

Instructions

Electronic Oil Igniter 240 VAC

Application Information:

- This igniter is intended for use with 240 VAC burner systems.
- It is rated for continuous duty and can be used with intermittent, or interrupted ignition primary controls.
- The Beckett oil igniter is designed to mount in the same manner as ignition transformers and igniters.
- This igniter can be adapted to multiple base plates to accommodate Beckett residential and commercial burners. It will also fit on many other vendors' base plates. For other vendor base plates, verify that the igniter fit is free of air leakage between the base plate and the igniter.

CAUTION: Do not use this igniter beyond its design specifications. Improper operation and igniter failure may result.

Specifications:

Input Voltage: 208-240 VAC, 50/60 Hz

Output Voltage: 20 kV

Output Current: 25 mA RMS

Input Current: 0.2A RMS

Secondary Middle Point Grounded

Ambient Operating Temperature: -40 to +150° F


Storage Temperature: -40 to +150° F

Moisture: 5 to 95% Relative Humidity, Condensing

Table 1 — Complete Igniter Base Plate Assemblies

Part No.	Burner Models
5250001U	AF, AFG, NX, and CF375
5250002U	SM, SF, CF500, and CF800
5250003U	Wayne 'M' Models.
5250004U	Wayne 'E' Models.
5250005U	Igniter Only

⚠ WARNING




Electrical Shock Hazard

Failure to disconnect all power sources could result in severe personal injury or death.

- ▶ Disconnect all electrical power to the burner before servicing. There could be more than one disconnect switch in the supply circuit.
- ▶ Installation and service must only be performed by a qualified service technician.
- ▶ Perform all wiring in compliance with the National Electric Code ANSI/NFPA 70 (Canada CSA C22.1).
- ▶ Connect burner housing and circuit to earth ground.

⚠ WARNING



Electrical Shock Hazard

Failure to wire the burner correctly could cause serious injury or death.

- ▶ Perform all wiring in compliance with ANSI/NFPA 70 (Canada CSA 22.1).
- ▶ Connect the electrical circuit and burner housing to earth ground.

Instructions

(If base plate is already installed, skip to step number 9)

1. Locate the igniter blue "hot" and white "neutral" input leads.
2. Install the 32302 igniter gasket, if required, and route the leads through the appropriate base plate lead exit hole. Make sure these leads are not being crushed.
3. Mount the igniter flush to base plate with the mounting screws supplied.
4. Note: Use #6 x 7/16" screws when using the bottom mounting holes. Use #10 thread forming paint scraping screws, if using the two top mounting holes for 5250001 & 5250002.
5. Tighten all screws securely.
6. Install the barrier and base plate gaskets for AF, AFG, and CF375 Beckett burners. Do not use barrier gasket on NX.

(Instructions continued on next page)



(Instructions continued)

7. Use gaskets for other burner models, as required by the manufacturer.
8. Use of top mounting screws is possible for Beckett AF, AFG, NX, CF375, SM, SF, CF500 and CF800.
9. Mount the assembled unit to the burner using the screws supplied.
10. Use "paint scraping" screws for all burners (2 at the hinge and 2 for non-hinged base plates). Tighten these screws securely to provide effective grounding to burner housing.
11. Verify the burner is properly grounded.
12. Carefully route the igniter input leads to prevent them from being pinched during closing. Install cad cell, if applicable.
13. Fasten cad cell leads to control, if applicable. Wire white to neutral and blue to primary control ignition lead. Refer to control or appliance manufacturer's wiring diagram.
14. Verify the igniter secondary output terminals are correctly arranged to make good electrical contact with the oil burner electrodes.
15. Close the igniter. Install and securely tighten the two front base plate retaining screws (4 screws, if no hinge).
16. Reconnect electric power to the burner circuit.
17. Verify with instruments that the burner is adjusted to the manufacturer's recommended settings
18. Cycle the burner several times to verify prompt and smooth ignition before leaving.

Table 2 — Igniter Base Plate Bill of Materials

Part No.	Burner Models	Baseplate Gasket	Baseplate	Igniter Gasket	Barrier Gasket
5250001U	AF, AFG, NX, and CF375	31405	51780BK	32302	32301 *
5250002U	SM, SF, CF500, and CF800	31481	51855BK	32302	n/a
5250003U	Wayne 'M' Models.	n/a	51899BK	n/a	n/a
5250004U	Wayne 'E' Models.	n/a	51833U	n/a	n/a

* 32301 Barrier Gasket is not used on igniters for the NX burner. It must be used on AF, AFG & CF375 burners.

