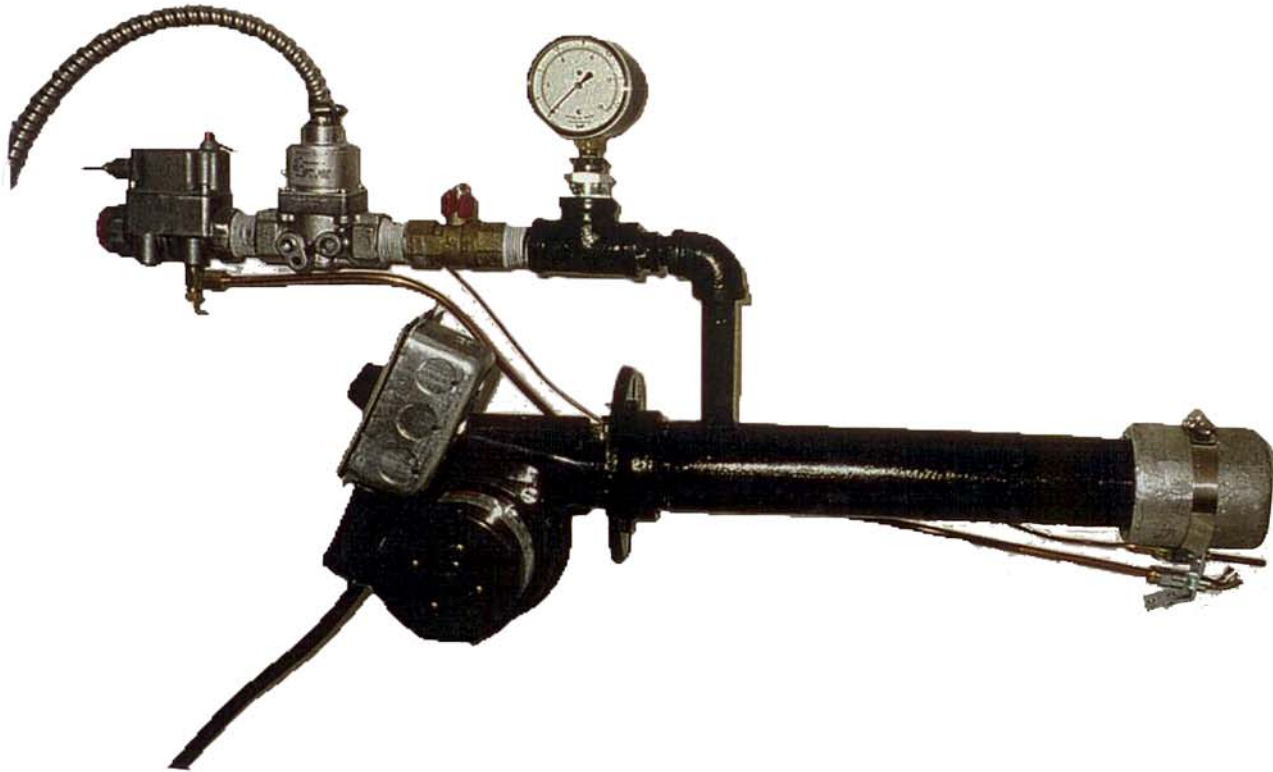


OLYMPIC 200K BLOWER BURNER



STANDARDS & APPROVALS

- AGA** American Gas Association
- ANS** American National Standards
- CGA** Canadian Gas Association
- CSA** Canadian Standards Association
- UL** Underwriters Laboratory

Listed below is a component breakdown of the operating parts of the Olympic Power Burners and their respective approvals. Virtually all burners are, themselves, not approved by the above agencies because they become part of systems which are field approved by local agencies. If you have problems with compliance to local codes, feel free to contact us or have inspectors contact us. We use the finest approved parts available.

DAYTON SHADED POLE BLOWERS: MODEL 4C440, 4C442, & 4C443:
CSA & UL (under the motor component recognition program) File E47479 for the thermal protection, File E37403 for impedance protection and File E40077.

VARI-SPEED MOTOR SPEED CONTROL, MODEL: KBWC-13K: UL Approved

GENERAL CONTROLS SERIES MR2 BASO™ VALVE:
AGA, CSA, ANS tested Z21.20 Auto Ignition systems and Z21.21 Auto Valves.

JOHNSON CONTROLS SERIES H91 BASOTROL ELECTRIC SOLENOID VALVE: AGA, CSA, ANS Z21.21 Auto Valves.

HONEYWELL PILOT BURNER MODEL Q314A: AGA, ANS Approved.

JOHNSON CONTROLS PENN BASO™ THERMOCOUPLE MODEL: K24BT
AGA, ANS Approved.

WATTS GAS COCK REGULATOR VALVE; MODEL: 3/4 INCH 0545005
AGA, CSA, UL Approved.

CAROL GROUNDED 16/3 CORD SET: JACKET TYPE: SJT, UL, CSA Approved.

OPERATING INSTRUCTIONS

1. Make sure burner shutoff valve is open and the flow control valve is closed.
2. Open needle valve to pilot burner.
3. Hold down red BASO™ reset button and light the pilot burner while continuing to hold down the reset button for 30-45 seconds. Release. If pilot does not stay lit, see "Troubleshooting" below.
4. Adjust blower to a low setting.
5. Slowly open flow control valve until main ignition occurs.
6. Increases in gas need to be accompanied by increases in air. It is easier to adjust the air, then adjust the gas to match. Due to the circuitry involved in the speed control, you may experience a lag in the air setting.
7. To turn off burners: Shut flow control valve, turn off blower, close gas cock. Unplug after use.

REDUCTION TIPS

Power burners offer more control than Venturi burners when it comes to the air/gas ratio. This can cause confusion if you are not used to forced air systems. Venturi burners pull the air they need into themselves. They will not pull more than they need, but can be made to pull less than they need. When you want to reduce with Venturis, you close down the primary air spin plate and push the damper in some.

Since you have more control over the air with Power Burners, you can reduce as well as spill excess air into the kiln. Excess air cools the flame and can be as wasteful as overreduction. Also, spilling excess air can reoxidate the ware by providing extra oxygen that would not otherwise be present. The tightest small blue flame you can produce is most likely a cool, excess air flame. To get a good air/gas ratio flame, look for the earliest signs of reduction such as a "swirly" atmosphere, then clean up the flame by increasing the air or decreasing the gas. When the flame first starts to clean up by becoming tighter and a little louder, your ratio is becoming correct.

To reduce with your Power Burners you can increase the gas while leaving the air constant, or decrease the air and leave the gas constant. Increasing the gas will tend to keep the kiln from stalling as much as if you decreased the air. If you want your reduction climb to go slowly, you may want to decrease the air. You are going to be looking for normal reduction indicators: swirly atmosphere, short flames from top and middle spy holes. Long spy hole flames and flames going up the chimney are signs of overreduction and a waste of gas. Your burner and its' settings control reduction while the damper controls kiln pressure. You want to have positive pressure in the kiln at the top and middle and neutral pressure at the bottom spy hole. Remember, any new kiln or burner system takes some experimentation to understand the nuances.

TROUBLESHOOTING

PILOT WILL NOT LIGHT:

There probably is air in your gas lines if this is your first firing. Bleed off any excess air.

PILOT IGNITES, THEN GOES OUT WHEN RESET BUTTON IS RELEASED:

Bad thermocouple. These can be obtained from a hardware store in an emergency, but will most likely not be of industrial quality. If you are having trouble with repeated thermocouple failure, the burner is positioned incorrectly or you have too much kiln backpressure. See placement diagram.

PILOT BLOWS OUT OR DANCES:

Kilns should be located away from windy areas. Incorrect port size and burner placement can cause pilots to blow out or "dance". See burner placement.

BURNER "PUFFS" AT LOW SETTINGS:

Too much air in the mix. Try using both the manual shutter and the speed controller to adjust the air.

BURNER SHUTS DOWN SUDDENLY:

This is usually caused by a pilot flame that is not stable (dancing). The signal from the thermocouple is too low to keep the BASO valve open. See burner placement.

KILN WILL NOT REACH TEMPERATURE:

Several things can cause this: Improper burner choice, poor kiln design, inadequate gas supply (especially true of large demand natural gas kilns), burners not operated at full BTU output, or LP tank freeze-up.

PROPANE TANK FREEZE-UP:

This happens when you try to remove too much gas from the tank in relation to its' size. Turning up the pressure will not help. If this is a recurring problem, you need a larger tank or several similar tanks hooked together.