Tips for Installing K Type Thermocouple

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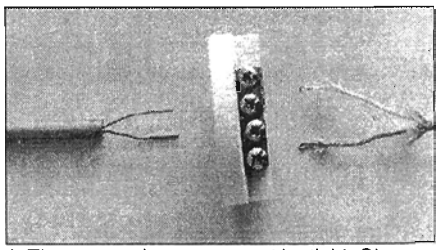
Assembling the Thermocouple

If your thermocouple is already assembled, skip this section.

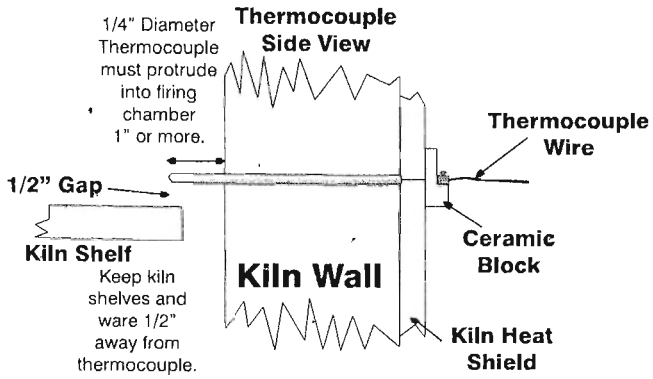


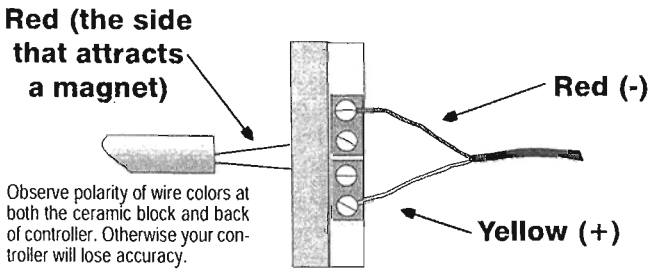
1. Thermocouple screws must be tight. Observe wire color coding. The wire on the thermocouple that attracts magnet is the red side.

1 You will find four screw connectors on the ceramic block. Turn the ceramic block so the screws are away from the thermocouple. Insert the wires from the thermocouple into the two center screws. The red wire goes into the side marked "-" on the ceramic block. Do not tighten the screws yet.

2 Included with a new thermocouple is a length of double wire. Remove 2" of outer insulation from one end of the wire. Remove ½" of insulation from the two exposed wires. Fold ¼" of the end of each wire to form a double-thick end. (See photo above.)

3 Insert the wires into the ceramic block outer screw holes. Insert the red wire on the side marked "-". Tighten the two screws securely. But don't tighten the screws from step 1 until after adjusting the thermocouple length for your kiln.





Make a visual inspection of the thermocouple connections on the ceramic block and back of the controller.

Placement of the Thermocouple

Placement of the thermocouple is important. When installed through the wall of the kiln it should extend about 2" into the kiln from the inside wall. In large kilns 3 to 4 inches is better. On thin wall kilns it may be necessary to shorten the thermocouple so that it does not extend too far outside the kiln. This can be done by removing the desired length of insulators and cutting the thermocouple. Unlike changing the length of the extension wire, this will not affect the accuracy of the meter.

The life of the thermocouple can be extended, especially in a reduction kiln by using a ceramic protection tube. This can be purchased from your dealer.

Install the thermocouple through a peephole or other hole provided on your kiln. If there is no hole drill one just slightly larger than the ceramic insulator. If you are using a protection tube you will need to drill the hole to accommodate it.

CAUTION!

IN ELECTRIC KILNS THE THERMOCOUPLE MUST NOT CONTACT THE HEATING ELEMENT(S). THESE ELEMENTS ARE LIVE AND CAN CAUSE SEVERE SHOCK UPON CONTACT WITH A THERMOCOUPLE. (BE ESPECIALLY CAUTIOUS IF ELEMENTS HAVE COME OUT OF THEIR GROOVE AND ARE DRAPED AROUND THE KILN