



Hot Water Management Experts Since May, 1993

Monthly Tech Tips

Tip of the Month: What You Should Know About Testing HSI's

As everyone is now well aware, Texas adopted a Clean Air Act in 2002 that caused the gas appliance industry to build low NOx burners. The result of course is a lower level of emissions emitted to the atmosphere.

One of our manufacturers, Raypak, did a lot of research on the most reliable and safest way to ignite a burner in a sealed combustion chamber. They found the hot surface igniter (HSI) to be the most reliable, test after test. After over five years of selling and servicing low NOx boilers we now know that the HSI is reliable when new, but can deteriorate prematurely. Our original test to check the status of the HSI has been to use an amp probe to read the amp draw while the igniter is heating up. If the igniter pulls 3.5 amps or more, the igniter worked. Anything less and we had ignition failures. While this is still a good gauge on whether you have a productive HSI, we now have a more defined test.

Switch your volt meter to "Ohms", and read the ohms across the two (disconnected) wires on the HSI. You can check right at the igniter, or pull the plug on the Fenwal ignition module and test at the two HSI terminals (S1 & S2). Your resistance reading should be between 30 to 70 ohms. Anything above or below this window indicates a defective hot surface igniter

Electronic Tempering Valve for Domestic Hot Water

When water temperature control and convenient operation are needed, the ETV delivers. This electronic tempering valve accurately regulates water temperature for a variety of applications. The large, easy-to-read display and user-friendly adjustment module can be located conveniently, up to 500 feet from the valve. This allows outlet water temperature to be monitored at a glance and for the temperature to be adjusted without having to access the valve piping.

The ETV is ideal for any application where water temperature must be accurately controlled.

Typical use include:

- * Domestic hot water temperature control
- * Heating and cooling applications
- * Industrial processes

For more information on the ETV and other Heat-Timer Products go to <http://www.heat-timer.com>. As always, feel free to call on us at Hydrotemp with any questions you may have. We are more than happy to help you.



QUICK NOTES

Boiler Training:

We have a new training class coming up March 7, 2009. This will be a follow-up to our beginner class. The subject matter will be an intermediate level troubleshooting.

Sign up soon, chairs are going fast. Cost is \$100 per person and must be paid in advance.

Shop Closed

Our office will be closed on Friday, April 10, in observance of Good Friday.

Missing In Action

Jerry and Eric will be out of the office from March 16— March 20.

Joke of the Month

"Did you hear that someone broke into our local police station and stole the toilet?

Right now the cops have nothing to go on....."



Any comments or suggestions regarding this monthly publication would be greatly appreciated.