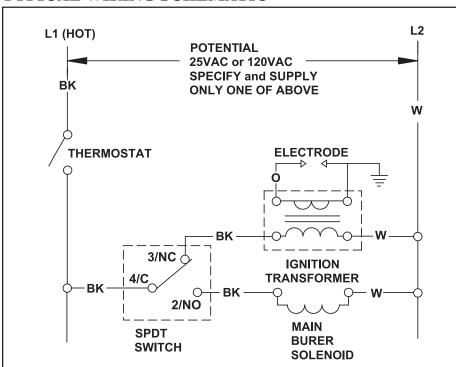
DETROIT RADIANT PRODUCTS CO.

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

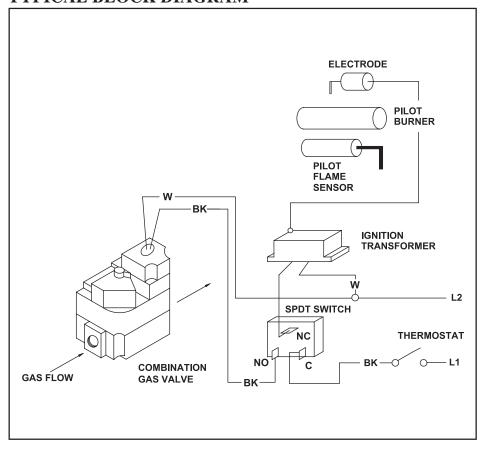
(Pilot Sensing Element - SPDT Mercury Element)

TYPICAL WIRING SCHEMATIC



- 1. This wiring diagram must be affixed on or adjacent to the heater at all times.
- 2. If any of the original wire as supplied with the appliance must be replaced, it must be replaced with 16 AWG-TEW 105°C, 600V wire or its equivilant.
- 3. Applies to natural gas system only.

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 sunsequent heating of the pilot sensing element, a mercury single-pole, double-throw pilot switch, occures.
- 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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