

# England's Stove Works, Inc.

Coal, Gas, Pellet and Wood Stoves

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**WARNING: ELECTRICAL SHOCK CAN OCCUR IF UNIT IS NOT UNPLUGGED.**

## WIRING YOUR PU-CB04 CIRCUIT BOARD

**WARNING: STOVE MUST BE OUT (NO FIRE), COOLED DOWN, AND UNPLUGGED BEFORE PROCEEDING. FOLLOW ALL CODES.**

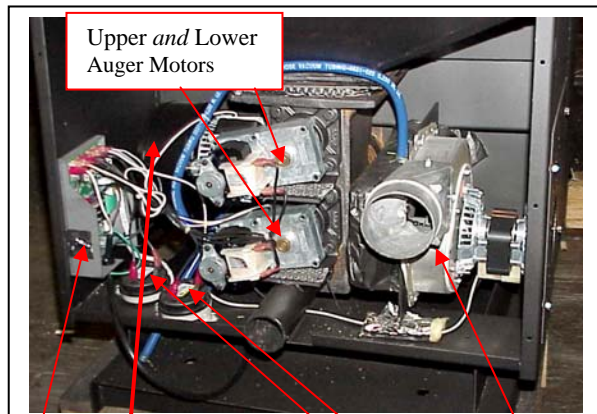
**NOTE: OLDER BOARDS (THOSE WITH TWO KNOBS AND TWO BUTTONS, INSTEAD OF THE TOUCH PAD) ARE WIRED DIFFERENTLY. THE NEWER STYLE BOARDS SHOULD WORK WITH STOVES THAT USED THE OLD BOARDS; PLEASE STATE YOUR MODEL NUMBER AND DATE OF MANUFACTURE WHEN ORDERING.**

1. If you are replacing an existing board, remove the rear access panel from the stove. The simplest way to change boards is to remove the wires one at a time from the old board and plug them into the new board; however, if the old Circuit Board has already been removed, wiring a new one is quite easy. No solder joints are required, and the tools you will need are very basic. **You will need:** A pair of cutting pliers; a 5/16" wrench or socket; and some zip ties (plastic wire ties).

*Note: if your stove was manufactured before 2001, you will also need a 1/8" Allen wrench for the Heat Sensor screw.*

2. The first step in replacing the old board is to remove the screw that holds the Heat Sensor in place. The sensor is located on the left side of the Feeder Pot Assembly (looking from the back), and is screwed into the firewall. **NOTE: When you replace the Heat Sensor, be sure to screw it tight against the firewall.**

3. The next step is to unscrew the old Circuit Board from the side of the stove. *Note: If your unit is an insert, remove the Circuit Board mounting plate from stove with the board attached.* There are two 5/16" screws that hold the board in place.



Circuit Board

Convection Blower

Vacuum Switches

Comb. (Exhaust) Blower

4. **NOTE: Some components have a black and a white wire, while others will have two black wires; with this board it does not matter which color wire goes to which terminal.**

Looking at the back of the board (from left to right), the wires should be placed as follows: Terminals 1 and 2 are for the Convection (Room Air) Blower (this is the black blower located against the firewall, to the left of the feeder pot assembly.).

5. The next two terminals (Terminals 3 and 4) are for the

Upper Auger Motor circuit.

The Upper Auger motor is located in the center of the stove and is mounted to the Feeder Pot. If your stove was built in 2002 or later, the "door ajar" switch is connected through this circuit – in this case, Term. 3 should have a wire leading to the switch (marked ".17" and located on the left side of the bottom of the stove, looking from the back), and the wire from Term. 4 should lead to the Upper Auger Motor.

6. The wires for the Lower Auger Motor (also located in the center of the stove, under the Upper Auger Motor) should be plugged into Terminals 5 and 6. **NOTE:** Term. 5 (marked "Lower") is turned sideways to allow room for the top mounting screw.

7. The next two terminals (7 and 8) are connected to the Combustion (or "Exhaust") Blower.

8. The final two terminals (9 and 10) are for the Cartridge Heater Igniter, if your unit is so equipped (2004 or later). If your unit predates the Auto-Start Igniter system, nothing is plugged into either of these terminals.

9. On all stove models 25-PDVC, 55-SHP10 or 55-TRP10, **and** on all pellet stoves (any model) manufactured in 2001 or later, a Vacuum Shutdown Switch is present with a hose connecting it to the Exhaust Chamber near the Exhaust (Combustion) Blower. There are two wires connected to this switch that are plugged into the board at the "J-2" terminals (located near the bottom of the Circuit Board).

10. If the unit is connected to an External Thermostat (optional), the connection for the thermostat is at the "J-3" terminals (also located near the bottom of the Circuit Board, in the right corner). Please call our 800 number or visit our web site for more info. on thermostats.

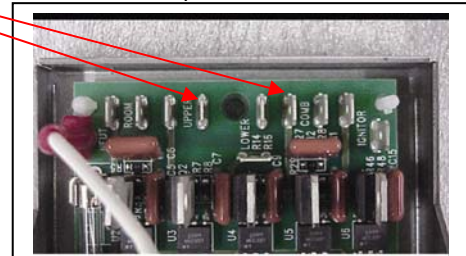
11. Finally, reinstall the new Heat Sensor securely (to the hole located to the left of the Feeder Post Assembly, looking from the back). Fasten the Circuit Board to the side of the stove and re-tie the wires inside the stove.

**Important: Tie the wires up in such a way as to prevent them from touching any electric motors or hot or moving parts inside the stove!**

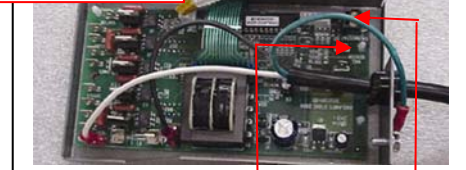
After tying up the wires, plug the stove back in. **Do not reach into the back of the stove after plugging it in!** Turn the stove ON and run a functional check of it to ensure proper function.

12. After confirming proper function, shut the stove down and unplug it from power, replace the back panel, and reinstall the flue system if necessary.

Terminals



Heat Sensor wire (insulated)



J-2 Terminals connect to Vacuum Switch

J-3 Terminals connect to optional Thermostat

**Technical Support:** (800) 245-6489

**Web Site:** [www.englishstoves.com](http://www.englishstoves.com)