

DIRECT SPARK IGNITION SYSTEM SERVICE GUIDE:

Direct Spark Ignition Systems operate through a thermostat to provide a means of ignition for the main burner on gas-fired equipment. This is accomplished by generating a spark between high voltage electrode and ground. Once the flame is established a flame rod monitors the main burner flame.

SEQUENCE OF OPERATION: On a call for heat, voltage is applied to the ignitor across Terminals 1 (power) and 6 (ground) of the input connector. A high voltage spark is then generated from the spark electrode to ground. Simultaneously, the gas valve is energized.

At the start of each heat cycle, there is a "Trial for Ignition Period" of three to ten seconds duration depending upon the model ignitor used. Normally, main burner flame will be established before the end of this period. Once the flame is established, sparking will cease and the "flame rod" will provide flame monitoring for the remainder of the heat cycle. If the flame is extinguished during this cycle, the ignitor will start sparking automatically in an attempt to re-establish the flame. If this does not occur within the "Trial for Ignition Period" the system will go into lockout, closing the gas valve.

