

# MAINTENANCE

1. **ANNUAL MAINTENANCE OF MENDOTA UNITS IS REQUIRED.** The following procedures must be performed each year by a Mendota approved service person. NOTE: Any adjustments to burner, pilot or logs must be done by a qualified Mendota service person.
  - a) Clean all lint and dust build-up around the control. Inspect the condition of any wiring under the burner for melting or damage.
  - b) Remove logs & coals and clean away any foreign matter (lint, carbon, etc.) on the burner and logs. Be sure the burner ports are "open". Clean the pilot and under side of the logs for any carbon deposits. NOTE: Logs should be visually checked for carbon "build-up". If carbon deposits are visible on logs, unit should be turned off and Mendota service person contacted.
  - c) Make sure hot air outlet grills are free from lint and other obstructions. Never block or obstruct grill openings. Check condition of gaskets, gaskets must be tight, replace if necessary.
  - d) Check that chimney flue and outlet are open and free of blockage.
  - e) Before re-installing glass, have qualified service person check the operation of the pilot with millivolt meter and cycle the burner per LIGHTING INSTRUCTIONS (see page 16).

## 2. COMBUSTION SYSTEM MILLIVOLT READING:

Millivolt readings must be taken by a qualified installer at the time of installation and after any interruption in burner operation. These readings will establish proper thermopile millivolt generation and assure trouble-free burner operation. Readings must be taken with: a.) Pilot ONLY operating. b.) Main Burner operating.

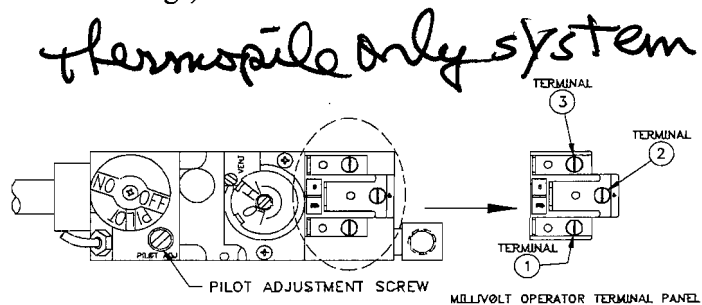
### A. PILOT ONLY OPERATING - Thermostat "OFF" - Minimum Millivolts 325

Using a Millivolt Meter, a millivolt reading should be taken by attaching Meter leads to terminals #1 and #2 on the main gas valve. The Meter must read a minimum of 325 millivolts with the Pilot Light operating, Thermostat turned "OFF" and Main Burner "OFF". To increase or decrease millivolts, (and pilot flame) adjust pilot screw on control (see Figure 14).

### B. MAIN BURNER OPERATING - Thermostat "ON" - Minimum Millivolts 100

Using a Millivolt Meter a millivolt reading should be taken by attaching Meter leads to terminals #2 and #3 on the millivolt panel on the main gas valve. The Meter must read a minimum of 100 millivolts with the Gas Cock Dial turned "ON", Thermostat "ON" and Main Burner operating. To increase or decrease millivolts (and pilot flame) adjust pilot screw on control (see Figure 14: Millivolt Readings).

CHECK TEST	TO TEST	CONNECT METER LEADS TO TERMINALS	THERMOSTAT CONTACTS	METER READING SHOULD BE
A	COMPLETE SYSTEM	2 & 3	CLOSED <i>Burner</i>	100MV OR MORE
B	THERMOPILE OUTPUT	1 & 2	OPEN <i>Pilot only</i>	GREATER THAN 325 MV
C	SYSTEM RESISTANCE	1 & 3	CLOSED	LESS THAN 80 MV
D	AUTO/PILOT DROPOUT	1 & 2	OPEN	BETWEEN 120-30 MV



**Figure 14: Millivolt Readings**

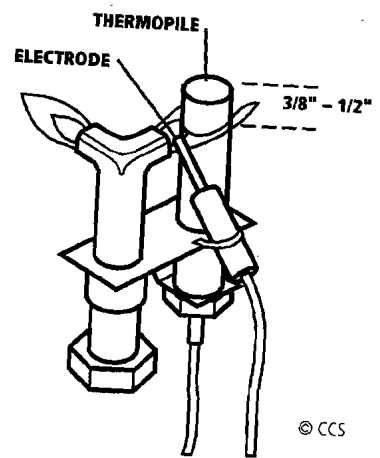
3. **THE VIEWING GLASS SHOULD BE CLEANED PERIODICALLY.** Exterior glass may be cleaned with cleaner as desired. Interior glass - use KEL KEM "Polish Plus" or comparable product (see page 23 ). Do Not use oven cleaner to clean glass.
4. **PERIODIC VISUAL CHECK OF BURNER AND PILOT FLAMES IS REQUIRED.**

## 1.2 MILLIVOLT PILOT ASSEMBLY SERVICE

Problems associated with millivolt pilot assemblies include clogged orifice, clogged burner, clogged primary air inlet, and misadjusted flame.

### 1.2.1 CLOGGED ORIFICE

If the orifice is clogged, remove the orifice from the bottom of the pilot assembly and carefully clean the orifice opening. It is important not to ream the opening out. Use a soft brush and/or air and solvents to clean the debris or blockage



*Thermopile: Pilot Flame Position*

from the orifice. Sometimes it is simpler to replace than to attempt cleaning. See Chapter 12 for other orifice problems.

### 1.2.2 CLOGGED BURNER

It is possible that the burner itself is clogged by foreign material such as an insect or dust. Clean the burner by taking a small wire and running it through the burner opening.

### 1.2.3 CLOGGED PRIMARY AIR INLET

The primary air inlet hole at the pilot must be clear to maintain a steady blue flame. Clean with compressed air (directed away from the orifice) or with a soft brush.

### 1.2.4 MISADJUSTED FLAME

A misadjusted flame can be caused by the following conditions:

- the flame lifts or blows off the pilot hood, indicating too much gas pressure
- a small weak flame indicating too little gas pressure
- debris in the primary air opening producing a yellow flame that does not adequately heat the thermocouple
- wrong orifice (propane pilot burner producing large yellow tipped flame through natural gas orifice).

To adjust the pilot, turn the adjustment screw according to the manufacturer's instructions. Note: the pilot adjustment screw is turned the opposite way from the pressure regulator adjustment screw: clockwise turns the pilot flame down; counter clockwise turns the pilot flame up.