DETROIT RADIANT PRODUCTS CO.

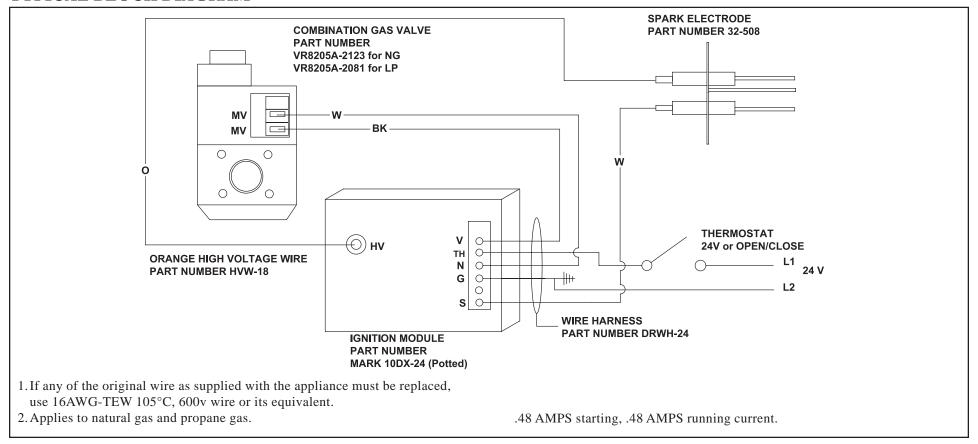
Wiring Diagram for Suffix NFS-2/PFS-2 25V

(Electronic Detection Direct Spark Ignition System, 100% Shutoff)

Flame Sensing Element

Solid state logic circuit in control board continuously monitors spark current and flame conductance to ground through spark electrode.

TYPICAL BLOCK DIAGRAM





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Wiring Diagram for Suffix NFS-2/PFS-2 25V

(Electronic Detection Direct Spark Ignition System, 100% Shutoff)

Normal Sequence of Operation

- 1. Thermostat contacts close.
- 2. Three second pre-purge.
- 3. Power is applied to main burner electrode and gas valve.
- 4. Upon ignition of the heaters main burner(s), sparkling will cease and sensor will continue monitoring until thermostat is satisfied.
- 5. If flame has not been established by the 15 second trial for ignition period, the heater will try an additional 2 times before going into soft lockout. After 60 minutes the ignition modual will attempt 3 more tries. If ignition still doesn't occur then it will go into safety lockout. The heater must be reset by an interruption in the power source.
- 6. Should flame outage occur during duty cycle, the system will reactivate the electrode to provide for reignition. The flame will be re-established or operation #5 will occur.

