#### SERIES 2000 BATCH TOPDRY TIPS

# **Operation Tips for Top Dry Batch**

### **Special Wire Terminals**

**J7-10 or J7-13** on stand alone unit - 12 volt Ground for use with a tester. Any unused third terminal on any network connector is also a 12 volt ground.

- 1. When ever you see 000 on the Screen there is an Error some where on the screen.
- 2. To Force a new time setting while the Dryer is running Push the "Inc" (Up Arrow) and the "Dec" (Down Arrow) keys at the same time
- 3. To change the Second Fan Start delay hold down the "Program Dry/Cool Timers" and "Program Temperature" keys and turn on the power switch. Note this must be done on the Master Fan and cannot be done of the Slave Fan or at the Remote Display.
- 4. Turning Dip Switch 3 ON disables the Air Flow monitoring function for testing. Remember to turn OFF before leaving the Dryer as loss of airflow will not shut down the dryer if the switch is left on.
- 5. There is a setup procedure that allows you to change how the Top Dry operates.

  To change this setting use the following steps. Move quick as there is a limited time to do each step.
  - 1. While holding the Program Temperature Key in turn Power switch on. The Screen should read "0"
  - 2. Release the Program Temperature Key and press the "Inc" (Up Arrow) key 3 times. The screen should read "3".
  - 3. Press the Program Temperature Key to scroll through the various allowed operation changes. Press the "Inc" (Up Arrow) or "Dec" (Down Arrow) keys to change to change the setting.
  - 4. The allowed changes come up in the following order.

C or **no** C C = Hi-Lo cycling heater **no** C = Cycling heater

\*\*\*Note that in Batch Top Dry Mode C or no C does not work. The system always cycles Hi-Lo no matter how you set the flag. \*\*\*

**H** or **no H** = Humidity sensor present **no H** = No Humidity Sensor

 $\mathbf{F}$  or  $\mathbf{C}$   $\mathbf{F}$  = Fahrenheit  $\mathbf{C}$  = Centigrade

L or no L L = The dryer will advance to Cool cycle when the Dry timer has reached zero AND the Grain temperature set point has been met.

No L = The dryer will advance to the Cool cycle when EITHER the Dry timer has reached Zero or the Grain temperature set point has been met.

- 5. After L or no L you press the Program Temperature Key one more time to finish.
- 6. To Operate Burner OFF/ON rather then High/Low you just have to set the High Limit and Cycle Set Points for the Temperature you want to operate. The system always cycles hi-lo no matter how you set the flag in setup.
- 7. To Clear the NOVRAM

Hold down the Program key (lower left key) and power the unit up. When the "0" comes up Enter a "7" with the Increment key (Up Arrow) and then push the Program Key again. When the "---" comes up you have 2 Seconds to depress the "Inc" (Up Arrow) and "Dec" (Down Arrow) keys at the same time. (Do not do this unless you are told to or are at a last resort to fix inconsistent behavior of the board)

- 8. When an Error shuts down the Dryer you can determine how long ago the shutdown occurred by pushing the "Dec" (Down Arrow) Key. It will read in hours with a maximum of 218 (9.1 days).
- 9. Drying Time has a minimum setting of 10 minutes no matter what time is set.
- 10. To light up all the words and warnings on the screen hold the "Start" Switch through the Power Up Screen.
- 11. To hook up a DMC Calcudry connect their activation contactor to J5-3 and J5-4. When these pins are shorted the system will go to the Cool Cycle immediately even prior to the 10 minute Drying Time minimum

- 12. 2003 Production Top Drys were shipped with a **Mechanical Plenum High Limit assembly**. It is a sensor located in a two piece tube strapped to each Fan and Heater Unit. You will continue to see a plenum high limit error on the display if the Electronic Plenum High Limit is tripped, but the Mechanical limit will shut the power off to the Fan and Heater completely. You check for continuity between terminals 20 and 21 on the Master Fan and Heater to determine if this limit is tripped. It will automatically reset when the temperature returns below the 280 degree Fahrenheit setting.
- 13. DIP Switch Settings (Turn on Switches named and leave all others off)

# **Top Dry Master**

Stand Alone - No Remote Display 6 ON With Remote Display 6 & 7 ON

## **Top Dry Master with Slave**

With or Without Remote Display 6 & 8 ON Slave 2 and 6 ON

## **Top Dry Master with 2 Slaves**

With or Without Remote Display 6,7 & 8 ON First Slave 2 & 6 ON Second Slave 1,2 & 6 ON

**Top Dry Remote Display** 1 & 6 ON

#### 14. Temperature Sensor Testing

A. You can find charts with the Resistance readings at various Temperatures in the following manuals Located in **Resource 2003 CD** in the "**Resources – Manuals**" Folder

PNEG-630 Portable Dryer – Trouble Shooting Feb 1999.pdf **Page 54** (Portable Dryers | Trouble Shooting – Operating Tips)

PNEG-377 Fan & Heater – Service Manual Feb 2000.pdf **Page 50** (Fans and Heaters | Trouble Shooting Guide)

The Batch Top Dry's use the Thermister type sensors, the bolt style for the Plenum and the Grain Temperature.

You have to disconnect the wires before testing. Check the charts listed above for readings at other temperatures.