

# HIGH LIMIT SWITCH REPLACEMENT 2000 Series and Quantum

Item #1040406R – Limit Switch Assembly 2002 and 2003 REPL Item #1040408R – Limit Switch Assembly 2004 and 2005 REPL Item #1040410R – Limit Switch Assembly 2006 REPL

### THIS PROCEDURE MUST BE PERFORMED BY A QUALIFIED TECHNICIAN

# TOP LIMIT REPLACEMENT

- 1. Disconnect power to all branch circuits and remove the front painted panel.
- 2. Place the control panel bracket into the service position. (Figure 1)
- 3. Locate the 2 black wires that route from the element termination on the back side of the top 2 elements to the service light (2000 Series) or core limit relay (Quantum). Cut both black wires about 8" (inches) from the element termination.
- 4. Disconnect the wires from the back side of the top 2 elements.
- 5. Remove the screw holding the high limit switch to the bracket and remove the high limit switch by pulling out.
- 6. Uncoil the new high limit switch.
- 7. Insert the new high limit switch by gradually inching it through the bracket and into the guide tube.

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. Secure the high limit switch to the bracket with the screw.
- 9. Secure the ends of the 2 black wires from the service light (2000 Series) or core limit relay (Quantum) to the 2 black wires off the limit switch using the butt crips provided.
- 10. Connect the element terminations to the back side of the top 2 elements.
- 11. Move the control panel back into position.
- 12. Secure the front painted panel and restore power.
- 13. Verify heater operation.

# **BOTTOM LIMIT REPLACEMENT**

- 1. Disconnect power to all branch circuits and remove the front painted panel.
- 2. Place the control panel bracket into the service position. (Figure 1)
- 3. Disconnect wires from the back side of the bottom 2 elements.



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.







## High Limit Switch Replacement - 2000 Series and Quantum cont.

- 4. Remove the screw holding the high limit switch to the bracket and remove the high limit switch by pulling out.
- 5. Uncoil the new high limit switch.
- 6. Insert the new high limit switch by gradually inching it through the bracket and into the guide tube.

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.

- 7. Secure the high limit switch to the bracket with the screw.
- 8. Verify the ends of the 2 black wires with butt crimps are insulated.
- 9. Connect the element terminations to the back side of the bottom 2 elements.
- 10. Move the control panel back into position.
- 11. Secure the front painted panel and restore power.
- 12. Verify heater operation.