

REPLACING AND CALIBRATING THERMOSTAT

MODELS: 125BS

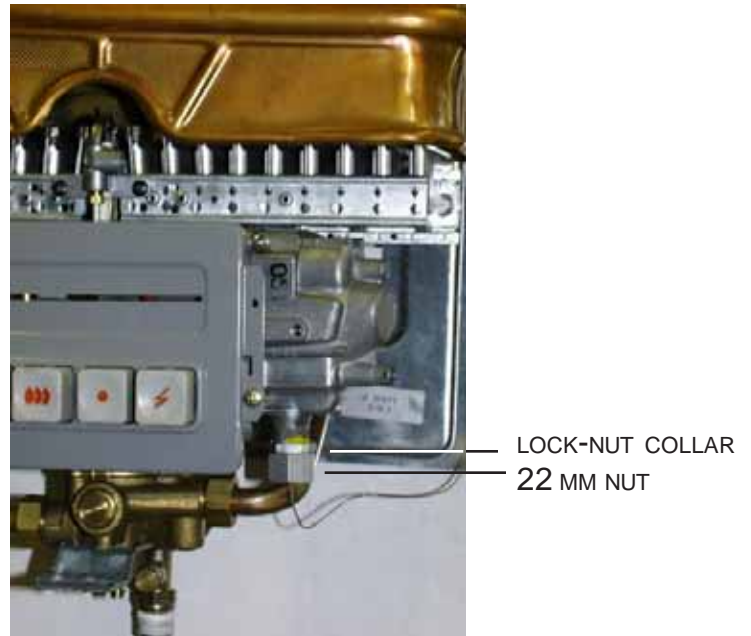
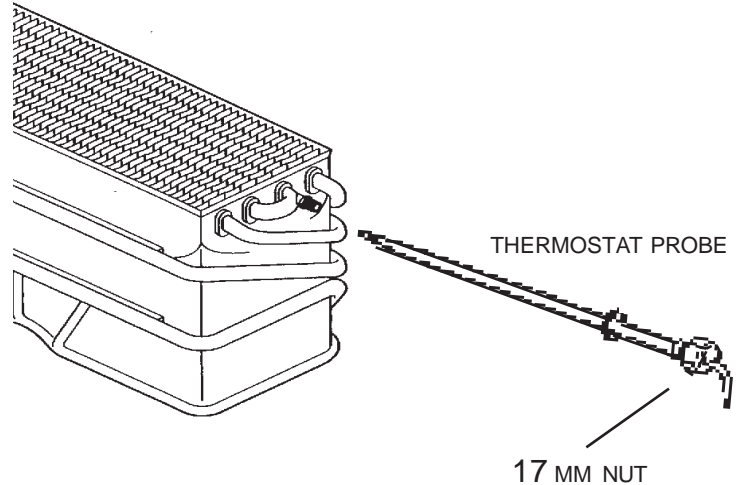


WARNING

LP & NG ARE EXTREMELY FLAMMABLE SO
TAKE EXTRA PRECAUTIONS WHEN
PERFORMING ANY WORK TO THE HEATER

Replacing thermostat

1. Shut off gas and water to heater. Then open a nearby hot water tap to relieve pressure.
2. Loosen screw at bottom of front cover panel to remove, pull bottom forward and lift up.
3. Locate thermostat wire on right side of heater, undo bracket holding it to frame.
4. Position a basin to catch water below heater and remove thermostatic probe from right side of heat exchanger with a 17 mm or medium sized adjustable wrench.
5. Using a 22 mm or medium sized adjustable wrench undo nut at other end of thermostat wire. Thinner lock-nut collar above nut will remain in place. A painted seal will be broken.
6. Install new thermostat being sure not to crimp thermostatic wire. Thread nuts by hand before using any wrenches. Note that there are already gasket seals on both ends.
7. Tighten 22 mm nut up to collar nut.
8. Turn on water and look for any leak at upper right hand connection.
9. Turn on gas and apply soap solution above the 22 mm nut. Then operate heater, bubbles are a sign of a leak.
10. Once complete run unit and calibrate temperatures. If too cool loosen 22 mm nut in 1/2 turn increments and test water temperature again. If too hot tighten 22 mm nut in 1/2 turn increments. The lock-nut collar above the 22 mm nut will need to be tightened to 22 mm nut once calibration is complete.



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Calibrating Thermostat

As it comes from the factory the 125BS will raise average ground water temperature (50F) +90 degrees to 140F with flow rates from a 1/2 gallon per minute to a little over 2 gallons per minute. The Aquastar 125BS is designed to modulate the flame height as inlet water temperature or flow varies. The Aquastar's thermostat should be calibrated if the unit fails to modulate properly or raises preheated inlet water above 140F. **Note:** the thermostat can be calibrated to produce less than a 90F degree rise.

1. Loosen screw at bottom of front cover panel to remove, pull bottom forward and lift up.
2. Loosen the lock-nut collar above the 22 mm nut to begin the calibration procedure. A seal of yellow paint will be broken when it is loosened. See diagram below.
3. Tightening the 22 mm nut (upwards) will lower the flame height. Loosening (downwards) will raise the flame height. When making an adjustment it is recommended to have water flowing and the heater on, then at 1/4 turn increments of the 22 mm nut, test the temperature of the outlet water by either touching the plumbing leaving the Aquastar or feeling the hot water at an open tap. **Note:** it should not be necessary to loosen 22 mm nut beyond two turns out, this is a gas seal and will leak if loosened too far.
4. If the water temperature does not vary when the thermostat is adjusted then it needs to be replaced.
5. **Note:** The thermostat's modulation will respond sooner with varying flow rates of preheated water. Although varying flows of cold water will be sensed by the thermostat there will often be a delay to stabilize temperature.
6. Retighten lock-nut collar against 22 mm nut when calibration is complete. Replace front cover panel.



LOCK-NUT COLLAR
22 MM NUT