

Service bulletins are issued by *Maine Energy Systems* at irregular intervals to alert Installers of common issues of installations and are also used to pass information of interest or information concerning parts replacement that may be considered unusual or unscheduled for boilers already in service.

Subject: Over temperature / STB Testing

Models: All AutoPellet boilers

Problem: Some AHJ have required yearly testing / activation of the high temperature / over temperature / STB sensor that is factory standard on all AutoPellet boilers. Because of the difficulty in bringing the boiler to the trip temperature of the STB, it is preferable to follow the below example to test this device should your customer require it. This is normally a yearly need if at all and intended to be performed at the time of the yearly cleaning.

Solution: See pictures: Using $\frac{3}{4}$ inch copper pipe and a sweat end cap construct a water tight vessel between 3.5 and 4.0 inches in length. Secure this in a fixed upright orientation with metal clip or something like vice grips to provide solid and stable positioning of the copper pipe. Use a candy or deep fry thermometer for temperature measurement as these go well beyond boiling which is necessary. Fill copper pipe with a fluid which will not boil under 240 degrees F. (antifreeze works well) Insert bulb of STB / over temperature sensor, which is normally mounted on the right side of boiler vessel in one of the probe holder slots, into the copper pipe, along with your candy thermometer. With the boiler "on", but not firing, slowly heat the fluid in the copper pipe with your torch while watching the temperature on your thermometer, until you hear the STB "click" and see the message "SAFE T S" or "SAFETY T SYS". The message will vary depending on which screen you are on at the time the sensor trips. Note temperature at which this happens. Depending on accuracy of your thermometer, and a normal variance as well for the accuracy of the STB, you will usually see this happen between 215 and 230 degrees.



CAUTION!!! Vessel will be extremely hot. Fluid inside vessel is extremely hot. Take precautions to prevent accidental contact / spillage. Use extra caution in handling liquids over or around the electronic main controller!!!

NOTE: Results to be documented for customer if requested please.