

# BGN891 Direct Spark Ignition Control Replacement for JCI G891 Pulse Ignition Control

The BASO BGN891 (black) Ignition Control is a direct replacement for Natural Gas or Propane ovens which have a Johnson Controls G891 (blue) Pulse Ignition Control.

### **Replacement Instructions:**

- Disconnect the electrical power from the appliance before performing service.
- 2. Remove the existing wires and the G891 ignition from the appliance: Make sure to mark the SENSE (WHT or ORG) wire with the 3/16" Q.C. terminal before removing it from the ignition. Remove the wires, and disconnect the 6 Pin wire harness. Remove the mounting screws, and keep the screws for installing the BGN891 ignition. Remove the G891 ignition.
- 3. Mount the BASO BGN891 Ignition Control in the same place of the OLD G891, and use the same screws to secure the ignition in place. One additional 7/64" (0.109") hole may need to be drilled for a #6-32 mounting screw.
- 4. Connect the following Wires and Wire Harness to the BGN891 Ignition Control:
  - 4.1 Plug in the Wire Harness: Connect the BGN (6 pin) Wire Harness into the existing wire harness.
  - 4.2 <u>Connect the "GREEN" ground wire to frame:</u> Connect the #6 Ring Terminal to one of the mounting screws from Step 3.
  - 4.3 <u>Connect the SENSE wire:</u> Connect the existing WHT or ORG SENSE wire coming from the appliance to the short ORG jumper wire with the 3/16" Q.C. terminal located on the SENSE terminal of the BGN891 ignition.
  - 4.4 <u>Install the ORG SPARK wire (thick insulation):</u> Install the 1/4" Q.C. Insulated Terminal (provided in Kit) onto the SPARK Wire, and connect it to the SPARK terminal on the BGN891 Ignition Control.

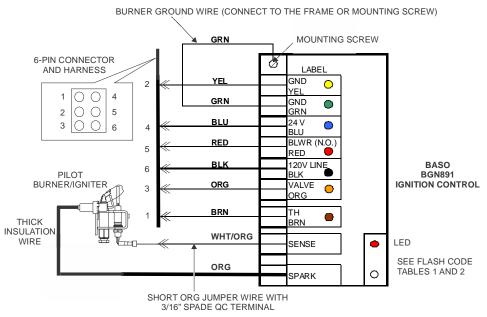


Figure 1: BGN891 Wiring Diagram

**Table 1: Normal Operating LED Indications** 

Green LED	Definition	
Rapid Blinking	Spark Active	
Steady On	Flame Detected, Main Burner On	
0.5 Second On/Off	Pre-purge, Interpurge, Post- purge or Waiting for THS Signal	
0.5 Second On 4.5 seconds Off	Retry or Recycle Time	

Table 2: Error Code LED Indications Error Codes Blink 0.25 Second On/Off then Pause 1.0 Second and Repeat.

Led Light	Error Definition	Error Type
Blinks 1 Time	No Flame in Trial Time	Lockout
Blinks 2 Times	Flame Sense Circuit	Lockout
Blinks 3 Times	Pilot/Main Valve Circuit	Lockout
Blinks 4 Times	Flame Loss	Lockout
Blinks 7 Times	Ground or Internal	Lockout
Steady On	Line Voltage/Frequency	Standby

## RES100A-600 Resistor Installation Instructions

#### **Application**

The RES100A-600 Resistor is a direct replacement for Honeywell 202764BAC Resistor and is used in certain applications to ensure compatibility with power-stealing thermostats. The RES100A-600 is a 1000 ohm, 3 watt resistor.

#### Installation

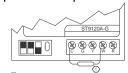
When Installing this Product...

**IMPORTANT:** Only qualified personnel should install or service BASO Gas Products. These instructions are a guide for such personnel. Carefully follow all instructions for the appliance.

CAUTION: Electrical Hazard.
Can Cause Electrical Shock or Equipment
Damage.
Disconnect power supply before installing resistor.

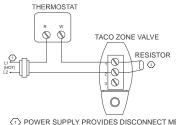
#### To Install the Resistor

- Loosen terminal screws as shown in the application drawing.
- 2. Slide the resistor leads under the terminal screws and tighten the screws.
- 3. Turn on the system power.
- 4. After installation is complete, check out product operation as provided in these instructions.



① DISCONNECT POWER SUPPLY BEFORE INSTALLATION

Figure 1: Connect Resistor to ST9141 Fan Timer Terminals C or (T) and W



POWER SUPPLY PROVIDES DISCONNECT MEANS AND OVERLOAD PROTECTION AS REQUIRED.
 BEND RESISTOR AWAY FROM ZONE VALVE CASE TO PREVENT SHORTING.

Figure 2: Connect Resistor to Taco Zone Valve Terminals 1 and 2

Note: If furnace fails to start, remove flapper and clean before re-starting.

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