

## Replacing Fireside Franklin Thermocouple

**This procedure should only be performed by a qualified gas technician.** Please read all the instructions before beginning the procedure. Confirm that you have all the necessary tools and materials. If you have any questions, technical support is available toll free at 1-800-866-4344, Monday –Saturday 9:00- 5:00 E.T.

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### **Tools Needed:**

- 5/32" Allen wrench (6" T-handle preferable; regular "L" will work)
- 5/16" nut driver
- 3/8" wrench
- wire cutters
- 10 mm socket and wrench, or, 7/16" socket and wrench

### **Materials Needed:**

- Replacement thermocouple: Part# PSE-019A (for stoves equipped with a PSE pilot assembly) or Part FF-tcouple (for stoves equipped with an SIT pilot assembly).

### **Note:**

The easiest way to determine which pilot assembly is in your stove is to look at the pilot hood. The hood splits the pilot flame into three distinct flames. If the pilot hood is round your stove was built with an SIT pilot assembly.



**SIT pilot**

If the pilot hood appears to be bent over your stove was built with a PSE pilot assembly.

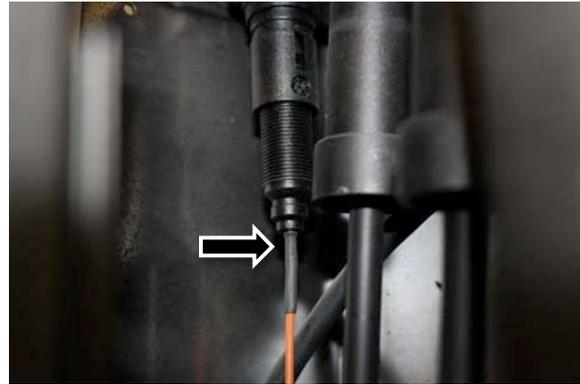


**PSE pilot**

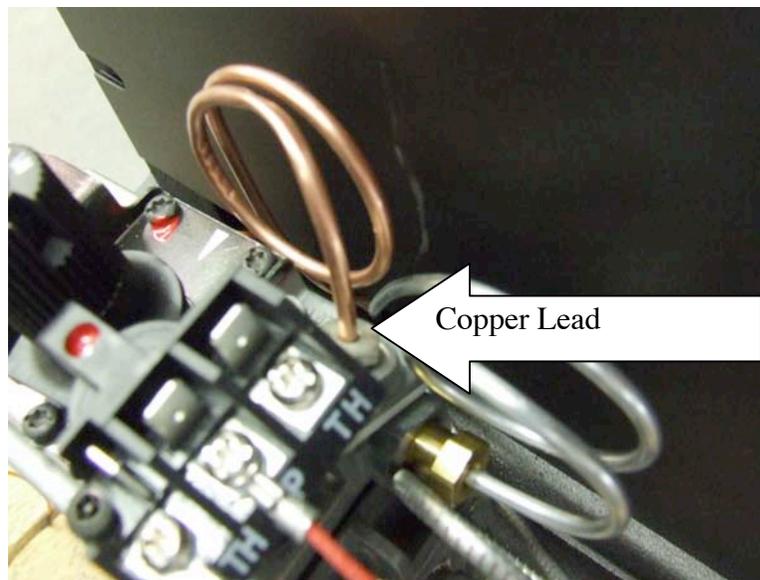
If you cannot determine which you have, call 1-800-866-4344 for assistance.

Make sure the stove is cool. Shut off main gas supply to the stove.

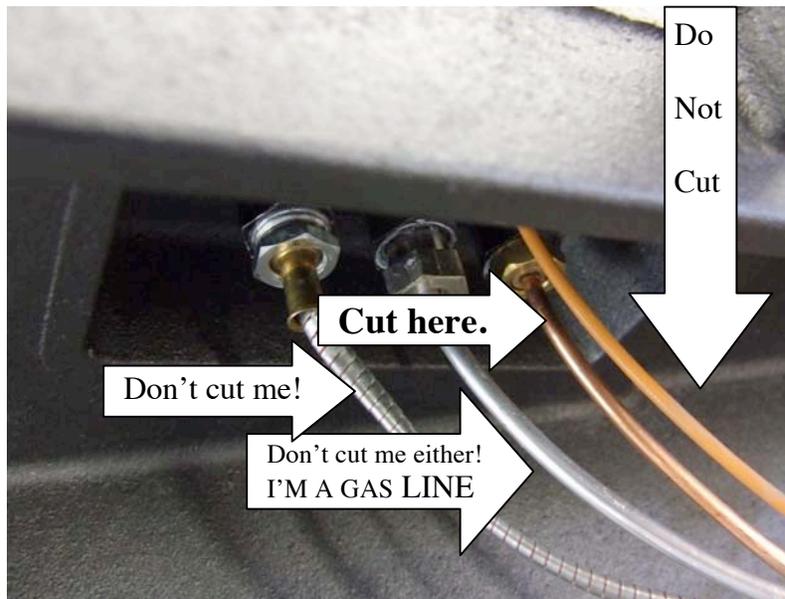
1. Remove the control cover at the rear of the stove using a 5/32" Allen wrench and a 5/16" nut driver.
2. Lift the cover upward away from the knobs and disconnect the wire from the underside of the igniter button. The on/off switch may remain connected.



3. Set the cover aside.
4. Use a 3/8" wrench to disconnect the brass fitting on the copper colored lead going into the control valve.



- From underneath the stove, use wire cutters to cut the copper colored lead to the thermocouple as close to the fastening nut as possible. **DO NOT CUT THE ALUMINUM GAS LINE!**



- At the rear of the stove, pull the copper lead up through the stove base from where you disconnected it from the control valve.
- Using a 10MM socket for a SIT pilot (white, black, or clear igniter lead) or a 7/16" socket for a PSE pilot (orange igniter lead) disconnect the thermocouple from the bottom side of the pilot assembly bracket underneath the stove.



- Pull the thermocouple down and out of the bracket.

9. Push the new thermocouple up into the bracket and fasten the fitting using the appropriate wrench (see Step 7). **Note:** *This step is a little difficult due to the position of the pilot assembly and working from below the stove. You only need to supply a light tightening pressure to the thermocouple as it carries no gas.*
10. Run the copper lead from the new thermocouple along the underside of the base towards the control valve.
11. Wrap the lead around a size D battery, or something of similar circumference, to coil the extra length (see Step 4 picture) and then attach it to the control valve using a 3/8" wrench. **Note:** *This connector is positioned at a difficult angle. DO NOT force it in as you could ruin the threads on the brass fitting. Tighten the fitting snug, but do not over tighten. Tip: Making this connection properly is imperative, but it can be frustrating. If you are ready to give up, walk away from the stove, then try again in a few minutes.*
12. Test the stove before replacing the control cover. Attach the igniter wire temporarily. Be sure that the pilot will light and stay lit once the thermocouple has been given 15-30 seconds to warm up. If it does not light, check all of the wiring connections and retest. Be sure main gas supply is open.
13. Replace the control cover over the control knobs and reconnect the wire to the igniter button. **Note:** *The reason you place the cover over the knobs before you connect the wire is that the wire is too short to connect it first.*
14. Fasten the control cover to the rear panel of the stove.
15. Please contact Woodstock Soapstone Co. for any assistance during this replacement process at 1-800-866-4344.

We need your help! Woodstock Soapstone Co. takes pride in providing the highest quality products as well as the best customer service in our industry. We welcome your suggestions and input to help us achieve these goals. If you have any comments to improve our products, service, and information provided in these instructions please contact us at (800) 866-4344 or [info@woodstove.com](mailto:info@woodstove.com). Thank you.

Revised 8/7/10