TROUBLE SHOOTING 24V AC TRANSFORMER HOOK-UP
Using Knightronix 300mA or 600mA 24V AC Transformer.

The following troubleshooting instructions only apply when using the Knightronix™ 300Ma (.25mA fuse) or 600mA (.5mA fuse) 24V AC Transformer (with in-line fuse) during igniter hook-up. Slo-blo fuses; (2AG, 15mm x 5mm, or 5 X 20), are used in-line with the transformer.

300mA Transformer

Normal operation (No Shorts and New Fuse):

28.5 V AC will be read across input lines at gas light igniter (after transformer and fuse)
Green LED will be lit up
Unit will begin sparking
If checked with an ohmmeter, fuse will read a direct short across the fuse (0Ω)

Shorted input line:

No Green LED while lines are shorted.
No spark, solenoid valve will not open
Inline fuse will be blown (fuse will either be completely open or partially open).

Find and remove all shorts and replace fuse with new fuse. Verify isolation between the 24V input wires and the igniter case.

NOTE: Do not attempt to bypass the fuse with a direct short, doing so may damage board and void warranty.

If short is removed and fuse is not replaced you may experience the following symptoms*:

1st Scenario
LED will be dim and get slightly brighter
Unit may spark; one spark every minute or so
12 – 17 V AC will be read across input lines at the gas light igniter (after transformer and fuse)
If resistance is measured, fuse will read approx. 4 – 7K on a 40K scale

2nd Scenario
There will be no Green LED
4.54V AC will be read across the input lines at the gas light igniter (after transformer and fuse)
Unit will not attempt to spark
If resistance is measured, fuse will read approx 77K on a 400K scale

NOTE: Slo-blo fuses have residual resistance across the fuse after blowing. Depending on how long power was applied to the igniter while input lines were shorted determines how open the fuse will become and what symptoms will occur.

Knightronix, Inc. 2212 Silver Lake Rd. New Brighton, MN 55112 USA.
Phone (651) 636-1008. Fax (651) 636-0211. http://www.knightronix.com email: info@knightronix.com