of the lift button (*Consult fibre drum handling instructions in this manual to properly lift fibre drums!*). \*\*Liftomatic's double "Parrot-Beak®" clamping system is recommended for all fibre drum pick-up and transporting. <u>Warning: Do not attempt to overload the unit beyond its rated capacity or raise the drum beyond its maximum lifting height.</u>
- 3. To transport a drum, adjust the height of the drum to approximately two (2") to three (3") inches above floor level. Then "drive" the unit (forward or reverse) to the desired location. (Note: operators should "back" the Ergomatic down any inclined surface. This will provide more support for the drum). \*\*The harder the black/grey drive levers are depressed, the faster the unit will travel they are pressure sensitive. Turn off all power (key switch) when not in use.

#### **OPERATING INSTRUCTIONS CONTINUED**

- 4. NEVER LEAVE THE UNIT AND DRUM ON AN INCLINED FLOOR! Doing so may cause unnecessary wear on the power drive mechanism, braking system, and Parrot-Beak® clamping assembly. NEVER OPERATE THE UNIT ON A SURFACE WITH AN INCLINE OF MORE THAN TWELVE (12) DEGREES. This unit also has a three point support system, thus sharp turns should be <u>avoided at all times</u> with the Ergo-Matic® 750. Smooth, gradual turns with the unit will offer greater levels of safety and stability. Consult your supervisor if you think the operating environment should be checked or analyzed. ALSO, NEVER MAKE TURNS WITH THE ERGOMATIC ON INCLINED SURFACES. TURN ONLY ON LEVEL SURFACES.
- 5. To pick up a drum from a pallet or platform, "drive" the Ergo-Matic forward and approach the drum from whichever side is the most convenient (or closest to the drum). Drive the Ergo-Matic forward until the Parrot-Beak® head fully contacts the drum sidewall. Then follow step 2.
- 6. To disengage the drum, depress the "lower" button located on the control handle. The inner mast and Parrot-Beak® assembly will slowly lower. <u>IMPORTANT</u>: Just as the drum makes initial contact with the ground/pallet/platform, slightly "drive" the Ergo-Matic back approximately one or two inches. This will remove the load bearing weight from the Parrot-Beak jaws. Further depressing will allow the Parrot-Beak® to release smoothly from the drum.
- 7. To adjust the clamping head to a different adjustment hole, raise up the inner mast with the lift button so that additional adjustment holes are clearly visible above the outer mast (\*\*Note this must be done with NO drum on the "Parrot-Beak®" jaws). After removing the circular retaining fastener, use one hand to hold the clamping head and another to pull out the L-shaped adjustment pin. Slide the head up or down to the desired height and put pin and fastener securely back in place.

#### **\*\* MAINTENANCE INSTRUCTIONS \*\***

- 1. Before every usage (on a daily basis), check that all springs, pins, casters and lifting components are in good working order. WARNING: DO NOT OPERATE THIS EQUIPMENT IF ANY PART IS MISSING OR IN POOR CONDITION AS THIS WILL DIRECTLY AFFECT THE PERFORMANCE OF THE UNIT. The Ergo-Matic® does run on electric battery power, thus a full charge of the batteries will provide the best product performance. Consult the factory for more details or product support (PH: 800-837-6540).
- 2. On a monthly basis, lubricate casters through the provided grease fittings. Greased wheels will offer smoother rolling for the unit. The Parrot-Beak® clamping mechanism should be sprayed with light grade oil on all moving parts to ensure smooth operation as well. It is recommended to keep the clamping mechanism well lubricated and free from foreign materials that may impede proper operation of the jaws and springs. Inspection of the "Parrot-Beak®" components should be made monthly and full disassembly once a quarter to ensure all parts are working properly, and not wearing abnormally. If signs of above average wear occur, components should be replaced on the "Parrot-Beak®" clamp and or rest of the Ergo unit.

#### MAINTENANCE INSTRUCTIONS CONTINUED

3. For heavy usage of the unit, it is recommended that the user replace all springs, rollers and caster wheels annually (semi-annually in extreme usage environments). Regular maintenance will ensure a longer working life for the product. Batteries may need to be replaced more frequently depending on amount of usage. Note: <u>all</u> power should be turned off when the unit is not in use. This will preserve the highest amount of battery charge through the unit's 24V system.

DO NOT LEAVE THE ERGO-MATIC® OUTSIDE FOR LONG PERIODS EXPOSED TO ANY KIND OF WEATHER. FURTHER, DO NOT USE ANY KIND OF LIQUID TO CLEAN THE ERGO-MATIC® AND AVOID <u>ANY/ALL TYPES</u> OF POWER WASH DOWNS (WATER CAN CAUSE ELECTRICAL DAMAGE).

#### **\*\* BATTERY CHARGING \*\***

The Ergo-Matic® 750 contains two self-enclosed (deep cycle) batteries. No water or chemical replacement is required. The charging cycle will take approximately five to six hours for a full charge. Batteries can also be trickle charged (for periods less than five hours). Liftomatic does recommend that the unit be charged fully before use, as it will lead to the best performance.

- 1. Be sure that the unit is positioned "out of the way." Once in "position" turn the ignition key off, and let the steering handle return to it's straight up "resting position." This disengages all power from the battery system, and allows you to properly charge the batteries. Plug the charge receptacle into the power unit (on the frame of the Ergo-Matic®), and then plug the charger into a standard 110-service outlet (DO NOT USE VOLTAGE GREATER THAN 110).
- 2. Upon completing the charge, disengage the plug from the 110-service outlet, and then disengage the receptacle from the Ergo-Matic<sup>®</sup>. The battery charger will indicate a full charge after the charging cycle is complete (approximately five to six hours).
- **3.** Turn the ignition key on, lower the steering handle to the 45 degree position and the unit will be ready for operation.

For any further technical assistance, please contact our Customer Service Department at (PH: 800-837-6540). Thank you for your attention!

LIFTOMATIC MATERIAL HANDLING, INC.

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#### OPERATION SAFETY CHECKLIST FOR THE ERGO-MATIC® 750-PWPL

- 1. Be sure all packing materials, banding, or other floor obstructions are out of the way prior to using the Ergo-Matic unit. Check that all springs, pins, casters, and fasteners are properly in place and appear to be in good order. Contact Liftomatic should any questions arise.
- 2. Move the upper and lower jaws back and forth by pulling downward on the lower jaw pin (identified by the vertical inch long oval slot the pin travels within). Also, push the entire "Parrot-Beak®" head assembly down to be sure the vertical springs are engaged properly and control the "Parrot-Beak®" head movement up and down. Should any limitations be found on the clamping head or jaw movement, verify that the parts are clean, and perform a visual inspection as to the problem. Should difficulties persist, take the unit out of service and consult your maintenance personnel or Liftomatic (PH: 800-837-6540).
- 3. Turn on the power ignition key switch (located on the front left of the chassis). This will engage all power to the control handle of the Ergo-Matic unit. All power should be turned OFF when the unit is at rest.
- 4. After turning the ignition switch "on" operators should verify that a positive charge is indicated on the battery charge gauge. If there is less than a 50% charge listed on the gauge, Liftomatic recommends further charging the unit until (at least) a 75%, or a full charge is available. Having a full charge will offer greater operational success with the Ergo-Matic.
- 5. "Drive" the Ergo-Matic two to three feet (by depressing the black/grey drive levers located on the control handle) in both forward and reverse to verify operational movement. (*Pressing the drive levers several times will be required when the unit has been at rest for a minute or two as a part of the internal power source safety verification system*). Also depress the "lift" and "lower" buttons located on the control handle. This will move the inner mast and "Parrot-Beak®" clamp up and down. Operators should also turn the control handle in each direction to verify no obstructions are present through the steering system.
- 6. Consult the fibre drum handling instructions in this manual to properly identify and lift fibre drums should they be a part of your daily handling routines. \*\*Liftomatic recommends all fibre drums be handled with the double "Parrot-Beak®" clamping system. Further, area supervisors should identify all gross weights of the drums to be moved in their locations. Each Ergo-Matic unit has a maximum rated capacity (standard is 750 pounds), and it should NOT be exceeded for any reason.
- 7. Each operator should familiarize themselves with the operating instructions, maintenance requirements, and battery charging specifications for this piece of equipment. Should additional assistance be required, please contact Liftomatic at your earliest convenience. Thank you!

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### LIFTOMATIC "ERGO-MATIC®" ROUTINE MAINTENANCE CHECKLIST

1. On a daily basis, visually verify that all springs, pins, and fasteners are in place and not missing or broken. Further, verify all casters/drive wheels roll smoothly and that the lifting chain (standard push foot pump models) and its anchors are in good working order. Depress each foot pedal on the hydraulic jack (manual models only) to ensure smooth function and no sign of fluid leaking. For all powered models, the hydraulic fluid levels should be checked a minimum of once a week for any signs of leakage.

WARNING: Do not operate the unit if any part is missing or in poor condition, as this will directly affect the performance of the unit.

- 2. On a monthly basis, lubricate casters, wheels and chain sheave with grease through grease fittings. Spray light grade oil on moving parts in the clamping mechanism to ensure smooth operation. It is recommended to keep the clamping mechanism well oiled and free from foreign materials which may impede proper operation of jaws and springs. <u>WARNING: Do not leave the Ergo-Matic® outside in the</u> elements as this will also impede its performance.
- 3. For heavy usage of the unit, it is recommended to replace all springs, fasteners, and hardware on the unit (as well as any broken or worn components) no less than once a year to help ensure good working performance.
- 4. The lifting (hydraulic) cylinder should be inspected regularly once a week is suggested. Also, once a month (or more frequently as needed) a load test should be performed to verify no fluid leaks or worn components are apparent. A seal kit (model dependent) should be put into the unit no less than once a year (or more frequently based on unit performance) to keep the cylinder in good working order.

## Thank you very much for your patronage. For any further technical assistance, please contact Liftomatic's Customer Service Department:

Toll Free: 800.837.6540 or Local Telephone: 847.325.2930 Fax: 847.325.2959 Email : <u>info@liftomatic.com</u> Website : <u>www.liftomatic.com</u>