

Midco International Inc.

4140 West Victoria Street Chicago, Illinois 60646 tel 773.604.8700 fax 773.604-4070 www.midcointernational.com



V Series burner Startup Instructions

V Series burner with Siemens Control

- Before attempting a burner start up, thoroughly study and familiarize yourself with the exact sequence of operation and all other details on the specific Primary Safety Control System being used. This information can be found in the burner Installation and Service manual as well as technical literature covering all components included in the Owners information envelope.
- 2. Prewired and installed burner on equipment.
- 3. To begin burner setup, close the manual ball valve after the Dungs regulator
- 4. Turn on power.
- 5. Do not turn on gas at this time.
- 6. Burner blower motor will ramp up to high fire purge.
- 7. Burner blower motor will ramp down to low fire.
- 8. Burner will lockout with no gas flow.
- 9. Siemens Controller display will read Loc 2, no flame stablished.
- 10. Remove the 1/8" plug of the Tee downstream of the pilot regulator
- 11. Install a 1/8' barb fitting
- 12. Install a differential manometer on the downstream Tee of the pilot regulator, to read pilot pressure.
- 13. Turn gas on.
- 14. Reset Siemens control by pressing info button for < 3 seconds.
- 15. Burner will go through sequencing and light.
- 16. Check pilot pressure
- 17. If pilot is an internal pilot, the pilot pressure should be 3" w.c. for natural gas, 1.5" w.c. for propane.
- 18. Open the manual ball valve slowly, pilot should remain on with main at minimum fire on as well.
- 19. If pilot goes off while opening the manual gas valve slowly then dungs regulator needs to adjusted.
- 20. Turn the top adjustment screw on the Dungs regulator clockwise until it stops, then counterclockwise 10 turns for natural gas. Turn 12 turns for propane. (**Note:** This is a starting point only, small adjustments may be required. See below).
- 21. Turn the side adjustment screw clockwise until it stops, then back it our counterclockwise 2 turns.
- 22. Try turning the burner on again
- 23. If the burner fires and stays lit, then give Dungs regulator top adjustment just ½ a turn more counterclockwise, and put the black cap back on.
- 24. If burner fails to light, then keep turning the Dungs regulator counterclockwise one turn at a time and retry lighting the burner for every turn until stays on.
- 25. Once burner remains on, set temperature control to desire temperature setting.
- 26. Burner should ramp up to high fire and will modulate to meet temperature setting.
- 27. Check gas inlet pressure on side inlet of first solenoid gas valve.
- 28. Inlet pressure to side inlet of first 1/8" Tee before the pilot regulator at high fire should be 7" WC.
- 29. Readjust main gas pressure regulator if required.
- 30. Consult the burner Installation and Service manual for manifold gas pressure adjustment and pressure chart.