# ADDENDUM HIGH EFFICIENCY OIL BOILER

# FIELD SERVICE FOR WELL AND AQUASTAT CONTROL REPLACEMENT

### Purpose:

If your boiler has the aquastat control in the manifold tree and you wish to run the boiler hot stand-by (with TT jumpered), you <u>must</u> move the aquastat control sensor to the well in the top rear section of the boiler.

#### **Issues:**

The current boiler well is a larger diameter than recommended for the best performance (poor physical contact). It is possible to use this well with heat conductive compound but still the results may not be satisfactory (pressure valve relief) if the aquastat temperature is set to 220 F.

### Changing out the well:

- **1.** Disconnect all electrical power.
- **2.** Isolate boiler and partially drain.
- **3.** Remove Jacket top. (See Installation, Operation & Maintenance manual.)
- **4.** Locate well in top rear section of boiler, under the insulation.
- **5.** Remove the old well with a 27 mm socket. An impact gun works best. However, if a wrench is used heat may be required to break the sealant.
- **6.** Clean the female threads.
- **7.** Apply anaerobic sealant to the replacement well. (i.e. Loctite 567)
- **8.** Drive the replacement well in at least 4 thread engagement, using a 1-1/16" socket. Do not over tighten or strip threads.
- **9.** Clean excess calking.

## Changing the sensor:

- **1.** Open the aquastat box.
- **2.** Locate and remove the old sensor.
- **3.** Open the electrical knock out in the bottom center of the controller box.
- **4.** Insert 36" long sensor and tighten electrical wire clamp nut.
- **5.** Insert the 36" sensor, 3-pin connector into the aquastat receptacle.
- **6.** Thread the 36" sensor through the back of cabinet and insert the sensor head into the well.
- **7.** Using the sensor clip provided, attach to sensor wire. Before installing clamp, force sensor to bottom of well. Make sure sensor is completely inserted; if tight use a little soapy water. (Top of well to tip is 4-3/4")
- **8.** Secure clamp by inserting prongs into groove in well. See **Figure 2**
- **9.** Restore power and check the operation of the aquastat and sensor.
- **10.** Check for leaks before reinstalling insulation and cabinet top.

Over for Pictures....

Supplied Items	
Part No	Description
1635001	Replacement Well
240007733	36" Temperature Sensor
240008013	Well Anchor Clip
240007736	Instructions
You Will Need:	
27 mm Socket and 6" extension	
1-1/16" Socket	
Impact Gun or torch	
Thread Sealant	

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Figure 1 - Aquastat Wiring

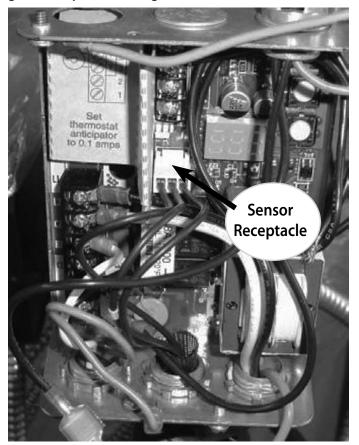


Figure 2 - Sensor Clip

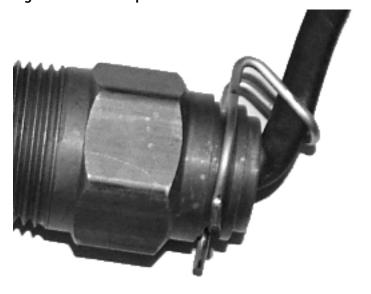
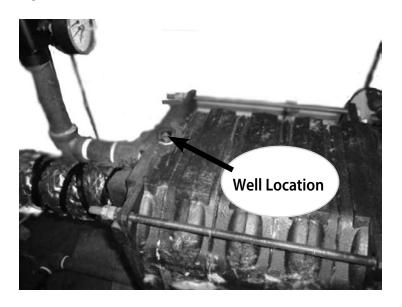


Figure 3 - Well Location





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