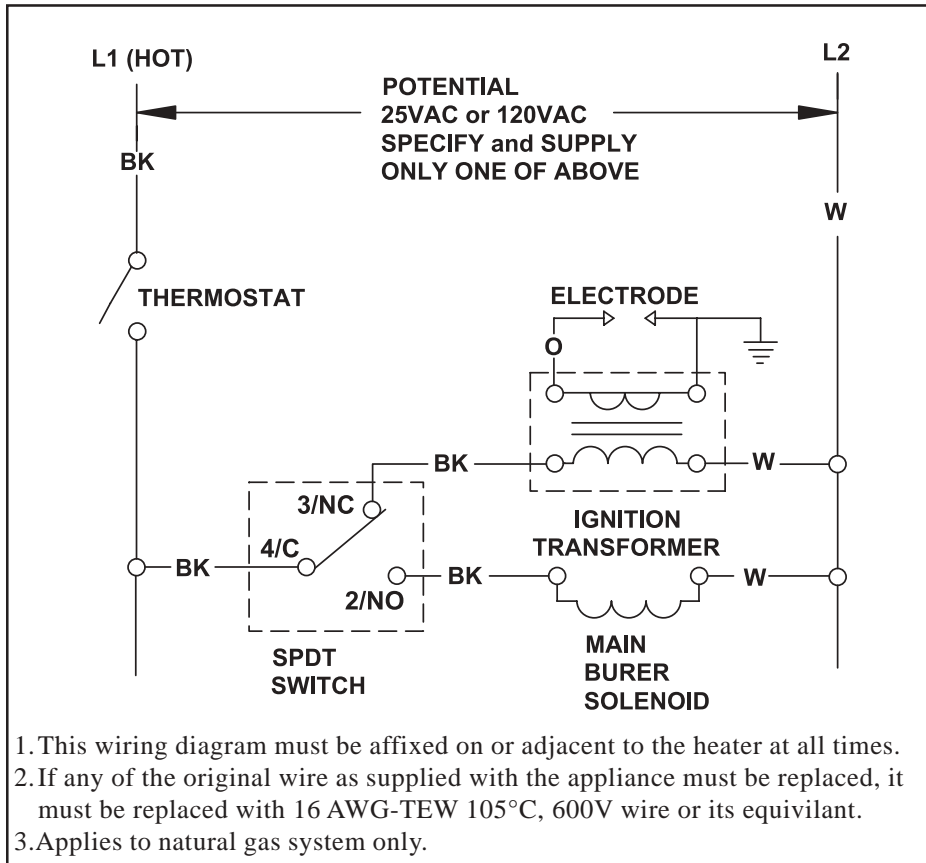


# DETROIT RADIANT PRODUCTS CO.

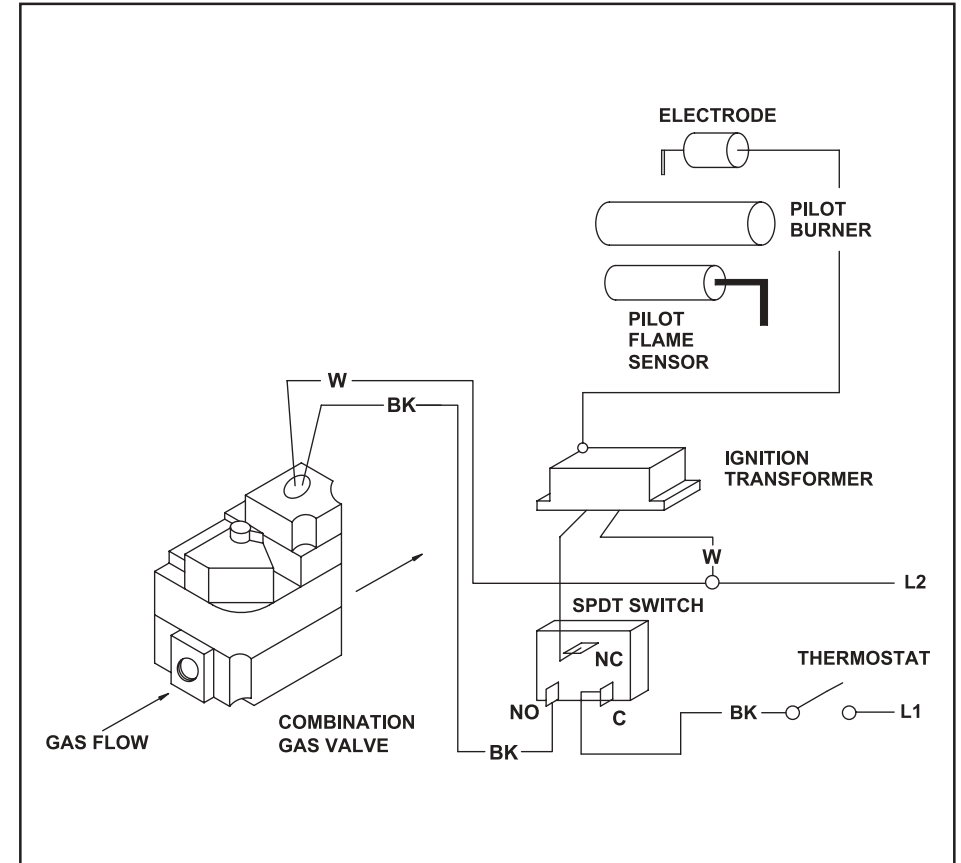
## Wiring Diagram for Suffix NSP-4 25V and 120V

(Pilot Sensing Element - SPDT Mercury Element)

### TYPICAL WIRING SCHEMATIC



### TYPICAL BLOCK DIAGRAM



# ***DETROIT RADIANT PRODUCTS CO.***

## ***Wiring Diagram for Suffix NSP-4 25V and 120V***

*(Pilot Sensing Element - SPDT Mercury Element)*

### **Normal Sequence of Operation**

Closing of the electrical circuit, upon demand for heat, the following occurs:

1. The systems capacitor discharge ignition transformer is energized, generating a spark at the pilot burner electrode assembly.
2. The pilot burner gas is ignited and a subsequent heating of the pilot sensing element, a mercury single-pole, double-throw pilot switch, occurs.
3. Upon adequate heating, the pilot sensing element switches from its normally closed position - causing the system's capacitor discharge ignition transformer to be de-energized.
4. The heater's main burner solenoid valve is enlarged and opened, resulting in the operation of the heater.



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