Gas Burner Adjustment

I want to set my gas burner on my own. Can I do that?

Crown does not recommend setting or adjusting the gas burner unless the operator has been trained by a certified gas burner service technician.

That said, gas burners are set up by measuring the amount of oxygen that is left at the end of the tube by inserting a meter at the exhaust stack.

At the pilot setting that oxygen ratio mix should read 12% - 16%. For the burner to fire consistently, there should not be more oxygen used than that percentage.

- 1. In order to regulate the gas air mixture the operator should find the small pilot line's shut off/adjusting valve.
- 2. Open this line for more gas and close for less gas.
- 3. Turn the main gas valve off and the unit will stay on the pilot setting during this final adjustment.
- 4. Start and stop the unit at least 5 times to make sure the system fires correctly.

The proportionating valve and main gas regulator control low fire.

Low fire

- 1. By turning the top-adjusting stem out or up, it will reduce the output.
- 2. The setting should be at 16% oxygen on low fire.
- 3. Once the fluid has reached temperature the gas train should cycle down to this low fire setting.
- 4. If the train goes to low fire and temperature of the water continues to climb, then you should check the pilot setting again or the proportionating valve setting.

High fire

- When unit is on high fire the oxygen reading should be 4%
- Control is by the main regulator and the dung valve
- If the reading is too low, then close down the dung valve until the 4% ratio is reached
- Normally there is no need to adjust for air flow.

Because Crown is here to help I hope this helps get you up and running. I do however realize not every problem can be solved online.

Please don't hesitate to call or email me for further assistance.

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