

THIS PROCEDURE MUST BE PERFORMED BY A QUALIFIED TECHNICIAN

CAUTION: *Risk of fire. Can cause personal injury, equipment and structural damage, and/or death. Use extreme care and caution when splicing insulation. Damage to the brick core, integrity of the system, and insulation damage can occur. Read and follow all instructions and contact Steffes with any questions or concerns.*

RULES OF SPLICING

- No two (2) splices shall be located within six (6) inches of another splice.
- Only one splice is allowed per layer of insulation. There are three layers of blanket insulation on the 9100 Series head assembly.
- The right side painted panel **MUST** remain in place.
- Do not remove the left or back galvanized panels.
- Head assembly side panels **MUST** be secured using straps or other preferred method before removing the top galvanized panel.



WARNING

HAZARDOUS VOLTAGE:
Risk of electric shock.
Can cause injury or death. System may be connected to more than one branch circuit.
Disconnect power to all circuits before servicing.

CAUTION: *The service strapping above must be capable of holding the brick stack in place to keep bricks from falling.*

- Supplied insulation staples **MUST** be used to secure blanket insulation splices in all non-exposed splices.

TYPES OF SPLICES

- **Exposed Splice:** An exposed splice is a splice that is made in the area which is visible when the front galvanized panel is removed. This type of splice may be on any one of the three layers of insulation. If multiple exposed splices are used, they must remain at least six (6) inches apart.
- **Non-Exposed Splice:** A non-exposed splice is located under the top galvanized panel. Non-exposed splices must have at least eighteen (18) inches extending under the top panel and must remain at least six (6) inches apart. Therefore, if splicing all three blankets using non-exposed splices, the bottom layer of insulation could be spliced eighteen (18) inches back under the galvanized top panel, the middle layer could be spliced at twenty-four (24) inches, and the top layer could be spliced at thirty (30) inches back.

If one of the three layers tears here, an exposed splice can be used.

If all three layers tear in this area, the splices must be at least six inches apart; therefore, one or more of the splices may need to be non-exposed splices.

Figure 1



INSTALLATION INSTRUCTIONS

NOTE: *Make sure the brick core is cool before performing this procedure.*

1. Disconnect power to all branch circuits of the heater and remove the painted front panel.
2. Remove the galvanized front panel.

3. Determine what type of splice is required. If using an exposed splice, no other panels will need to be removed. Skip to Step 9. If a non-exposed splice is required, continue to Step 4.
4. Lift the insulation blankets gently out of the way and secure the head of the furnace by using straps or other desired method to ensure the brick core cavity remains tight.

NOTE: If the head assembly is not secured, the brick core can become damaged beyond repair. A new head assembly would then be required to put the system back in service.

5. Remove the top painted panel.
6. Disconnect the wires from the limit switch and secure the wires to the side of the furnace so they don't fall between the painted and galvanized side panels.
7. Remove the galvanized top panel.
8. Lift the insulation layers up over the top of the furnace to expose the area where the splice will be made. Use extreme care when handling the insulation to avoid any further damage.
9. Align the existing insulation blanket with the new insulation to be spliced in. Carefully install five (5) wire staples evenly across the insulation blankets. Be careful not to tear the insulation with the staples.

NOTE: Make sure the insulation pieces come together in a butt joint to ensure there are no visible gaps along the splice seam.

NOTE: Staples are only needed for non-exposed splices.

10. Bend each staple end toward the seam and, using a plier, twist the ends of each staple together.
11. Once the splice(s) have been made, gently lower the insulation blankets.
12. Install the galvanized top panel.
13. Remove the straps used to secure the head assembly.
14. Re-install the blanket insulation, making sure there are no air leaks.
15. Install the painted top panel.
16. Install the front galvanized panel and the painted front panel.
17. Energize the system and complete the system check out.

**Figure 2
Insulation Splicing**

