

### INSTALLATION INSTRUCTIONS

#### Application Information:

- This igniter is intended for use with 120VAC 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.

Table 1 - Complete Igniter Baseplate Assemblies

Igniter Part Number	Description
51771U	A, AF, AFG, NX and CF375
51824U	S, SF, SM, CF500 and CF800
52437-003U	RF (With Contact Clips)
51838U	Igniter Only
51825U	Wayne 'M' Models
51827U	Wayne 'E' Models
51826U	Carlin 99, 100, 102, EZ
51840U	Carlin 201, 301

#### Specifications:

**Input Voltage:** 102-132 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

#### ⚠ 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.

#### ⚠ CAUTION

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

#### ⚠ 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. More than one disconnect switch may be 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.

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 baseplate 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 51771U and 51824U.
5. Tighten all screws securely.
6. Install the barrier and baseplate gaskets for AF, AFG, and CF375.
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, RF, SM, SF, CF500 and CF800.



(Instructions Continued)

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 2 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	Baseplate Gasket	Igniter Gasket	Barrier Gasket
51771U	A, AF, AFG, NX and CF375	51780BK	31405	32302	32301
51824U	S, SF, SM, CF500 and CF800	51855BK	31481	32302	n/a
52437- 003U	RF	52662U	52662U	n/a	n/a
51825U	Wayne 'M' Models.	51899BK	n/a	n/a	n/a
51827U	Wayne 'E' Models.	51833U	n/a	n/a	n/a
51826U	Carlin 99, 100, 102, EZ	21846	32198	n/a	n/a
51840U	Carlin 201, 301	21854	n/a	n/a	n/a

Figure 1 - Igniter Assembly Components (51771U shown), Other models will have different baseplates and terminals.



[www.beckettcorp.com](http://www.beckettcorp.com)

USA: **R.W. Beckett Corporation**, 1-800-645-2876  
Canada: **R.W. Beckett Canada Ltd**, 1-800-665-6972

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