

Common Symptoms & Causes of Heater Failure:

No heat:

A heating element is similar to a light bulb in that its filament is a heating coil which in time can break or burn out. Assuming that the heater's connection terminals are in good condition, it is properly energized by your hot tub's control system when it should be, and that the thermostat and high limit switches are functioning properly, no heat can indicate a burned-out or broken heating coil, which results in an open circuit.

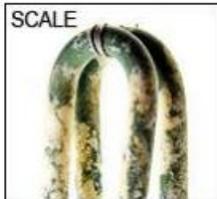
Note:

Catastrophic failure of the heater element can be caused by a dry fire. This occurs when the heater is operated with little or no water present, or a greatly reduced water flow, which can cause the heating coil and/or outer sheath to actually melt. The element will often have visible signs of damage when a dry fire occurs. Although properly functioning high limit switches, pressure/flow switches, and thermostats are designed to help prevent this condition, like all devices, these too can fail in hot tubs.

Reduced heat:

Low heat is more often caused by a reduced water flow rather than an electrical problem with the heater itself. Check your filter to make sure it is not clogged, and that there are no other obstructions restricting spa water flow. Excessive scale buildup on the heater element, as a result of poor water balance, can reduce heating efficiency.

Preventing Scale Buildup:



Example of a Spa heater element suffering from calcium scale buildup:

This buildup not only reduces heater efficiency, it eventually results in element failure. Regular use of Spa System Flush can help eliminate scale. The number one thing you can do to extend the life of your spa heater is maintain proper Chemical levels in your hot tub water, especially PH. Chemical levels that are not balanced will cause scale or calcium build up and corrosion especially on your heater element.

You will receive a serious problem with your heater if you leave your spa water with low pH (under 7.0) for an extended period. The acid starts to oxidize on the metal heating element when the pH becomes to acid, finally resulting in heater failure.

Warranty:

The failure to maintain proper water chemistry and chemical balance, the use of abrasive or improper chemicals. Any sanitation or water purification device or heating system which contributes to a component or unit failure or unsafe operating system will not be covered under warranty.