



1M2S Control Box Wiring & Programming Guide

Parts Referenced



Figure 1. Gel Pad



Figure 2. Remote(s)



Figure 3. Control Board



Figure 4. Call Send Box



Figure 5. Overlimit Rocker x 1

Pan Switch Rocker x 2



Figure 6. Magnetic Limit Switch Mounting Bracket



Figure 7. Magnetic Limit Switch Non-Wired Portion



Figure 8. Magnetic Limit Switch Wired Portion

Gel Pad Buttons and Functions

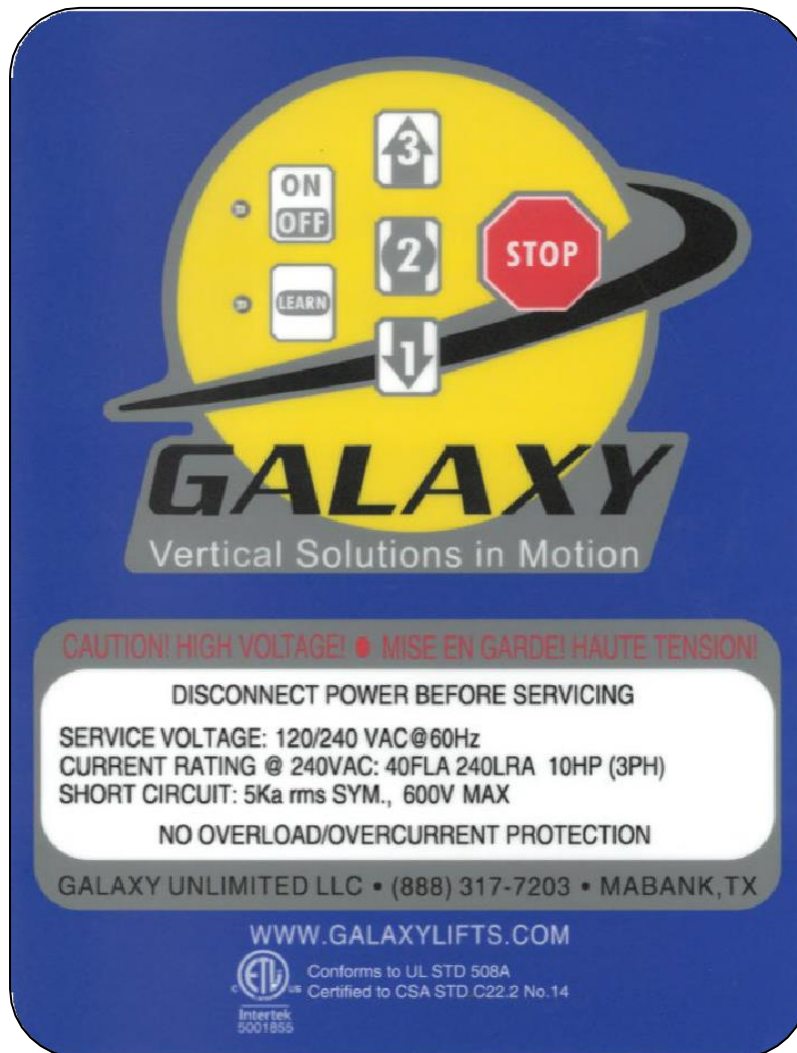


Figure 9

The Gel Pad is the primary control center for your lift. The Gel Pad can turn your unit off and on, send the unit to its levels, or stop the travel in any direction. The remotes are programmed from the Gel Pad.

Remote Functions and Programming

Your remote and gel pad can be programmed for either momentary or latching modes.

Momentary: You must hold the button down for the lift to move.

Latching: Press and release the button and the lift will travel until you stop it, or it reaches its limit.

Momentary

You MUST move quickly during this process!

Please read through instructions thoroughly before starting. The control board will exit the programming mode after 7 seconds of inactivity; you may have to practice the steps a few times before programming your remote successfully.

1. Have all remotes present.
2. Press and hold the learn button on the Gel Pad until the green LED beside the button lights up (approximately 3 seconds).
3. Press the up button on each remote once, you will see a corresponding flash from the learn LED.
4. Give the learn mode 10 seconds to expire, you will see a rapid flash from the learn LED.
5. Now test the remote(s) to see if the programming was successful.

Latching

You MUST move quickly during this process!

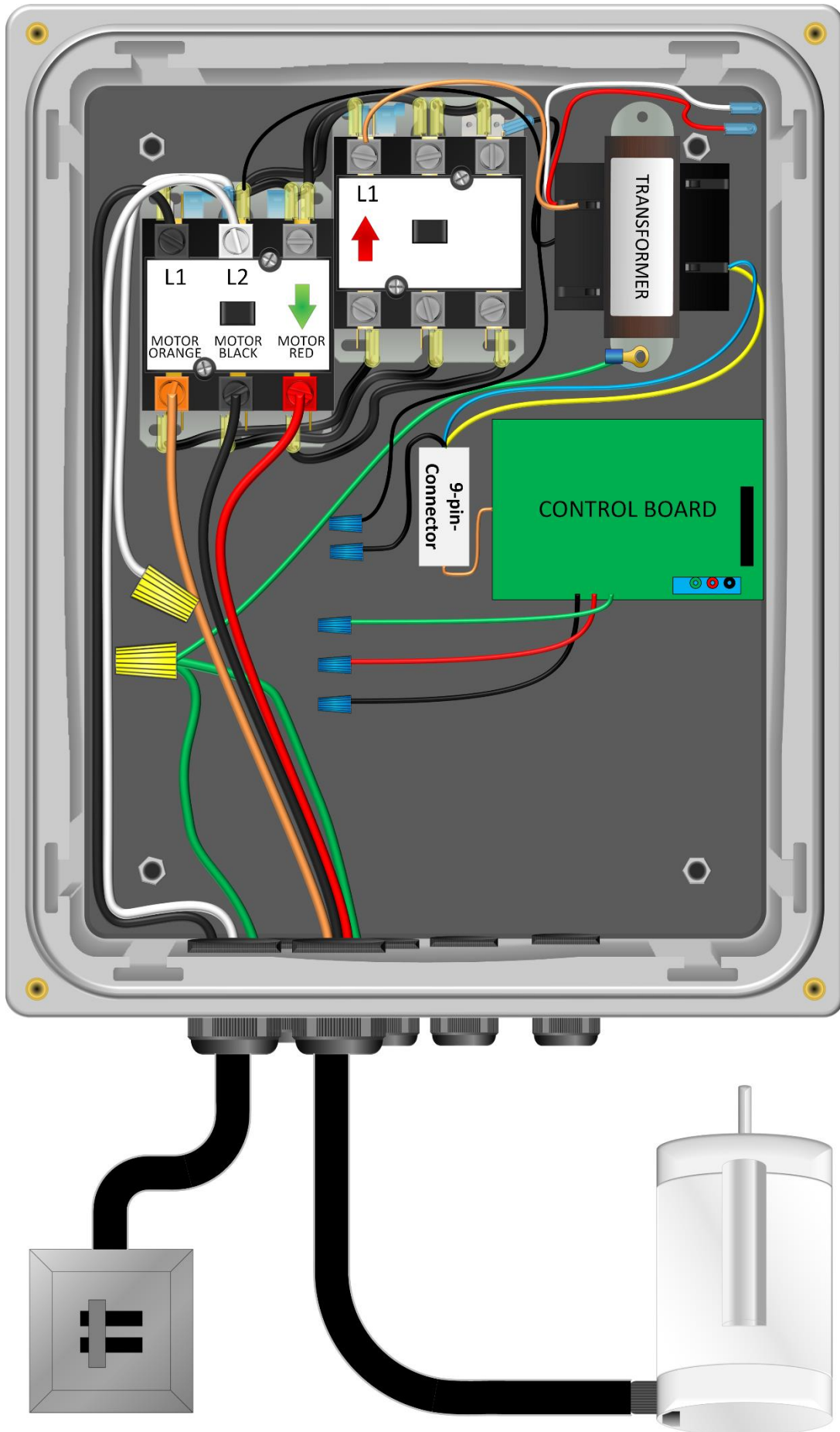
Please read through instructions thoroughly before starting. The control board will exit the programming mode after 7 seconds of inactivity; you may have to practice the steps a few times before programming your remote successfully.

1. Have all remotes present.
2. Press and hold the learn button on the gel pad until the green LED beside the button lights up (approximately 3 seconds).
3. Press the up button once on each of the remotes and twice on the last remote.
4. Give the learn mode about 10 seconds to expire, you will see a rapid flash from the learn LED.
5. Now test the remote(s) to see if the programming was successful.





240 Volt standard Lift Wiring



This diagram is only for 60Hz 240VAC. Verify line in voltage before connecting. If you are not sure of the operation and/or installation of this unit, contact an electrician or contract our office. Galaxy Unlimited, LLC is not responsible for incorrect field wiring, damages to equipment or harm to anyone or anything. Incorrect field wiring will void warranty.

Important:

If the voltage on site does not match the voltage indicated in the Control box door, please call our technical support team to receive further instructions.

Phone: 888-317-7203

Inside Motor Wiring:

Black: T1

Orange: T4

Red: T5

Join: T2, T3, T8

Inside Control Box Motor Wiring:

Orange: Motor Orange

Black: Motor Black

Red: Motor Red

Green: Tied together with Transformer green and Power green.

White: Not used in 240 Volt configuration.

***If your motor is causing your cables to spool backwards on the winder, swap Motor Black and Motor Orange to reverse the rotation of the motor.**

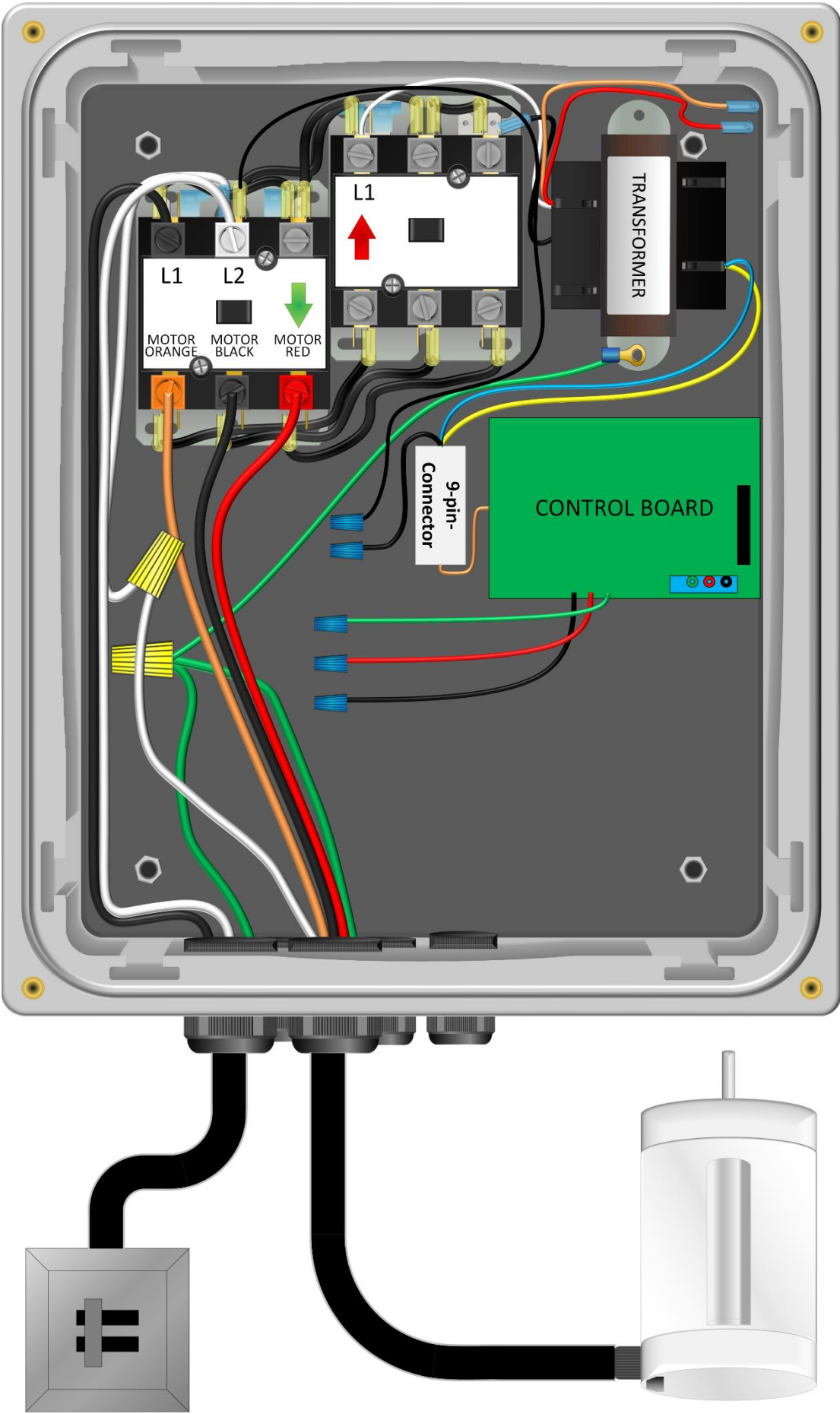
Power Disconnect Wiring:

Black: L1

White: L2

Green: Tied together with Transformer green and Motor Green

120 Volt Standard Lift Wiring



This diagram is only for 60Hz 120VAC. Verify line in voltage before connecting. If you are not sure of the operation and/or installation of this unit, contact an electrician or contact our office. Galaxy Unlimited, LLC is not responsible for incorrect field wiring, damages to equipment or harm to anyone or anything. Incorrect field wiring will void warranty.

Important:

If the voltage on site does not match the voltage indicated in the Control box door, please call our technical support team to receive further instructions.

Phone: 888-317-7203

Inside Motor Wiring:

Black: T1, T3

Orange: T2, T4

Red: T5

White: T8

Inside Control Box Motor Wiring:

Orange: Motor Orange

Red: Motor Red

Black: Motor Black

Green: Tied together with Transformer green and Power green.

White: Tied together with the white wire coming from the bottom of the down contactor.

***If your motor is causing your cables to spool backwards on the winder, swap Motor Black and Motor Orange to reverse the rotation of the motor.**

Power Disconnect Wiring:

Black: L1

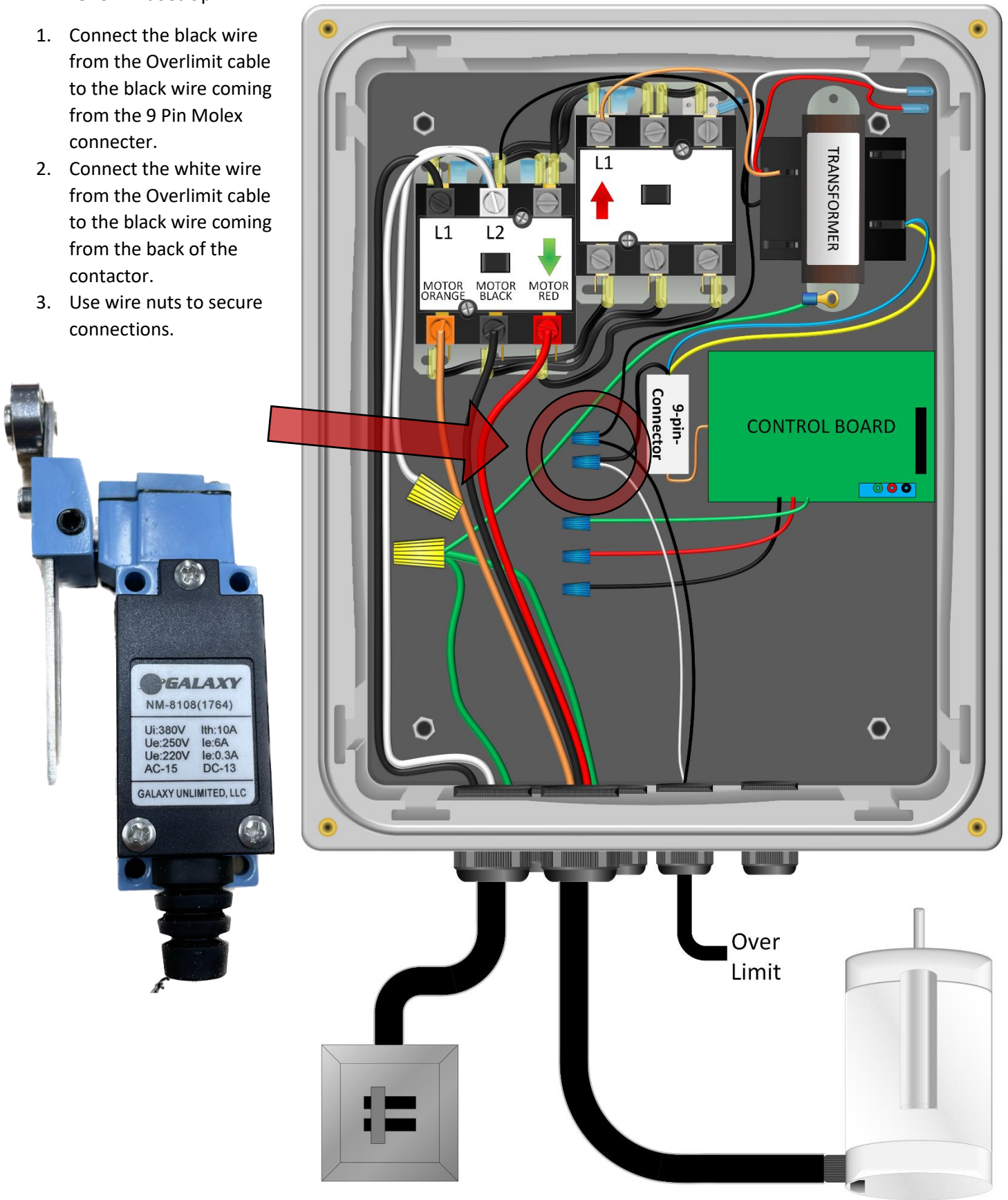
White L2

Green: Tied together with Transformer green and Motor Green

NOTE: The following wiring examples are not affected by whether the lift is wired for 240V or 120V

Overlimit Set Up

1. Connect the black wire from the Overlimit cable to the black wire coming from the 9 Pin Molex connector.
2. Connect the white wire from the Overlimit cable to the black wire coming from the back of the contactor.
3. Use wire nuts to secure connections.





Magnetic Limit Switch Set up

The Galaxy Cargo Lift includes Magnetic Limit Switches, wiring and the necessary mounting hardware. A two-stop cargo lift will have two magnetic limit switch bags. Each bag contains one Wired and one Non-wired component. The two Components comprise one Magnetic Limit Switch.

The magnetic limit switch is designed to stop the lift at a specific location when the two components are near one another. There are no mechanical components, so once the magnetic limit switch is firmly attached in the desired position there should be only minor adjustments required in the future.

The installation hardware includes four (4) pieces of two-sided tape. The tape should be used to temporarily attach the Wired and Non-Wired Components to the cargo lift. This will allow the two Components to be easily removed and relocated during the installation process before permanently attaching the Components with screws.

Please Read All Instructions carefully before starting the installation of the cargo lift.

Limit Switch Installation Procedure

1. Before installing the cargo lift basket to the vertical beams, use the two-sided tape to temporarily mount the Non-wired Component of the Magnetic Limit Switch on the outside of one of the external backbones of the cargo lift. Either of the two backbones is acceptable but note that the Wired Component of the Magnetic Limit Switch will need to be mounted on the vertical beam corresponding to that backbone and you should consider how the wire will be run from the vertical beam to the control box. **The Non-Wired component of the Magnetic Limit Switch must be located within ½ inch of the furthest point to the back of the lift.** That is extremely important as it allows for a precise proximity point between the two components (wired and non-wired) of the magnetic limit switch.

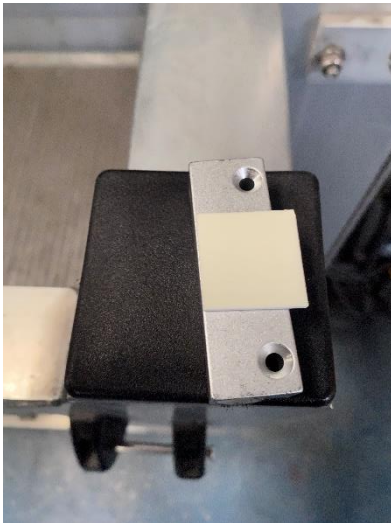


Figure 10. Two-sided tape attached to magnetic component



Figure 11. Magnetic component attached to the backbone

2. Mount the cargo lift basket to the vertical beams and complete the installation of the head assembly, motor, and control box.
3. With the basket installation complete, lower the basket to the desired bottom position. Apply the two-sided tape to the back of the mounting bracket (see figure 12), position the mounting bracket to the back of the vertical beam (see figure 13), attach the Wired Component of the Magnetic Limit Switch to the bracket using the included screws (see figure 14). The Wired Component should be located parallel to the Non-Wired Component

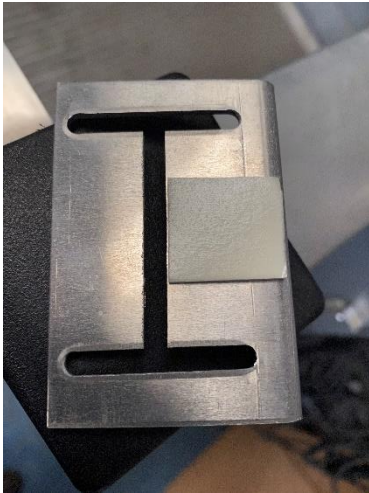


Figure 12. Two-sided tape on the bracket



Figure 13. Bracket tapped to the back of the travel beam



Figure 14. Mounted wired component to the mounting bracket

of the Magnetic Limit Switch. Note that the mounting bracket is designed to allow for some adjustment once the optimal location is identified and the bracket is secured with screws.

4. The next step will be to connect the Wired Component to the control board in the control box. Remove the four screws that secure the gel pad to the control box. BE CAREFUL The connector and ribbon are fragile and will be very difficult to successfully reattach. The Gel pad can be placed in the side of the control box while attaching the wires for the magnetic limit switch (see figure 15).
5. For reference, the figure 16 below show the Control Board, CB, outside the control box. Figure 15 shows the CB installed inside the control box. There are 3 wires (red, green, black) coming from the middle edge of the control board. These wires are called the “limit wires.” They connect to the Magnetic Limit Switches. The other ends of these wires are joined together with a blue wire nut which can be removed. The black wire is the common, the red is for the Top Mag switch wire, and the green is for the Bottom Mag switch wire.



Figure 15. Gel Pad Placed in the side of the control box

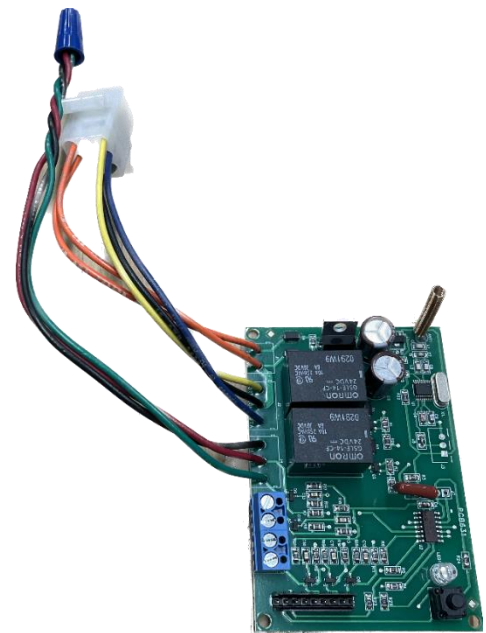
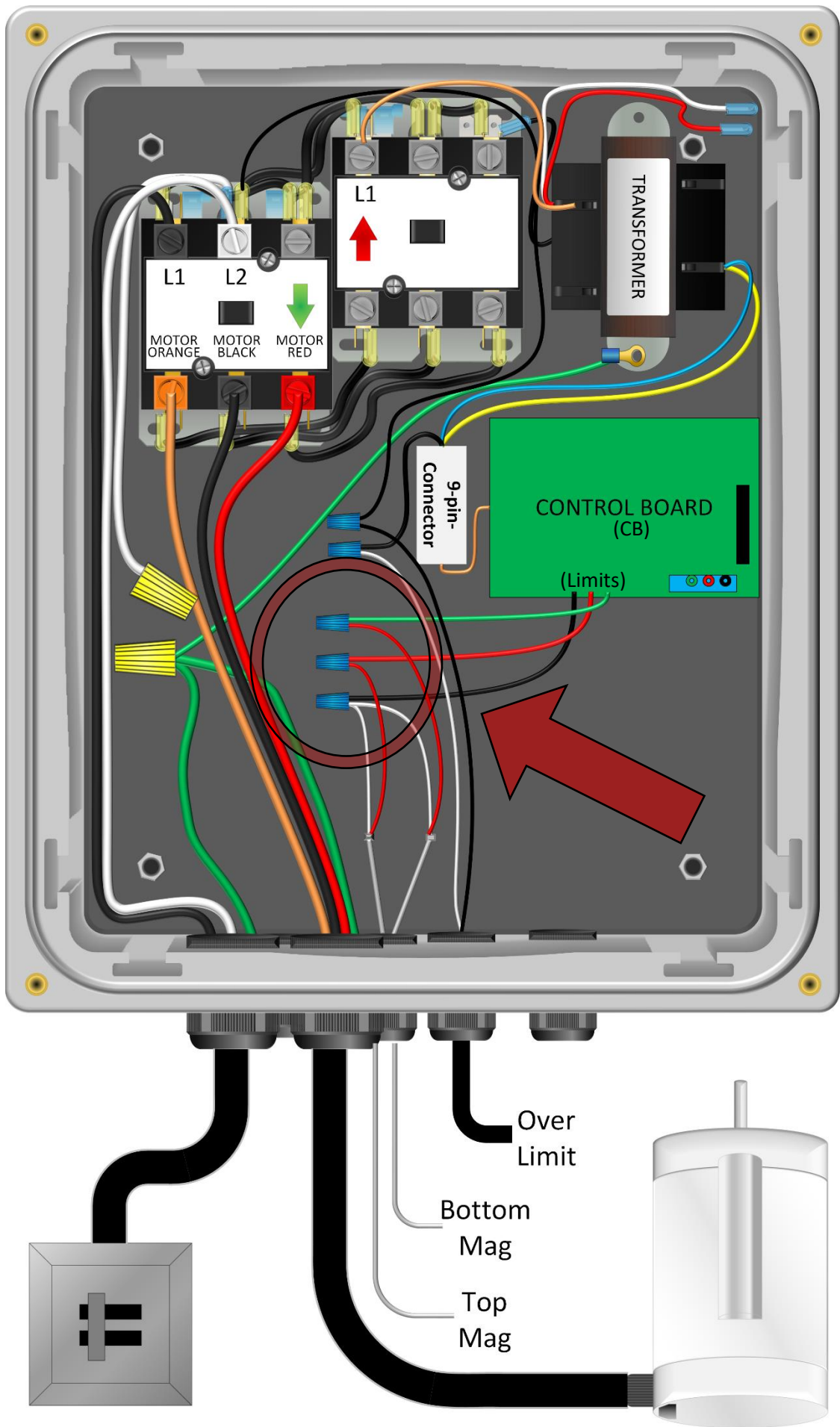


Figure 16. Control board or “CB”



Magnetic Limit Switch Set Up Continued

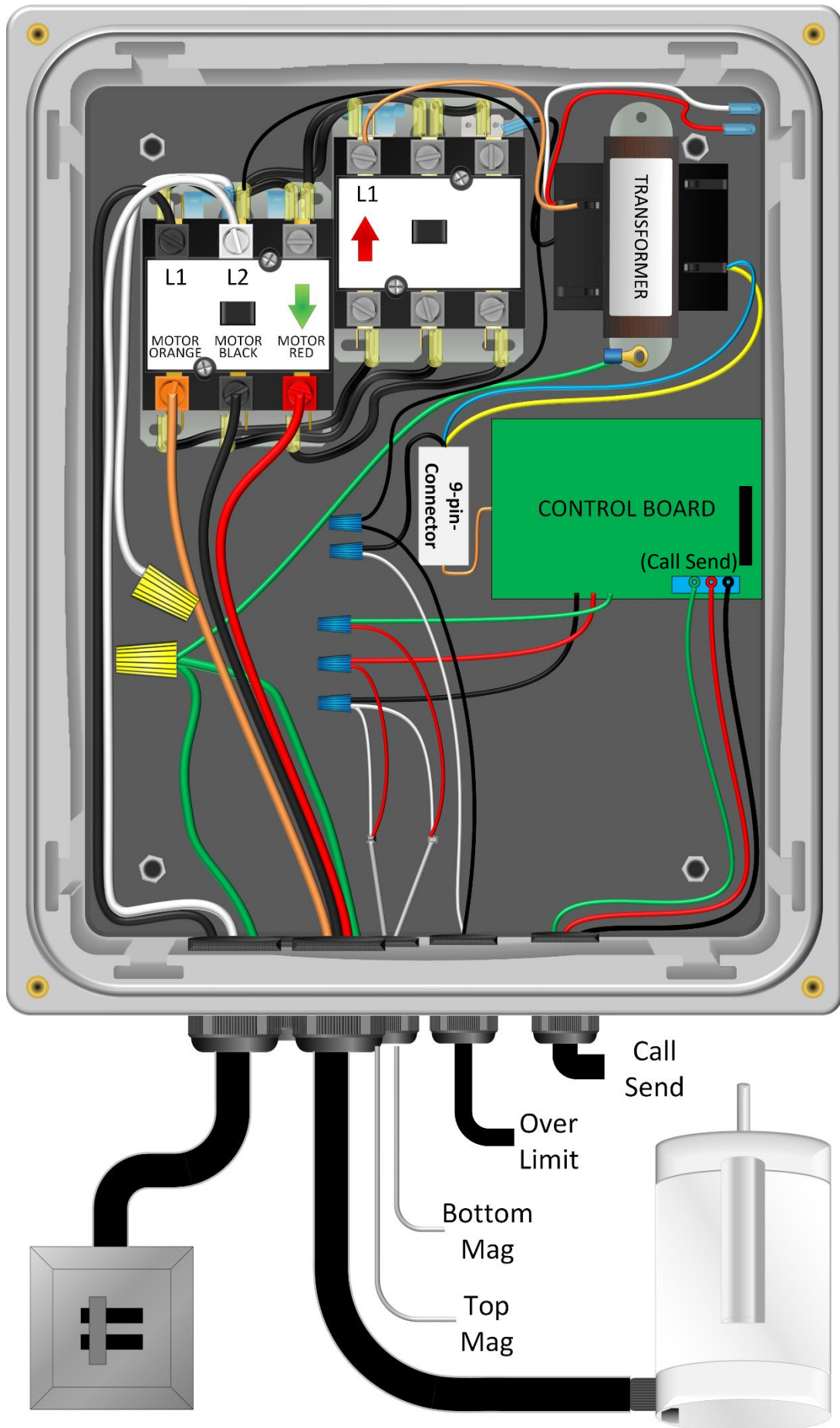
- The Wired component of the Magnetic Limit Switch contains three colored wires (white, red, black). Note that the black wire will not be used in this installation.



Figure 17. Magnetic Limit Switch wires

- Run the ends of the wire for Upper Magnetic Limit Switch, and the Lower Magnetic Limit Switch through the cable glands in the bottom of the control box.
- To connect the Top Magnetic limit switch, connect the black limit wire from the CB to the white wire for the Top Magnetic limit switch. Connect the red limit wire from the CB to red wire from the Top Mag. Note the black wire for the magnetic limit switch is not used.
- To Connect the Bottom Magnetic Limit Switch, connect the black limit wire from the CB to the white wire for the Bottom Magnetic Limit Switch. Connect the green limit wire from the CB to the red wire for the Bottom Magnetic Limit Switch. Note the black wire for the Magnetic Limit Switch is not used.
- Use wire nuts to secure the connections.
- Carefully replace the Gel Pad on the control box with the four screws that secure the pad.
- Using the up and down buttons on the control pad, move the lift to the top and bottom positions, testing the stopping points. Utilizing the two-sided tape, move either one of the two Components of the upper or lower magnetic limit switch as needed to achieve the desired stopping point.
- When the lift is stopping in the desired positions, mark the location for drilling the holes for the attaching screws. There are two holes required for the Non-Wired Component. Use a 1/8" drill bit and two self-tapping screws or two through bolts and nuts as appropriate.
- The wired component will need on hole in the middle of the vertical slot. This will allow for the minor adjustments up or down to the stopping position in the future. A second hole can be drilled in the two horizontal slots to firmly secure the mounting plate. Use a 1/8" drill bit and two self-tapping screws or two through bolts and nuts as appropriate.

Additional Equipment Setup Section (Not Standard)



Call/Send Station

1. Disconnect the electricity going to the lift.
2. Remove the four screws that secure the gel pad to the control box. BE CAREFUL The connector and ribbon are fragile and will be very difficult to successfully reattach. The Gel pad can be placed in the side of the control box while attaching the wires.
3. Find the blue screw terminals located near the Gel Pad connector as shown in figure 18 below.
4. Connect the wires from the call send station as shown in the figure below. **Note that the uncolored terminal furthest to the left is not used in this application.**
5. Reinstall Gel Pad. Route the ribbon cable so that it does not kink sharply.
6. Reconnect power to the Galaxy control box and test.

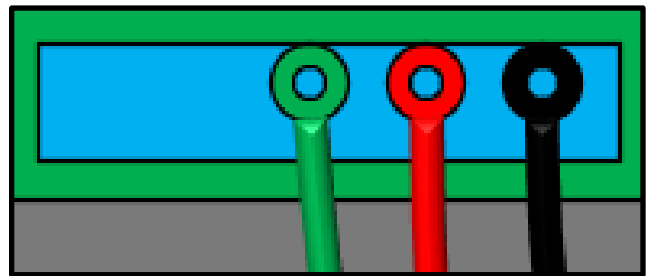


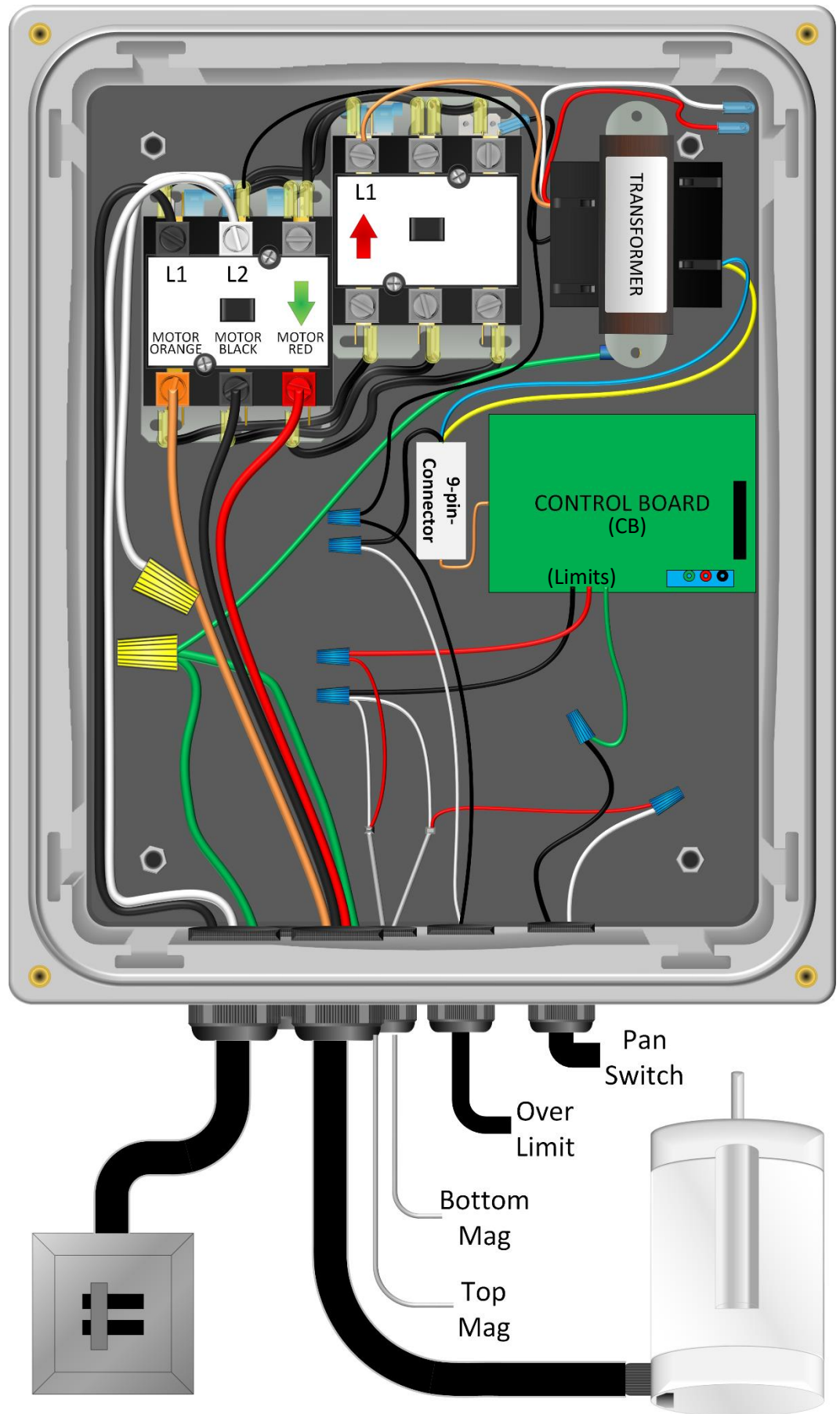
Figure 18. Call Send Station Wiring Terminal



Additional Equipment Setup Section (Not Standard)

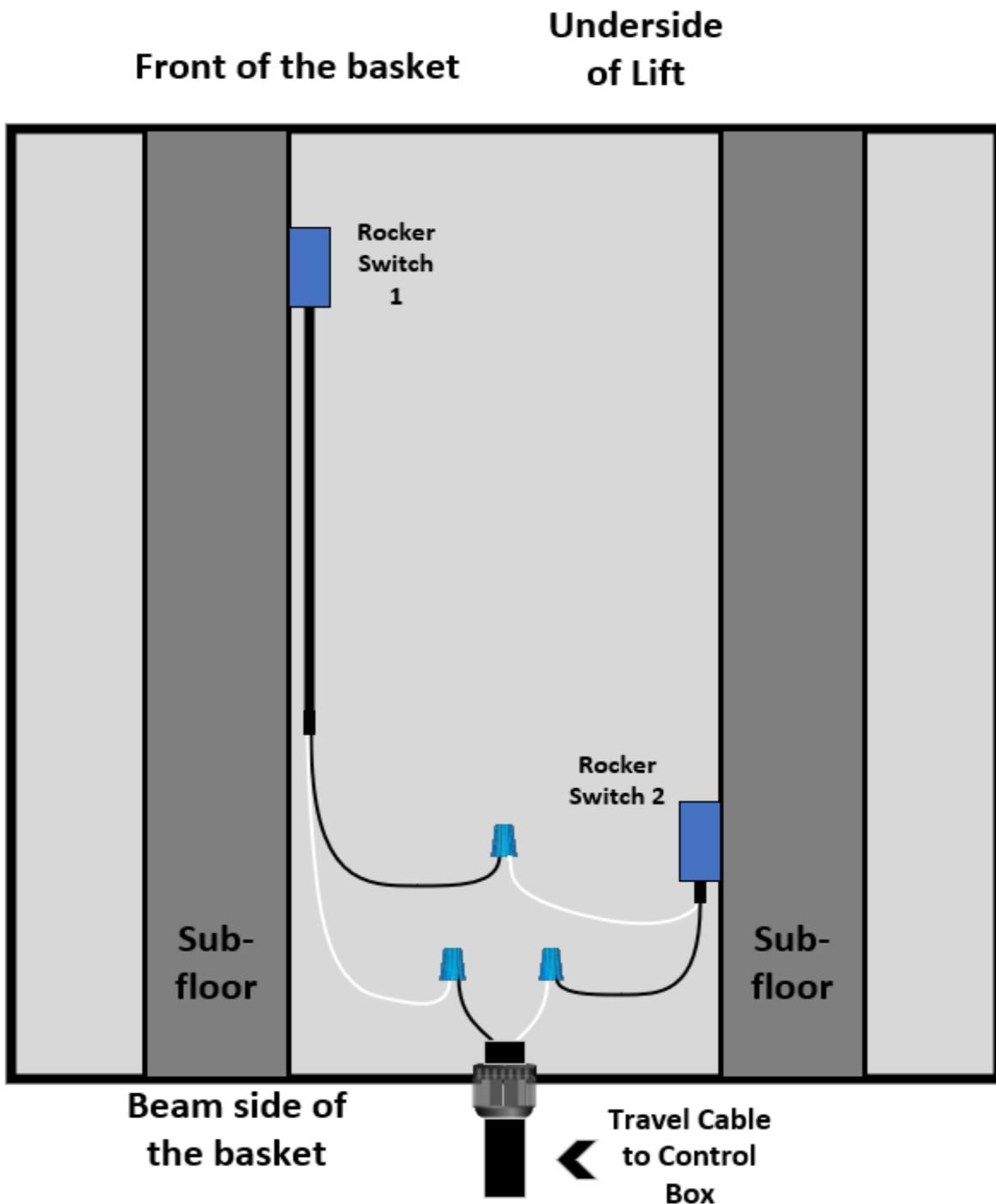
Pan switch

1. Connect the black wire from the Pan Switch to the green limit wire coming off the control board.
2. Connect the white wire from the Pan Switch to the red wire coming off the bottom magnetic limit switch.



Pan Switch Continued

1. Install the two rocker switches on the inner most side of the sub-floor beams.
2. Run the cables for the rockers through the underside of the basket to avoid slack
3. Drill a 3/8" size hole in the frame of the basket towards the beam side as shown below.
4. Install the 3/8" cable gland for the travel cable.
5. Run the travel cable through the gland and start making the necessary connections at the bottom of the basket:
 - a. Black wire from travel cable to the White wire from Rocker Switch 1 (See Diagram Below), then connect the black wire from Rocker switch 1 to the white wire from Rocker Switch 2.
 - b. Black wire from Rocker Switch 2 to the white wire from the travel cable.
6. Run the travel cable along the brace and down to the control box. The cable needs to be long enough for the lift to reach the top stop and the bottom stop without pulling on the control box



For warranty information and registration please visit our website at:

<https://galaxylifts.com/warranty-registration.php>