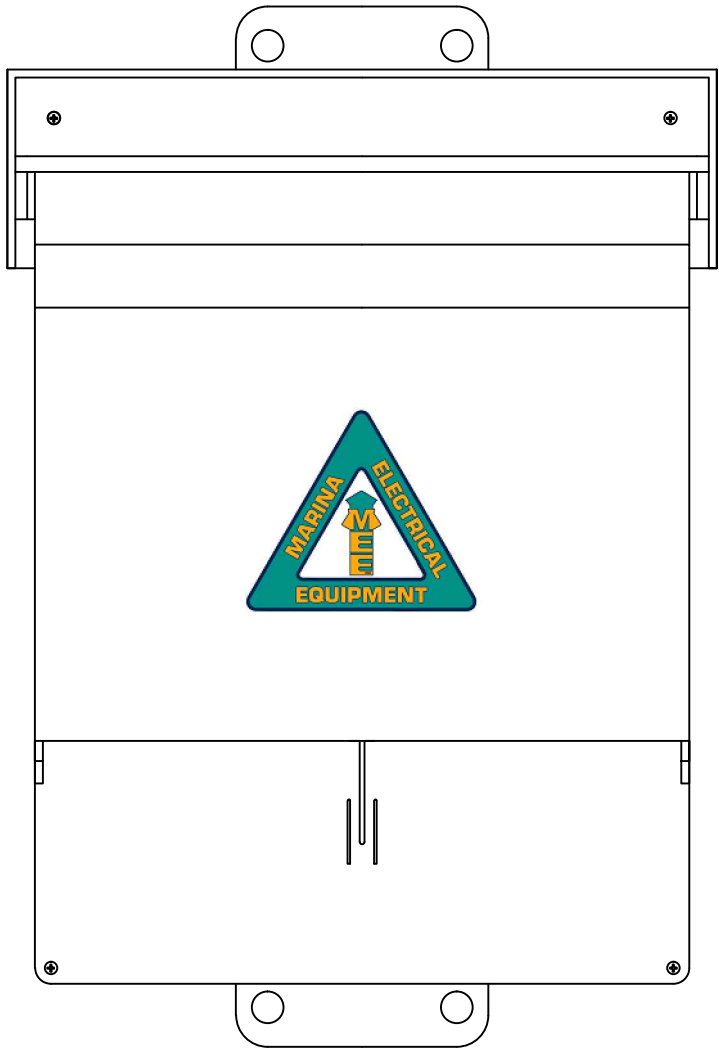


Marina Electrical Equipment
LiftPower
Installation, Operation and
Maintenance Manual



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Williamsburg, VA 23185
Toll Free: 1-855-258-3939
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LiftPower Installation, and Operation Manual

INTRODUCTION:

PRODUCT DESCRIPTION:

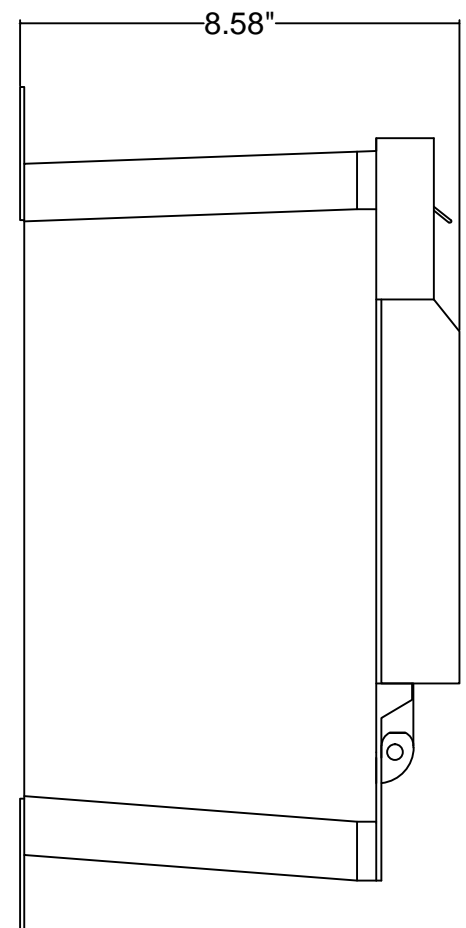
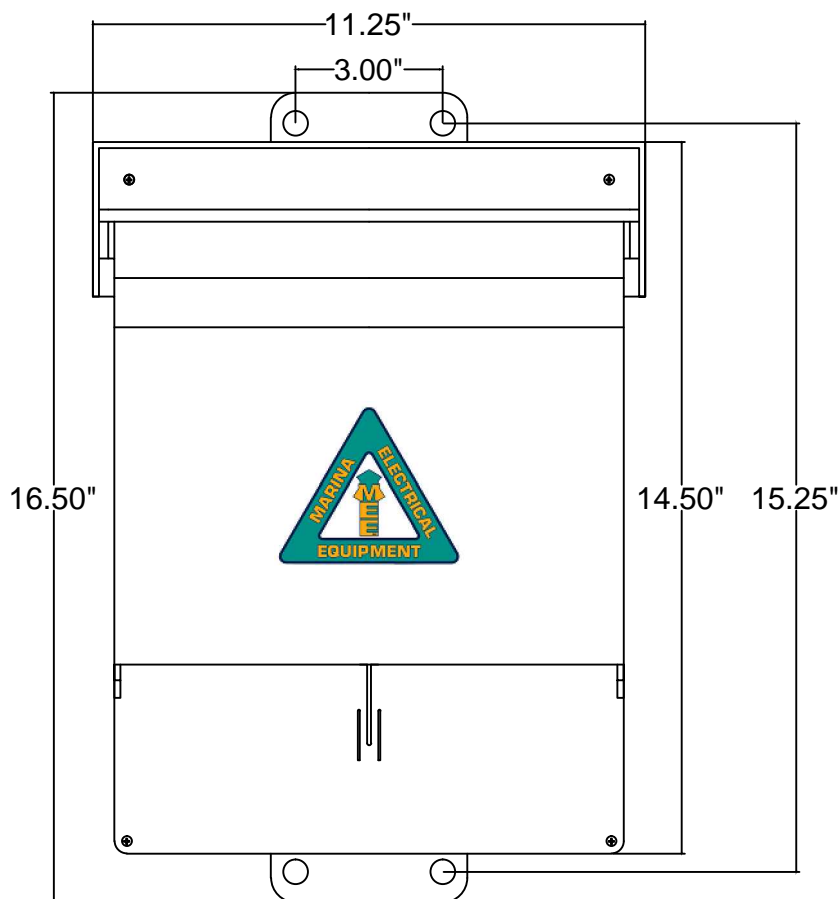
The LiftPower Boat Lift Control system shall be listed under UL @ 508 entitled "Industrial Control Equipment."

It is designed as a NEMA 3RX enclosure for use in outdoor locations such as residential docks or marinas.

FUNCTION: The product provides wireless remote and manual control of boat lift systems using up to 40 amps from up to 250' away without any obstructions.

WARNING: Disconnect power before servicing. Marina Electrical Equipment, Inc. recommends that only qualified personnel or an electrician, familiar with the operation of this control equipment, should install or service this equipment. This product must be installed in accordance with the National Electrical Code (NEC) and any other applicable local codes. Before installing equipment, check with your local electrical inspector for specific requirements and information for your area.

CAUTION: Marina Electrical Equipment, Inc. will not assume any responsibility for property damage or personal injury resulting from misuse of the information in this manual.



LiftPower

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INSTALLATION:

IMPORTANT: Installation manual for use by qualified personnel or an electrician only.

Step 1: Disconnect power prior to any service.

Step 2: Mounting: Secure provided mounting flanges to the exterior housing using provided, stainless steel hardware. Then, secure the assembly to a fixed surface or piling with an unobstructed view of the boat lift.

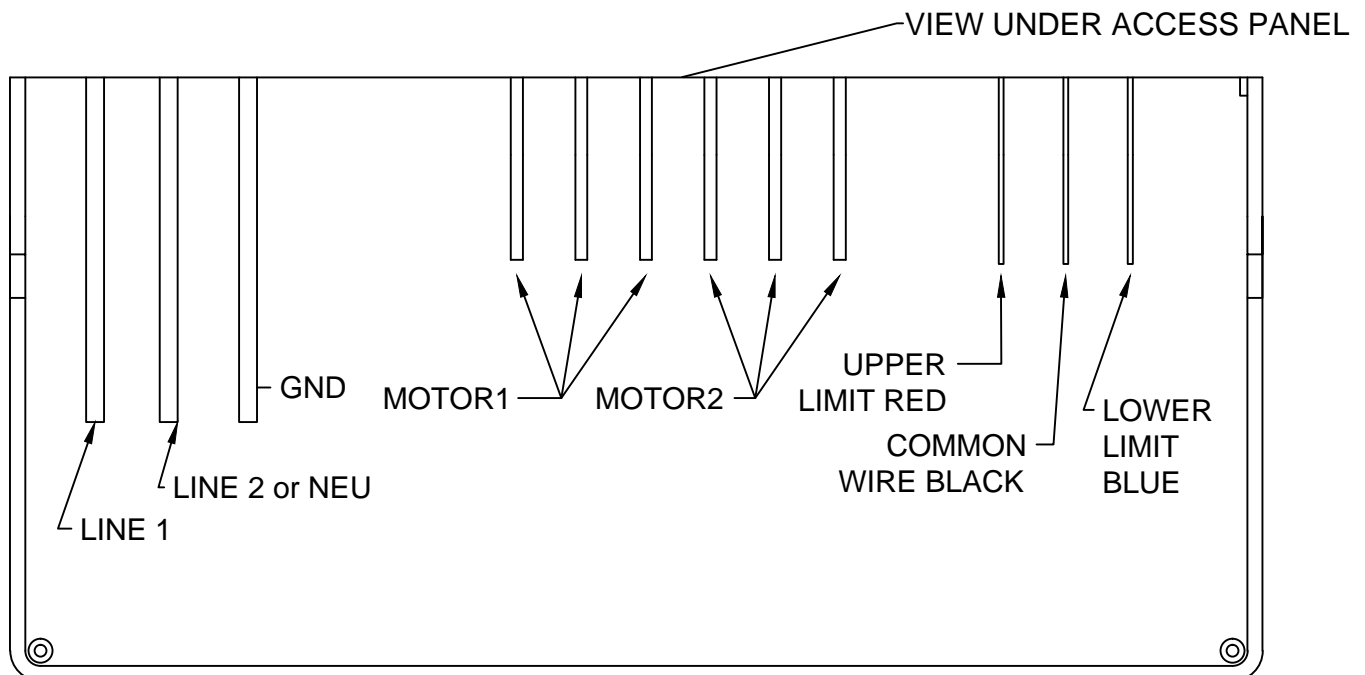
Step 3: Feeder Wiring: IMPORTANT: overcurrent and ground-fault protection provided by others. MEE recommends protecting the LiftPower controller with a GFCI circuit breaker designed to protect personnel from electric shock ($\leq 6\text{mA}$ trip).

120V Wiring: connect the incoming hot wire to the black lead labeled "Incoming." Then, connect the incoming neutral wire to the red lead labeled "Incoming." Connect ground wires to the green ground wire in the unit.

240V wiring: connect the incoming line 1 to the black lead labeled "Incoming." Then, connect the incoming line 2 to the red lead labeled "Incoming." Connect ground wires to the green ground wire in the unit.

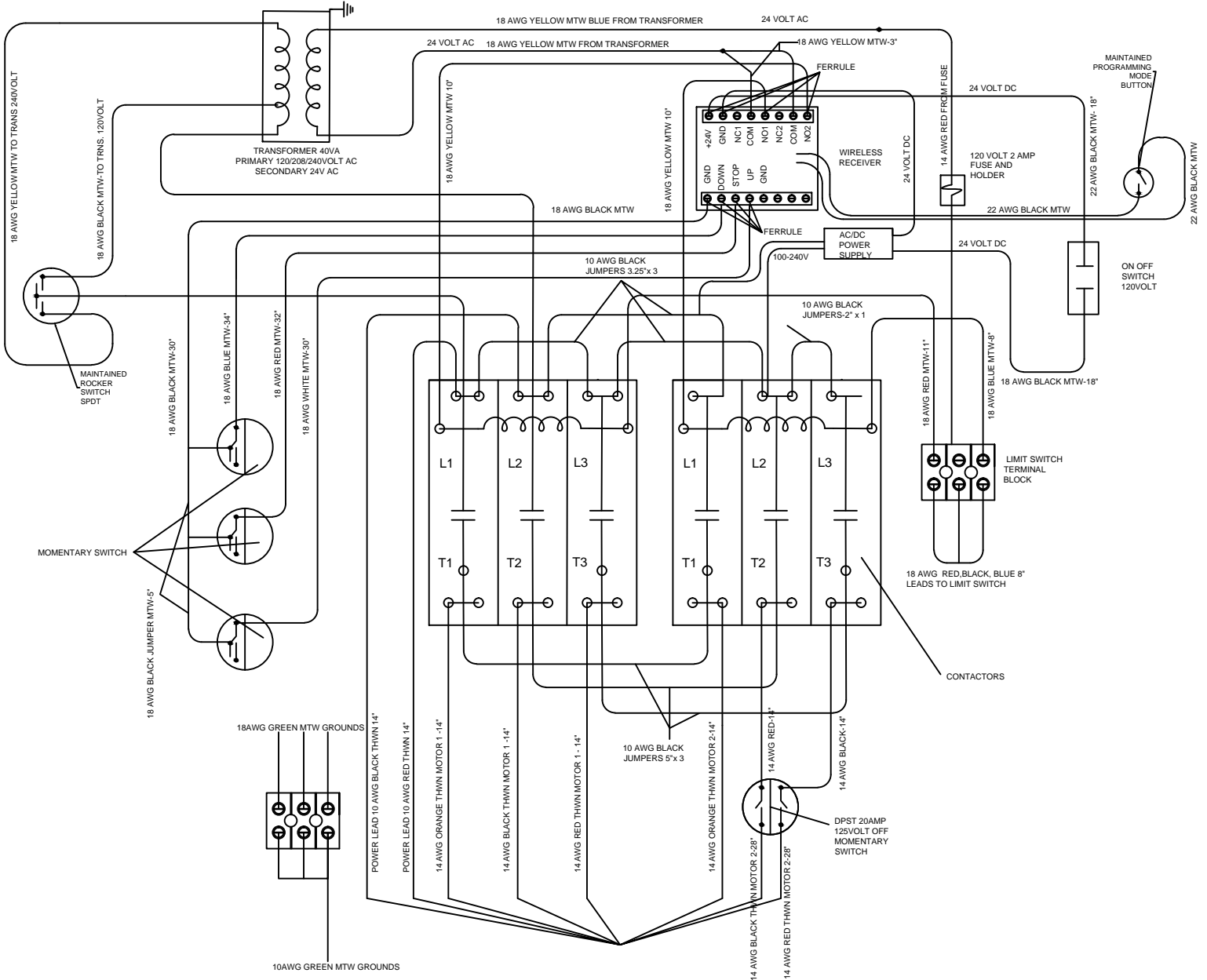
Check that the transformer is wired for the correct voltage. If the black wire from the trans. is connected to the contactor, it is wired for 120V. If the Orange wire is connected, it is wired for 240V. If a neutral is present (120/240V system), cap off the neutral and wire the unit using 240V wiring instructions.

Step 4: Limit Switch Wiring (Optional): Connect the black wire from the limit switch to the 18 AWG black wire in the limit switch circuit. Connect the red wire coming for the limit switch to the 18 AWG red wire in the limit switch circuit. Connect the blue wire from the limit switch to the 18 AWG blue wire in the limit switch circuit. Specify lift/limit switch type when ordering. The limit switch type for flat plate drive type boat lifts require the FDLS. E-Drive boat lift drives require EDLS, and the Rotary limit switch (RDLS) fits a number of different types of lifts. Consult with the lift manufacturer to determine the correct type.



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Electrical Wiring Diagram



Specifications Subject to Change Without Notice

END OF SECTION

LiftPower Installation, and Operation Manual

OPERATION:

Step 1: Turn on power to the unit, then turn on the 24V supply.

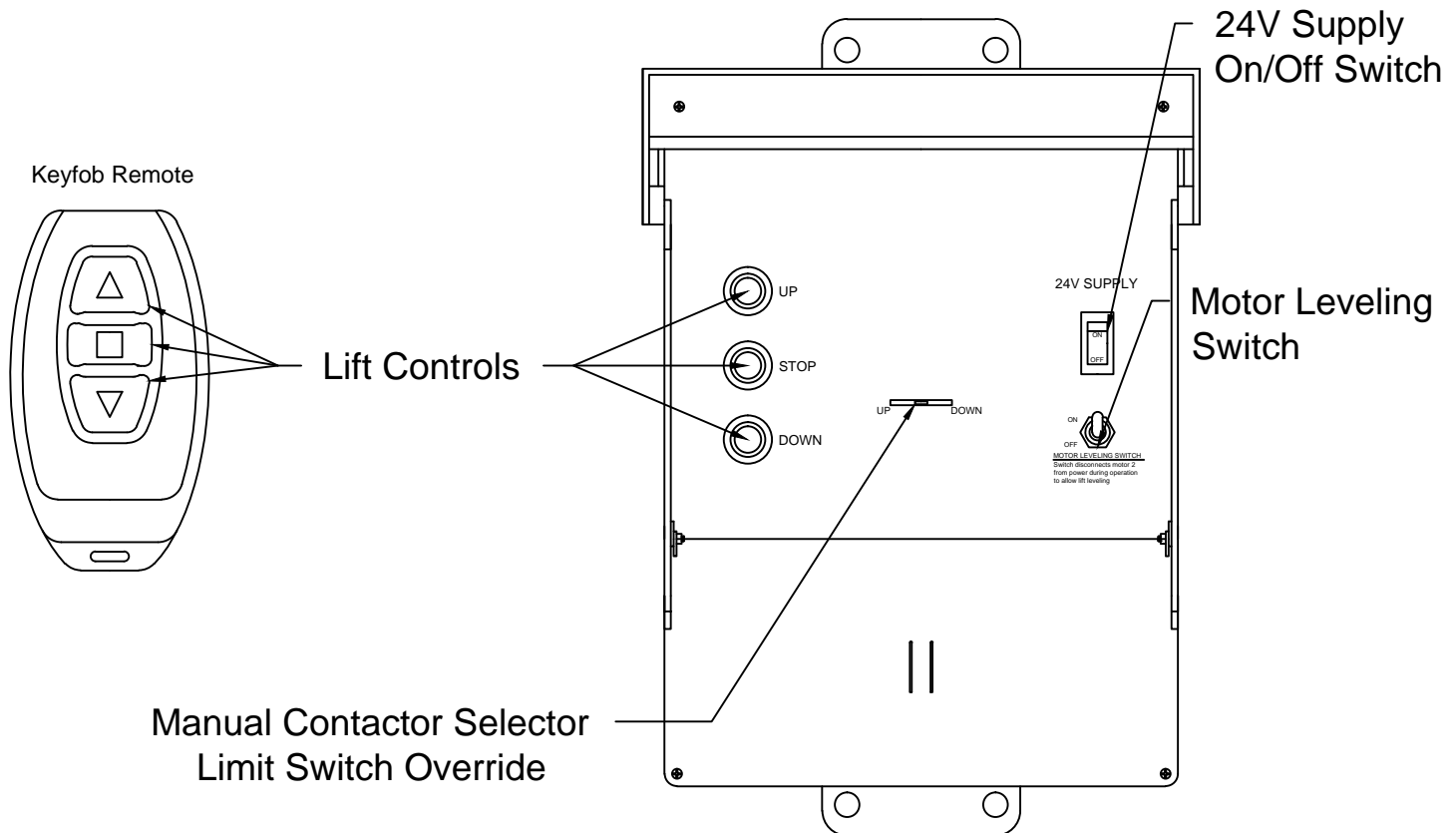
Step 2: Inspect the boat lift for worn parts, loose belts and any other signs indicating the lift is not ready for operation. Do not operate the lift with anyone on it.

Step 3:
Once the lift is safe to operate, press the up or down button on the remote or on the unit to move the lift. If a limit switch is installed, the lift will continue running until the upper or lower limit is reached, even after the button is released. The lift can be stopped using the stop button on the remote or unit at any time. Note if an optional limit switch is not installed, or the unit is produced with momentary operation, the button must be held until the lift is at the desired height.

Leveling Lift: Determine which direction motor 1 needs to move to level the lift. Turn the 24V supply switch off. Hold the motor leveling switch down to disconnect motor 2 from power. Push the Manual contactor selector firmly in the direction motor 1 needs to travel. Release the selector quickly once the lift is level. **Do not release the leveling switch while lift is moving.**

Manual Contactor Selector: For use only when leveling lift, or if standard controls are not working. **Always turn 24V supply off when using this feature.**

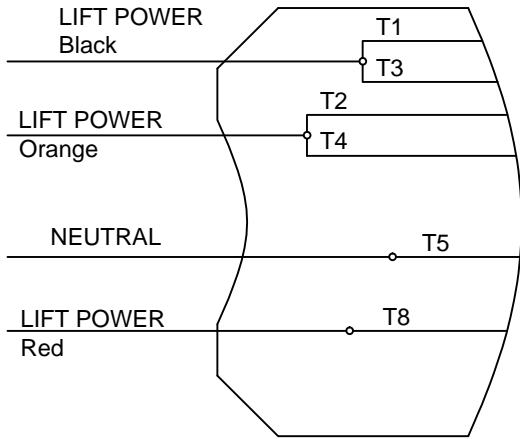
Warning: When lift is not in use, turn off the 24V supply to protect against unintended operation.



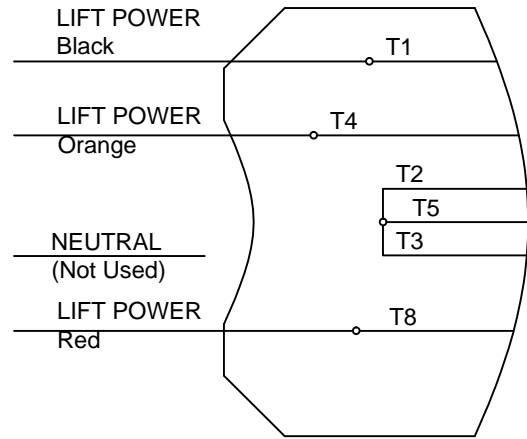
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Marina Electrical Equipment LiftPower Motor Wiring

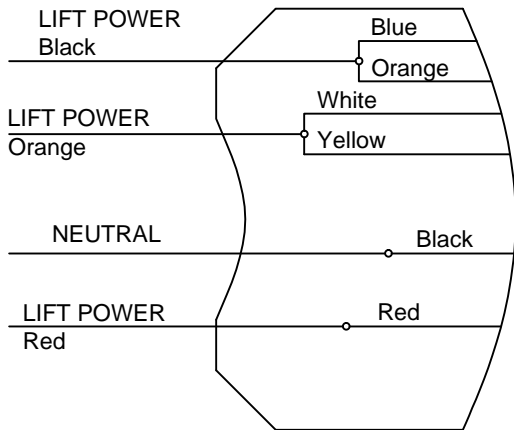
Standard T numbered
motors 120V



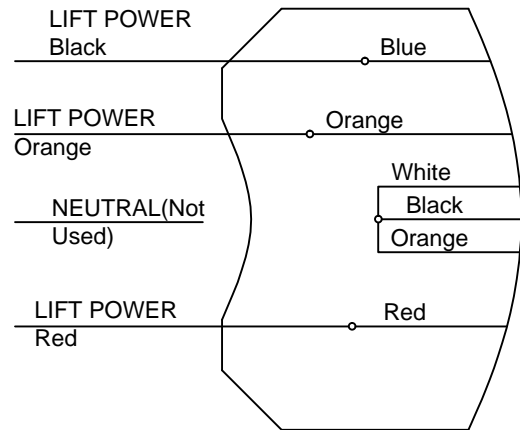
Standard T numbered
motors 240V



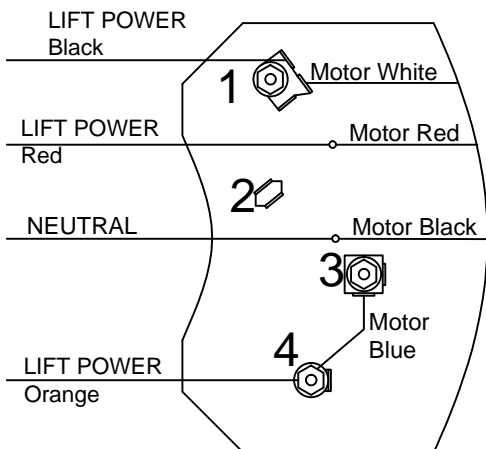
Standard colored wire
motors 120V



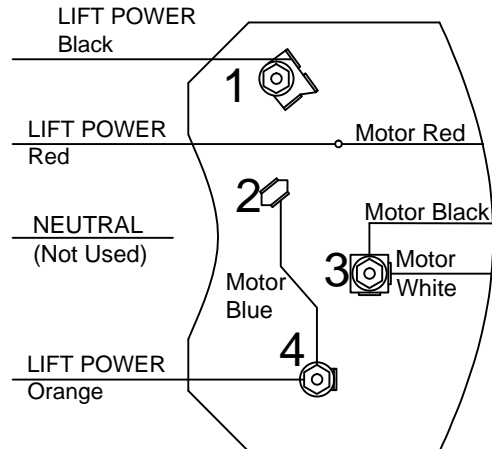
Standard colored wire
motors 240V



Elite motors 120V



Elite motors 240V

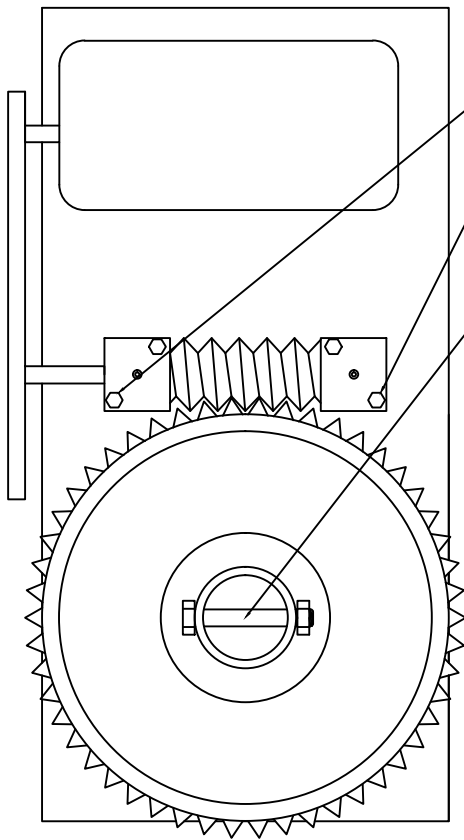


Make connections using wirenuts or terminals provided on the motor. To change motor direction, switch the black and red motor wires.

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Flat-Plate Drive Limit Switch FDLS

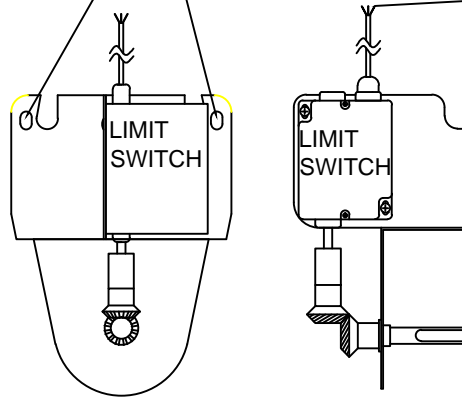
1: Remove the cover from Motor 1.



2: Remove these bolts from the Motor 1 assembly.

3: When the shaft bolt is horizontal, place the fork over the bolt.

4: Then line up the holes on the limit switch with the removed bolt holes and replace the bolts.



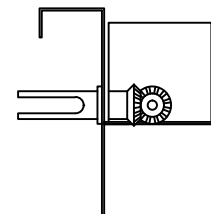
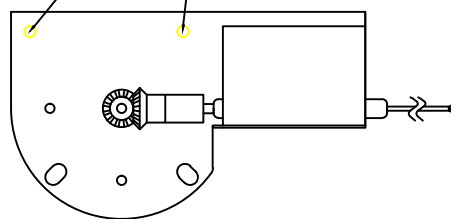
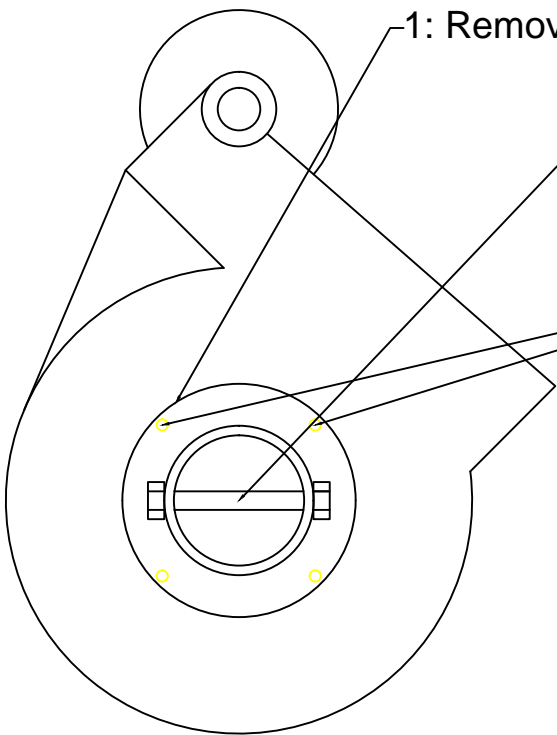
5: Route the limit switch to the control unit, and connect it color to color to the wires labeled "Limit Switch"

E-Drive Limit Switch EDLS

1: Remove the shaft bolt cover from Motor 1 assembly.

2: Place the limit switch fork over the shaft bolt and line up the holes in the switch with the two top holes on the motor assembly.

3: Use provided 2" bolts to pass through the limit switch and thread them into the motor assembly. Securely tighten bolts to prevent movement.



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WARRANTY POLICY

Housings:

Marina Electrical Equipment, Inc. (MEE) warrants that the main housing and attached parts (faceplate, access panel, door and mounting flanges) will be free from failure resulting from defects in material and/or workmanship, and are covered by a limited warranty of one (1) year. Should any of the above parts fail to comply with the above-mentioned warranty, MEE will either repair or replace the defective part(s), or credit the purchaser for the purchase price of the part. This warranty is voided if any petroleum-based solvent is used anywhere on or near any of the polycarbonate parts.

Internal Components:

MEE warrants that the LiftPower will be free from failure resulting from defects in material and/or workmanship, and are covered for one (1) year. Severe over-voltage conditions such as lightning strikes or abnormal utility surges are not covered. Should a unit fail to comply with the above-mentioned warranty, MEE will either repair or replace the defective part(s)/components, or credit the purchaser for the purchase price of the part. This warranty is voided if the damage to any or all of the components is the result of abuse, misuse, or Force Majeure. This warranty is voided if the factory seal is broken or manipulated.

This warranty policy does not cover damage or failure resulting from abuse, misuse, negligence or Force Majeure. All warranty claims must be made in writing and all defective products shall be returned to MEE for evaluation unless stated otherwise by MEE. MEE will not be responsible for reimbursing the purchaser for any sort of expense incurred by the purchaser as a result of the repair or replacement of a warranty claim.

Send all warranty claims to:

Marina Electrical Equipment, Inc.
1715 Merrimac Trail
Williamsburg, VA 23185
Toll Free: 1-855-258-3939
Fax: 757-258-3988

Specifications Subject to Change Without Notice

END OF SECTION