

PRIMING THE PUMP

1. Initiate a call for heat.
2. While the ignition is on, press and release the reset button (hold 1/2 sec. or less). If the control has not locked out since its most recent complete heat cycle, the lockout time will be extended to 4 minutes (45 sec. in earlier units), and the ignition will remain on the entire heat cycle.
3. Bleed the pump until all froth and bubbles are purged. If prime is not established within the extended lockout time, the control will lock out. Press the reset button to reset the control and return to step 2.
Note: The reset button can be held for 30 seconds at any time to reset the control's lockout counter to zero and send the control to standby.
4. Repeat steps 2 and 3, if needed, until the pump is fully primed and the oil is free of bubbles. Then terminate the call for heat, and the control will resume normal operation.

RESETTING FROM RESTRICTED LOCKOUT

If the control locks out three times in a row without a complete heat cycle between attempts, the lockout becomes restricted in order to prevent repetitious resetting by the homeowner. To reset, hold down the reset button for 30 seconds (until the LED flashes twice).

DISABLE FUNCTION

Any time the motor is running, press and hold the reset button to disable the burner. The burner will remain off as long as the button is held and will return to standby when released.

LED INDICATOR KEY

| LED | STATUS |
|--------------------------------------|------------------------------|
| On | Flame sensed |
| Off | Flame not sensed |
| Flashing (1/2 sec. on, 1/2 sec. off) | Lockout / Restricted Lockout |
| Flashing (2 sec. on, 2 sec. off) | Recycle |

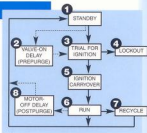
CAD CELL RESISTANCE CHECK

While the burner is firing, and after the ignition has been turned off, press and release the reset button (hold 1/2 second or less) to check the cad cell resistance. The LED will flash 1 to 4 times, depending on the cad cell resistance (see the chart below). For proper operation, it is important that the cad cell resistance is below 1600 Ohms.

| LED FLASHES | CAD CELL RESISTANCE |
|-------------|---------------------|
| 1 | 0 – 400 Ohms |
| 2 | 400 – 800 Ohms |
| 3 | 800 – 1600 Ohms |
| 4 | ≥ 1600 Ohms |

TYPICAL SEQUENCE OF OPERATION

- 1. STANDBY.** The burner is idle, waiting for a call for heat. When a call for heat is initiated, there is a 2-6 second delay while the control performs a safe start check.
- 2. VALVE-ON DELAY.** As applicable, the ignition and motor are turned on for a 15 second prepurge.
- 3. TRIAL FOR IGNITION (TFI).** The fuel valve is opened, as applicable. A flame should be established within the 15 second lockout time (30 second lockout time is available).



- 4. LOCKOUT.** If flame is not sensed by the end of the TFI, the control shuts down on safety lockout and must be manually reset. If the control locks out three times in a row, the control enters restricted lockout. Follow the instructions on the front to reset the control.
- 5. IGNITION CARRYOVER.** Once flame is established, the ignition remains on for 10 seconds to ensure flame stability. It then turns off.
- 6. RUN.** The burner runs until the call for heat is satisfied. The burner is then sent to burner motor-off delay, as applicable, or it is shut down and sent to standby.
- 7. RECYCLE.** If the flame is lost while the burner is firing, the control shuts down the burner, enters a 50 second recycle delay, and then repeats the ignition steps outlined above. If the flame is lost three times in a row, the control locks out to prevent continuous cycling with repetitious flame loss caused by poor combustion.
- 8. BURNER MOTOR-OFF DELAY.** If applicable, the fuel valve is closed and the burner motor is kept on for the selected postpurge time before the control returns the burner to standby.