How to calibrate a stem thermometer

Freezing point calibration

Get a container of ice water (glass, pan, etc.) Make sure that the container is mostly ice with a little bit of water. (See picture.)



Place the thermometer in the container and wait a couple minutes. (Tip: stir the water a couple times while waiting to get a nice even temperature in the container.)



Read the temperature on the thermometer. If it says 32°F, then your thermometer is calibrated.



If the temperature on the thermometer does not read 32°F, then calibrate the thermometer by holding the bolt below the dial (with the thermometer tool or pliers) and turning the dial until the arrow on the dial is pointing at 32°F.



Boiling point calibration

Make a pot of boiling water. Place the thermometer (carefully) in the boiling water.



Read the temperature on the thermometer. If it says 210°F, then your thermometer is calibrated.



If the temperature on the thermometer does not read 210°F, then calibrate the thermometer by holding the bolt below the dial (with the thermometer tool or pliers) and turning the dial until the arrow on the dial is pointing at 210°F.



Note

Boiling point decreases with elevation. If your facility is located at a high elevation, the boiling point of water will be 1-2 degrees less at your location.

Elevation above 1500ft – Boiling point of water: 209°F Elevation above 2000ft – Boiling point of water: 208°F