
9 Adjusting Thermocouples

This section outlines the basic procedure for the use of the stem psychrometer and should be read before attempting to inspect or operate the instrument.

VIDEO 11- [Adjusting Thermocouples](#) - Watch this BEFORE Opening the Chamber

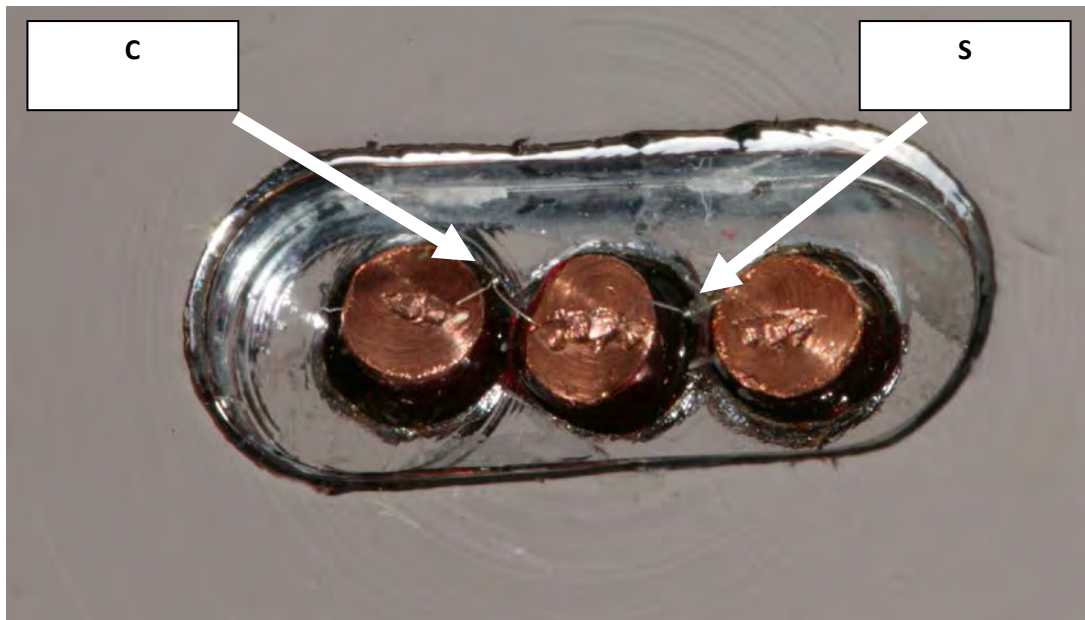


Photo 6: 25µm Chromel/Constantan thermocouples viewed under a dissection microscope at 20x magnification

WARNING 3: NEVER grab or pull the thermocouples with forceps. This will break the very fine 25µm wires and result in the instrument being returned to ICT for factory repair.

The recommended procedure is to use a very fine pair of forceps to push or nudge the thermocouple wires from side to side as this will raise the thermocouple up into a vertical position. It should only be necessary to raise Thermocouple-S into the vertical position. Thermocouple-S must be raised to the face of the psychrometer chamber so that it can make contact with the xylem surface in order to directly measure the stem temperature and thus determine dT .

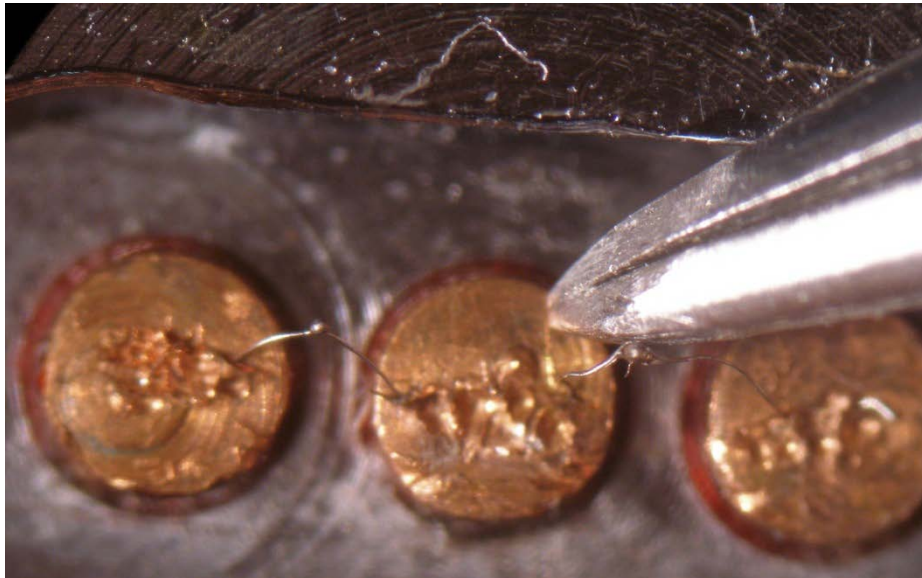


Photo 7: Adjusting Thermocouple-S vertically to the face of the chamber

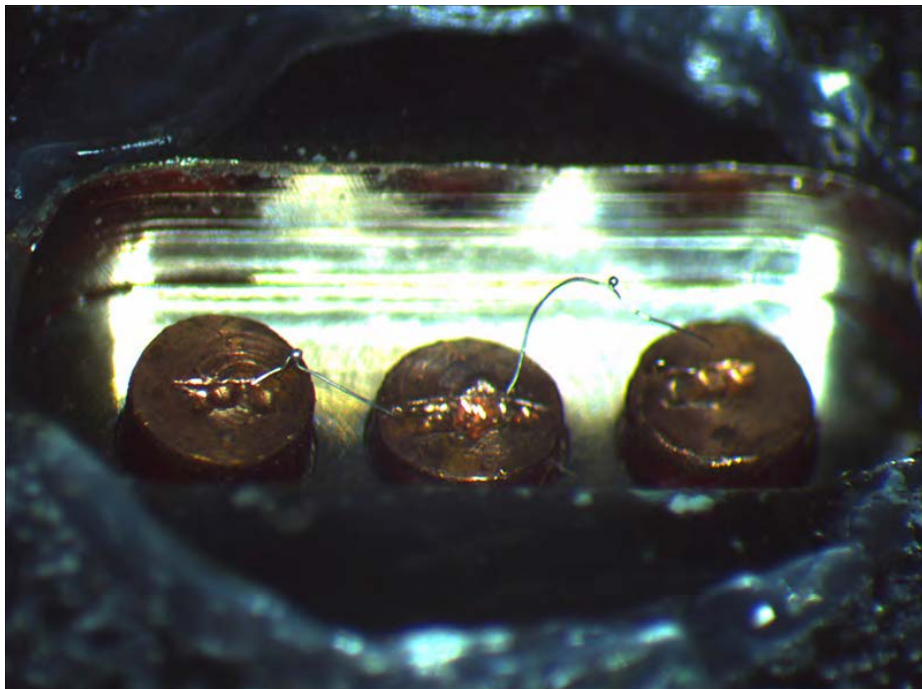


Photo 8: Thermocouple-S viewed from the side sitting just above the chamber surface.