

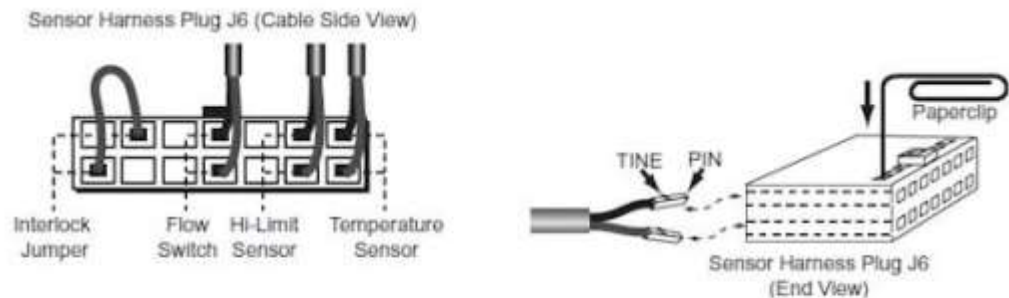
How to Replace a Temperature Sensor (Without Draining the Spa!)

You'll Need

- Wire cutters
- Groove joint pliers
- Electrical tape
- Small jeweler's screwdriver or equivalent (to push down the retainer clip on the sensor wire ends)
- 2' to 5' of 1" pipe or larger.

Instructions

1. Remove the old sensor wires from the plug at the circuit board (Picture below shows a LCD sytem sensor harness. LED sytems plugs are different in appearance, but the wires come out the same way).



To remove a sensor or flow switch wire from the sensor harness connector J6, insert the end of a paperclip or similar device into the slot corresponding with the wire to be removed. This will depress the pin tine, allowing the wire to be pulled from the harness connector.

2. Connect the new sensor and toss it over the top of the spa into the water,
3. Wait for a few minutes, then power the system back on and see if everything works as it should.
 - If the system works as it should, disconnect the new sensor wires from the plug at the circuit board and exit the wire from the control box. Continue on to Step 4.
 - If the system does NOT work, there is likely an issue with either the Hi Limit sensor or the circuit board of the tub. Call (660)826-2446 for assistance.

4. Trace the old sensor wire to the right, and you'll see it go into a 1/2" spa flex pipe and continue into a wall of foam.
5. Fit a piece of pipe 1" or larger to divert the water over the 1/2" spa flex. **Don't forget** to fish the old sensor wire through this add-on pipe. This is to prevent water from splashing down on pump one, or if you have a long enough piece, you can tape it to the sensor wire conduit and bring it above the water line. Either way, our goal here is to not let water enter the equipment bay. We use a 5' piece of garden hose with a 1/2"X3/4" male adapter screwed into the hose. We fish the wire through our hose, then press the 1/2" slip side of our male adapter to the sensor wires "conduit".
6. Remove the skim shield and Filter One from the spa. Looking down, you'll see the grey sensor head coming out of the side of the filter box.
7. Un-screw the sensor head (it's threaded in) and pull just enough wire through to clear the water.

Couple different ways to go next.

8. Cut the head off the old sensor head and transfer the gasket to the new sensor.
9. Tape the new sensor wire to the old wire and pull it all the way though.

Alternate method

- 9a. Attach a cord or heavy string to the connector side of the old sensor wire. Go to the Sensor head end and pull it all the way out until you reach the cord or string you attached to the other end. Tape the new sensor wire connector end to your cord and fish it back through the conduit. Don't forget to transfer the gasket.
10. Hand-tighten the sensor and then give it another 1/2 -3/4 turn to seal it to the tub wall.
11. Remove your "diverter" pipe.
12. Install the wires into the sensor plug end and connect back to the circuit board.