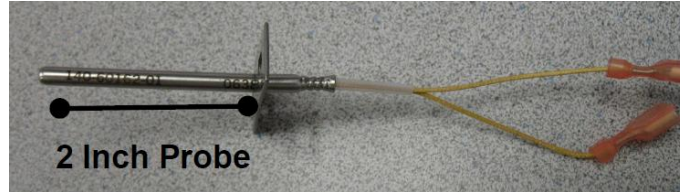


Convection Oven Digital Control Probe Error Diagnosis Guide

Probe:

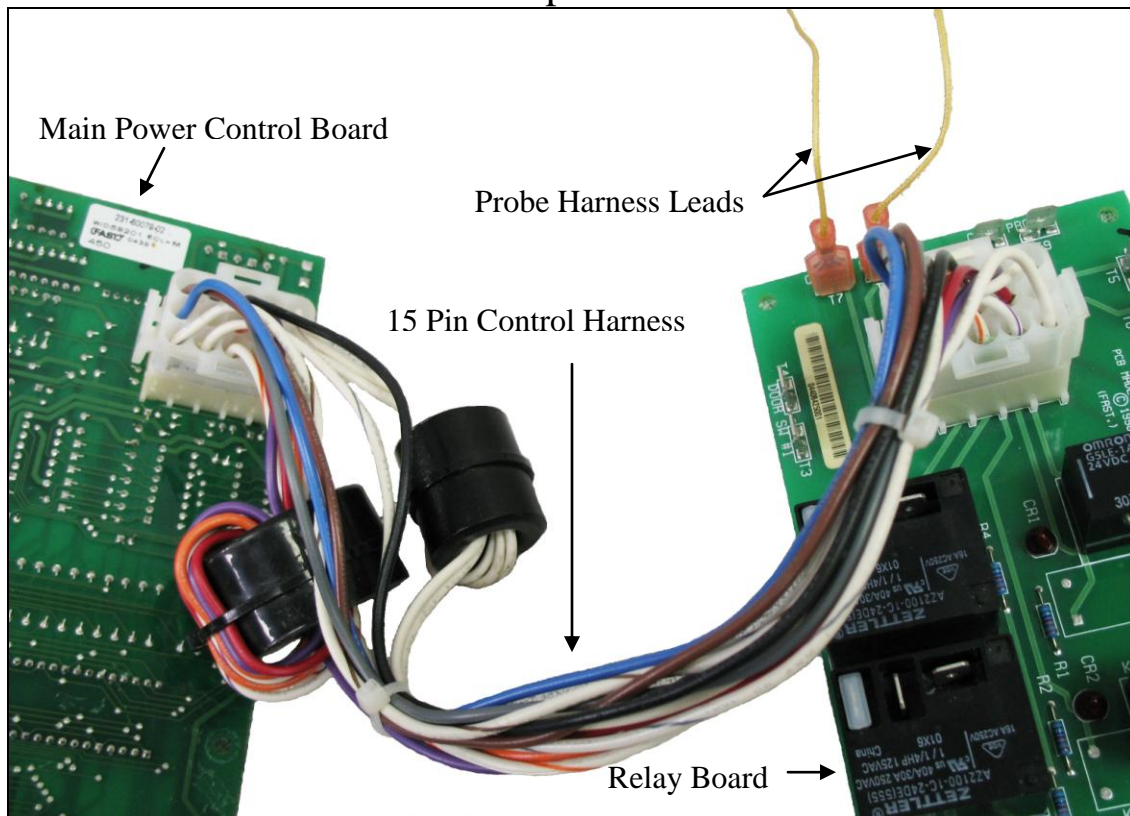


The digital controller and the probe function together to control the temperature of the oven cavity. The probe transmits the oven temperature to the control in Ohms. In the cook cycle, if the control is set to 300 degrees for example, when the probe relays 1553 ohms, the call for heat will stop, because the unit is at temperature. Also when the off button is pressed and the unit is above 150 degrees, or 1143 ohms, the fan will run and the control will display “Auto”. When the temperature is below 150, the probe relays an ohms reading below 1143, and the fan relay will open and the control will display “Off”.

When the unit displays “Probe Error”, it is not receiving a signal from the probe.

The cause could be the probe, the probe harness, the relay board, the 15 pin control harness, or the main power control board. If the signal passes all the way to the main power control board, and the probe error still exists, the main power control board is at fault. (Always ensure the 15 pin control harness pins are properly seating)

Components:



Step 1:

Disconnect the probe leads from the Relay Board (as shown below), and test according to the Probe Ohms Chart on the next page. **If the oven temperature converted to Ohms matches the Ohms across the Probe, Proceed to step 2, If it does not, replace the probe. If the leads test open, replace the probe and harness if applicable.**

The 3 steps must be taken in order to determine the source of the problem.



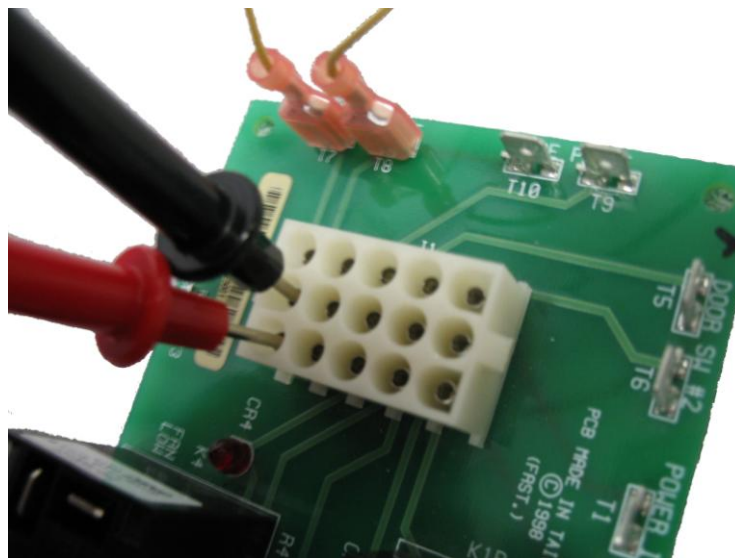
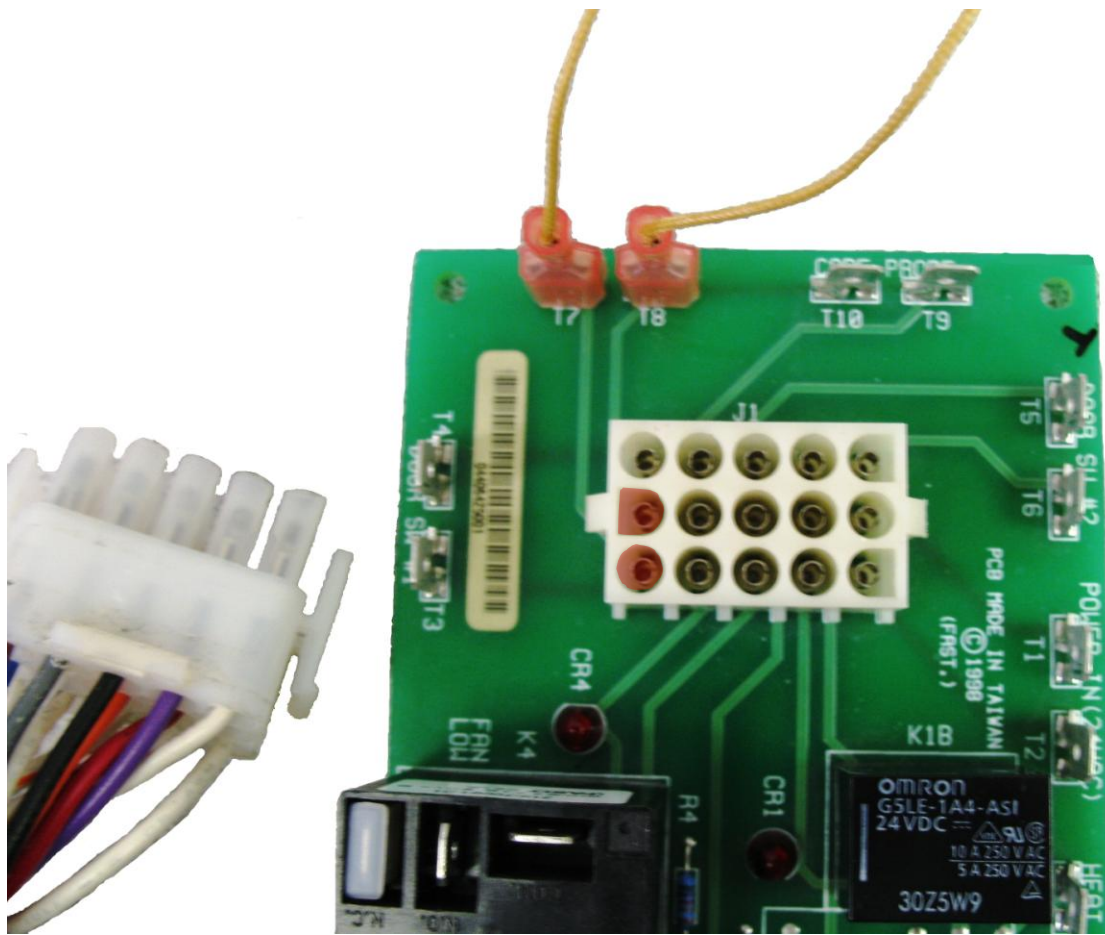
Probe Ohms Chart

Temp (°F)	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	932	953	974	995	1016	1038	1059	1080	1101	1122
100°	1143	1163	1184	1205	1226	1247	1267	1288	1309	1329
200°	1350	1370	1391	1411	1432	1452	1472	1493	1513	1533
300°	1553	1574	1594	1614	1634	1654	1674	1694	1714	1733
400°	1753	1773	1793	1813	1832	1852	1871	1891	1911	1930
500°	1949	1969	1988	2008	2027	2046	2065	2085	2104	2123

The Chart above is used to convert the oven temperature to a corresponding Ohms value to test the probe.

Step 2:

Disconnect the 15 Pin Control Harness from the Relay Board. Make sure the Probe Leads are plugged in to the Relay Board also.



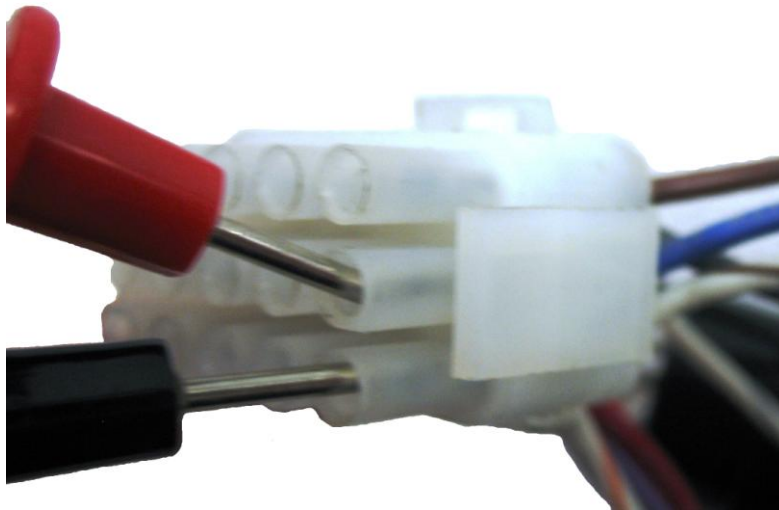
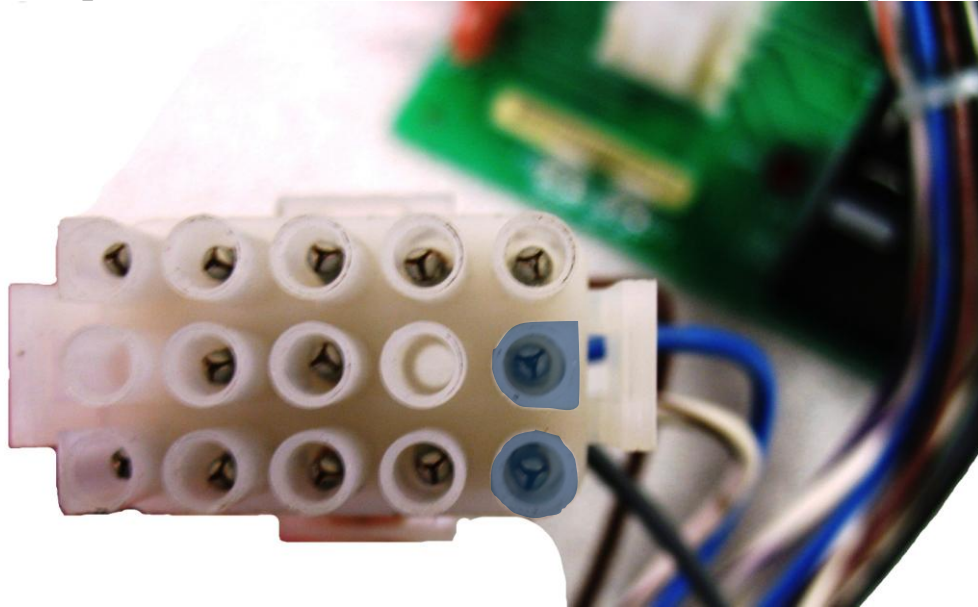
Using a multimeter set to Ohms, test the two ports as shown. The reading should be the same as the results of Test 1 if the temperature is the same.

If the reading matches the temperature of the oven cavity, converted to Ohms by the Probe Ohms Chart on page 2, the Relay Board is not the cause of the Probe Error, so proceed to Step 3.

If the reading is open, the relay board should be replaced.

Step 3:

Reconnect the 15 pin Control Harness to the Relay Board and Disconnect the other end from the Back of the Main Power Control Board. The highlighted pins on the photo below are where Step 3 test points are located. (Note the orientation the Squared Pins)



When testing the Ohms between the highlighted pins, the reading should match the results of test one and two. **If the reading matches the temperature of the oven cavity converted to Ohms, the Probe Error is caused by the Main Power Control Board and it should be replaced. If the test reads open, the 15 pin Control Harness should be replaced.**