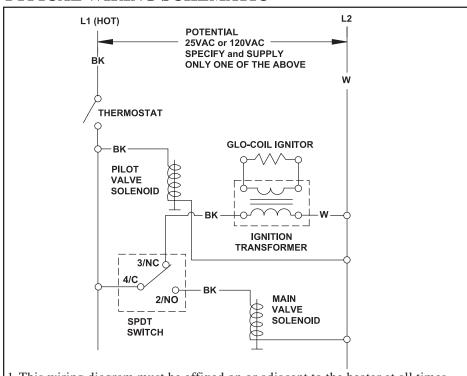
## DETROIT RADIANT PRODUCTS CO.

# Wiring Diagram for Suffix NGCI-3 25V and 120V

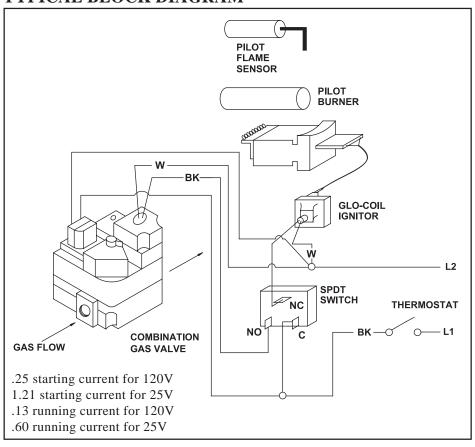
(Pilot Sensing Element - SPDT Mercury Element, Cycle Pilot Operation)

#### 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 NGCI-3 25V and 120V

(Pilot Sensing Element - SPDT Mercury Element, Cycle Pilot Operation)

### **Normal Sequence of Operation**

- 1. Upon closing of the electrical circuit, (usually thermostat), the following occurs:
  - A) The glo-coil transformer is energized, lighting the pilot burner glo-coil assembly.
  - B) The pilot solenoid on the gas valve is energized, supplying gas to the pilot burner.
- 2. The pilot burner is lighted and heats up the mercury filled sensing element.
- 3. Heating of the sensing element switches power from the glo-coil transformer to the main solenoid on the gas valve, supplying gas to the main burner and shutting off glo-coil.
- 4. The pilot solenoid remains energized through the initial closed circuit.
- 5. When the electrical circuit is opened, both the pilot and the main burner(s) are shut off.



Form# DRWD-NGCI-3-1/06 (DRP)