

CORE CHARGING HIGH LIMITS:

Item #1040816R Limit Switch Auto 24" – 2102/2103
Item #1040817R Limit Switch Auto 38" – 2104/2105
Item #1040818R Limit Switch Auto 46" – 2106

Item #1012088R Limit Switch Manual 34" – 2102/2103/2104
Item #1012090R Limit Switch Manual 48" – 2104/2105/2106

These models **MUST** have heat shrink and be coiled!

CLEARANCE VIOLATION HIGH LIMITS:

Item #1012091R Clearance Limit Switch Manual 36" - 2102/2103/2104
Item #1012092R Clearance Limit Switch Manual 50" - 2104/2105/2106

THIS PROCEDURE MUST BE PERFORMED BY A QUALIFIED TECHNICIAN

INSTALLATION

NOTE: Auto reset and manual reset core charging high limit switches are not interchangeable. The limit switch used as a replacement MUST be the same style and type as the limit switch the heater was manufactured with. Heaters with serial number ending in 095580 or lower use auto reset limit switches. Heaters with serial number ending in 095581 or higher use manual reset limit switches.

1. Disconnect power to all branch circuits of the heater and remove the painted front panel.
2. Hinge the right side panel open by A) removing the screw located above the grill slats on the lower right side of the heater, B) loosening the screw located at the top right corner of the electrical compartment, and C) pushing out on the right side panel. Refer to Figure 1.
3. Disconnect the wires connected to the high limit switch being replaced.
4. Remove the screw(s) holding the high limit switch to the bracket and remove the high limit switch by pulling out of the guide tube.
5. Uncoil the new high limit switch.
6. **2102 and 2104 Heaters Only:** Slide the heat shrink onto the limit switch wires (Figure 2).

NOTE: If installing 1012088R limit in a 2102 or 1012090R limit in a 2104, heat shrink is required and the limit MUST be coiled as shown in Figure 2.



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.

FIGURE 1

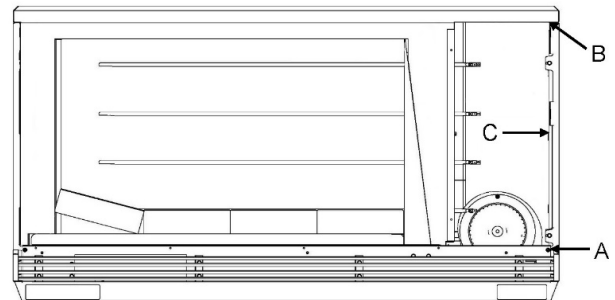
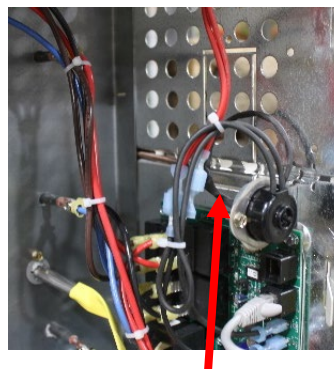


FIGURE 2

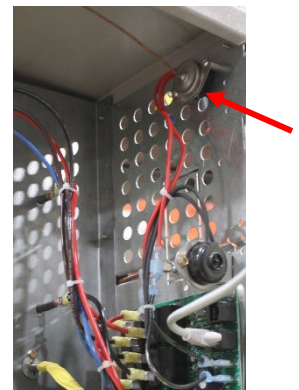
Core Charging High Limit



**IMPORTANT!
HEAT SHRINK & COIL
ONLY USE ON MODELS LISTED ABOVE**

FIGURE 3

Clearance Violation High Limit

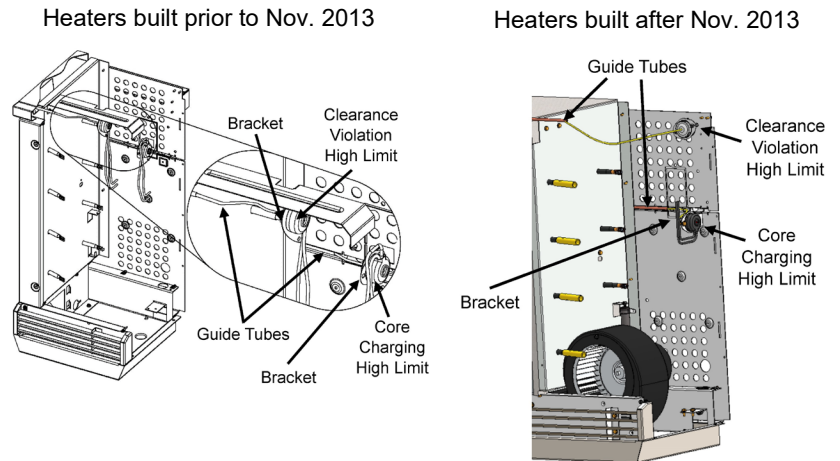


Core Charging and Clearance Violation Limit Switch Replacement...

7. Insert the new high limit switch by gradually inching it through the bracket and into the guide tube. See Figure 4.

FIGURE 4

NOTE: DO NOT use water-based lubricant to aid in the installation of the high limit switch(es). Use of a water-based lubricant will make any future replacement of these limits impossible.



8. **2102 and 2104 Heaters Only:** Coil any excess length of the limit switch wires and tie wrap together as shown in Figures 2 and 3.

NOTE: If installing 1012088R limit in a 2102 or 1012090R limit in a 2104, heat shrink is required and the limit MUST be coiled as shown in Figure 2.

9. Connect the limit switch to the bracket.
10. Connect the wires from the high limit switch as shown in the wiring diagram (Figure 5).

NOTE: The core charging and clearance violation high limit switches MUST be series connected to the Limit 1 and Limit 2 terminals on the base I/O relay board.

11. Secure the right side panel, reinstall the painted front panel, and restore power to the heater.

FIGURE 5

