

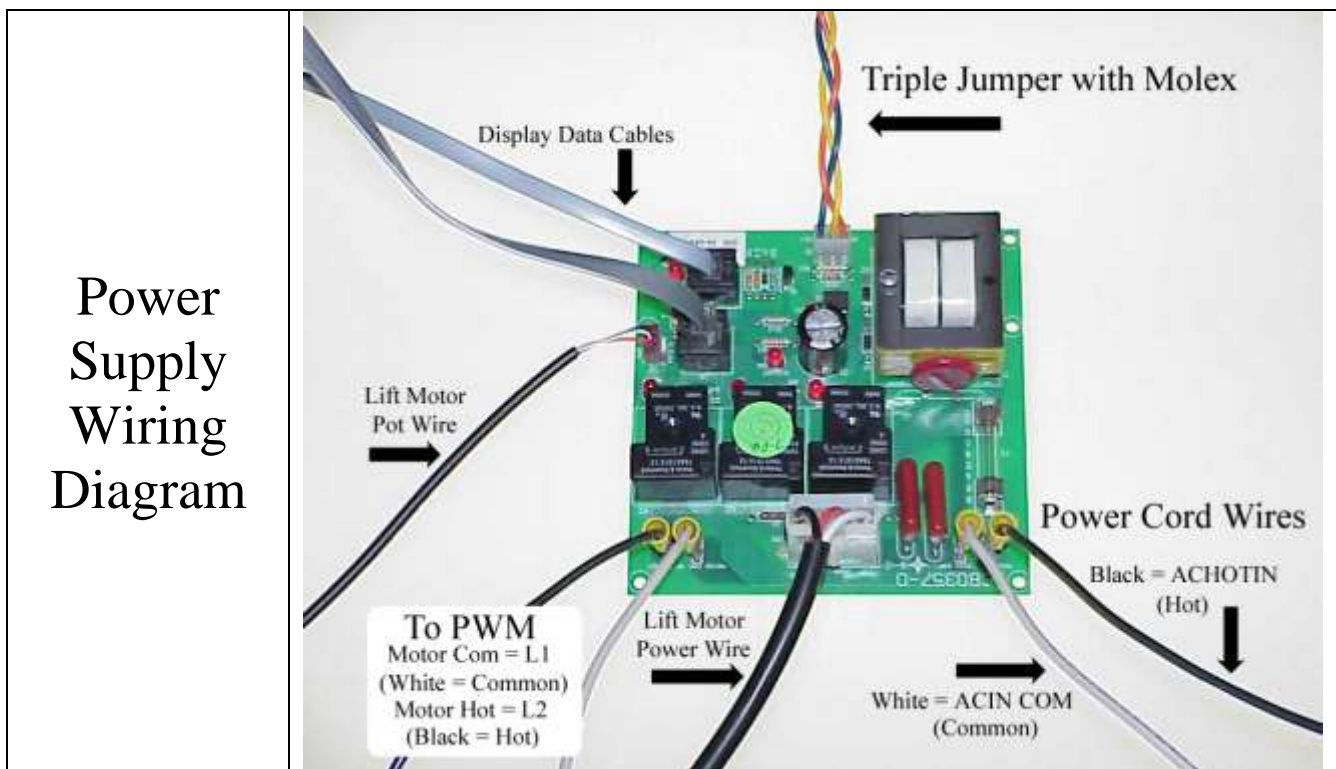
# Tuff Tread

502 W. Montgomery STE 120  
Willis, TX 77378  
PH: (800)827-2017 FAX: (888)898-8974  
[www.TuffTread.com](http://www.TuffTread.com)

## Wiring Diagrams for Version 3 Power Supply and PWM

**Always be sure the treadmill is unplugged before attempting any electronic board replacement.**

It is very important that the Power Supply and the PWM boards be wired correctly. If the wires are connected in the wrong way, the Power Supply board or the PWM may be damaged. This damage would not be covered under your parts warranty.



### Power Supply Wiring Diagram

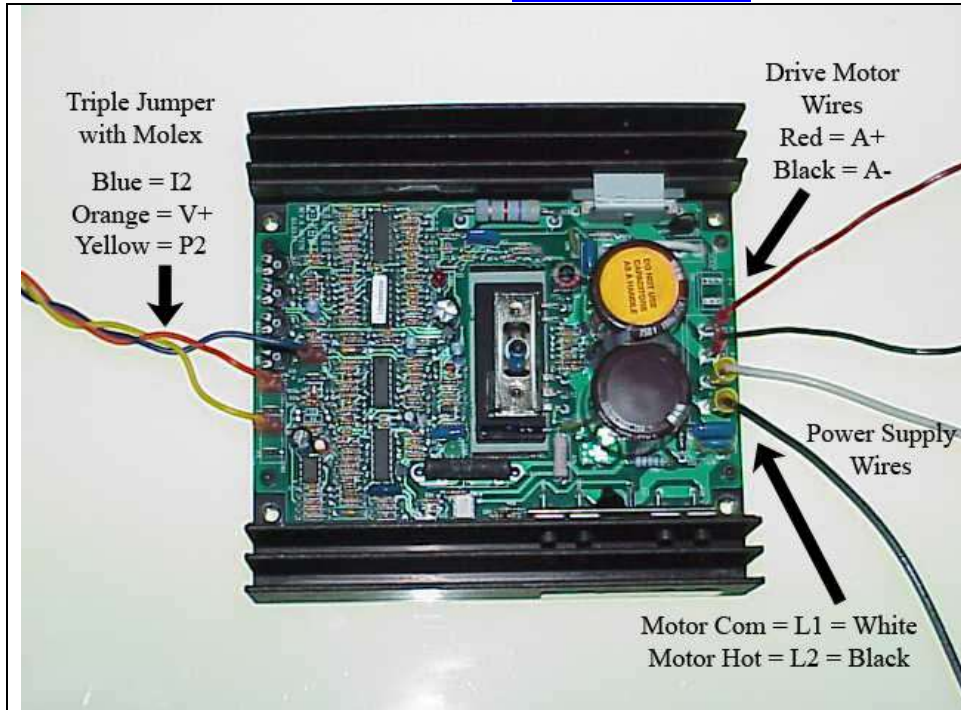
Pay close attention to the Power Cord wires that run from the end of the AC Power Cord to the Power Supply board. The black wire (hot) must be connected to the spade marked "ACHOTIN" (AC Hot In). The white wire (common) must be connected to the spade marked "ACIN COM." If the Power Cord is not connected properly to the Power Supply, the board will be permanently damaged.

Also check the wires that run from the Power Supply board to the PWM board. Don't just go by the wire color – someone may have switched them in the past.

**Caution: Incorrect wiring can damage the boards.**

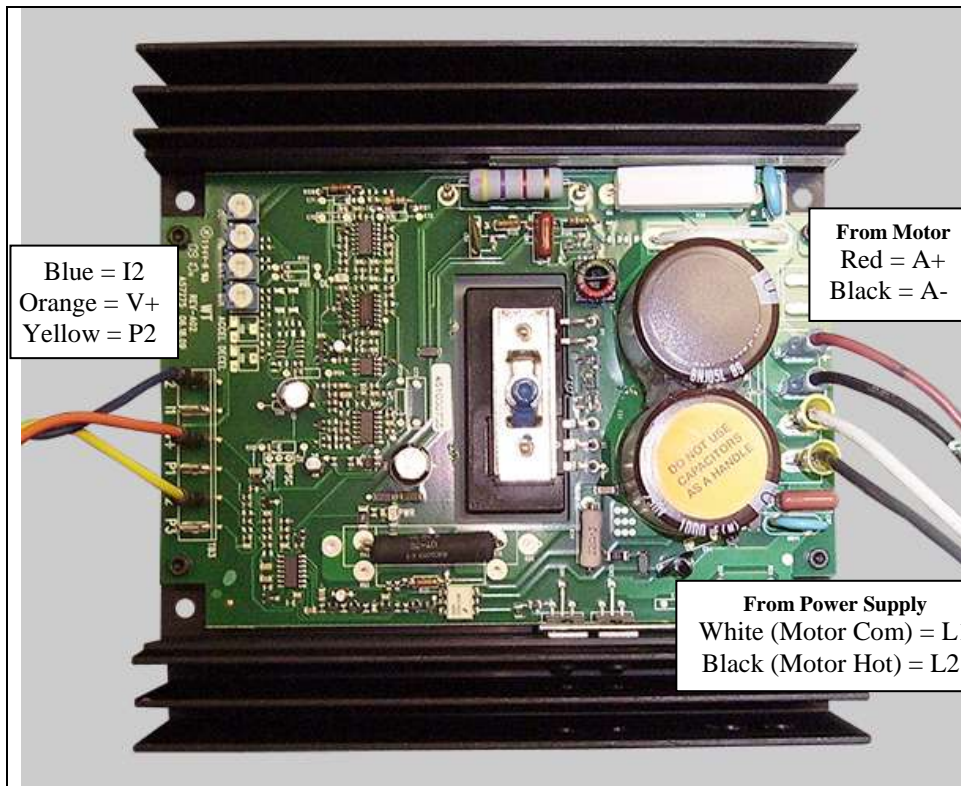
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**Classic  
Style  
PWM  
(Motor  
Controller)  
Wiring  
Diagram**

**Fig. A**



**New  
Style  
PWM  
(Motor  
Controller)  
Wiring  
Diagram**

**Fig. B**

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As you can see, the wiring going to the PWM is being connected to the same ports on both the Classic style and New Style PWMs. However, please note that the layout for these connections is slightly different.

Please note the labels next to each connector on the PWM, and ensure the wiring is connected properly.

The wires that run from the drive motor are red and black.

- The red wire must be connected to the spade marked “A+” on the PWM.
- The black wire must be connected to the spade marked “A-” on the PWM.

If these connections are reversed, the motor will run backwards (as will the treadmill belt).

Double check the black and white wires that run from the Power Supply to the PWM board. Don't just go by the wire color – someone may have switched them in the past.

- The white wire should connect “Motor Com” on the power supply to “L1” on the PWM.
- The black wire should connect “Motor Hot” on the power supply to “L2” on the PWM.

If these connections are reversed, damage will occur to the PWM.

The Triple Jumper wires are blue, orange, and yellow.

It is very important that these wires be connected correctly!

- The blue wire must be connected to the spade marked “I2” on the PWM.
- The orange wire must be connected to the spade marked “V+” on the PWM.
- The yellow wire must be connected to the spade marked “P2” on the PWM.

If these wires are not connected correctly, the treadmill may run, but it will display symptoms of lift motor failure or display board failure. If you think you have a problem with the lift motor or the display board, check these connections first.

**The PWM has a few different groups of wiring connections. Ensuring that these connections are correct is very important. Please do not go by “the way the old one looked”, and don't just rely on your memory. Check the markings on the PWM itself.**

Please call our service department at (800)827-2017 if you have any questions.