1. Make sure the below condition does not inadvertently trigger an LDO event.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pilot Drop Fail | 8 | Y | remove power for ~15 sec/recycle | Knob turned to OFF position, but power is not lost for 45sec PV must have failed to drop. Test Procedure: Connect 0.400V power supply directly to board. Move knob to pilot position. Wait for the the yellow flashing light. Now, turn knob to OFF position. Leave power supply at full voltage. Wait for Error 8. |

1. Only update bucket averages when the chamber thermistor checks ok. Per the below truth table. This is because in an error state, we are unsure of the data quality.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Chamber Thermistor Heat Rate (Snap Shot >12F) | Chamber Thermistor > Ambient + 50 | Thermowell Rate | Error | Enable Bucket Average |
| TRUE | TRUE | TRUE | No Error | Yes |
| TRUE | TRUE | FALSE | No Error | Yes |
| TRUE | FALSE | TRUE | Error 9 | No |
| FALSE | TRUE | TRUE | Error 9 | No |
| FALSE | FALSE | TRUE | Error 9 | No |
| TRUE | FALSE | FALSE | Error 3 | No |
| FALSE | TRUE | FALSE | Error 3 | No |
| FALSE | FALSE | FALSE | Error 3 | No |

1. Verify the logic on how the LDO event is saved. Our intent, was as described below.
   1. LDO Occurs and triggers system shutdown (pilot and main valve will close)
   2. Board will go dead (I don’t recall if the board will flash anything when a system shutdown is called, please verify)
   3. I have noticed that I have to wait at least 45 seconds before the board can be re-picked.
   4. Once re-picked, the board will flash 10 blinks (this happens regardless if the customer moves knob to pilot or OFF position)
   5. Error will clear if valid cycle at the 30 minute check. Therefore, it will have 10 blinks until the 30 minute check.
   6. If it passes 30 minute check, LED will flash normal yellow.
   7. If it does not pass, it will either trigger Error 3, 9, or 10. Depending on what is going on.
   8. If you leave knob in pilot position, but pull the thermopile plug or cut gas supply, then re-pick the board, the error will clear and it will flash normal. I don’t really care what happens in this condition, however, I do want to verify everything is understood, and behaves as expected.