

Burner issues: **White smoke** after the main-flame goes off

Too much fuel can cause several problems..

make SURE the heater runs PERFECTLY.

The heater should NEVER smoke.. NO black smoke, NO white smoke, NO smoke at all..

And.. Make sure it doesn't start leaking under the burner.. Small leaks become BIG problems FAST.

Don't do the adjustment yourSelf, if you don't know what I just said.

Bring it to a tech, have him install a fuel-pressure gauge (permanently),

and ask him nicely to show you how to make the adjustment, in case you have to do it for yourself, in the middle of a job, or middle of the night especially.

If, after fixing an ignition problem the smoke didn't clear after the first hour of use, and the "main-flame" was burning clear..

The air-bands might be too far open, or the fuel-pressure is set a little too high.. (probably over 120psi,) both of which can "elongate the fire-ball", which pushes the fuel-spray up against the bottom of the coil, allowing the fuel to re-coagulate, back into bigger droplets, and causing fuel to remain, after the main-flame goes out.. Thus, causing the white smoke.

Being meticulous ALWAYS gives you a clearer understanding of how things work, and how they fail. There is more downtime associated with heater problems than other systems, because the perfect fire.. is a "Balancing Act" ..NOT luck.

Get a pressure-gauge on your fuel pumps. Know the set-pressure.

And be familiar with the functional range of the air-adjustment on YOUR system.

..or one evening, when all the techs have gone home,

..you'll wish you were more confident in your knowledge.

Also.. If that heater is over 5 years old,

..the burner nozzle is probably worn.. it can cause the elongated fireball too..

Replace that, if the air adjustment doesn't eliminate the white smoke.

..Also, use soot remover if there is EVER any soot build-up on your coil.

! Caution ! .. If there's ANY unburned fuel in the burner chamber

when the main-flame finally ignites.. There can be up to a 6ft flame rise out of the burner stack !

..So, do your testing outside, in open-air, very carefully,

..AND with a fire-extinguisher handy.

Be prepared to quickly disconnect the power from the fuel solenoid

Pulling the connector out of the fuel solenoid, is usually the fastest way.

Pulling the ReedSwitch out of the Flow-Switch works to cut power,

..unless sticky contacts on the ReedSwitch is a compounding problem.

One more thing..

as you go up in altitude, the air gets thinner, watch for sooting problems..

..if you go up-hill, every 2000 feet requires that you readjust the air-bands.

Respect the tech that keeps you safe and productive.