

# INSTALLATION INSTRUCTIONS

## ELECTRONIC OIL IGNITER • 24 VDC

### SPECIFICATIONS:

**Input Voltage:** 21.6 - 32 Vdc

**Output Voltage:** 19 kV peak

**Output Current:** 35 mA RMS

**Input Current:** 1.2A

**Ambient Operating Temperature:** -40 to +150° F

**Storage Temperature:** -40 to +150° F

**Moisture:** 5 to 95% Relative Humidity, Condensing

### APPLICATION INFORMATION:

- This igniter is designed for use with 24 VDC.
- 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 standard ignition transformers and igniters.
- This igniter can be adapted to multiple base plates to accommodate Beckett ADC & SDC burners. It will also fit on many other vendors' transformer base plates.

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

Table 1 - Complete Igniter Base Plate Assemblies

Part No.	Burner Models
5218501U	Beckett ADC 24 VDC
5218502U	Beckett SDC 24 VDC



### WARNING Electrical Shock Hazard



**Electrical shock can cause 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.
- Remove all jewelry, such as rings and watches before servicing.
- Provide ground wiring to the burner, metal control enclosures and accessories. (This may also be required to aid proper control system operation).

### Installation Instructions:

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

1. Locate the igniter input leads.
2. Install the 32743 igniter gasket 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 5218501 & 5218502.
5. Tighten all screws securely.
6. Install the barrier and base plate gaskets for Beckett Model ADC only.
7. Use gaskets for other burner models, as required by the manufacturer.
8. Use of top mounting screws is possible for Beckett Models ADC and SDC.
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. Install the cad cell if applicable.
13. Carefully route the igniter input and cad cell leads to prevent them from being pinched during closing.
- 14. Wiring Igniter to GeniSys 24 VDC Primary Control**
  - Carefully follow the control, or equipment manufacturer's wiring instructions and diagrams.
  - Fasten cad cell leads to control CAD CELL spade terminals.
  - Attach the Black lead with insulated flag terminal to the primary control GND (IGN) spade terminal.
  - Connect the Blue-White striped lead with insulated flag terminal to the primary control IGNITER spade terminal.
15. Verify the igniter secondary output terminals are correctly arranged to make good electrical contact with the oil burner electrodes.
16. Close the igniter. Install and securely tighten the two front base plate retaining screws (4 screws, if no hinge).
17. Reconnect electric power to the burner circuit.
18. Verify with instruments that the burner is adjusted to the manufacturer's recommended settings
19. Cycle the burner several times to verify prompt and smooth ignition. Verify proper operating and limit control operation before leaving.

Figure 1 - Igniter Assembly Components (5218306U shown. Other models will have different baseplates and terminals.)



Table 2 - Igniter Base Plate Bill of Materials

Part No.	Burner Models	Baseplate Gasket	Baseplate	Igniter Gasket	Barrier Gasket
5218501U	Beckett ADC 24 Vdc	31405	51780BK	32743	32301*
5218502U	Beckett SDC 24 Vdc	31481	51855BK	32743	n/a

\* 32301 Barrier Gasket is used only on Beckett Model ADC.

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*Beckett*  
**POWERLIGHT™**  
 24 Vdc Oil Igniter