

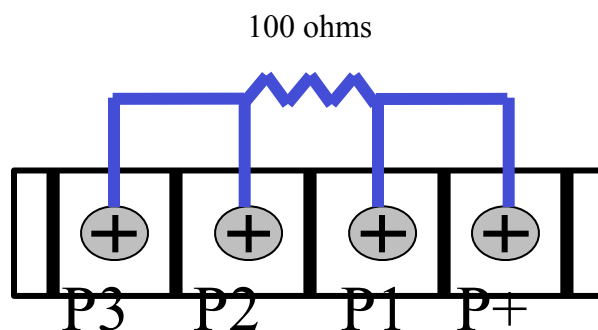
## Problems with the RTD Temperature Probe.

### SYMPTOMS:

- Reading an *extreme* positive or negative temperature (i.e. -350°F, or -177°C)
- Analyzer is not reading a temperature at all.
- The temperature reading is wildly varying

### SOLUTION:

1. First measure the **resistance** on the wires from the RTD Probe. There are two red wires and two blacks. The resistance (measured using an Ohmmeter) between the two red wires (and the two black) should be ZERO and the resistance between any red and any black should be **about 100 Ohms**. The user can also test to see if measuring the resistance between any wire, and the football base (ground on measurement section) results in a short. The resistance between any wire and ground should be greater than 100 Kilo-Ohms.
2. If any of the above measurements fail, or give incorrect measurements, new RTD Probe is required. Please contact the factory for a new one.
3. Otherwise, measure the resistance between the pins on the motherboard: P+ and P1 are the two red wires, and P2 and P3 come from the two black wires. This should be the same values as step 1 above. If not, the cable or end connector between the measurement section and the main electronics is bad. Please contact the factory for a replacement.
4. If all the above numbers are correct, On the oscillator on the measurement section, there are four screws where the RTD is connected. Replace the four wires with a 100-Ohm resistor as shown in the drawing below.



One end of the 100-Ohm resistor is attached to both P+ and P1, and the other is attached to the P2 and P3 screws. When the resistor is attached as shown, the reading should be **32°F or 0°C** on the display.) If the resistor is attached as shown and the display is still not reading 0°C or 32°F, then most likely the *analog input board* is bad.