

Correcting Intermittent Heat Failure in LOV Gas Fryers

Follow these instructions to enhance the performance of LOV gas fryers exhibiting intermittent heat failures.

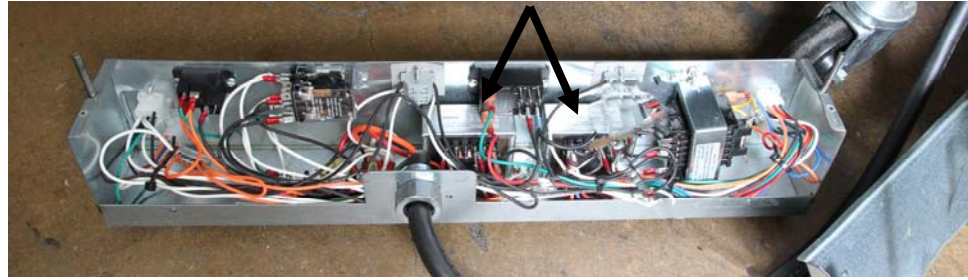
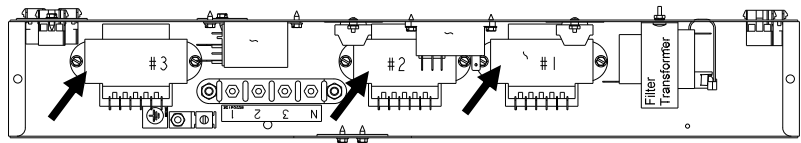


Photo 1/Drawing 1: Remove the two 7/16th nuts securing the transformer box to the fryer and remove the top. Move the leads on the transformers powering the ignition modules (See arrows above on two-vat fryer and arrows on drawing below for three-vat fryer.) from 230 volt position to 220, positions 1 and 4.



1. Drop the transformer box at the back of the fryer and reposition the leads on the transformers powering the ignition modules to the 220 volt taps, positions 1 and 4. (See photos 1 and 2 and drawing 1.)
2. Ensure the gas type is correct and gas pressure supplied to the burner is correct. See gas pressure chart below.

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Photo 2: Transformer leads shown attached to positions 1 and 4, the 220 volt leads.

Gas Pressure Chart								
Gas Type	G20/Split	G20/Full	G25/Split	G25/Full	G31/Split	G31/Full	G30/Split	G30/Full
Min Pressure (mBar)	8.0	7.5	11.2	10	20.5	20.5	16.9	16.9
Max Pressure (mBar)	9.0	9.0	13.4	13.4	26.1	26.1	21.2	21.2
Orifice Size (mm)	3.18	3.18	3.18	3.18	1.95	1.95	1.95	1.95

3. Install igniters 826-3053. (See photos 3 and 4.)
4. In some instances, it may be necessary to replace the igniter plates, exterior and interior, to ensure proper alignment of the igniter and the burner face. Remove the exterior sheet metal surrounding the igniter recess, the insulation and the igniter plate. Replace the plates with the provided plates. (See drawing 2 below.)



Photo 3: Replace existing igniters with 826-3053.

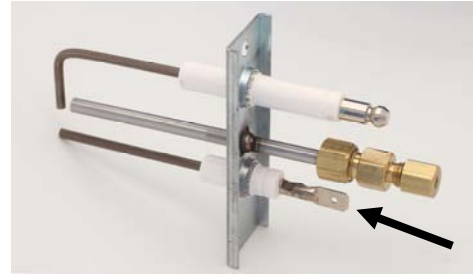
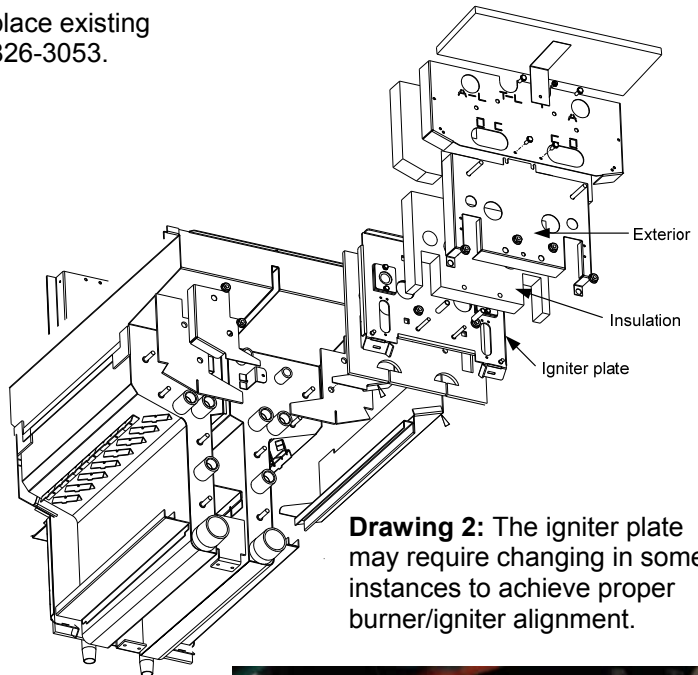


Photo 4: The new igniter, above, is visibly different than the original unit. There is no nut on the flame-sense rod. (See arrow.)

5. Insert a micro-amp meter in series with the flame sense rod and turn the fryer on. Adjust the blower shutter (See photos 5, 6.) settings to create the maximum flame-sense current at the start of a heating cycle. Usually this means increasing the air opening. Observe several cold-start ignitions. They should be reliable and with no delayed ignitions (popping). Target micro amps should be greater than 1.5 during the beginning of a cold start and the start of any idle heating cycle. Verify that the micro amps are over 2 after a continuous burn of over 1 minute.



Drawing 2: The igniter plate may require changing in some instances to achieve proper burner/igniter alignment.



Photos 5, 6: Adjust the blower (right) shutter to create the maximum flame-sense current at the start of a heating cycle and over 2 micro amps (above) after a continuous burn of over a minute.