

# Training Bulletin

## GE Cordless Gas Range Models: JGBS14PCD RGB518PCD

December 2012

### INTRODUCTION

In compliance with Department of Energy requirements, GE has introduced 2 cordless battery-powered ignition 30-in. free-standing gas ranges:

GE model JGBS14PCD

Hotpoint model RGB518PCD

### RANGE FEATURES

- Standing gas pilots have been replaced with electronic spark ignitors.
- Surface burners use spark ignition similar to previous models.
- Ovens use a pilot burner and thermocouple configuration.
- Oven thermostat controls both oven burner and oven pilot operation.
- Gas is used only when surface burners or oven are turned on.
- AC voltage not required or used for range operation.
- The ignitors are powered by a 9-volt battery.
- The battery is conveniently located in a compartment on the front of the range behind the broiler door.
- GE models include a low battery indicator light located on the left side of the control panel.

GE model  
JGBS14PCD



Hotpoint model  
RGB518PCD



GE Appliances  
General Electric Company  
Louisville, Kentucky 40225

## MINI-MANUAL AND LP CONVERSION KIT:

The Mini-manual and the LP conversion kit are attached to the back of the range near the gas inlet pipe with a 1/4-in. hex-head screw.



## TO LIGHT THE OVEN:

1. Turn thermostat knob to the **Pilot** position.



1. Push the thermostat knob in completely and hold it in for 10 seconds. This 10-second period allows gas to be supplied and ignited at the pilot burner and heat applied to the thermocouple.
2. Turn the thermostat knob to the desired temperature. This allows gas to be supplied to the oven burner and ignited.
3. Open the oven door and check for burner flame.

**Note:** The oven may be lit with a match and operated normally even if the battery is too weak to activate the spark system.

## **To match-lite the oven burner:**

1. Remove the oven door and oven racks.
2. Remove the two 1/4-in. hex-head screws at the back of the oven bottom.

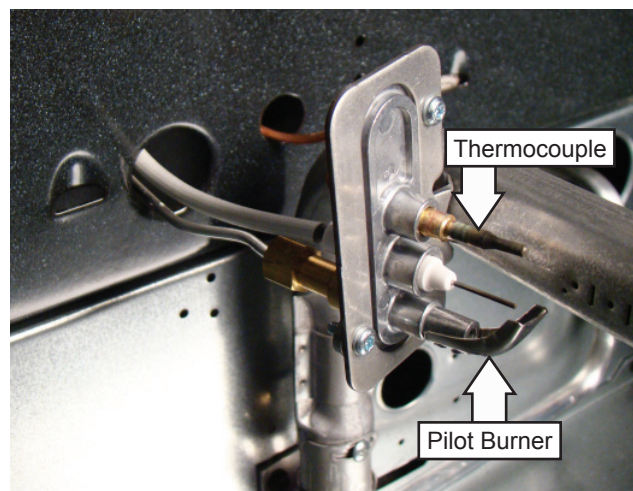
3. Lift the back of the oven bottom then remove the bottom from the oven cavity.
4. Locate the oven burner pilot at the left rear of the oven burner.
5. Hold a lit match to the oven burner pilot. Turn the oven control knob to the **Pilot** position and push it in completely.
6. After the pilot is lit, continue to hold in firmly on the knob for 10 seconds before releasing.
7. Pilot should remain lit, if not, repeat steps 5 and 6.
8. Replace oven bottom, racks, and door.
9. Turn knob to the desired temperature setting. Oven will operate normally.
10. Turn oven control knob to **Off** when finished baking.

## THERMOCOUPLE — HOW IT WORKS

The thermocouple is an electronic device that senses if the pilot flame is the proper size and hot enough to ignite natural gas or propane fuel to the burner.

**Note:** The thermocouple is a part of the pilot assembly. To replace the thermocouple, order a pilot assembly.

The thermocouple (technically called a thermocouple junction) is a device that contains two metal wires welded at the ends, forming a sensor, and placed inside a protective metal case. The thermocouple sensor is found at the end near the pilot burner and is designed to be placed in the hottest part of the pilot flame. The other end is connected to the oven thermostat. As the thermocouple heats up, it produces a small amount of electricity (3 to 20 millivolts) that is applied to a small electromagnetic valve in the oven thermostat. The energized electromagnetic valve will keep the pilot gas valve open.



**Pilot Assembly**

Once the pilot gas valve is open, turning the thermostat knob to a temperature setting will allow gas to be supplied to the oven burner. Oven temperature can then be regulated by the thermostat. If the thermocouple does not sense enough heat from the pilot flame (such as when the pilot is out), then the thermostat shuts off the gas supply to both the pilot and oven burners.

### **BATTERY-POWERED IGNITION**

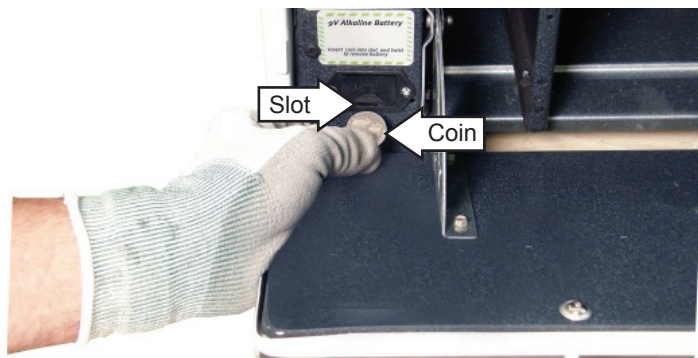
The range is equipped with a 9-volt battery. The battery supplies power to the spark module that operates the spark ignitors.

The battery is located in a compartment on the front left corner of the range behind the broiler door.

Depending on usage, battery life is estimated to be 12 to 18 months.

### **To replace the battery:**

1. Open the broiler door.
2. Insert a flat blade screwdriver or coin in the slot at the bottom edge of the battery tray.
3. Lift and pull out the battery tray from the receptacle.



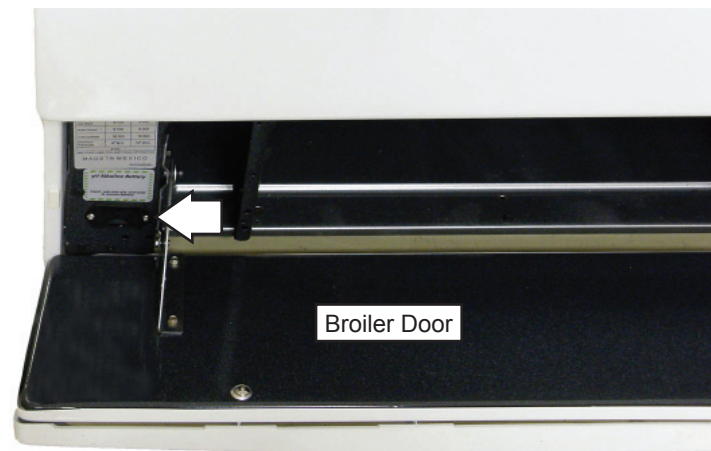
4. Insert a new battery in the battery tray.
5. Slide the battery tray back into the receptacle.

**Important:** Replace with standard 9-volt alkaline battery. Follow all state and local requirements for disposing of the old battery.



### **To replace the battery tray receptacle:**

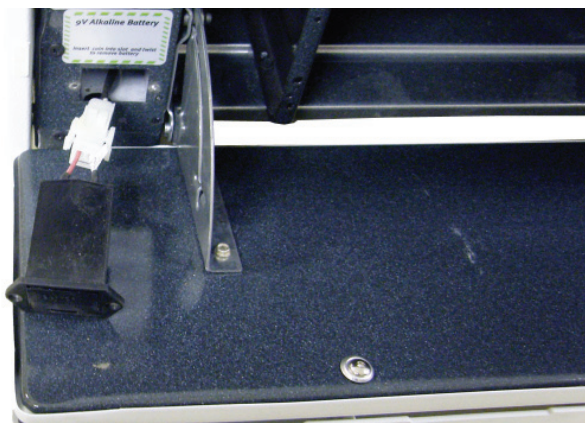
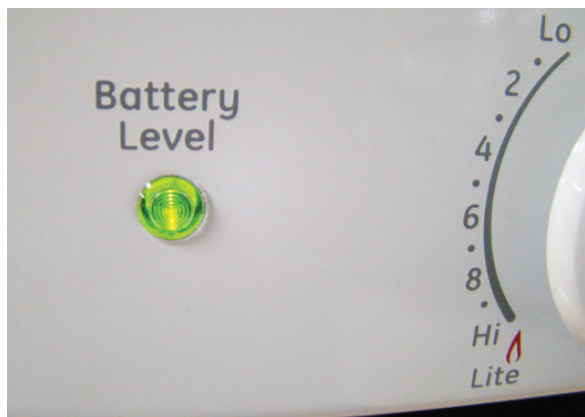
1. Remove the battery tray. (See **To replace the battery**, follow steps 1 through 3.)
2. Remove the 2 Phillips-head screws from the front of the battery tray receptacle.
3. Pull the receptacle out and disconnect the wire harness.



### **When to replace the battery:**

- When the amount of time between sparks exceeds 1 second.
- When the green battery indicator light (GE models) fails to glow during sparking.
- When inspection of the battery shows leakage.

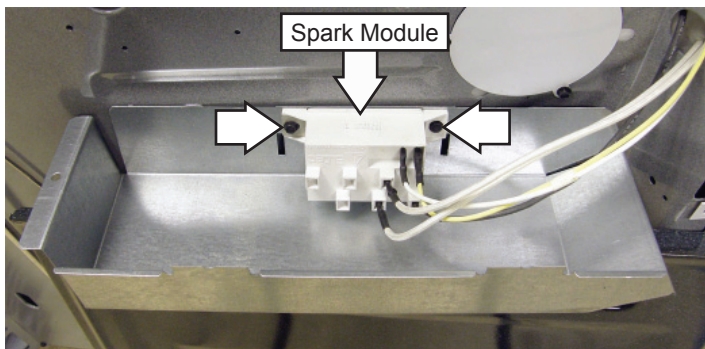
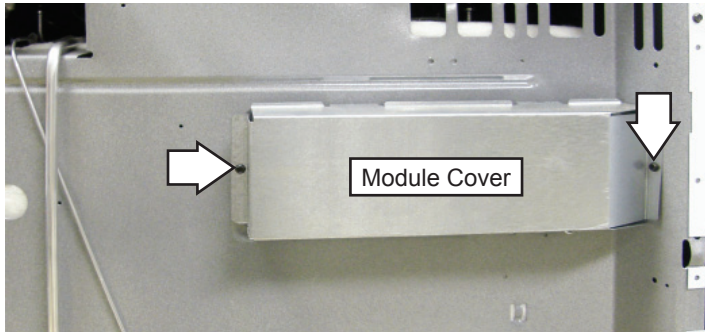
**Note:** If battery leakage has damaged the battery tray receptacle terminals, replace the receptacle.



## SPARK MODULE

The spark module, similar in appearance to previous models, is now powered by the 9-volt battery.

The module is attached to the inside of the module cover with two 1/4-in. hex-head screws. It is necessary to remove two 1/4-in. hex-head screws and module cover to access the module.



## THERMOSTAT

The oven thermostat utilizes a thermocouple to sense the presence of the pilot flame and a capillary to sense oven temperature.

### **To replace the oven thermostat:**

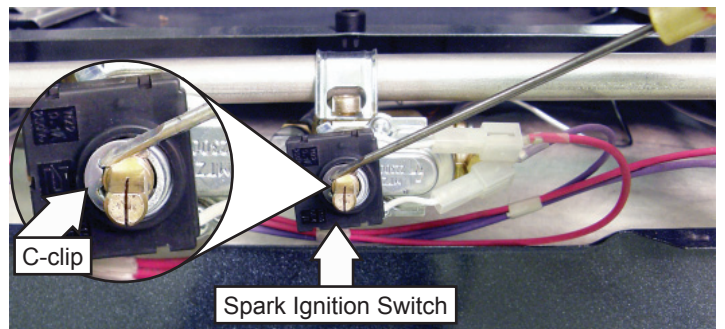
1. Turn off the gas supply to the range.
2. Open oven door and remove the capillary from clips on the back wall of the oven cavity.
3. Lift main top to the open position and remove the knobs.
4. Remove three 1/4-in. hex-head screws from the bottom of the control panel.



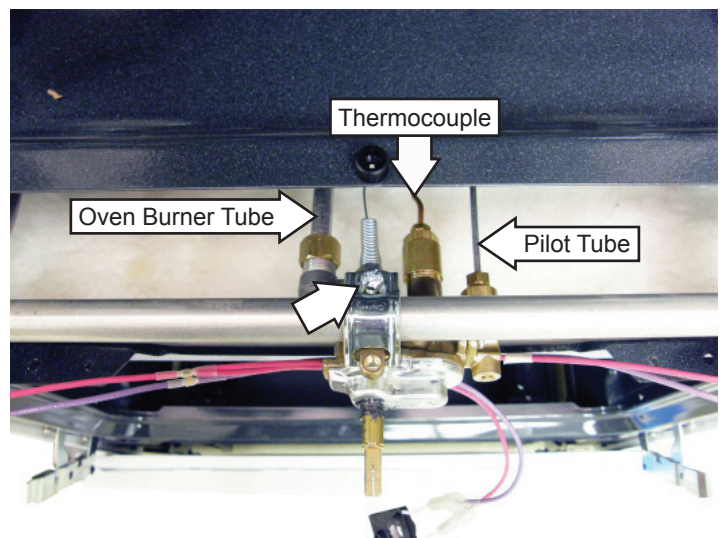
5. Remove the 2 Phillips-head screws from the front of the control panel.



6. Pull the control panel off the range.
7. Using a small flat blade screwdriver, remove the C-clip and pull the spark ignition switch off the thermostat shaft.



8. Remove the 5/8-in. hex nut that attaches the oven burner gas tube.
9. Remove the 3/8-in. hex nut that attaches the pilot gas tube.
10. Remove the 5/16-in. hex nut that attaches the thermocouple.
11. Remove the Phillips-head screw (5/16-in. hex nut) from the thermostat bracket.



12. Lower the thermostat from the gas manifold pipe and remove the capillary from the range.