



# PROFESSOR MOTOR CONTROLLERS

## **Power Relay System Installation Instructions (PMTR2037) for “Plus Series” Controllers**

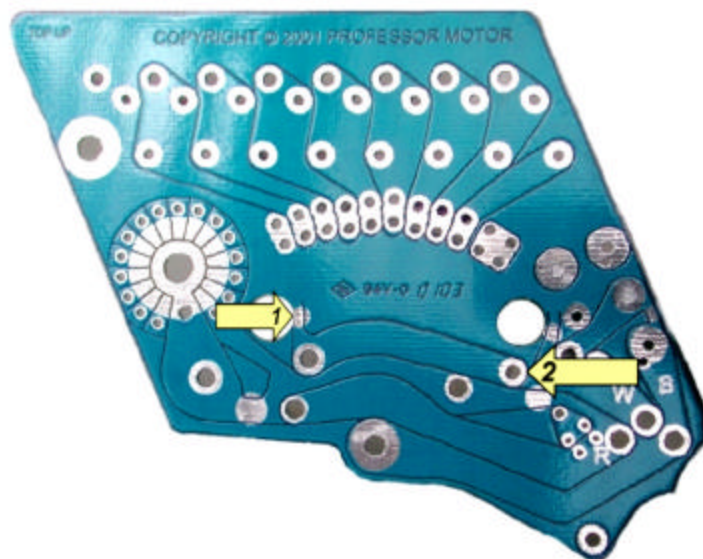
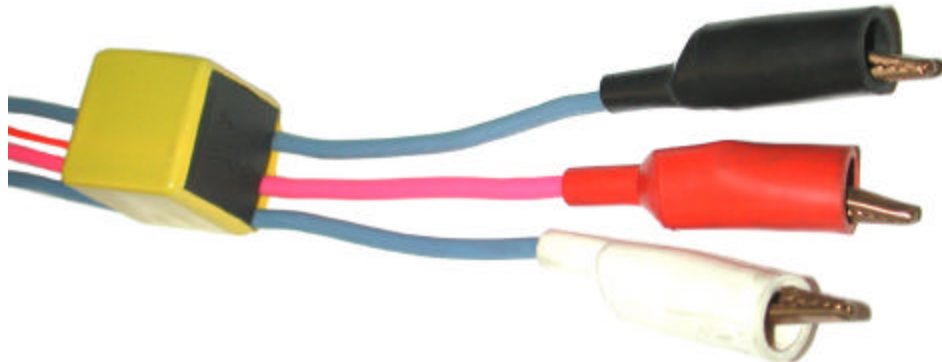
**Step 1** – With a Dremel cut through the circuit board trace as noted in #1 in the

**Step 2** – Using the lead wire provided in the kit, strip and solder the wire to the location as noted in #2 in the picture. For best results the wire should be on the front face of the circuit board with only the bare copper extending through the back side of the circuit board in the location indicated. Solder the wire in using a good grade of rosin core electrical solder. Do not use acid flux or a solder with an acid flux core.

**Step 3** – Route the lead wire out the bottom of the controller handle through a notch cut with a Dremel. You can then close up the handle and tighten the screws.

**Step 4** – Trim the relay brass tabs with a Dremel to make them about 3/16” high. Solder the relay supplied into the controller wires using the circuit numbers as marked on the relay as noted below. Again, be sure to only use rosin core electrical solder for these connections. Ideally the relay should be located about 4-6” from the end of the wire alligator clips. Circuit numbers and wires : Lead wire from controller (& resistor if used) - #85, Black - #87 (either one), White - #30, Red - #86.

**Step 5** – Cover the relay with the heat shrink tubing and shrink in place using a heat gun. When complete it should look like the picture below.



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