

## TROUBLESHOOTING TIPS

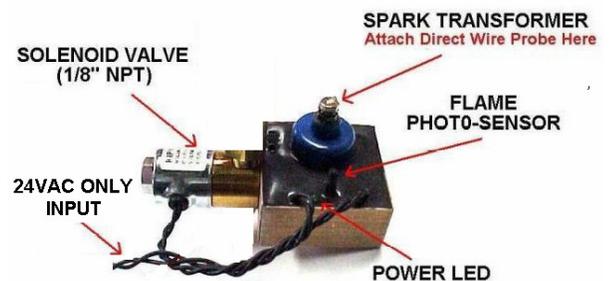
### 24VAC (Open Flame) Gas Light Igniter with Ion Flame Sensor with Complementary Photo-Flame Sensor; Switch Controlled - No Daylight Sensor Model: KNA1-24AI-F-S-(O)

NOTE: For daylight testing - If uncovered, cover complementary flame photo-sensor with BLACK electrical tape to block light; other colors or types of tape will not block out all light. Remove any temporary test cover when unit lights if you intend to use sensor for more reliable dual flame sensor detection.

#### 1. Nothing happens, no click and no spark, Green LED "OFF".

Verify igniter power input is properly connected to 24VAC source without any shorts to chassis or earth ground. When powering up igniter, the Green Power LED should be "ON".

NOTE: Do Not connect igniter to 120 VAC or hook up the transformer backwards; doing so will damage the igniter and void the warranty. It is highly recommended that an ohmmeter be used to verify isolation between the 24V input wires and the igniter case before powering up igniter unit.



#### 2. Sparks but does not light or lights inconsistently.

Probe adjustment; spark gap shall be 3/16 – 1/4 inch. Sparks shall appear across the spark probe to the side of the burner tip at the slit. The probe needs to be securely attached to the post. To avoid damaging spark transformer, do not over-tighten nut, use 6 inch pounds or less.

#### 3. Sparks and lights but does not stay lit.

Ion Sensor: Verify probe is properly positioned within the Flame Boundary of the flame; if probe is not touching the flame, unit will not stay lit.

Flame Photo-Sensor: Verify flame photo-sensor is covered; if using optional flame photo-sensor (sensor uncovered), check alignment. Verify sensor is pointed up toward the yellow part of the flame. If necessary, apply sheath to flame sensor to block out extraneous light.

#### 4. No Spark. Solenoid valve does not open, Green LED "ON".

Check Green LED status:

Flashing on and off: Flame Sensor seeing light; verify Flame sensor is covered.

#### 5. No Spark. Solenoid clicks ON; valve stays open during ignition cycle, and then clicks off.

Spark gap is too wide. Adjust Probe, see Item #2. Verify spark is not sparking to valve; this can occur if base of probe is attached too close to valve, creating a smaller gap for spark.

For questions and technical support please call 651-636-1008.

## What is the Flame Boundary?

The Flame Boundary is the outside edge of the flame where the gas and air mix. The Direct Wire Probe™ should be lined up so that it is just inside the edge of the flame without distorting the flame.

When aligning the Direct Wire™ probe, be sure to align so that it is perpendicular to the slit near the base of the burner tip; the probe gap should be approx. 3/16" – 1/4" for proper sparking. The best way to position the probe in the flame boundary is to light the flame; manually light if necessary, and then you can see exactly where the boundary is.

