

QUADRA-FIRE®

SOLID THERMOCOUPLE REPLACEMENT INSTRUCTIONS

PART:

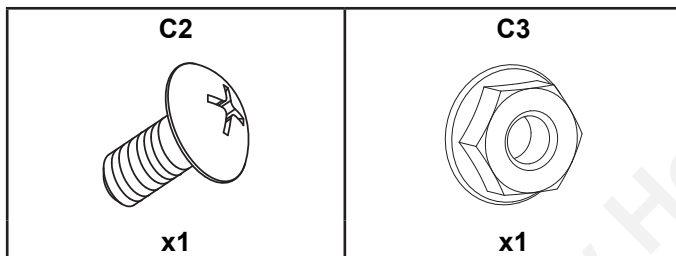
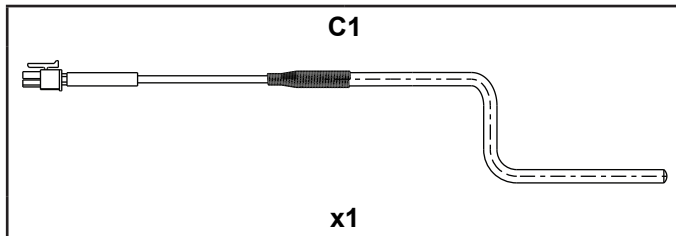
SRV7034-247

FOR PELLET APPLIANCES:

MOUNT VERNON AE

MOUNT VERNON AE INSERT

Included in Kit:



Included in kit:

Quantity one (1) Thermocouple (C1), quantity one (1) 1/4-20 x 5/8 inch Screw (C2), and quantity one (1) 1/4-20 inch Flange Nut (C3).

Tools Required:

Center punch, 7/16 inch socket, power drill, and 1/8 inch drill bit.

Proper Shutdown Procedure



CAUTION

Shock and Smoke Hazard

- Set wall control to OFF and AUTOMATIC/MANUAL SETTING screen.
- Wall control screen will scroll through the following messages after setting to OFF:
 1. Shutdown
 2. Auto-Clean
 3. Off
- Smoke spillage into the room can occur if the appliance is not cool before unplugging.
- There is a risk of shock if the appliance is not unplugged before servicing the appliance.
- After servicing, restart with the AUTO/MANUAL SETTINGS screen.



NOTE: The thermocouple wire has been re-routed for easier field replacement. The hole for the wire has been relocated and in some cases a new hole will have to be drilled to accommodate a replacement thermocouple (Figure 1 and Figure 2).

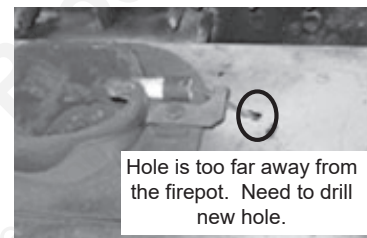


Figure 1

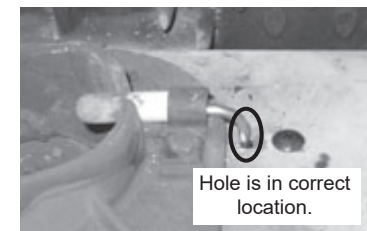


Figure 2

1. Follow **Proper Shutdown Procedure** to the left.
2. To access the thermocouple you will first need to remove the ash pan (Figure 3).

NOTE:

- Mount Vernon AE Stove: the ash pan is visible from the front of the appliance.
- Mount Vernon AE Insert: the ash pan is not visible from the front of the appliance; open the cast face to remove the ash pan.



Figure 3

Drill a New Hole for Retro Fit

1. Use a 7/16 inch socket to remove the 1/4-20 inch bolt securing the thermocouple in place.

NOTE: A lubricate is highly recommended such as a penetrating oil to facilitate the removal.

2. The clip, bracket and bolt will all come off together; discard the bracket (**Figure 4**).

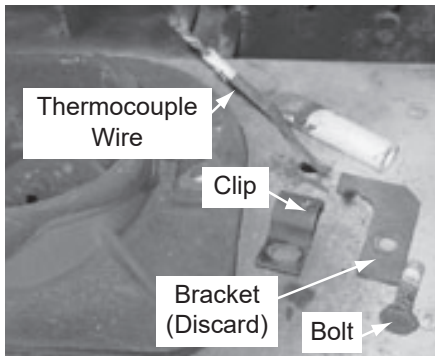


Figure 4

3. Straighten the thermocouple wire and push down through the hole and remove from the firebox. Disconnect from the control board by following the directions under the section **Disconnecting from the Control Board**.
4. Use a center punch to start a new hole 1/8 inch from the edge of the fire pot on center (**Figure 5**).



Figure 5

5. Drill a pilot hole using a 1/8 inch drill bit. Then drill a hole 1/4 inch as shown in **Figure 6**.

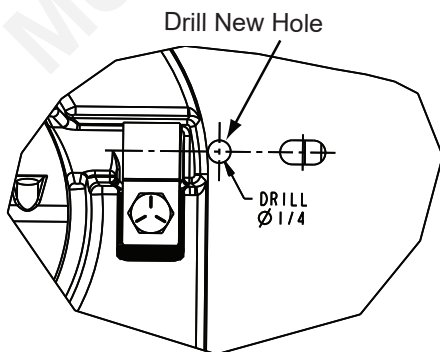


Figure 6

Remove Thermocouple (New Hole Not Required)

1. Use a 7/16 inch socket to remove the 1/4-20 inch bolt securing the thermocouple in place. Loosen the bolt and remove the metal bracket and ceramic thermocouple cover

NOTE: Lubricate is highly recommended such as a penetrating oil to facilitate the removal.

2. Slide the thermocouple through the hole in the firebox and into the ash removal system (**Figure 7**).

NOTE: On the Mount Vernon AE Stove, you will need to remove the right side panel to be able to access the wire.



Figure 7

Disconnecting from the Control Board

3. The thermocouple wires are connected to the control board. The wires need to be disconnected but extreme caution must be used when removing them. You may not have a visual of the control board and it must be done by feel. Review **Figure 8** for the location of the tabs for removing the wires.

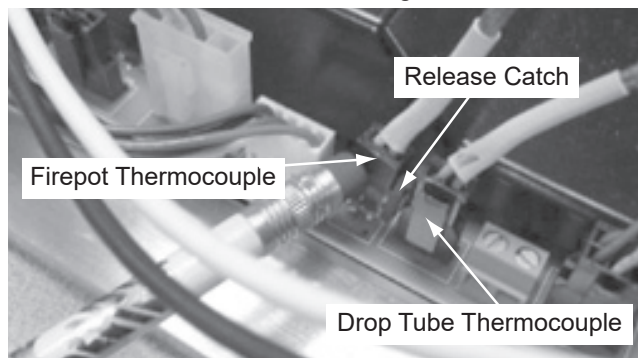


Figure 8

- For easier access for removing the fire pot thermocouple connector from the board, first remove the drop tube thermocouple by pinching the release latch on the front of the drop tube connector. Now pinch the release latch on the side of the fire pot thermocouple connector.
- Remove the thermocouple and wires through the ash pan opening in the front of the appliance (**Figure 9**).

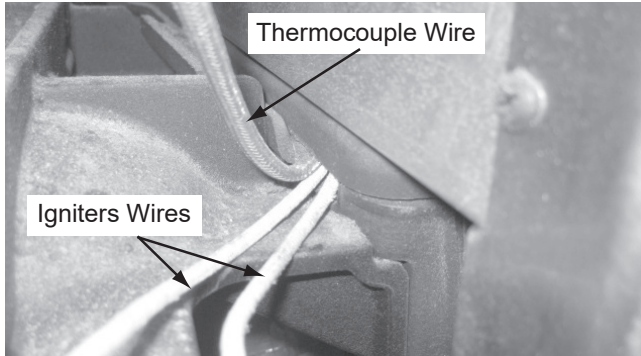


Figure 9

- The thermocouple connector will slide through the opening in the cast firebox in the back of the appliance, into the ash pan opening.

Install New Thermocouple

NOTICE: The thermocouple wire must be routed correctly to avoid:

- Damage to the wire by the fire pot floor or auto-clean rails.
- Premature failure of thermocouple.
- Wall Control Error Message: "BAD FIREPOT TC"

- The wire of the thermocouple (**C1**) need to be routed through the notch in the fire pot riser assembly (**Figure 10**).

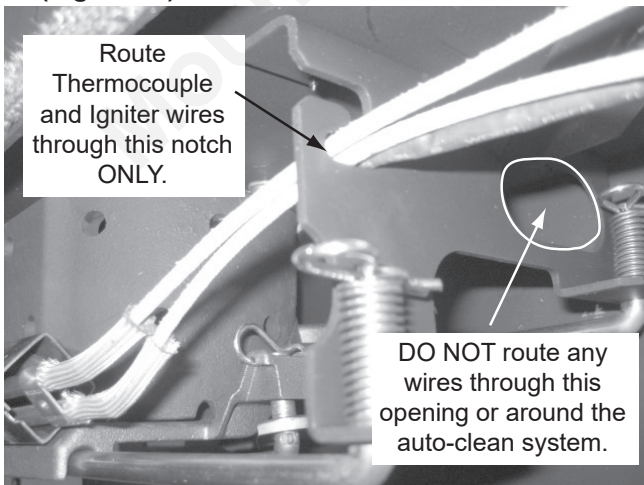


Figure 10

- Feed the wire through the right corner opening in the cast (**Figure 11**).

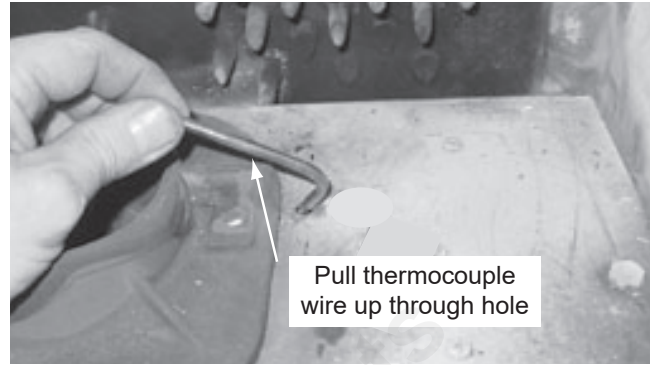


Figure 11

- Re-connect the wires to the drop tube and fire pot on the control board.
- Install the new Thermocouple (**C1**) through the hole in the firebox. If it was necessary to drill a new hole, plug the hole with the 1/4-20 x 5/8 inch Screw (**C2**) and 1/4-20 inch Flange Nut (**C3**) provided in the kit, as shown in **Figure 12**.

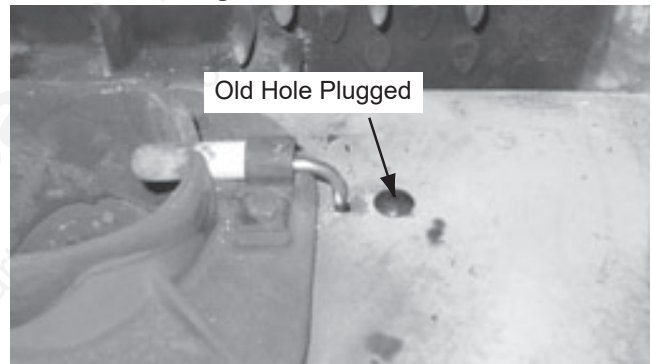


Figure 12

- Place the cover over the Thermocouple (**C1**). The tip of the thermocouple must be in contact with the inside end of the thermocouple cover or missed ignitions can occur.
- Re-attach the clip and secure with the bolt and nut. Use a 7/16 inch socket wrench to tighten the nut (**Figure 13**).



Figure 13

- Re-install the side panel on the Mount Vernon AE Stove (only) and re-install the ash pan in the appliance.