**Hot Tub Heater Not Heating**

I just put a new element in a few months ago but now I have no heat, did my new element go bad?

There are several things that can cause a No Heat situation on a hot tub. First, is the HEAT indicator light coming on? If it is coming on and you have no heat, then we need to test for voltage at the heater wire terminals. If the light is not ON, then something is not allowing the heater circuit to activate. First check the filter, is it clean? Check the water level, is it Up where it should be?

Hello and thanks for getting back to me, the heater light is not coming on. I did check the filter and replaced it with a new one, still no heat. What should i do next?

The first thing to check is if your pump is moving water properly. Do the jets seem to be the same pressure as they always have and are they moving water like normal? If yes -we can assume the pump is still working well enough to make the system function. Most spas use a pressure switch as a safety switch, it senses pressure in the pipe and allows the heater to come On if pressure is present, but if no or low pressure is present then it will not allow the heater to operate. So... we need to make sure the pressure switch is operating. For most spas the pump will need to be running and the heat set where it would normally be; all we need to do is bypass the switch (only long enough to see if the heater light will come on). We can either jump across the two terminals on top of the switch (where the two small wires connect), or bridge the two terminals with a small screw driver or a jumper wire, or tape the two wire connectors together temporarily. On most newer spas with Balboa, brand or Gecko brand control boxes these two wires are low voltage control wires and not 120v power leads.

I do have a Balboa control box --and the jets seem to be normal in every way. I found the pressure switch --and touched a screw driver across the two terminals, something clicked and the heat light did come on. So what does this mean?  Do i need a new pressure switch ?

Well that depends ... how does your pressure switch look?  Is it leaking at all, or rusted?  If not, you may be able to adjust it. Look just below the switch on top were the wires connect, there should be a small wheel looking piece with a small plunger that pops up and activates the micro switch on top of the unit. That wheel can be turned to adjust the PSI setting for activation. In your case you would turn the wheel counter clockwise which should raise the plunger area to be closer to the switch on top. You just don’t want to go too far -if you do the heater could stay on even once the pump has shut down. Give it a turn or two - then turn the power back on and see if it goes into the heat mode on its own. On the other hand, if the switch looks to be leaking at all or rusted --just replace it. Most adjustable switches use a 1/8th pipe thread mount and use two wire terminals -- there are several with these specs and price can be very different depending on the manufacturer so if you have any doubt -- call or e-mail. However, be sure to rule out any flow problems, an open pressure switch could just be doing its job!

**My Spa Heater is not Heating**

Hi, my husband says we have power to our heater but the water won’t get hot. He says he tested the heater terminals and got 120 volts on both terminals. What do we do?
Okay -- here is an important piece of info, on 240v parts like your heater you must test across both heater terminals at the same time. You need to see 230-240v on the meter to be sure you have proper power. Have him turn the system on - heat ON - and test across both terminals (be careful as these wires are the high voltage leads) just don’t touch anything except the tops of the terminals (either the nuts or the wire connector itself). In the event that you do have 240v at the heater and you don’t get any heat --at that point we can safely determine the element is bad. To back that up we would do an AMP check on each of the heater wires.

**Looks like we do have 237 volts across the heater element terminals, so do we need a new element?**

Yep --your spa heater element must be bad. We can also do an Ohms test to make sure but if you have 237 volts to the heater and no heat what so ever then it’s safe to say the element needs replaced. The flow through style heaters like yours are the cheapest style, so that’s good news. You may need to remove you element and look close at it to see the kilowatt rating that is stamped into the metal-(tiny little letters). There are usually on two different 240v elements available, one is a 4.0kw or 4000 watt, and the other is a 5.5kw or 5500 watts. You can usually use either or... but if you have the lower rated element now you should stick with that one. Now if you have a 120v heater, it’s still the same element but since you only have 120 volts, it only works as a 1.5kw heater or 1500 watts. Some elements will only show the 120v rating, if it does then the manufacturer has rated that element as a 120v only.

**We got the heater element out and it says it’s a 5.5kw . My husband did OHM test it and got no reading so it appears the element is dead. We did order a new one and I was quite surprised at the cost; it was much cheaper than i expected. Well the part is on its way - and we have learned a thing or two. THANKS for all the help, you saved us a lot of money in repair labor.**

**Hot Springs Spa trips the high limit reset.**

Hi - I have an older Hot spring spa sovereign model and the high temp reset keeps tripping. I reset it and it works for a few minutes and then pops again. Is my heater out?

Well actually if your Hi Limit reset is the one that’s tripping then your heater is fin, its overheating and it wouldn’t do that unless is was working. What’s happening is the water inside the heater is getting too Hot, usually due to a low flow condition. The main reasons for a low flow condition are 1- Dirty filter, 2- low water level, 3- the circulation pump is bad.

I put in a new filter and the water level is still about half way up the tile line. I don’t feel any flow from the return fitting -usually you can sit on the bench and feel warm water flowing from that fitting.

It sounds like your circulation pump is not working - when this stops the water in the heater will boil until the high limit pops. All Hot Springs now use a Laing E5 circ pump. Keep the cord from the old pump as most new pumps don’t come with one.
Hot Springs PDR heater upgrade for the No Fault

Some years ago Watkins discontinued the No Fault heaters made of plastic. If you have a 95-2000 Hot Springs and your heater goes out --you have only the one choice. The new PDR unit --see the web site - these can be retro fitted into any of the earlier Hot Springs and Tiger River spas. You should consider changing the thermistors as well --there are two. If you have a 95 or 96 model year you may also want the install kit as it has tubing and electrical connection, you will find handy. We generally stock the 6kw model because it can be used on the 120v spas as well.

I have a Hot Springs Grandee bought in '07. For the past year our electrical trip switch has been tripping. We drained the tub, removed the heater & cleaned it a few months ago, but it continued tripping. We could nudge the heater to increase temps by a few degrees but would usually have to reset the tripped switch. Since last week we have been unable to set the heater at all, but the electrical switch is not being tripped. I think we need a new heater. What do you think.

Are you referring to the GFCI tripping? If so it is more than likely the heater is causing the problem. But you are saying that it is not tripping currently, I need to know what exactly was tripping. When you say you can't set the heater, does that mean you cannot adjust the temperature now?

No Heat and Motor shuts off on high

I was hoping you could help with some troubleshooting advice. I recently set up a Southwest spa Tub that my brother gave me. I ordered a new heater from you and installed it. He thought it needed it. After getting it powered up all the jets and blowers seem to function. The Water temp rose from 61 degrees to about 77 degrees after 24 hours. It is a 6 person hot tub. It seemed to hang there for a long time without moving. I inspected other parts such as the pressure switch in the heater tube. Everything appears to be OK. My LED on the top panel is lit up for heater. The LED on the spa pack looks black and does not appear to work.

It depends on the kW of the heater you installed to determine how quickly it will heat. Meaning a 6kW will take less time than a 1.5kW. Check the label, for a six person spa, you want at least a 4kw heater element, if not 6kw. When the spa reaches 77 degrees, does the heat light on the top side shut off? If so, you may have a problem with your temperature sensor. If the ‘Heating’ light stays on all the time, but the water is not getting warmer, the next step would be to use a test meter to test the power coming into the heater, touching each wire terminal at the same time, should read 220V-240V, somewhere in that range.

Are all spa heater elements replaceable?

I have a balboa 4kw heater that’s 15" x 2" x 2" on a cal spa. I haven't taken the heater tube off yet so i don't know if I can replace just the element or if I have to replace whole silver tube. Any help would be great.
Most Balboa heaters have replaceable elements. The non replaceable elements would be welded in the manifold, the replaceable elements would have two bolts holding the element in place which would be visible, when you look at the tube. When replacing just the spa heater element, you do save some money over replacing the tube and element, but you must be careful when installing, to be sure that the element fits tightly into the tube, and does not come close to the tube side walls, and does not leak around the terminals, all which will short out the element. For this reason, and just for simplicity, it’s easier to replace the entire heater assembly, than replacing just the element alone, but you can do it either way, in most cases.

**Water Not Heating**

We have a Jacuzzi J365 hot tub. We emptied the hot tub and drained the pipes in Jan. because the water was getting cold. The ground wire came loose from the heater. Last week we reattached the ground water and refilled the hot tub. In 3 days it went from 65 degrees to 86 degrees. It hasn’t gotten any hotter.

The spa should have heated up to temperature in 2 days. You can verify that the heat indicator on your top side panel comes on when you put it in a heat call (or turn on the heater). If not, try removing your spa filter cartridge and then put it in a heat call. Check that the thermostat is turned all the way up, and if the spa has a 24 hour circulation pump, check to verify that is operating when the heater is turned on. Check for a tripped hi-limit (red button) on the spa pack also. If that all looks good, but still no heat, check the incoming voltage to the heater element.

**Hot Tub – No Heat**

Hi, I had a SN3 error, so I replaced the two sensors as a unit. When I refilled and powered up it heated up to temp just fine but now the heater will not come on. I do not get a red heat on light. The jets are working just fine. This is a 1996 Dimension One.

Then you are not getting a call for heat if the indicator is not coming on. You may want to remove the filter and put it in a heat call to see if the indicator comes on. This is done to see if you are have a water flow issue preventing the heater from coming on.

It turned out to be the Ozone. One of the air tubes got kinked. When I straightened it out the Ozone and the heater came on!? Now I have an SN3 error again... what else could this be?

Typically SN3 is means a malfunctioning temperature sensor. You may want to double check the connection of the sensor, and be sure it’s fully installed. Inspect the wire as well for melting or rodent/insect damage. Double check that you installed the correct temp sensor and if it still throws an SN3 error, you may have a pcb circuit board problem.

**Gecko not Heating up 32 on display**
I just replaced my pump and ozonator and the tub is not heating up (after some time the breaker trips off). I can hear the click after I put the spa on and I have check the leads that are on top of the heater housing. There is electric at that point. What else can I check can anyone help me.

The error code 32 on Gecko controls indicates that the temperature sensor is not being detected or is bad and needs to be replaced. However, the temp sensor would not cause the breaker to trip. You would need to determine which component is causing the breaker to trip. Usually heaters, blowers, ozone, and pumps would cause the breaker to trip. I would start by eliminating one component at a time by disconnecting the heater first and let the spa run to see if the breaker trips. Usually the heater is to blame when breakers are tripping.

Overheating Spa

I have a 2005 down east spa by master spa. It is overheating the water. We set the temp on 80 and the mode on sleep and it got to 107. We had the thermostats checked and both read ok. We removed the cabinet insulation and the filters to see if that was the problem. After cooling down overnight, I turned power back on and set to 95 on economy mode and in two days was 103. We bought the unit new and it performed perfect until this year.

Is the actual water temperature the same as what the readout says it is? Also, how many hours a day is the filter cycle set for and what is the ambient temperature during the day this time of year? How was the temperature sensor tested?

Yes, the temp readout is correct. The temp sensors were checked by a spa repair person in the area with an ammeter. The reading was .017, he had a new one on hand and it read the same, so we determined the temp sensors ok. This morning, I disconnected the terminals from the electrical panel to the heating element (no way it can heat now) I checked the temp just before this post and it was now 104. Still have no filters in unit. The pump sounds smooth as it ever did. I'm gonna drain the water and refill with new water. We haven't used the spa in ten months (wife was pregnant) and the water is 12 months old, however we have maintained proper ph and other chemical levels.

Yes, I would recommend replacing the water. Then I would take note of the water temp after fill up and leave the spa heater disconnected overnight and see what the temp gets to. The reason I asked how long the filter cycles are set for and what the outside temp is during the day because if the pump is running for a long period of time and it's hot outside the spa could potentially overheat with the heater not even coming on. This is due to the cover and a well-insulated spa. Also, I do not believe this model spa has a 24 hour a day circulation pump but can you please verify that for me. This would be a separate small pump from your regular therapy jet pump.

I have replaced the water and checked the temp. It rose from 69 to 78 overnight, however the temp was set to 80, therefore the pump ran all night thinking it needed to heat water. The heater is still disconnected. The polling cycle is set 2 min ever 30 min, and it supposed to heat water if necessary. The filter cycle is 2 hours every 12 hours. There is no circ pump.

I would go ahead and reconnect the heater. Leave it set to 80 or a little higher in case the water is
already there and when it reaches set temp take note if the heater indicator shuts off. If so and you are comfortable using a volt meter I would then take a voltage reading going to the heater to verify that power has shut off going to the heater, when the heater shuts off.

Sundance Royal 800 Heater Won’t Come On

I have replaced all heating parts to the hot tub, including the eprom chip and the dallas time chip. The element and the sensors also. I am still getting an Er 12, and Sn 1, and Sn 3 error codes on the panel. All other pumps work fine except the air blower.

The heater will not come on due to these error codes. As far as ER12, that was not a designated error code. When you get that reading replacing the Dallas time chip may correct, if it didn't, like in your case, then the circuit board would need to be replaced. Before that I would make sure the chip was installed properly. Since you are getting both sensor error codes SN1/SN3. I would also verify that the sensors wires have been installed in the proper location on the wire harness, try resetting the sensors and the plugs.

Spa Temp Does Not Match Display

I have a Jacuzzi J150 spa and the temperature does not match the lcd readout. The water is about 25 degrees warmer than the read out. The readout also reads OH.

Usually that means that your temperature sensor has gone out and needs to be replaced.

That might be my problem, too. Water temp does not match the digital readout, and it keeps overheating. Do you think that might be the problem with my dynasty spa?

Yes this might be what's is wrong with your Dynasty Spa. Your temp. sensor may be your problem as well. You have two sensors, one for led and one that goes to heater control. Replace the one that goes to the led, or topside panel. They should be beside each other under a cover on heater tube inside the command center. The temperature sensor monitors the actual water temperature in the pipe and will display that temperature on the topside panel. The high limit sensor monitors the water temperature inside the heater. OH errors trigger when the hi-limit trips, after sensing high temperatures.

Hot Tub Not Hot

I have a Coast Spa Bronze/Silver with a Gecko SSPA Spa Pack. I purchased it new in 2001. Recently it stopped heating. Due to its age and the absence of an OHM meter I replaced the heating element. All went successfully and the new heating element is in, but apparently not working because I still have no heat. When I have the pumps running the water temperature goes up 7 - 10 degrees and stops. All pumps work, there is plenty of water flow and the digital key pad shows the heater is on, and the
digital temperature readout records the proper temperature. The temperature is set considerably higher than the water temp.

So the heater is coming on but only heating to a certain temperature and then shuts off? If that is the case, you may have a bad temperature sensor and needs to be replaced. Or try to adjust the pressure switch, Gecko has a good tutorial in the SSPA manual. Jump it out first by using a short wire to jump the pressure switch, just touch the metal to both wire attachments at the same time and hold it there. This could indicate a flow problem.

Ok --- Here's the update. I went back into the works again and readjusted the pressure switch and the tub seems to be heating -- reaching -2 to -3 degrees of where I set it. Would this be considered a normal variance? It seems to me with the old heater it was +/- 2. Also; re: the pressure switch; It seems to be working now since I adjusted it. It been in the tub since new. Should I replace it or see how it goes?

That is good news. Since that pressure switch is 7-8 years old I would recommend replacing, since they are mechanical parts with an expected life of less than 10 years. Fortunately, pressure switches are not too expensive. Be sure to replace with the same spec pressure switch. Again, check the Gecko manual if the pressure switch is not labeled well enough.

**Hot Tub Heater Thermal Cut-Off**

We have a Tiger River Spa Sumatran (model N) working fine for the last 6 months. I have not used it for 2 weeks and it is due for water change out. Water was cold and power light blinking. Troubleshooting section says it is either 1) GFCI and high limit thermostat 2) No-fault 6000 heater and heater thermal cut-off or 3) Silent flo 5000 circulation pump and circulation pump thermal cut-off. Once the heater cools everything is fine but will trip in about 15 minutes? How do I check 2 and 3 and is there anything I am missing that you can suggest?

Sounds like you’re getting a low flow of water through the heater. Chances are you have a circulation pump that’s not pumping enough water. The inlet you spoke of should actually be the heater return line as the intake goes through the filters. So if you’re not getting a steady flow of water from that return line -- your circ pump is most likely dead or at least lazy. It should be moving one gallon every 30 seconds. If the circulation pump is running, you should feel water coming out of the return line in the spa. If you don’t you can verify that the pump is getting power from the circuit board. If you are but it is not pushing water but the motor is on you may have a clogged or broken impeller. To test the spa heater you need to verify that it is getting power when the thermostat is turned up. If you have a clamp on amp meter you can clamp around one of the wires going to heater and see how many amps it is drawing while in a heat call.

I ended up looking at the Circulation pump because I could not see water coming out of the return line. After unwiring the spa, moving the heater, clamping some hoses I got to the pump. There was a lot of plant debris and a massive calcium buildup. Pump is clean and calcium free now and the spa is running smooth. Later this month I am going to run spa purge to clean out the system so I can do the last fresh fill for the winter.
How to Set Spa Heating Cycles?

I have a Tonga hot tub from Leisure Spas. I want to program the heating cycles as it implies in the manual. Page 15 of manual says "Economy Mode operates the heater only during programmed Heating Cycles (See "Setting Heating Cycles" below)". Only problem is there is no section on "Setting Heating Cycles" so I have no idea how to program the heating times. I searched the internet high and low with no luck. Does anyone know how to do this or even how to contact this manufacturer?

Economy mode means the spa will only heat during its set filter cycles. Standard mode will heat the spa on demand. I have included a link for the owner’s manual and you’re right, it is confusing. So whichever filter cycles you have set for your spa it will only heat during these cycles.

Ah I see, so the manual is somewhat misleading. I guess this means it will heat/filter for 2, 4, or 6 hrs per 12 hrs (or continuous) as per the filter settings on pg 15 of the manual. No way to set actual time (just duration). That's too bad as I was hoping to have it heat during the evening (when it’s used and when hydro is cheaper) instead of during the day. Oh well.

When you first power up the spa the internal time clock will begin working keeping track of the 12 hours between cycles. So what you could do is shut the power off in the evening when you would like the filter cycles to begin. This will reset the internal clock and should have your evening cycle start at that time and then run for however long or which filter cycle mode you have it set on. Then 12 hours later the second cycle would begin.

Spa Temp Readout is Wrong

We have a Leisure Time Spa that is approximately 4 1/2 years old. The thermostat readout has been malfunctioning. The temperature will be at 100 for example and suddenly the readout will jump to 114. The actual water temperature is not 114. This problem has been occurring off and on for several months. We have cleaned the filter cartridge and adjusted the water levels; however, this does not seem to solve the problem.

It sounds like you may be having a temperature sensor problem. Usually when the readout does not match what the actual water temperature is it is the temperature sensor causing the problem. In the control load box there may be a wiring diagram. You will see a high limit sensor as well as a temperature sensor. Locate which one is the temp sensor from the wiring diagram. It should show you where it plugs into the circuit board. Follow those wires to the sensor. Sometimes you will have both the temp and high limit mounted on the heater. Other times you will have the high limit on the heater but the temp sensor head will be mounted in the spa somewhere to monitor the water temperature inside the spa. You can try to clean and reseat the sensor and wire plugs, if that doesn’t help, replace temp sensor.

Hot Tub Heater Complications
The heat is not working on my SL850 Sequoia. I do have electronics background, and need some advice to get headed in the right direction rather than jump in there cold (bad pun).

The first thing you need to find out is if there is proper water flow going through the spa heater. Try removing the spa filter and see if that makes a difference. If no difference, then you need to determine that the heater is getting power to it. Turn up the thermostat to put the spa in a heat call. If the spa has an indicator light or icon for the heater, if it is on then you can take a voltage reading at the heater terminals to verify it is getting power. If the heat indicator light is not on, then there is no call for heat, and the problem may lie in the circuit board. If the heater is a 220V you would want to take the reading across both and red and black wire power wires and not one leg to ground to verify you are getting 220V.

Only 110V on Hot Tub Heater Element

Replaced heater element but only tests 110v across heater posts, any suggestions???

If you check voltage on one terminal post to ground, you are only going to get 110V. To test a 230V spa heater you need to do a combined reading, meaning one meter probe on each terminal post at the same time. If you did test with both meter probes on each terminal post, then check incoming power to the spa to verify you are getting 230V. You should again do a combined reading across and black and red power wires. If you have 230V coming into the spa but still are only getting 110V to heater you may have a bad heater on the spa circuit board.

Flow Thru Element Slow to Heat

I have a Morgan spa that I just replaced the flow thru element on because the heat would not exceed 65 but now it has taken five days to reach 98. The pump does not seem to be putting out as strong as it used to as well, but this is also fairly new and should not be working better than it does. Could this be a pressure switch problem?

Is the heat indicator coming on when you turn up the thermostat? Have you tried removing the spa filter to see if the pump flow seems stronger? If the filter is old it will cause a restriction and not allow the heater to come on, the pressure switch is not getting enough flow to close. But a slow heating spa heater is not usually a pressure switch problem. Another thought is to ask if the new element was the same size as the old one, and not smaller? And how is the spa cover? An old spa cover will make it hard to heat up a spa from scratch, especially in cool weather.

Reduced Heat in Amish Country Eden Spa

I have an Amish Country spa with a Brett Aqualine EM-203T pack. I cannot get the spa temperature above 97 degrees. It heats up fast, but stops at 97. All other spa functions work fine. I tried removing the filter and it makes no difference. I can get more heat by removing the capillary bulb from the tube,
fooling the thermostat. So I know the heater element is good. I am wondering if there is an adjustment on the thermostat itself, and how do I get to it. I have read that on some thermostats there is a set screw to adjust heater shut off temperature.

It sounds like it may be the thermostat. I have seen different schematics for this system. Is your thermostat located on the front of the controller? Does your system have a separate "heat" time clock? If so, is the timer operating? Old mechanical thermostats with the copper wire and capillary bulb are sometimes adjustable, look for a small hex key screw head on the side of the thermostat ‘body’, and make very small adjustments, clockwise, and retest your temperature. Be very careful not to adjust it too high, and check the water temp before entering, as it could overheat to a dangerous temperature. It may be safer just to replace the thermostat.

Gulf Coast Spa – No Heat

We own a gulf coast spa rotunda, 2003 that stopped putting heat out a week ago. We had it up to 103 for one weekend, turned it down during the week, went back out to turn it up and got no heat. We replaced the heater element, the flow switch and still no heat. We cannot find a hi limit switch anywhere on the tub. We just got in the temperature probe and when we install it, it states the temperature is 124 and shuts the whole tub down (water temperature is actually around 45 degrees) if we unhook the probe it states the water temperature is 32 on the top side of the tub and no heat. Everything else works on the tub both motors, jets light etc. Just cannot get any heat. no error codes on the top side of the tub. The heater light does show that it is on when we crank up the numbers but no heat. Any suggestions?

Did the water temperature on the display match the actual water temperature before replacing it? If so, I would re-install old sensor back. I am not sure why you got such a high reading with new sensor, unless it was not seated fully. Since you are getting a heat light or heat icon when you turn up the thermostat I don't think you have a flow issue or a tripped high limit. What you would need to do is when the heat light is on and only if you are comfortable doing so you need to see if the circuit board is supplying the heater with voltage using a volt meter. If the heater operates on 220V then a reading across both hot leads is required, not one leg to ground. If no voltage is going to heater and heat light is on then I would think you have an issue with the circuit board.

Okay, we checked the leads to the element and we are not getting anything so that would say that the board is bad. Do we have to replace the whole board or is there just a part for the heater that we can replace? With that being said and what I have seen price wise for boards would it be better to just replace the whole spa pack? Also do you know where I can find one that would fit my gulf coast, I have been having trouble finding parts that are exact to what we have. Thanks for everything!

OK, it seems that you would need to replace the circuit board, or control pack, which aren't that much more costly. If you decide on a new pack then you would get a new controller, heater, and topside panel which is a plus. We have packs that would work for your spa. I am not exactly sure which control system they used on a possible 2003 Gulf Coast spa. If you can provide any information off the label on front of control box and any part numbers you see that would help me to identify.
Tub Won’t Heat Above 94°

I have a 2004 Tiger River Bengal spa. A few weeks back I noticed the temperature in the tub had cooled down. I put a thermometer in it and it read 94 degrees with the tub set at 102 degrees. It has maintained 94 degrees now for two days but will not heat further. The only work I have done on the tub was I replaced a burnt heater board two years back. I live too far in the boonies for repair service at a reasonable cost.

If the heater is being supplied proper voltage while it is in a heat call, then it may be a temperature sensor problem. Does your spa have a heat indicator that comes on when the heater should be on? If so, does that indicator light or heat icon come on when the water goes a couple degrees below 94 degrees and goes off once it reaches 94 degrees? If so then I would think it would be that temperature sensor causing it. Check that the existing sensor is seated properly and is clean, and plugged in securely on the other end.

Baja Spa Temp Reading Wrong

I went to enter my hot tub to find the water temperature hotter than it should be. The topside control read 82 degrees and was flashing and the heater was running. I turned off power and let it cool down for two days. Returned power and nothing will work now. I have replaced the fuse and still nothing. When I flip the power switch on the Hydroquip you can hear contacts but nothing else. How do I know if it is the topside control or the pack?

It sounds like it could be the temperature sensor, if the topside display reads something different than the actual water temperature. When nothing works, It may be in over heat mode and has shut down. I don't think it is the top side causing this. If not the temp sensor, check the circuit board for visible damage, or replace if the problem continues, with no other error codes to guide you.

No Heat Cal Spa

I have a 97 Cal Spa that is not heating at all. The pump is working fine. Where to start? I have drained the tub, but want to repair it for this winter.

Does your spa have an indicator of some sort that will come on when the heater should be on? If so does that indicator come on when you turn up the thermostat? If it does, we need to verify that the circuit board is suppling power to the heater. If it is then your heater is probably bad. If not, it could be the board. If you are not getting the indicator light or icon to come on when raising the temp then the problem lies elsewhere but start there first.

Sovereign Spa Stops Heating
It is plugged in, everything works fine except there is no water (hot or cold) coming from the heater return. I tried turning the spa off for 30 minutes to reset but still not working. Any ideas?

That spa should have a small circulation pump in addition to the main pump or pumps. Please check to see if that is running because that is the pump that will push the water out through the heater and the heater return fitting. If not running, check the power to verify that power is leaving the board and going to the pump. If so, inspect for circ pump problem.

**Spa Heater Trips GFI**

I have read through several previous post, i have replaced the heater element. I have checked my high limit and it has continuity with the wires removed. The tub runs on 110v 20 amp, i have checked my outlet and breaker. I’m just at a loss for what else could be wrong. When i plug the heater/pump in the pump works at low speed with no heater. If i press the button again the heater light comes on and immediately trips the GFI. I thought it may have been a flow issue so i removed the filter still no luck.

If you disconnect the heater from the control panel, and just run the pump does the GFCl breaker trip? I know you said you replaced the element but it could still be the heater, if elements are not installed ‘just right’, they can trip the sensitive GFCl. The high limit sensor would not cause the test button to trip. More likely within the heater itself, the element may be too close to the tube walls, or the wires may be loose, or the tube may be leaking just slightly. It could also be a damaged element, from being dropped (and cracked) or from chemical damage, in a hot tub with (very) unbalanced water. A tiny pinhole in an otherwise good looking hot tub heater element can cause it to short out.

**Jacuzzi Heater Problem**

I own a 2006 J385 Jacuzzi LED spa. It should heat as needed with circ pump working. Will only heat with pump 1 or on the filter cycle. Circ pump is working and pumping water, but the Tub will not reach set heat of 102 sits on 95/96 degrees. Filters look good.

First try removing the filter cartridge after you make sure there is nothing floating in the water that could get sucked into the filter system. Even though it looks clean it may have oils or something clogging it enough not to allow circulation pump to draw enough water through to allow the heater to come on. So when it is removed and main pump is off turn thermostat all the way up to see if the heat indicator comes on. If it does, then I would replace the filter with a new one. If not, bypass the pressure switch temporarily with a jumper wire to see if low water flow is being caused by something else, like a clogged impeller, closed valve or damaged check valve. If still no heat, I would suspect that the temp sensor is faulty, thinking it has reached full temp, when not.

**Sweetwater Bahia Overheats**

Water temp displaying higher temp than thermometer. It was showing 104, felt like 80, so I shut off breaker for 10 mins, all seems normal again. I check it about 10 hrs later, says 112° and OH code.
removed the spa filter, jets run better on heat mode, but still the temp display and the actual water temperature are different. What’s going on?

Usually when the water temperature does not match what the actual temperature of the water is in the spa it is the temperature sensor going bad. Check wire connections or signs of visible damage, or just replace the temp sensor. On your spa, the temp sensor is located by the filter. P/N 6600-166.

I cannot adjust my heat!

Both pumps can be controlled at high and low speeds. But nothing seems to click when the light or heat buttons are pushed. I cannot feel the light or heat buttons depress when they are pushed. Is it new topside control time?

If you don’t hear a click when pushing light button or you can’t adjust the temperature up or down then yes it sounds like your topside panel is failing. Replace with the same, contact us if you need help finding the match to your topside display panel.

No Power to New Element

I have an older Viking spa that the heater, which was working perfect, just quit. I am experienced with electrical, so I got out my toolbox and found an open heater element. Replaced the element and refilled the tub, still no heat. With the spa running in standard mode, no trouble codes, I tested at the element, no power. I checked the fuses, all good. When I had removed the old element, I noticed it was broken at one of the terminals (thus the open circuit). Could it have shorted and damaged the control board, or is there a reset on it that I am missing?

Does this spa have an indicator or icon on the topside that displays when it is heating? If so is that indicator coming on? I want to make sure it is not something else causing it like a sensor or flow issue. If it has an indicator light or symbol and that is on with no power going to heater, then your circuit board has failed. If that light or symbol is not coming on when it should be heating you may have a flow issue (clogged filter) or pump not pushing enough water through the heater, or your temperature sensor may be faulty. You can check for 220V across both hot terminals when a call for heat exists. If you don’t get full power, there may be a main circuit board problem.

Caldera Spa Stuck at 115 degrees

I have a Caldera Aventine Spa. It shut down a few months ago. After shutting off power and restarting, the panel continuously reads a temp of 115 but the spa is not heating and the jets do not activate. We have drained the spa and replaced the Hi Limit Thermistor and Pressure Switch. Temp still reads 115 degrees.
It may be the temperature sensor causing this. The temperature sensor is what picks up the temperature for the topside display, so if it thinks the water is this hot it will shut down the system. The temp sensor is easily replaced, it usually plugs into the circuit board next to where the high limit and pressure switch plugs in. On some spas, the temp sensor may lead to a fitting mounted on the wall of the spa to detect the temperature of the water in the spa.

**Heater Not Hot, Now Trips Breaker**

I have a Leisure Bay hot tub that's 9 years old and has slowly been losing heating capability over the past year or so. Yesterday it blew the circuit breaker 3 times before continuing to run. Now the heater light comes on but the water doesn't get hotter and it doesn't shut off until I lower the temp setting on the control panel.

First make sure power is off to spa. Then disconnect both power leads to heater and run all other components like the pump or pumps, blower if you have one, and ozone. If the breaker holds your heater would need to be replaced. Most of the time when breakers trip and it is the spa causing it and not the breaker, and it usually is a failed heater element. (But can also be a flooded blower, or a seized main pump). You can replace just the element, but it’s much easier and avoids more pitfalls if you replace the tube and element, or the entire spa heater assembly.

**Air in Heater Housing?**

I have a 1992 Hot Springs Sovereign which we drained and refilled. The jets are working fine and the circ pump is working as well, but it is not heating. The strange thing is that I can hear water sloshing in the heater housing like it is not completely full. What is the best way of going about releasing this trapped air?

Every time I drain mine I need to bleed the air at the filter AND slightly open the uppermost union fitting on the heater while running on slow speed to bleed off all the air trapped in the heater. For most spas however, just bleeding out the pump works, or removing the spa filter and forcing a hose down into the hole in the bottom of the filter can help force out trapped air, and fix an air lock situation.

**Spa only Heats on High Speed**

I have a Cal spa about 10 years old. everything appears to be working fine except i can’t get the heat light to activate unless the jets are on high, and that only works for 20 minutes at which point I have to keep turning it back on to draw any heat. If I turn jets back to low speed the heat light then shuts off. It used to cycle on low speed when setting temp higher than actual temp, now it seems as if it doesn’t recognize the command as not only will heat light does not come on, but when temp turned up it won’t kick in even on low speed unless pressing jet button manually, then it only turns on heat light when on high jet.
Well first thing to try is to remove your filter after making sure there is nothing floating in the water and then run the pump on low speed and see if the heater light comes on. If so, just replace your filter with new. If the heater still won’t come on in low speed, check that all valves are open, and check that the incoming union on the pump is tight and not drawing in air when on (and usually dripping when off). Possible that the impeller is clogged with small seeds or debris of some sort, you would have to open up the wet end to check, if suspected. You can also check to see if the pressure switch is keeping the heater from coming on, by using a jumper wire across the two terminals (one with alligator clips is easiest to use). If it comes on, then you know the pressure switch is doing its job well. Some spa pressure switches are adjustable, look for a thumb dial, and turn it counter-clockwise ¼ turn at a time, to lower the pressure requirement.

Great Lakes with Balboa Pak

I have an older Great Lakes spa that has balboa spa pack that is not heating. The spa fired up but would only heat to 80 degrees. I replaced the heater/tube/switch. I put in the new equipment and turned on spa and now I have no heat, the heat light does not light on the control panel, there is continuity in the pressure switch with power on and spa running. There is continuity at the heater. I removed the filter to make sure I had good flow. I have voltage to the circuit board before the heating circuit but zero volts after the circuit. The high limit is a circuit on the board and not a separate switch. Everything else on the tub works, light, blower, motor/pump, the heat is the only thing that does not work.

There should be a temperature sensor on the spa that may be bad. Spas will usually have a high limit, temp sensor and pressure switch. Are you getting any error codes on the display? With no heat indicator light coming on you are not getting a call for heat, something is preventing that, either low flow from closed valves, dirty filter or the temp sensor can also cause this. Do you have the spa set in standard mode? Some of these Balboa systems will have a sleep mode; confirm which mode it is set in, economy, standard, or sleep. Since you have verified that the circuit board is sending power to the heater when on, I would bet on the temp sensor being the problem.

Jacuzzi J-360 Out of Control

I have a Jacuzzi j360 had the flow regulator replace on it and since then it says it’s overheating and water is nowhere near the temp it reads, i shut it off and back on and all is fine for a few days.

If the Jacuzzi topside display is reading a higher temperature than the actual water it is probably the temperature sensor causing this, part 6600-167. That is the Jacuzzi sensor that displays the water temperature on the topside panel and usually will be the cause. When you push the jets button does the indicator light come on the topside panel? If not, you probably have an issue with the topside panel. This is probably a separate issue than the temperature readout not matching actual water temperature. Does your spa have a small remote topside panel other than the main topside, if so try disconnecting that first and then see if the main topside jet button will function. If your topside control panel is not functioning when pushing buttons, it is usually faulty.
Hot Spring Jetsetter Temp Control

My '90 jetsetter either is too hot or too cold. The copper wires are a bit chaotic and may be in the wrong place. I have one probe that inserts into a hole in the bottom of the wood frame of the compartment. Is there also supposed to be a probe going into the center of the heater?

On an old Hot Spring Jetsetter, there should be another copper capillary bulb that inserts in a thermowell on the heater, to measure the water temperature inside the heater, as a high limit. The other one is usually in a pipe to measure water temperature of the tub, as a temperature sensor.

Remove High Limit from Heater Tube

Hello, I have a 1996 Nordic Hot Tubs model DLX, with a Balboa spa pack, which needs a new heating element. The heater has a high limit sensor under a bracket on the outside of the heater tube. There is black foam under the bracket and around the sensor. My question is: how do you remove the sensor from under the bracket without damaging anything?

On that type of heater you should jet be able to just pull the sensor out of the plate. Some will have a wing nut on the plate, other will just have the plate attached to manifold that the high limit slips in to. The black felt piece is to inhibit corrosion and vibration.

Jacuzzi J-340 No Heat

I have a Jacuzzi J-340, 240-volt tub. The circulation pump is running; the heater light is on but the heater will not work. The heater input at the board measure 230 volts (across both terminals). The heater output measures 30 volts (across both terminals). Unplug the heater output terminals and measured at the circuit board spades 30 volts. The heater element reads 0.50 ohms on a 20k setting on meter. Circuit board terminal for the heater output has a small amount of black smoke on then connection..

You should be getting 220V on the heater output across both leads when the heater indicator light it on. Also, the heater element when test ohms should be around 9-12 on a 5.5kW element. Sounds to me like a bad element in the heater.

Overfilled Tub. Tripped GFI. Won't Reset.

Oops! I removed water from underneath the spa, not too much really. The main electrical box was dry inside. Motors to pumps dry although the power cords were laying in water. Fuses on circuit board are
good. I replaced the GFCI in the control panel and it still trips. I unplugged each pump one at a time, and it still trips. I am stumped.

I would try disconnecting both power leads going to your heater and then try running your pumps and see if it holds.

That did it. The terminals looked a bit corroded so I cleaned them, reconnected the leads and it tripped again. Bad heater?

If all other component are running with heater disconnected and not tripping breaker, then yes sounds like your heater is shorting out and needs to be replaced. It’s fairly easy to replace a spa heater assembly, replacing only the heater element is a bit trickier however.

**Cal Spas CS7000 No Heat**

I have a 2003 model Cal Spas CS7000 and the heater is not working. The ohm reading on the heater was 10.5 Ohms. I am not getting 230 volts to the heater. I suspect that the problem may be in the circuit board. Since this is an expensive item, i would like to do some more troubleshooting before I purchase one. This model has two "tape on" temperature sensors, but they are difficult to troubleshoot as well.

The element is in range so that should be good. If your spa has a light or indicator on your topside panel when heater should be on make sure that indicator is lit. If it is on and no power to heater, then it sounds like the circuit board. If that indicator is not coming on then it could be the sensor causing it. I would also try removing the filter and see if the light will then come on if it isn't, a flow problem can also cause a spa not to heat.

Yes, the "heat" light is on, on the topside controls. I just cleaned the filters last week, but did remove them just to test the flow, still no heat. I wonder where a person could find a wiring diagram or schematic for this spa??

Check for your owner’s manual on the manufacturer’s website, Cal Spas – there is a good troubleshooting section. If heat light is on then you need to verify if circuit board is supplying the heater proper voltage. If it is then heater may be bad, if not then circuit board may be the issue.

**Balboa VS M7 – No Heat**

My tub isn't heating! The topside panel seems to be displaying the temperature accurately and there are no error codes. I checked the heater using my multimeter and it was right around 12 Ohms so that seems fine. I then checked the copper leads coming off of the board while I had the topside panel set to HEAT and there was no power. Should I just order two new M7 Sensors? That's what I was planning on doing (hoping it isn't the board).

If the heat light is showing the heater as being ‘ON’, then the sensors are doing their job and sounds like there is an issue with the circuit board. If the heat light is not coming on then I would be looking at the
sensors as the issue, assuming that you have good water flow and no error codes. Check that sensors are seated properly and making good contact. Also if the heat light is not coming on try removing the filter and run it to see if it comes on.

**Sundance Optima says 112°, actually 82°**

Spa shuts off after a few seconds of resetting the gfi. Troubleshooting says overheating (OH message) display says 112, but water is only 82 or so - perhaps faulty sensor or computer board?

That sounds like an issue with the temperature sensor. Usually when the water temperature is not matching what the actual water temperature really is it is the temperature sensor. Hi-Limit error codes, (HL) can be different from OH, because they measure the temp inside of the heater. For HL codes, place your hand on the heater tube and if it is quite hot, but the spa water is only warm, you probably have a flow issue, or a heater element issue. If it is cool, then more likely a temp sensor issue.