The valve relay is rated for 12VDC at .5 amps. If a valve is used with a higher current rating than specified, damage can result to the relay contacts.

- 5. Electrode placement. (a) Electrode should be placed so optimum flame current is achieved for proper application. (b) Flame should not impinge on any portion of ceramic insulator.
- 6. The flame detector circuit uses the ionized gas flame to conduct the flame signal. This signal is a small DC current which can be measured directly with a 0 to 50 microamp meter.

Although the minimum flame current necessary to keep the 05-15 and ignitor from going into lockout is 2.5 microamps, the lowest recommended is 5.0 microamps. These ignitors can stand flame currents as high as 30 to 40 microamps.

To measure flame current, first shut off the power to the system and then remove the flame sensing lead wire from the electrode terminal and insert a 0-50 DC microamp meter in series with the sensor electrode and the sensor lead wire. "Plus" terminal of meter to component board and "Negative" terminal to sense electrode. Energize the ignitor. If the meter reads below zero, shut the system off and reverse meter leads.

Once the flame is established, assure that the flame current is above the minimum specified. If not, assure that the system has the proper input voltage, and then relocate the sensor electrode in the flame pattern until flame current is increased.

Once the flame has been established and the system is in its heat cycle, occasional sparking may occur. This is common in some installations and is not significant. Sparking will not damage the ignitor.

- 7. Ambient temperature. The 05-15 is designed to operate over the temperature range of -40 to $150\,^{\circ}$ F. Care should be taken to insure that it operates within this range. If these limits are exceeded, the ignitor should be relocated to an area that is within this temperature range.
- 8. Relative humidity. The 05-15 is coated for moisture resistance to 90 percent relative humidity. Caution should be taken to protect the component board against direct exposure to water.