

GAS HEATED DRYER START-UP SEQUENCE

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1. Set main gas regulator pressure initially at 7.5" W. C.
2. Adjust low gas pressure switch for 5" W. C.
3. Adjust high gas pressure switch for 10" W. C.
4. Operate the exhaust fan and the supply fan and check for proper rotation.
5. Operate the combustion air blower by placing a jumper connection between the control power (L1) and the combustion air motor starter coil and check for proper rotation.
6. Remove the 3/8" tube connection from the lower side of the combustion air switch and connect it to a monometer. Connect the negative side of the monometer to the burner duct.

Adjust the inlet damper on the combustion air blower for 1" W. C. pressure differential.
7. Connect a volt meter between the normally open contact on the combustion air pressure switch and ground.
8. Adjust the pressure switch until the volt meter reads that the circuit is open.
9. Reconnect the 3/8" tube to the lower side of the combustion air pressure switch.
10. The volt meter should read the full control voltage. If not, turn the adjusting screw out (c.c.w.) until it does.
11. Remove the jumper from the combustion air blower motor starter coil.
12. Remove the covers from both the temperature controller and high temperature limit switch.
13. Set the high temperature limit to the maximum allowable temperature for the system (400° F.). Set the low limit adjustment for a temperature 10° F. less than the minimum anticipated cold temperature. (The factory setting is approximately 50° F.)
14. Place a temperature probe into the same jet tube as the temperature controller probe.
15. Open the gas cocks and start the burner.

16. If the flame reading is less than 5 microamps on the meter while holding the start button in, increase the pilot needle valve adjustment.
17. If the flame reading is less than 15 microamps on the meter while at low fire, increase the low fire setting.
18. Set the gas valve train test cock at approximately 50% open and set the temperature controller for maximum temperature.
19. Put the machine in the run mode in order to bring the burner to high fire. (If the machine cannot be run, then add a jumper in the low fire interlock run relay circuit.)
20. Manually adjust the test cock until the normal operating temperature is established. (At least 50% of full scale)
21. Calibrate both the temperature controller and the high temperature limit switch so that they read the same as the probe.
22. Set the temperature controller for the normal operating temperature and slowly open the valve train test cock to the full position.
23. After the system has had sufficient time to settle down and the temperature indication either stops moving or cycles up and down, make the following adjustments:

<u>Condition</u>	<u>Adjustment</u>
Temperature cycles up & down.	Increase proportional band adj.
System responds too slowly.	Decrease proportional band adj.
Indicating needle is above set point.	Lower proportional band reset adjustment
Indicating needle is below set point.	Raise proportional band adjustment.

24. Replace covers on the temperature controller and the high temperature limit switch.
25. Adjust the temperature controller for maximum temperature. (Higher than the maximum operating temperature)

26. Observe the high temperature limit switch indication and the temperature probe indication and adjust the main gas pressure regulator so that the system achieves the maximum operating temperature without tripping the high temperature limit switch. (Main gas regulator pressure difference between the first s.s.o.v. and the burner duct is approximately 5.6" W. C.)
27. With the system operating at maximum temperature, adjust the supply fan pressure switch so that it is just barely holding in.
28. With the system operating at maximum temperature, adjust the exhaust fan pressure switch until the system shuts down and then adjust it back from $\frac{1}{2}$ to 1 turn.
29. Set the temperature controller for the normal operating temperature and remove all temporary jumpers from the system.