



Hot Water Management Experts Since May, 1993

## Monthly Tech Tips

### A Boiler Is Like An Automobile?

Many installers take for granted that if a boiler is properly installed, it should light off and be ready for duty. While it is true the manufacturer fire tests each boiler before shipping, field conditions can vary the set up needs of the boiler. Jobsite supply gas pressure, combustion air supply and exhaust vent design can require a completely different initial combustion set up on the appliance. It is important to check the manifold gas pressure settings and cabinet air pressure settings and adjust to factory recommendations. Further, much like an automobile, a boiler will require a tune up to stay within the recommended combustion setup. Most manufacturers recommend (at the minimum) checking the pressures once a quarter to make sure the set up remains correct. These routine tune-ups can save the owner of the boiler from bigger, more expensive problems later down the road.

Below is a quick reminder on how to check these pressures. Remember, you will need a manometer that reads 1/10's of an inch (slack tube is best).

**Checking The Air:** Turn off power. Unplug the cap at pressure switches and connect manometer to the tee. Close all manual firing valves. Turn power on. Check manometers attached to fan pressure switch. The reading should be  $1.4 \pm 0.1$  in. WC for propane gas and natural gas. If not, adjust the air shutter on the blowers to attain the correct value. Turn power off. Reconnect the cap.

**Checking The Gas:** Turn off unit. Open manual firing valves. Turn on the unit, wait 15 seconds, and the igniter should glow. Look into the sight glass located at each end of the heater to check igniter operation. Gas valves should open in 45-60 seconds. If burner does not light on first trial, it will retry up to three times. Main burner ignition: Check manifold gas pressure at gas valve outlet pressure tap. This should read  $3.5 \pm 0.1$  in. WC for natural gas and  $10.5 \pm 0.1$  in. WC for propane gas. If the pressure reading differs by more than  $\pm 0.1$  in. WC, removed screw cover from the gas pressure regulator and adjust main burner manifold pressure. Replace the screw cover. Repeat the above steps on other valves as necessary.

### Need A Boost? We Can Help With That



If you are in need of a system designed to boost pressure, we can help you out. The Thrush Packaged Booster Systems are pre-engineered pressure booster packages that increase pressure and maintain the pressure necessary to meet changing system demands. The unique constant pressure feature sets the Thrush

PBS's apart from other booster packages. For more information on this and other great Thrush products, give us a call. We would be more than happy to help.

### QUICK NOTES

#### Boiler Training

A date has not yet been chosen for the next class.

#### Office Closed

We will be closed on May 25 in observance of Memorial Day.

#### Quote of the Month

...Attitude to me is more important than facts. It is more important than the past, than education, than money, than circumstances, than failures, than success, than what other people think, say or do. It is more important than appearance, gift, or skill. It will make or break a company...a church...a home.

The remarkable thing is we have a choice every day regarding the attitude we will embrace for that day...I am convinced that life is 10% what happens to me and 90% how I react to it. And so it is with you... we are in charge of our attitudes.

- Charles Swindoll



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