## **Oven Order of Operation**

#### NOTE: BURNER START-UP PROCEDURE MUST BE FOLLOWED FIRST. THIS PAGE IS FOR REFERENCE

- 1. Turn the main disconnect to ON the main control panel.
  - a. All temp controllers will power up
  - b. Burner control panels (ensure the toggle switch on the burner control panel is in the "ON" position) will power up. The combustion fan will bump on slightly
- 2. Momentarily press the "Start Fans" button
- 3. a. You will hear all oven recirculation fans and exhaust fans ramp up to speed.
  - b. This will initiate the Main panel purge sequence. This purge time ensures all safety air flow switches "make" and are active.
- 4. Momentarily press the "Start Burner" button.
  - 1. If the "Purge Light" is still illuminated on the front of the panel, the "Burner On" light will not illuminate. This "Burner On" light will illuminate AFTER the "Purge" light goes off.
  - 2. Once the "Burner On" light illuminates, this will initiate the Burner Purge sequence. This time is programmed into the burner depending on the oven size.
  - 3. The Sequence of Operation for the burner is spelled out in the manual for the Burner starting on Pg.18. PLEASE FOLLOW 120V BURNER.
- 5. During operation, the following safety switches are present
  - 1. Recirculation air proving. This proving switch ensures that the recirculation fan is on and moving air. If this switch isn't made, the burner will shut off, and the "Recirculation Fan Fault" light will illuminate
  - Exhaust air proving. This proving switch ensures that the recirculation fan is on and
    moving air. If this switch isn't made, the burner will shut off, and the "Exhaust Fan Fault"
    light will illuminate
  - 3. VFD fault. If ANY VFD in the panel goes into fault, the burner will shut off, and you will have the "VFD Fault" light illuminate.
  - 4. Main Cabin High Temp. If the Temperature in the main cabin (or within a zone if applicable) rises over 30 degrees F of the set point, the burner will shut off, and the "Main Cabin High Temp" light will illuminate

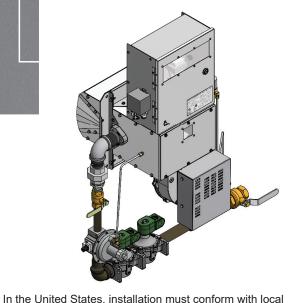
- 5. Burner Over Temp. If the Temperature on the Burner High Limit controller rises above critical temps, the "Burner Overtemp" light will illuminate. This temp is dependent on the size of the oven and the size of the burner.
- 6. Outside fault. This is an auxiliary fault circuit. If used, the external fault will cause the burner to shut off, and the "Outsize Fault" light will illuminate.
- 7. Burner Fault. If the Burner goes into fault, the burner will shut off, and the "Burner Fault" light will illuminate. The exact fault will then be flashing on the burner controller. Refer to Burner manual and documentation.
- 6. To shut down automatically, turn the switch located below the time to the "Auto" setting. Once

the set cycle time has elapsed, the burner shutdown sequence will begin a. The red "Shutdown Cycle" light will illuminate.

- b. The "Cycle Time Complete" light will illuminate.
- c. The Buzzer will sound for 30 sec.
- d. The burner will shut off and initiate its internal post purge sequence (refer to burner manual".
- e. The recirculation fan and the Exhaust fan will run and stay running for approx. 30 mins. f. After 30 mins., The fans will shut off, and the "Shutdown Complete" Light will illuminate
- 6. To shut down manually, Press the "Stop Burner" button
- 7. a. The burner will shut off
  - b. Watch the main cabin temperature, and when the main cabin temp drops below 200 to 180 deg. F, Stop the fans by pressing the "Stop Fans" button.
- 8. Final step is to shut down the main breaker. All lights will shut off, and the VFDs will power down.

## Application Guide





# Unipower VA Series Application Guide

### VA Burners (Variable Air)

Models V1 to V10 Max Input at 10" W.C. 670 MBH to 3,800 MBH

- Agency Approvals **UL Listed** Control Options 24Volt Honeywell S8670J 120Volt Honeywell 7800 Series 120Volt Siemens LME7 Series In Canada, installation must conform with local codes or in Low Pressure (less than 14" W.C.) Valve Train Options High Pressure (Less than 5 PSI) NFPA 86 GE GAP (IRI)
- codes or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1-latest edition available from American National Standard Institute. Further reference should be made to the recommendation of your fuel supplier.
- the absence of local codes, with Installation Codes for Gas Burning Appliances and Equipment, Standard CAN/CGA 1-B-149.1 or 2.
- ▲ WARNING: Additions, changes, conversions and service must be performed by an authorized Midco representative, service agency or the fuel supplier. Use only MIDCO specified and approved parts.
- INSTALLER: Inform and demonstrate to the user the correct operation and maintenance of the gas utilization equipment. Inform the user of the hazards of storing flammable liquids and vapors in the vicinity of this gas utilization equipment and remove such hazards. Affix this manual and associated literature to the burner.
- CODE COMPLIANCE IS THE SOLE RESPONSIBILITY OF THE INSTALLER.
- USER: Retain this manual for future reference. If other than routine service or maintenance as described in this manual and associated literature is required, contact a qualified service agency. DO NOT ATTEMPT REPAIRS. An inadvertent service error could result in a dangerous condition.

SAFETY INFORMATION TERMS: The following terms are used to identify hazards, safety precaution of special notations and have standard meanings throughout this manual. They are printed in all capital letters using a bold type face as shown below, and preceded by the exclamation mark symbol. When you see the safety alert symbol and one of the safety information terms as shown below, be aware of the hazard potential. Identifies the most serious hazards which will result in severe personal injury or death.



DANGER: WARNING: **CAUTION:** 

Signifies a hazard that could result in personal injury or death.

Identifies unsafe practices which would result in minor personal injury or product and property damage.









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