

Delayed Ignition Problem Solving—Electrical

Start the burner and use test meter to measure voltage at the transformer/primary lead junction and the Neutral connection. Do you have a nominal 120 VAC?



With the burner OFF, attach the leads of a transformer tester to the secondary terminals. Start the burner. Is there approximately 10,000 VAC output?



Check transformer secondary porcelain bushing for crazing, arc tracks, moisture, cracks, pin holes, carbon or other defects. Are they clean and free from defects that could cause short-circuiting?



When the transformer is in the closed position, do the spring terminals make good positive contact with the electrode rods?



Check electrode porcelains for crazing, arc tracking, moisture, cracks, pin holes, carbon or other defects. Are they clean and free from defects that could cause short circuiting?



Are the electrodes set to the manufacturer's specifications? Are the tips in good condition?



The dimension from the nozzle face to the combustion head flat surface is important. With Beckett burners this is designated the "Z" dimension. Is this set correctly?



The above procedure should enable you to isolate the source of trouble. However, if these items check positive and delays persist, then the problem may be located in the oil handling system or with improper burner adjustment.

Replace the primary control.
The relay contacts are defective.



Measure the line voltage input to the primary control. Is there a nominal 120 VAC?



Check the electrical supply system.



Replace the ignitor transformer.



Clean and restore to service if possible, otherwise replace the transformer.



Straighten, reposition to ensure positive contact. Replace springs if necessary.



Replace with good quality porcelain insulators.



Replace worn eroded electrodes.
Adjust to manufacturer's specifications.



Adjust to manufacturer's specifications.