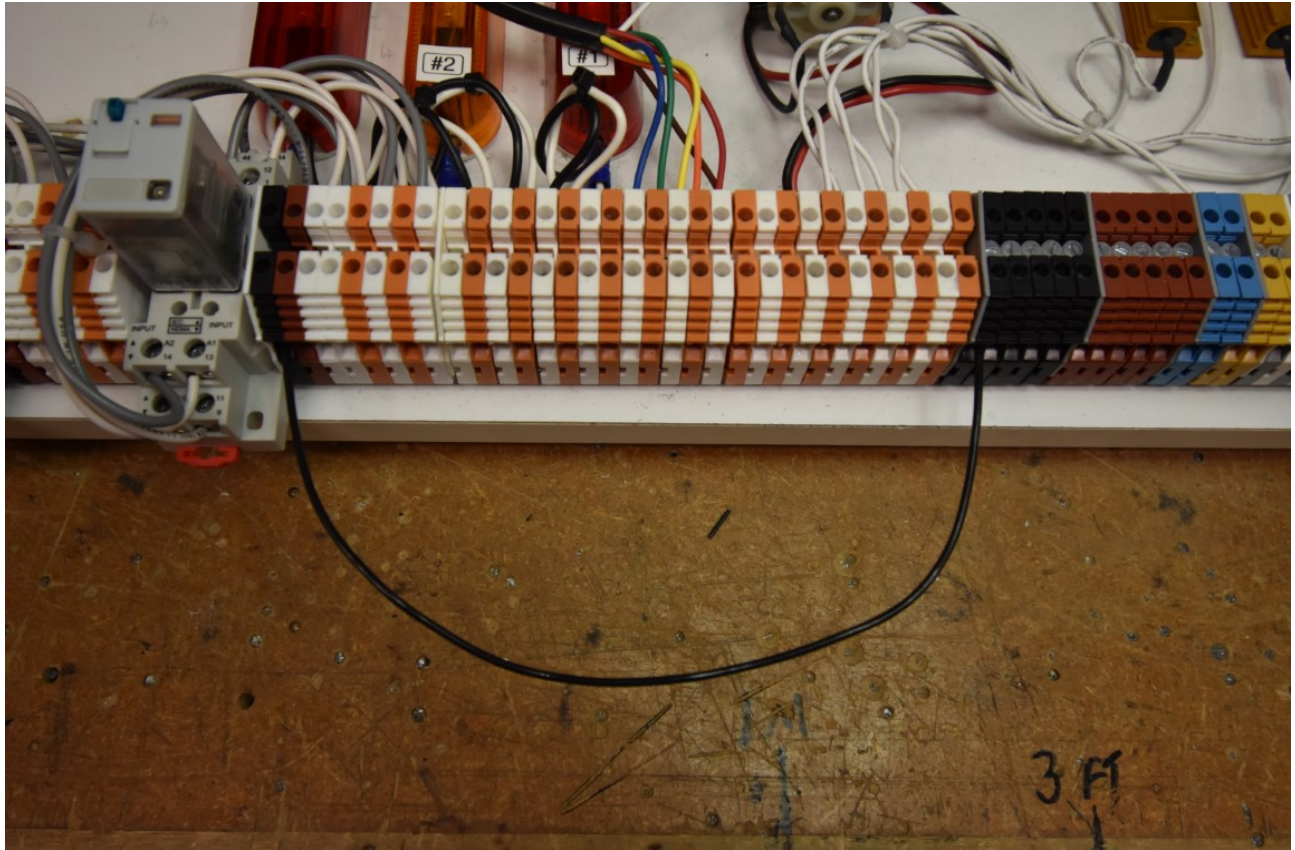
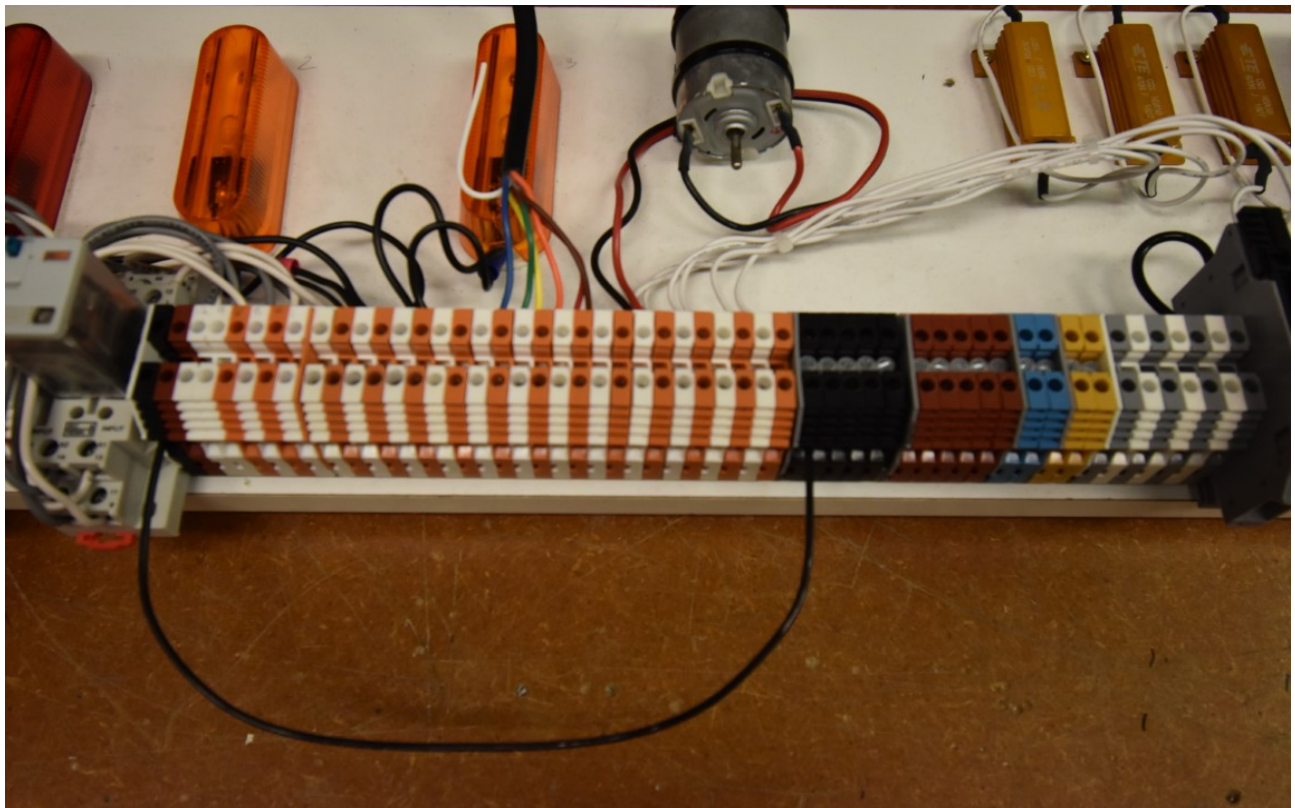


Step1 – Relay T14 to Black Distribution Block

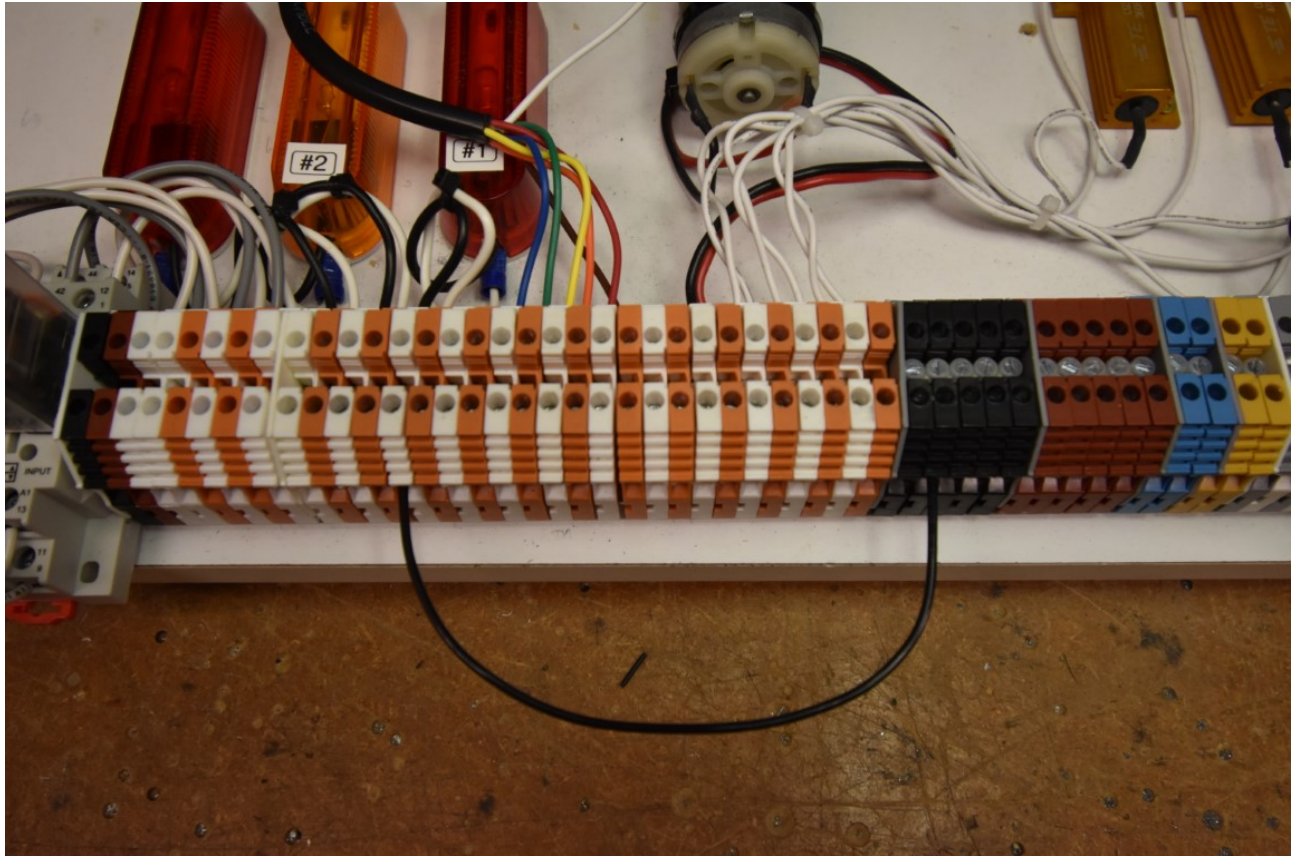


Install the 30 cm black wire

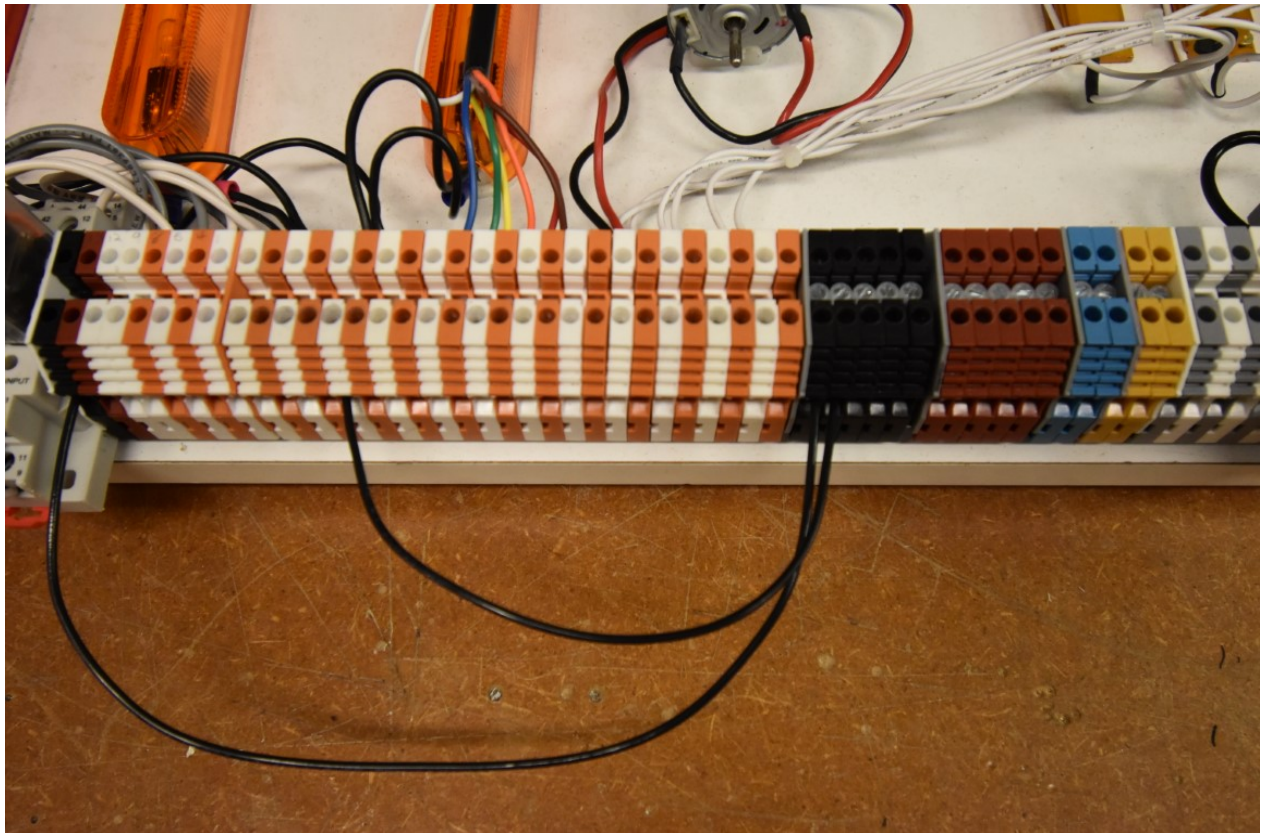


Now it should look like this

Step 2 – Light 1 T2 to Black Distribution Block

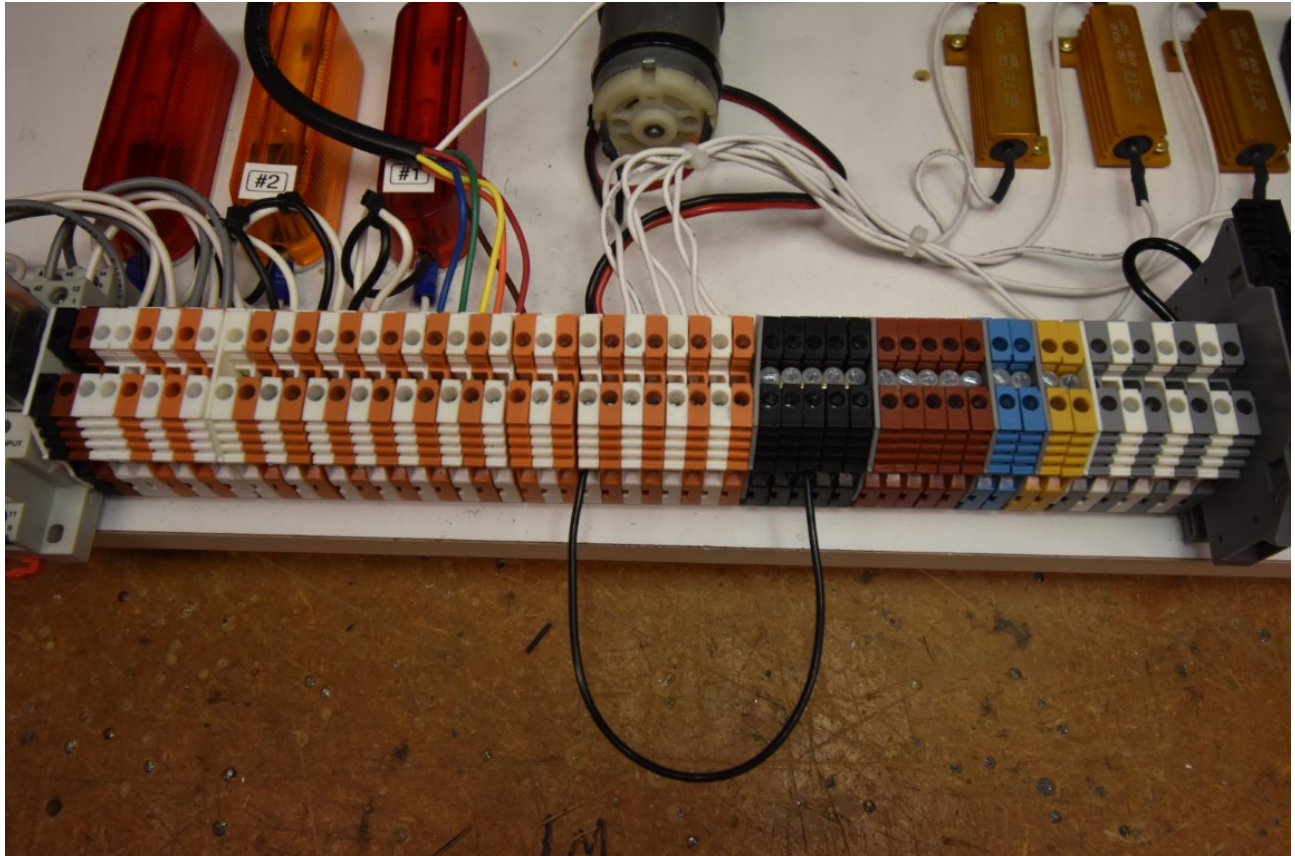


Install a 20 cm black wire

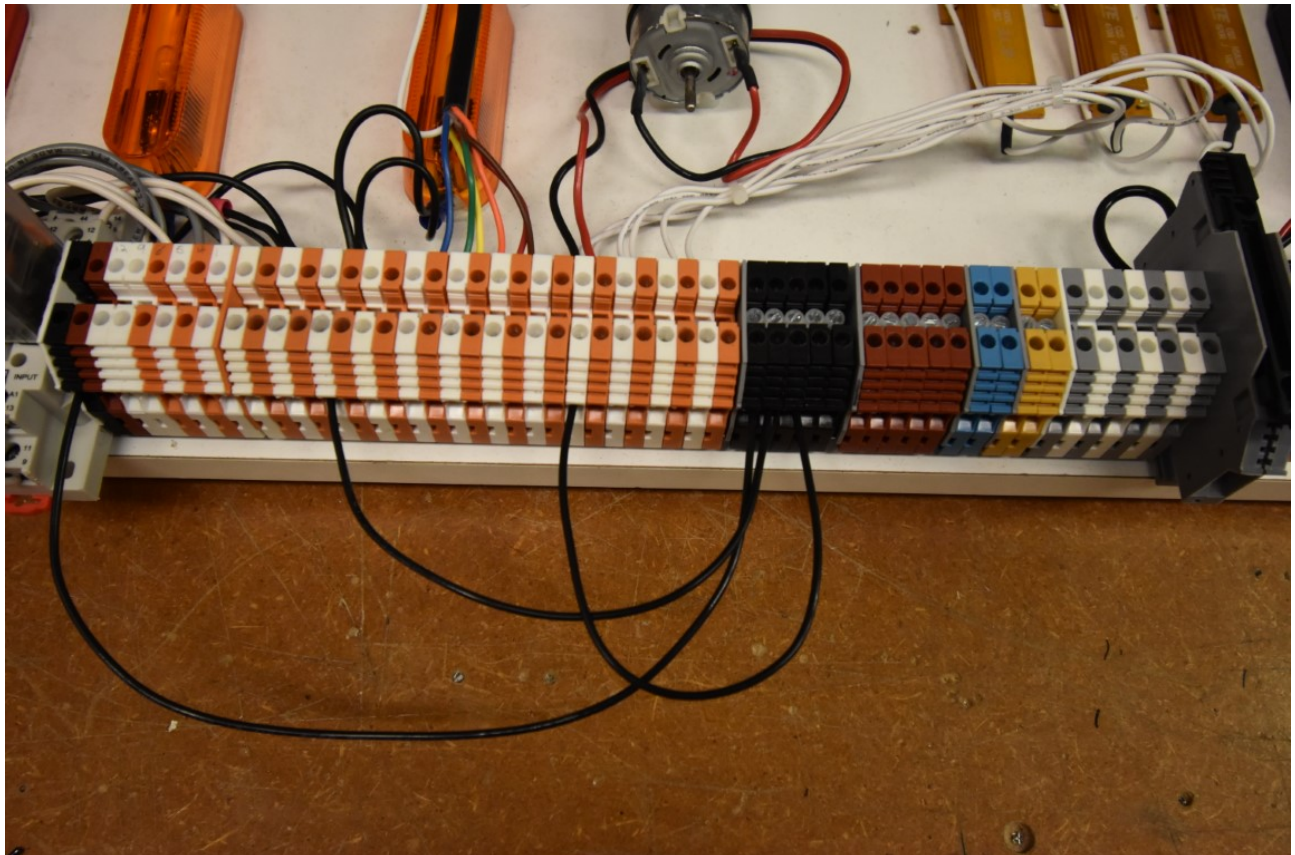


Now it should look like this

Step 3 – DC motor T2 to Black Distribution Block

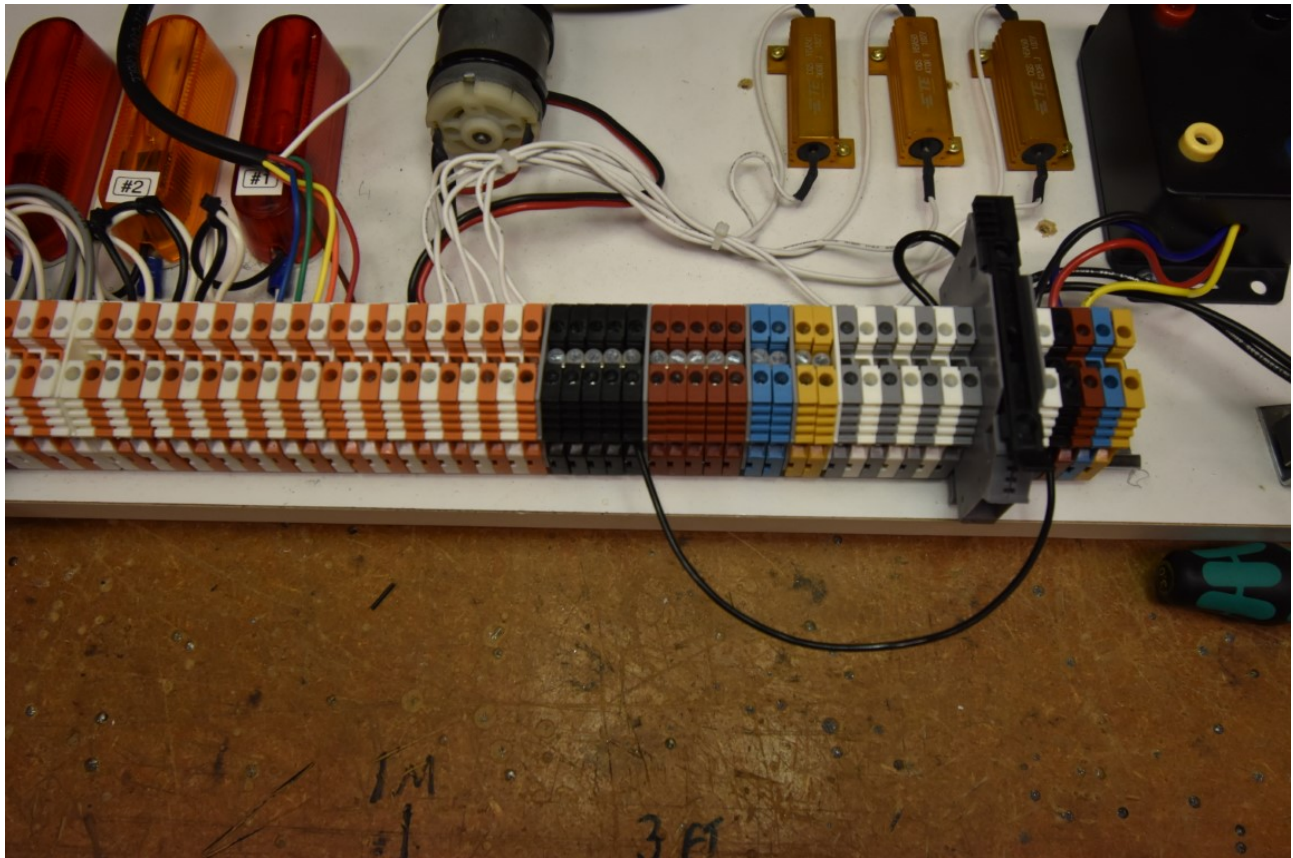


Install a 20 cm black wire

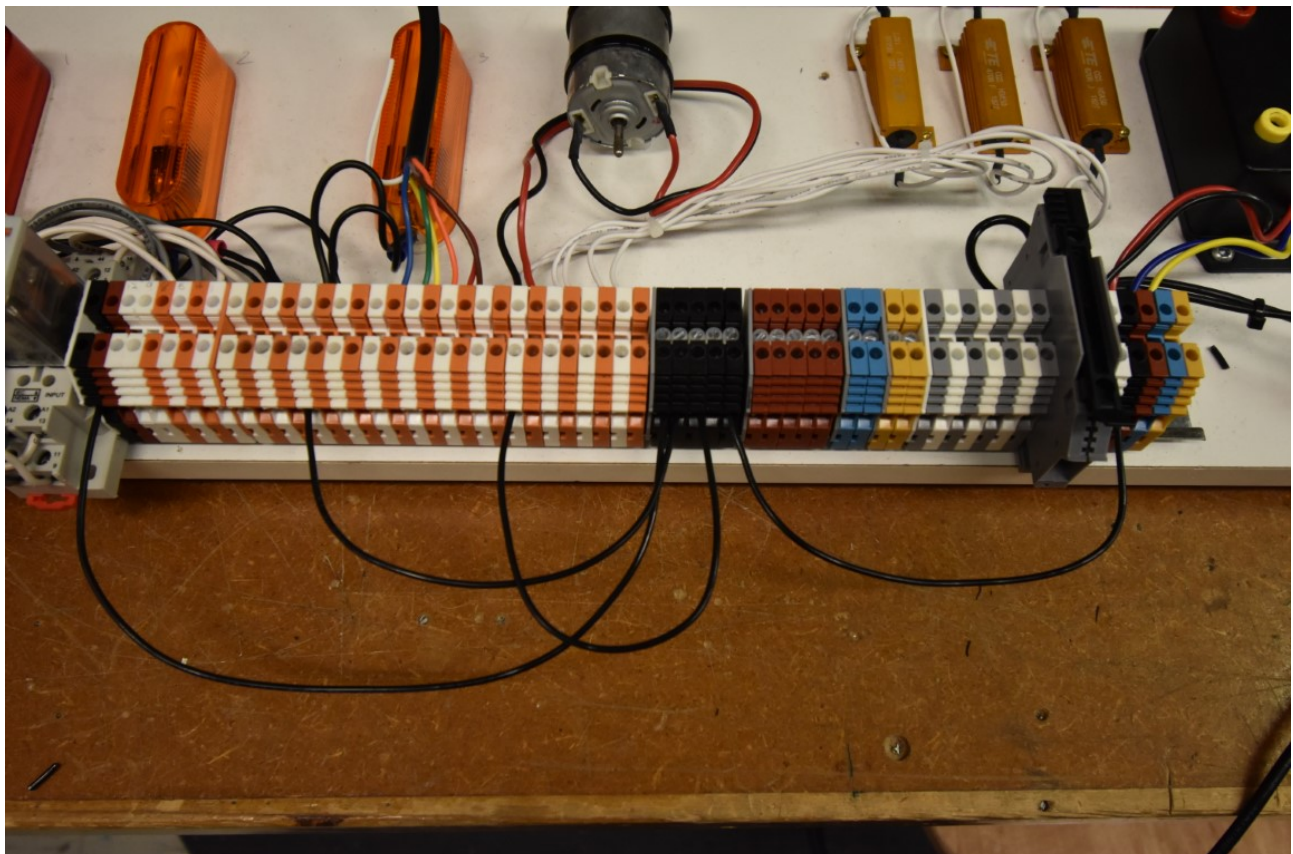


Now it should look like this

Step 4 – Black Distribution Block to Black Power Feed

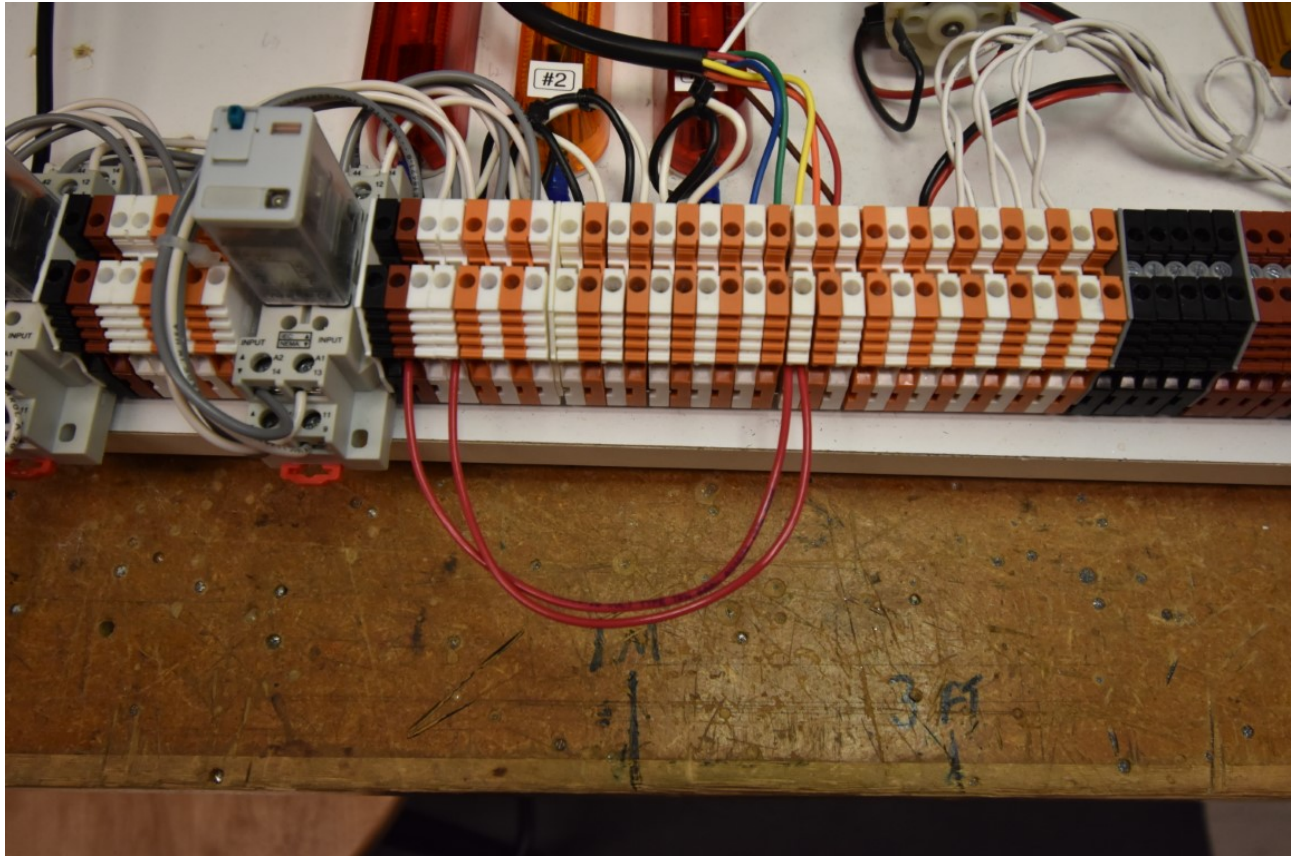


Install a 20 cm black wire

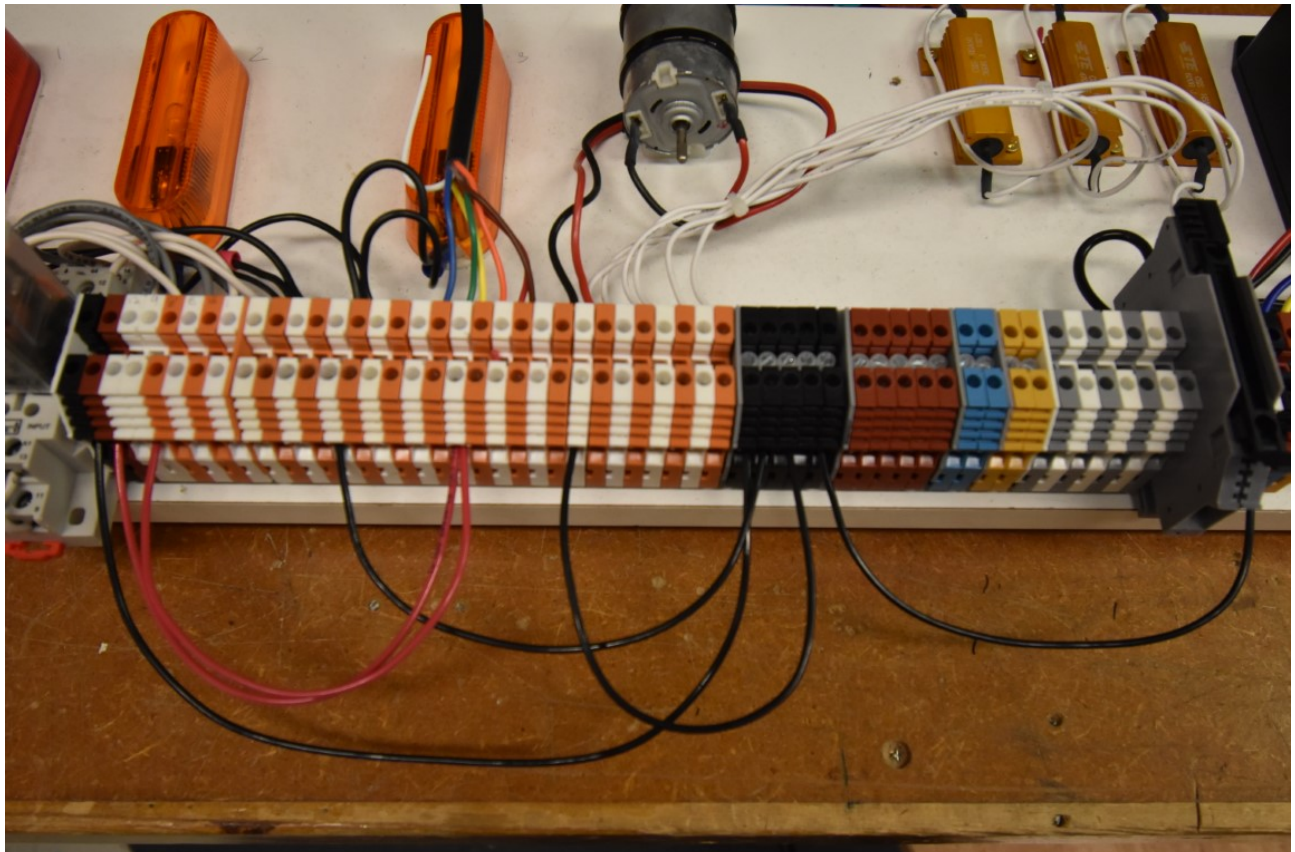


Now it should look like this

Step 5 – Start Button T2 to Relay T13 and T9

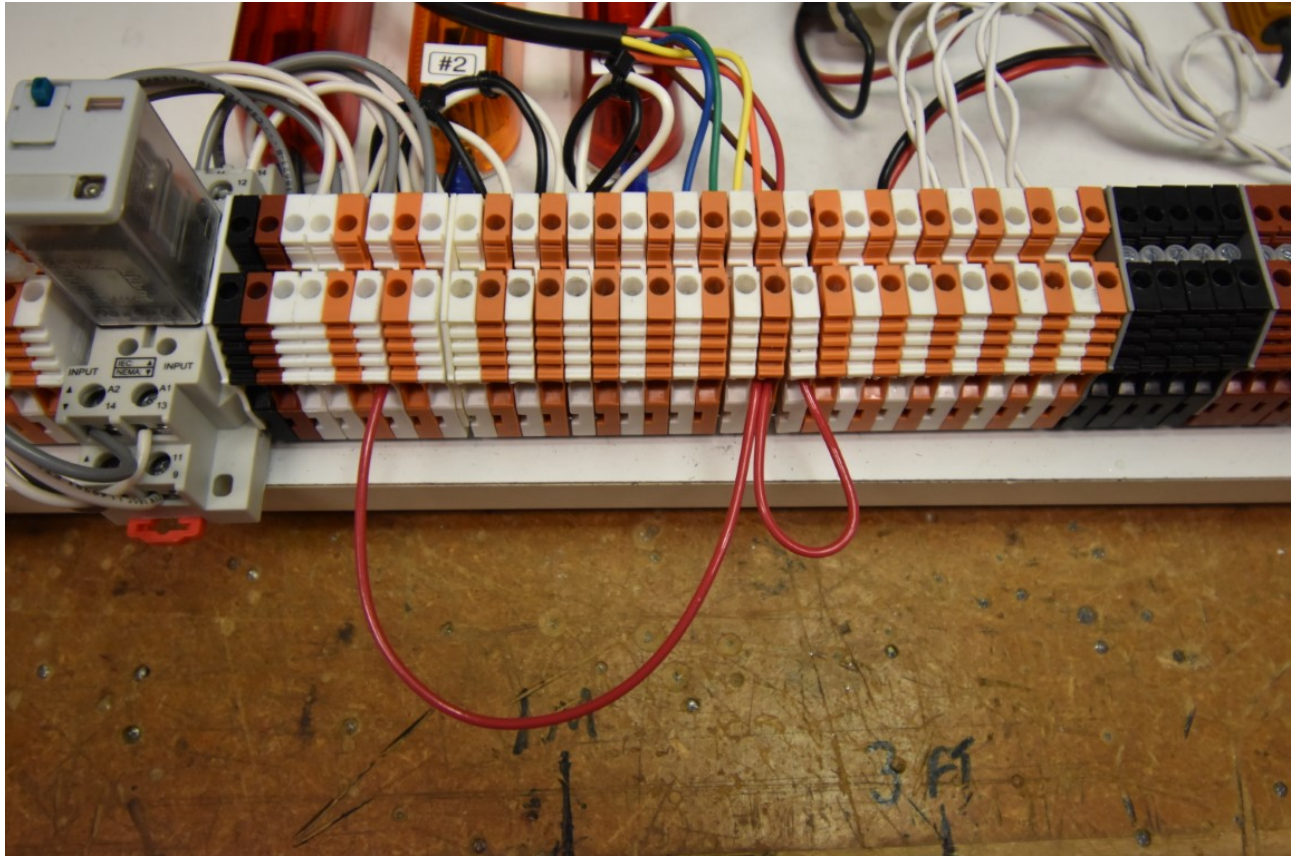


Install two 20 cm red wires

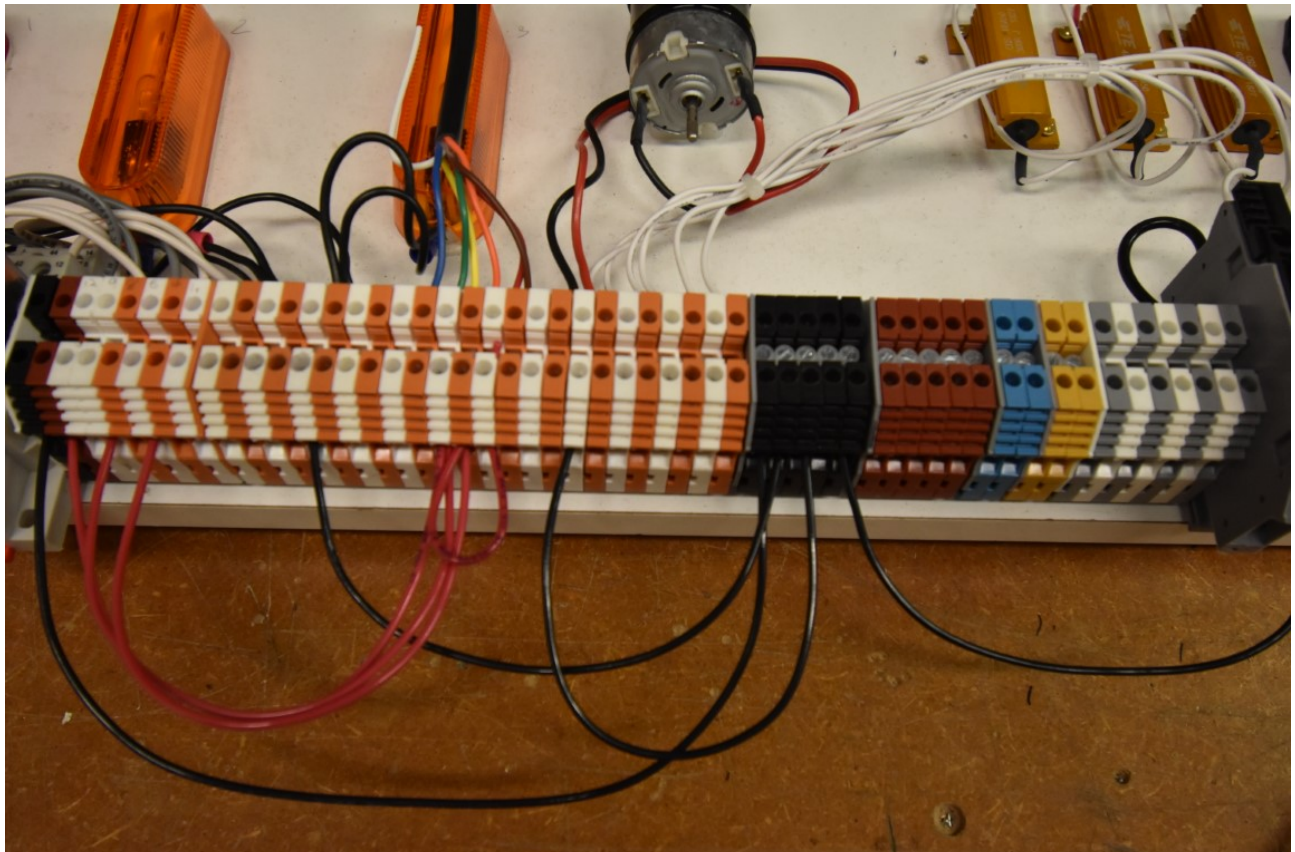


Now it should look like this

Step 6 – Start Button T1 to Stop Button T2 and Relay T5

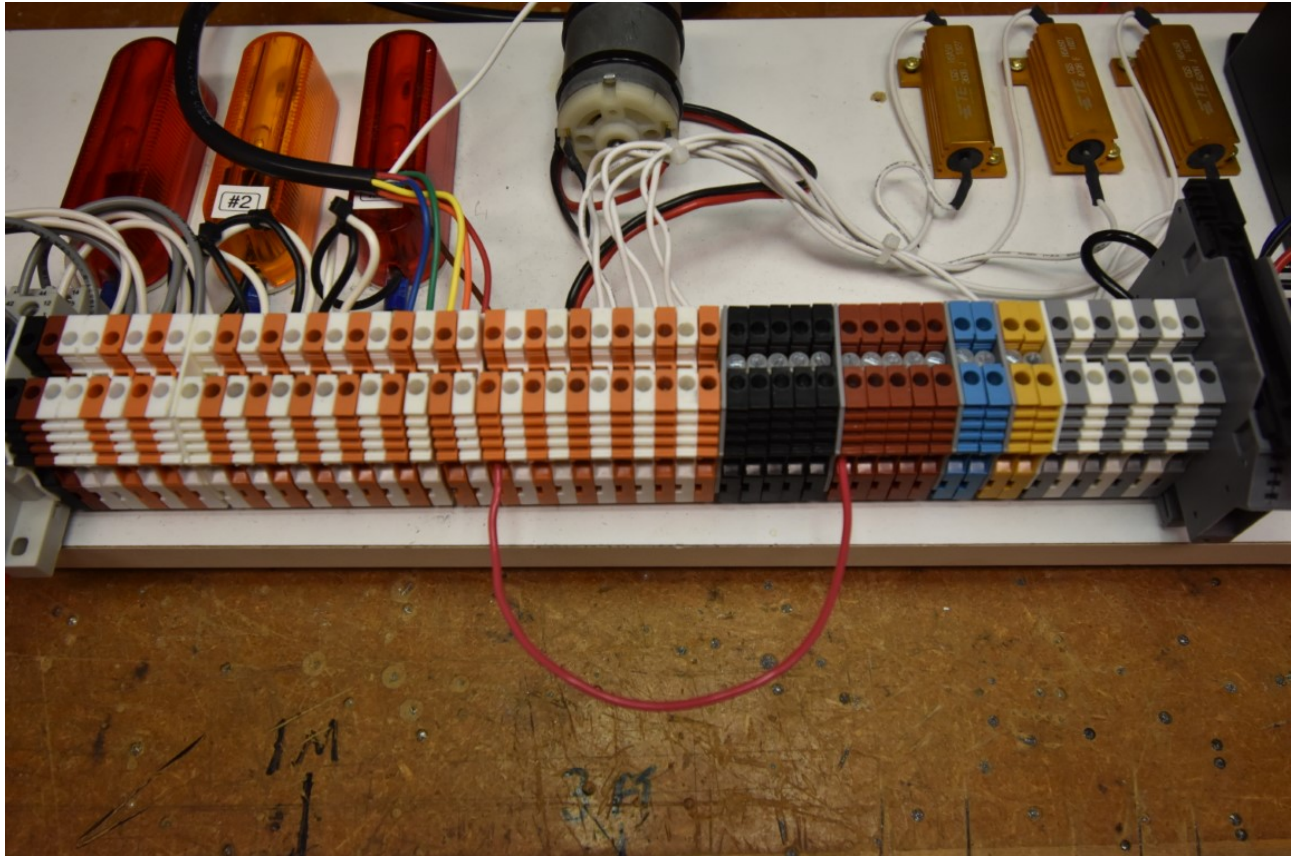


Install a 10 cm and a 20 cm red wire

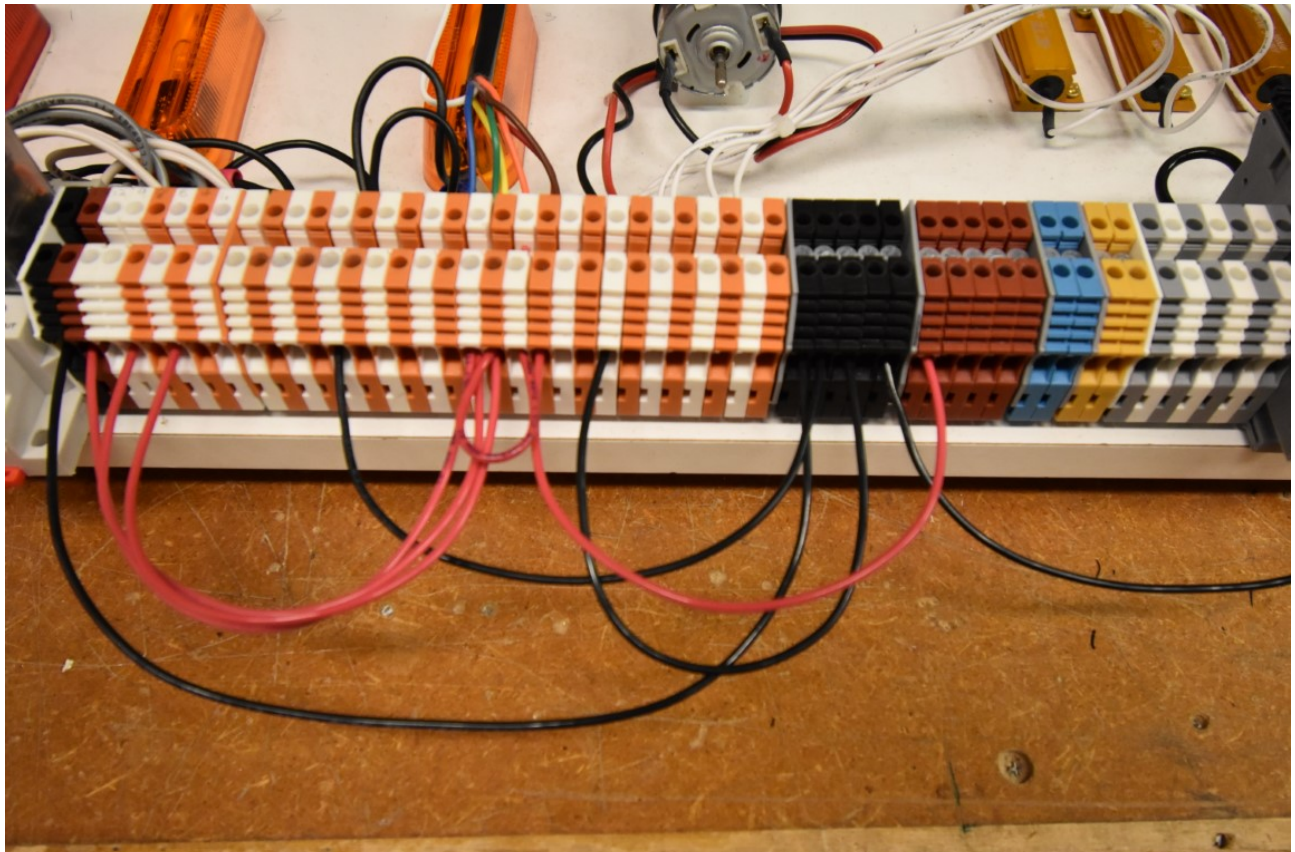


Now it should look like this

Step 7 – Stop Button T1 to Red Distribution Block

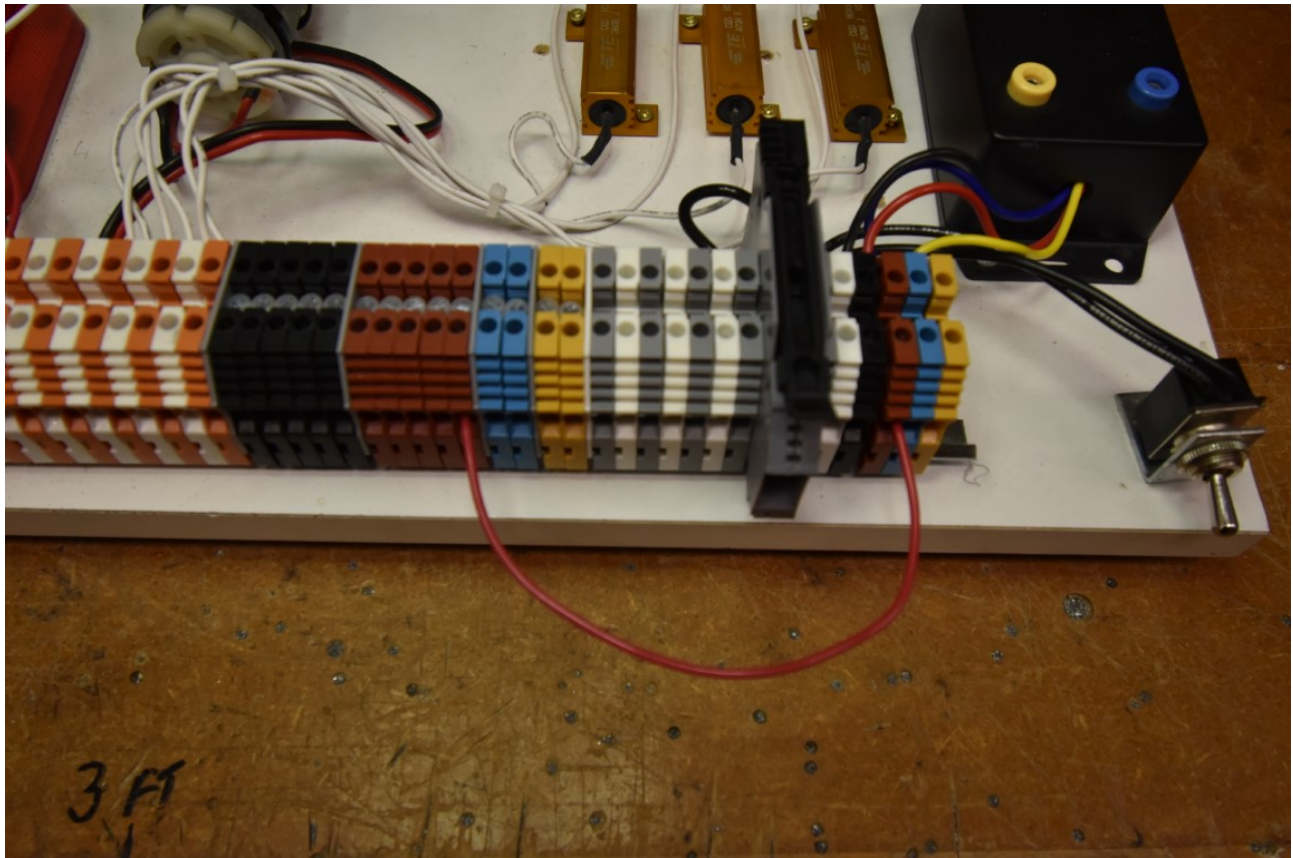


Install a 20 cm red wire

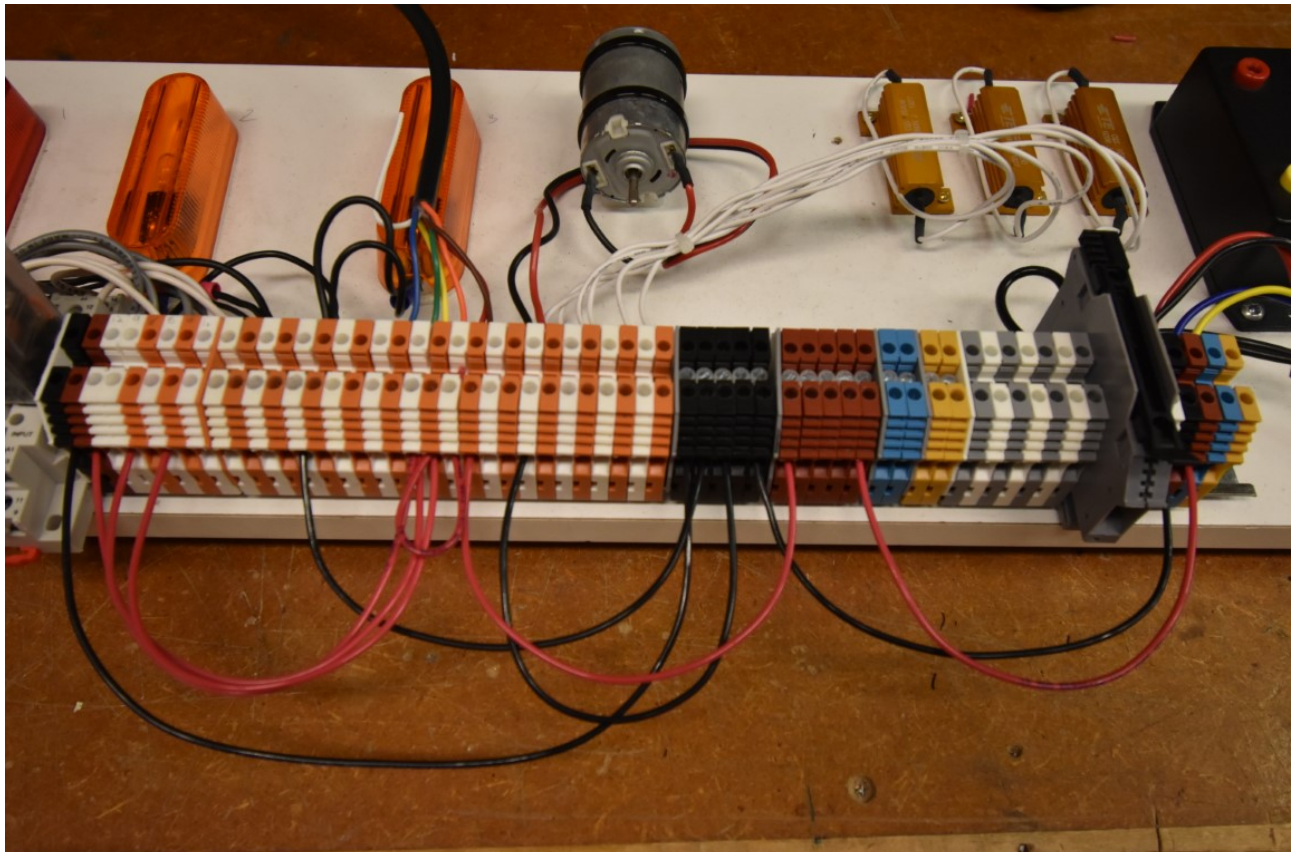


Now it should look like this

Step 8 – Red Distribution Block to Red Power Feed



Install a 20 cm red wire



Now it should look like this

STOP

**At this point, you should be able to test the control portion of your circuit.
(Hopefully without smoke and/or fire occurring)**

Testing time! Ask one of the lab demonstrators to verify that the bench top DC power supply is set for 12V and connected to your circuit. If you've followed the wiring diagram, and if your connections in the terminal blocks have been made correctly, things are about to happen. If not, rest assured we share your sadness. In an actual lab environment, we'd have lots of time to investigate the problems,

BUT FOR NOW...

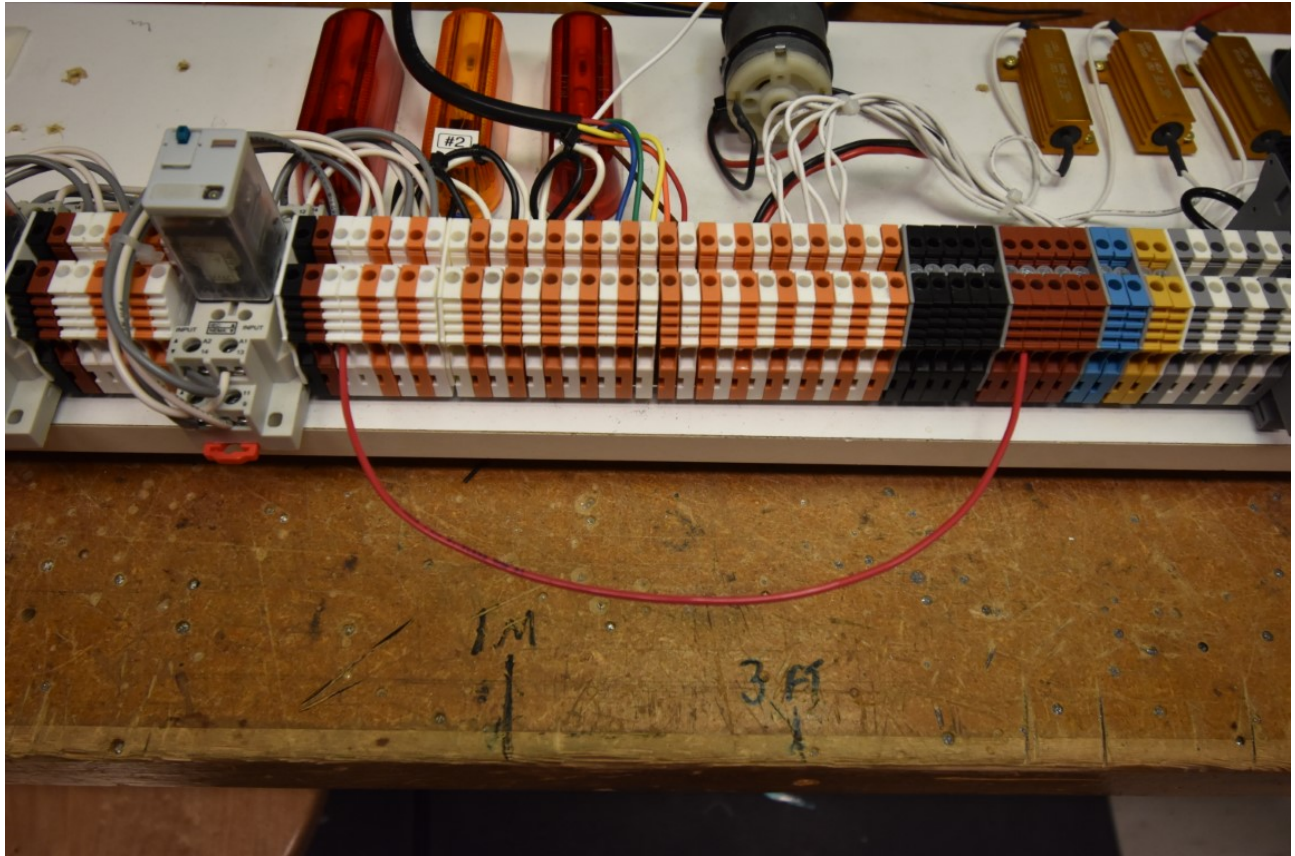
- Press and release the green button
- Confirm the indicator light on the relay is now ON.
- (If the relay turned on, there was probably no smoke or fire. This is a shame but for the best)
- Press and release the red button
- Confirm that the indicator light is now OFF.

If it worked, move on to the next page of connections

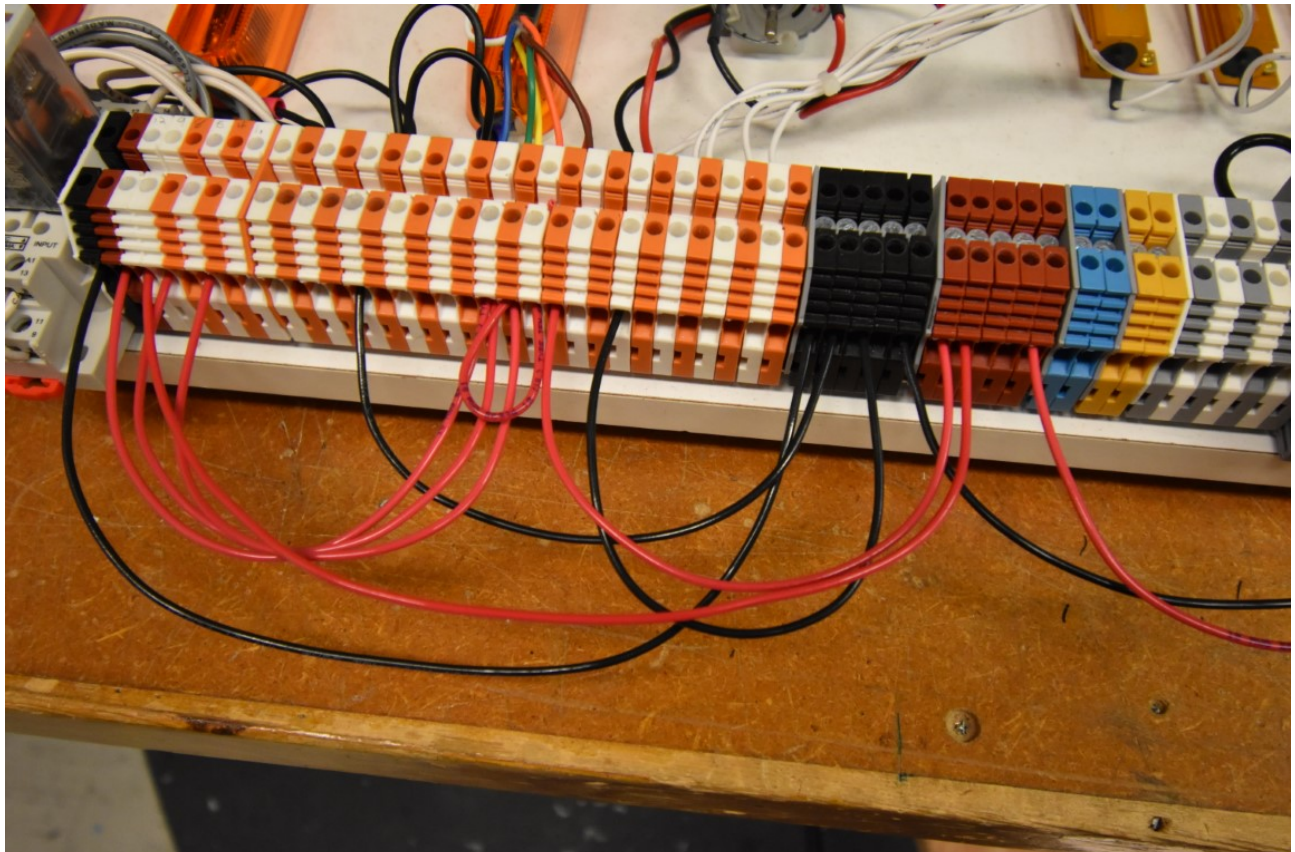
If it didn't, and if time allows, you'll need to go through each connection to ensure the wires are in the proper location and firmly connected in the terminal blocks.

There are no shortcuts and every connection is important. Engineers design and oversee the construction of facilities which have to operate reliably under many adverse conditions

Step 9 – Relay T12 to Red Distribution Block

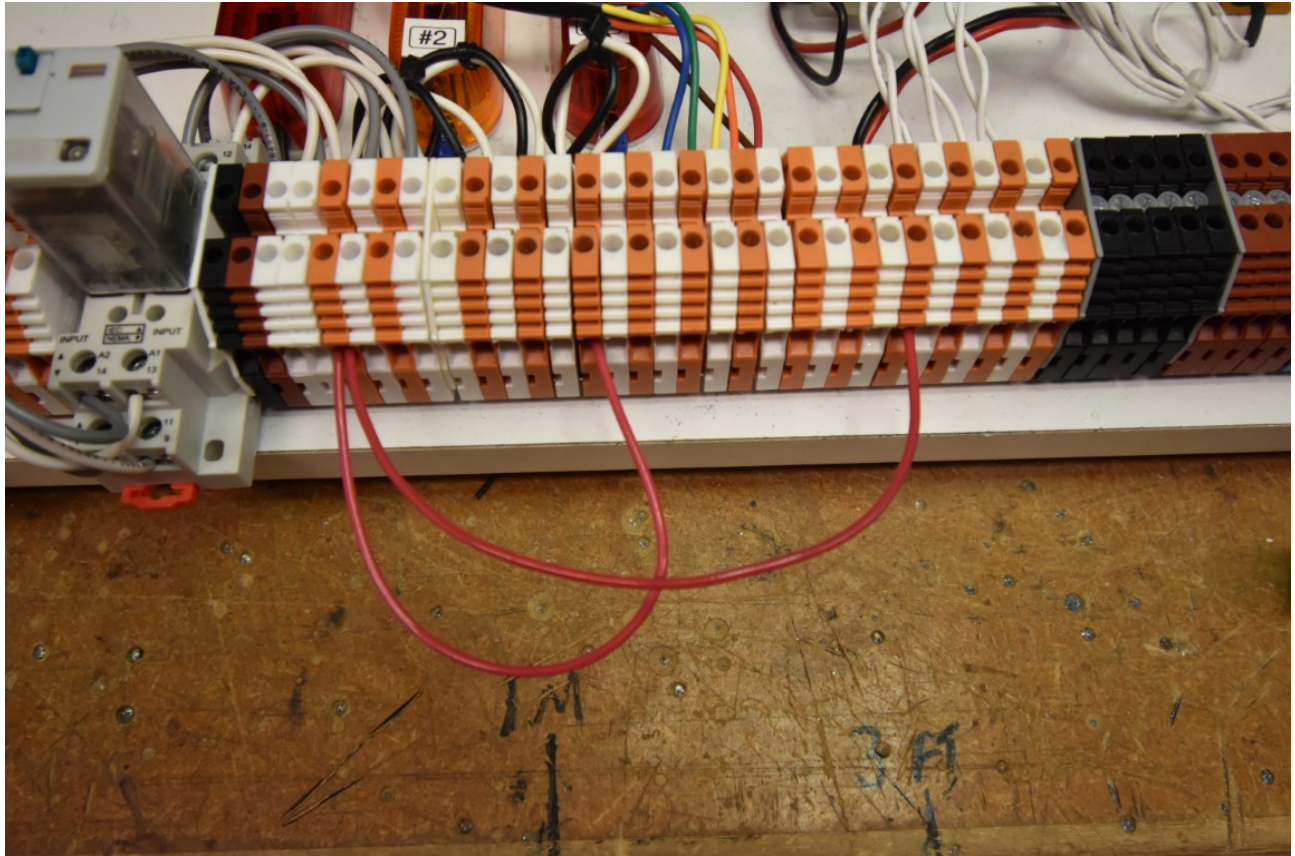


Install a 30 cm red wire

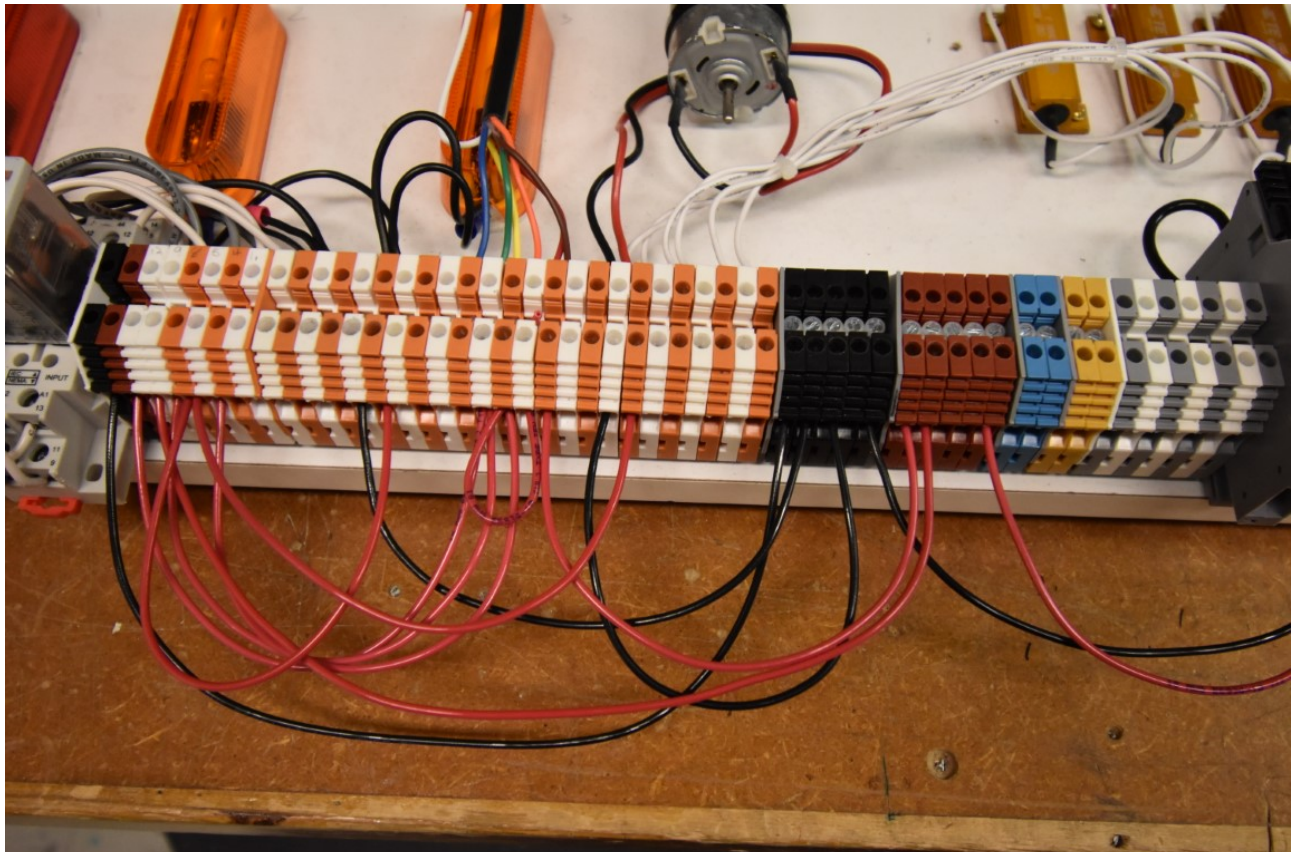


Now it should look like this

Step 10 – Relay T8 to Light 1 T1 and DC motor T1



Install two 20 cm red wires



Now it should look like this

YAY!!!

**Now you should be able to test the output portion of your circuit.
(Again hopefully without smoke and/or fire occurring)**

- Press and release the green button
- Confirm the indicator light on the relay is now ON. Now the motor should be running and the light should also be ON.
- Press and release the red button
- Confirm that everything is now OFF.

If it worked, that's it that's all! Thanks for coming in!

If it didn't, and if time allows, you'll need to go through each connection to ensure the wires are in the proper location and firmly connected in the terminal blocks.

There are no shortcuts and every connection is important. Engineers design and oversee the construction of facilities which have to operate reliably under many adverse conditions