REPORTED PROBLEM:

My GFCI trips when I push the pump button on the topside panel?

Topside Panel

SYSTEM VOLTAGE:

- 240V

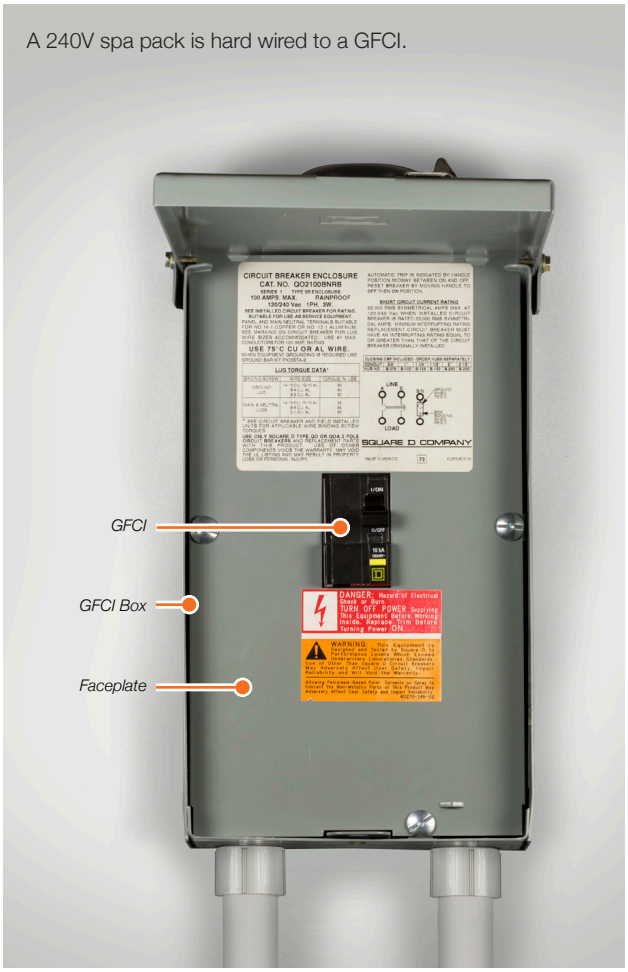
PROBABLE CAUSES:

- Damaged wiring or improper wiring.
- A component (pump, heater, light or ozone) has failed.
- House wiring is not correct or the house wall outlet circuit is overloaded with additional appliances (washer, refrigerator, electric heater, etc.)

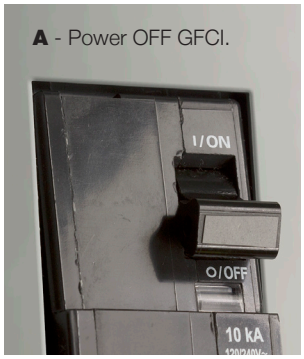
TROUBLE SHOOTING STRATEGY:

- Test individual components (GFCI, topside panel, lights, ozone, pump, heater) to find the source of the problem.

A 240V spa pack is hard wired to a GFCI.



STEP 1



A - Power OFF GFCI.

B - Verify the spa pack is wired correctly.

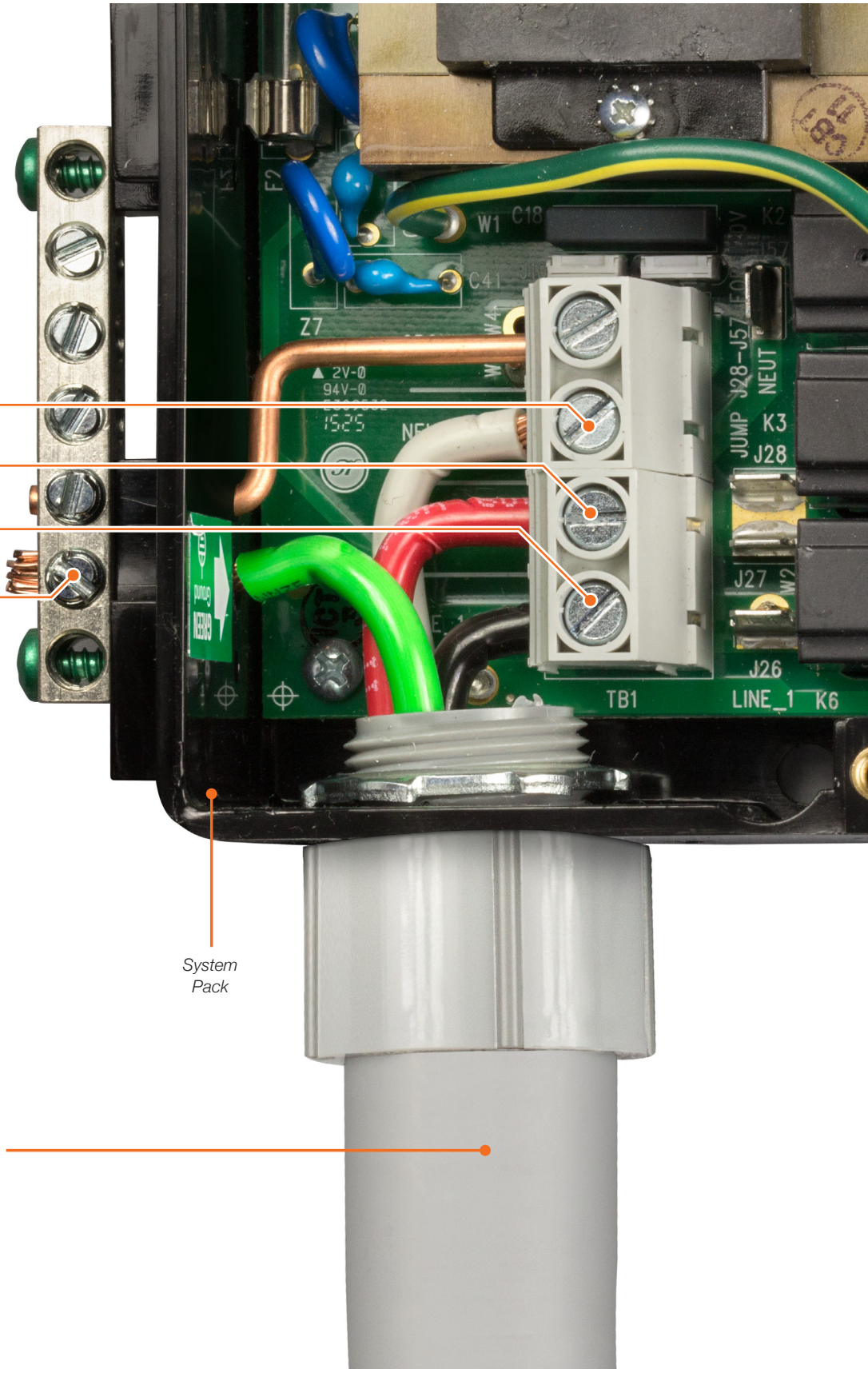
The white wire connects to “NEUTRAL.”

The red wire connects to “LINE 2.”

The black wire connects to “LINE 1.”

The green wire connects to the ground bar.

Refer to the wiring diagram on the inside of the spa pack lid.



System Pack

The white, red, black, and green wires run through this conduit and connect to the GFCI at the other end. In step 2, verify the white, red, black and green wires are properly connected to the GFCI.

STEP 2

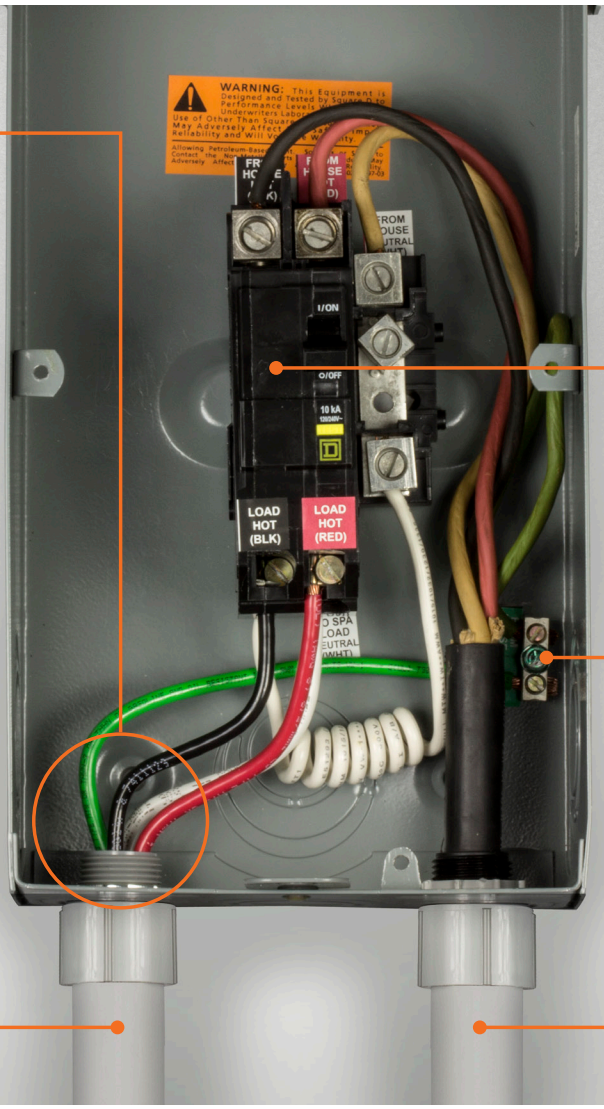
A - Power OFF GFCI.

B - Remove faceplate from GFCI enclosure.

Faceplate removed.

C - Verify the white, red, black and green wires are connected properly to the GFCI.

View more photos on the next page.



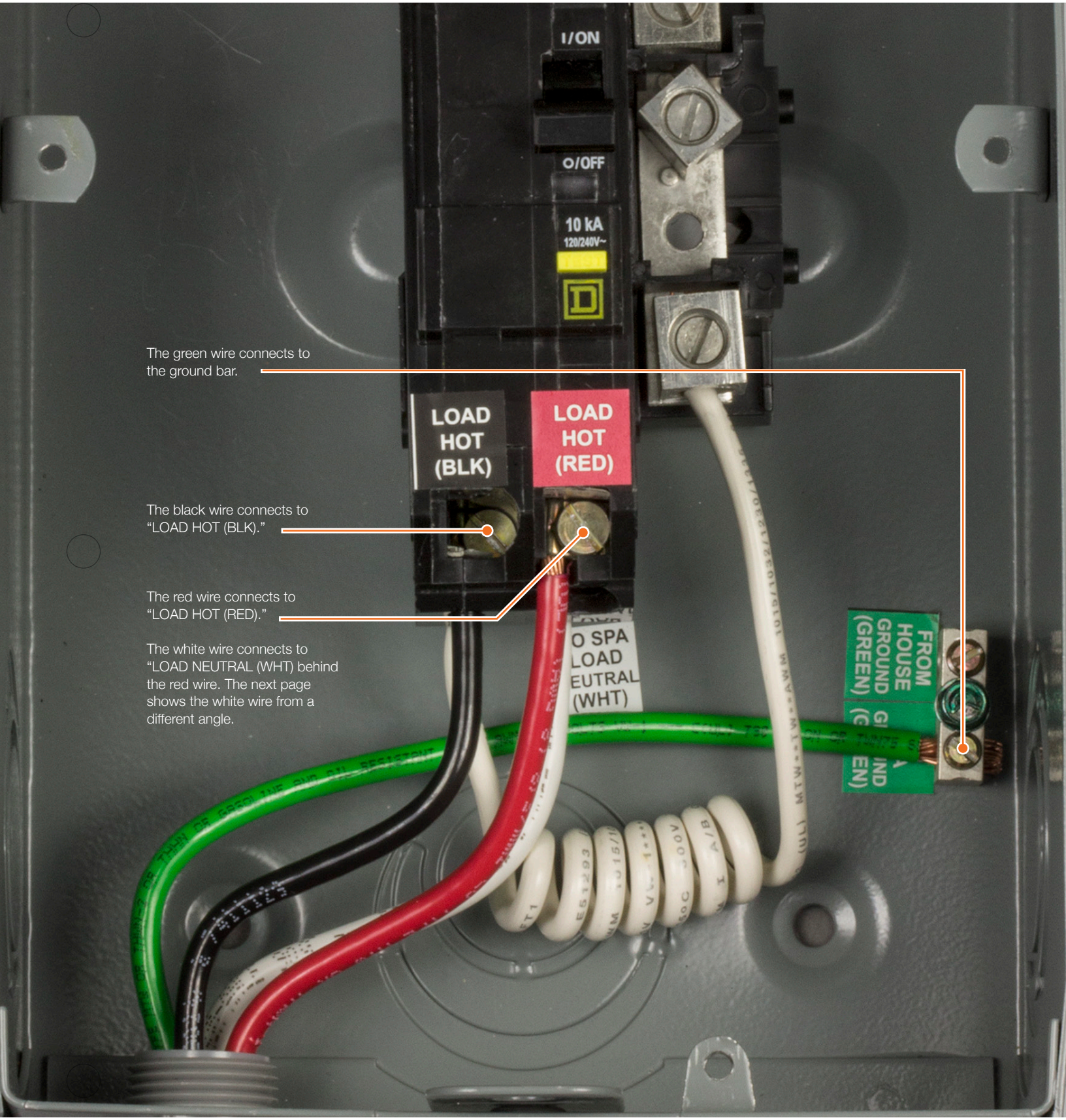
GFCI

Ground Bar

This conduit connects to the system pack.

This conduit connects to a circuit braker.

STEP 2



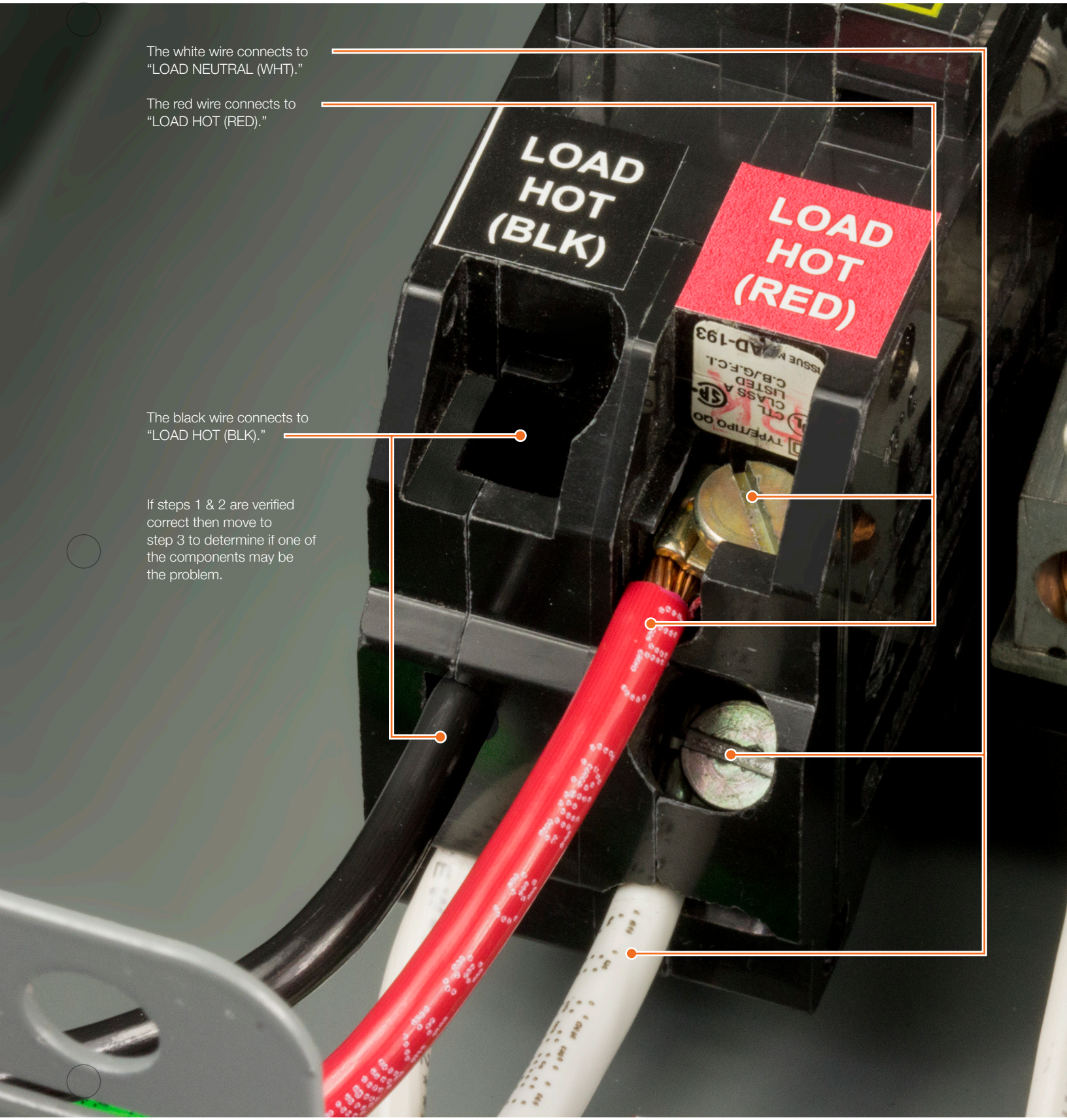
The green wire connects to the ground bar.

The black wire connects to "LOAD HOT (BLK)."

The red wire connects to "LOAD HOT (RED)."

The white wire connects to "LOAD NEUTRAL (WHT) behind the red wire. The next page shows the white wire from a different angle.

STEP 2



The white wire connects to "LOAD NEUTRAL (WHT)."

The red wire connects to "LOAD HOT (RED)."

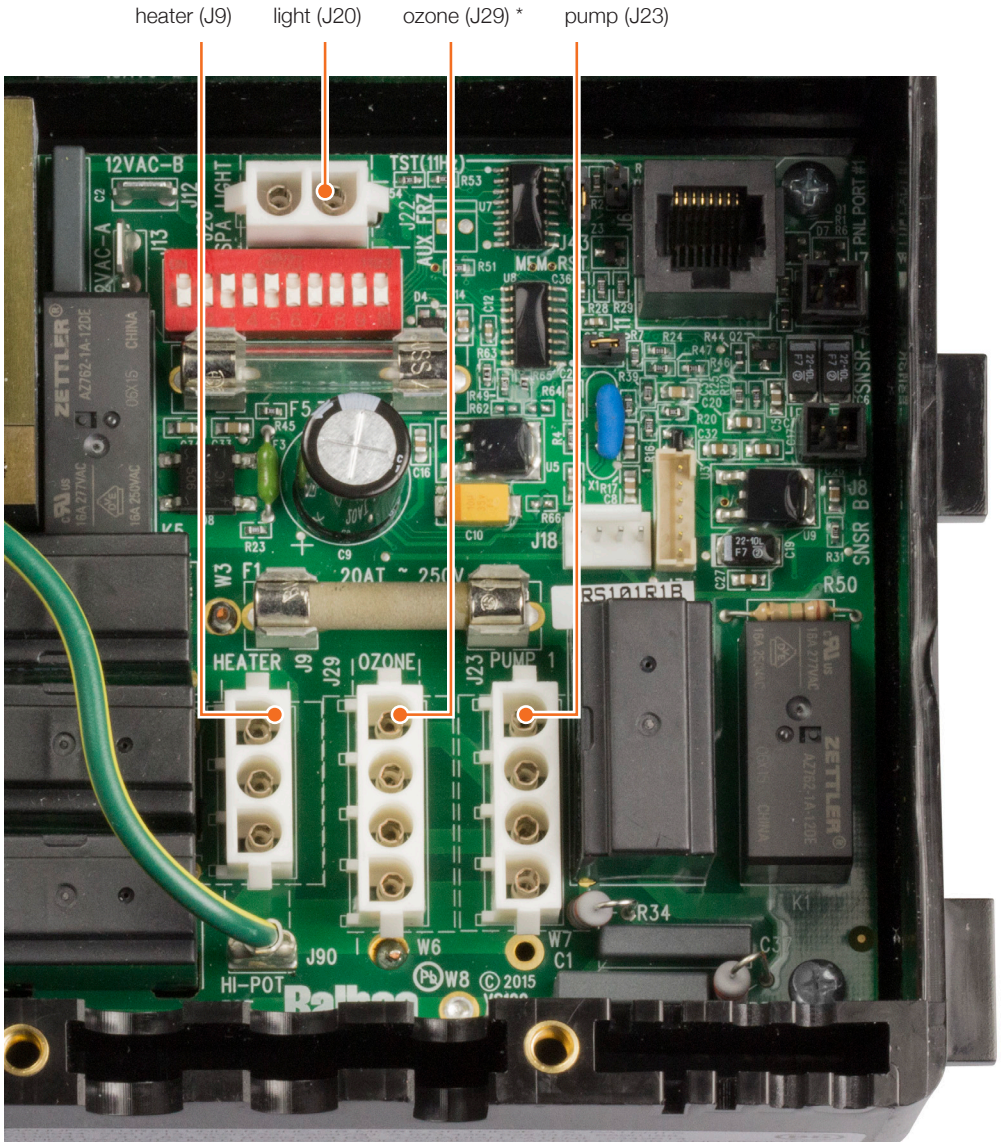
The black wire connects to "LOAD HOT (BLK)."

If steps 1 & 2 are verified correct then move to step 3 to determine if one of the components may be the problem.

STEP 3

A - Power OFF GFCI.

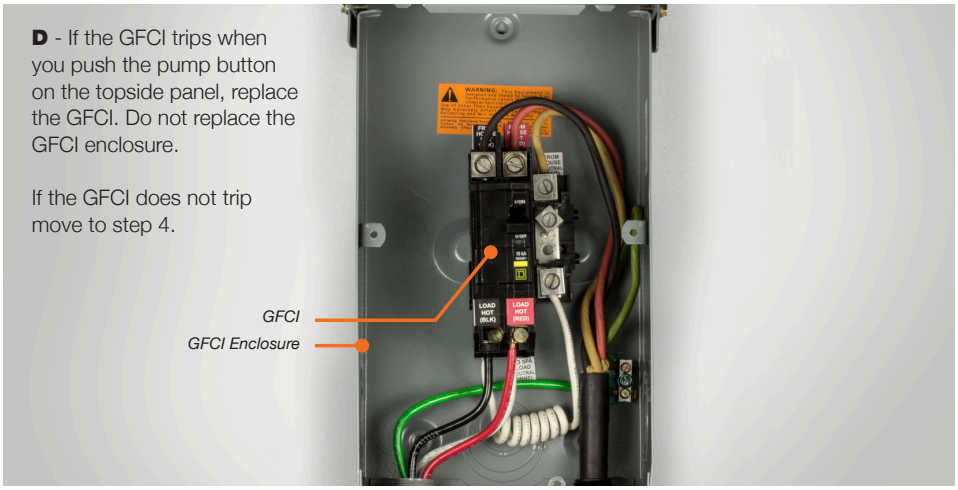
B - Unplug the following components from the system pack circuit board:



C - Power ON GFCI.

D - If the GFCI trips when you push the pump button on the topside panel, replace the GFCI. Do not replace the GFCI enclosure.

If the GFCI does not trip move to step 4.

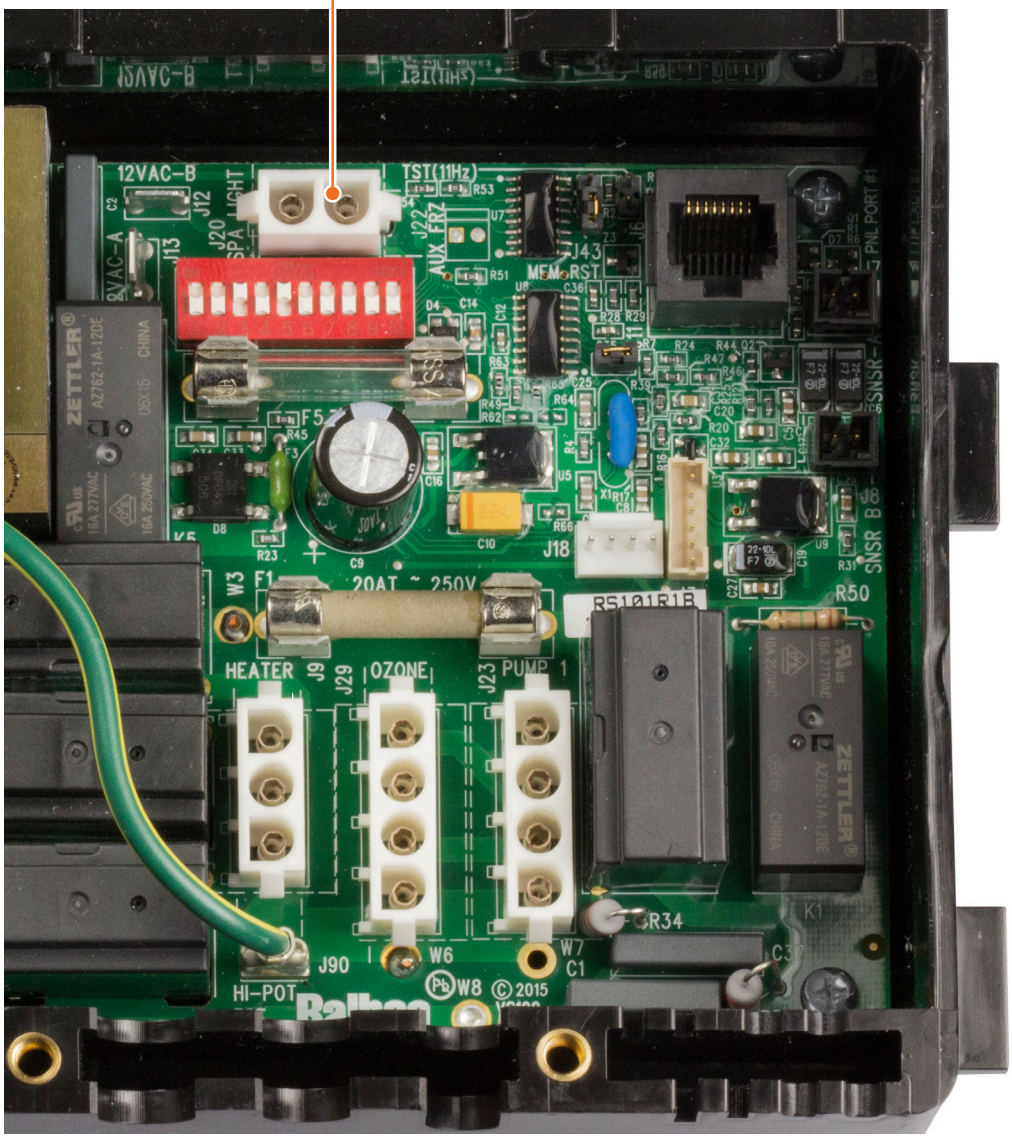


* An ozone generator is an optional component. Your system may not have one.

STEP 4

A - Power OFF GFCI.

B - Reconnect the light to the spa pack circuit board at J20.



C - Power ON GFCI.

D - If the GFCI trips when you push the pump button, inspect the light housing/ harness for moisture and replace the light.

Light housings vary in style. Your housing may look different.

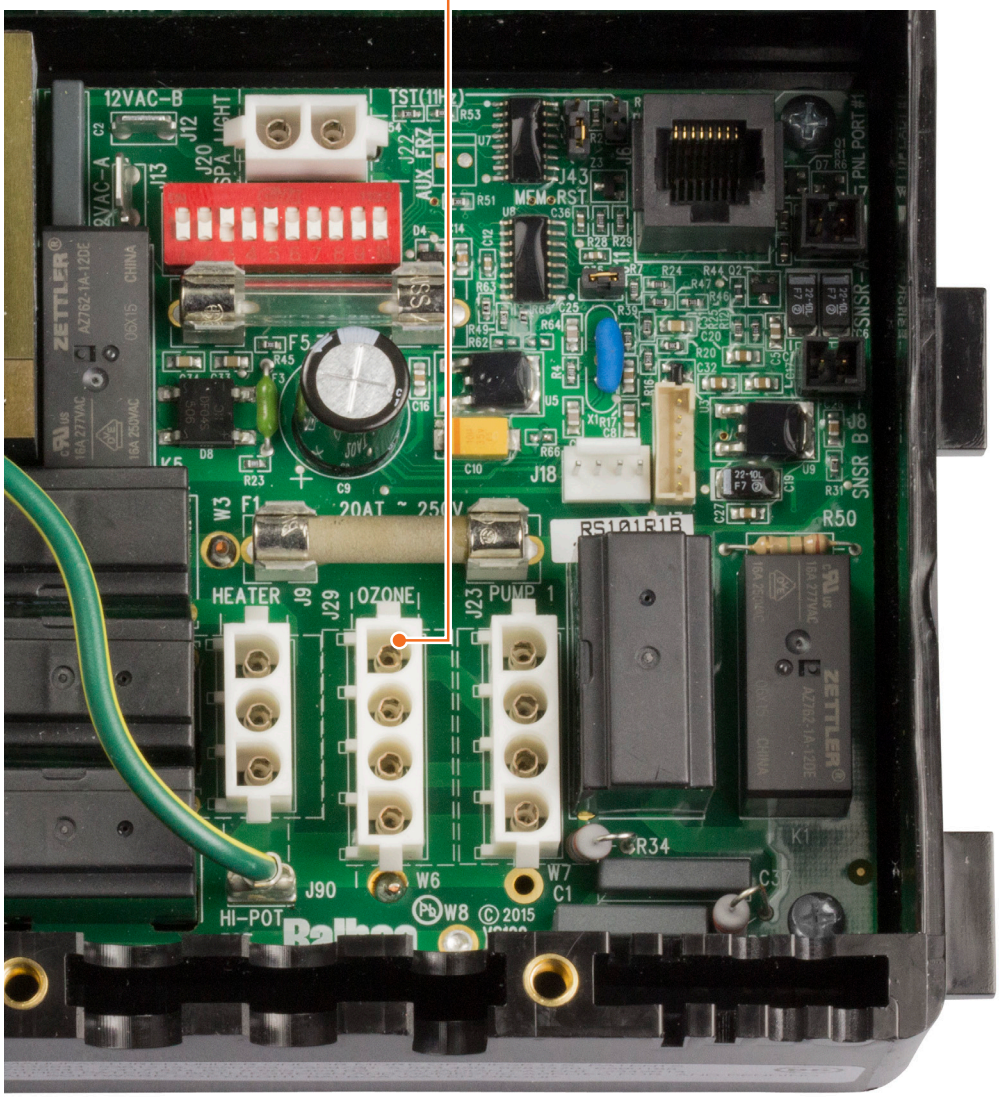
Light Housing

STEP 5

If the spa does not have an ozone generator, skip step 5 and continue on step 6.

A - Power OFF GFCI.

B - Reconnect the ozone plug to the spa pack circuit board at J29 (if you have this option *).



C - Power ON GFCI.

D - If the GFCI trips when you push the pump button, replace the ozone generator.

If the GFCI does not trip, leave the ozone plugged into the spa pack circuit board and move to step 6.

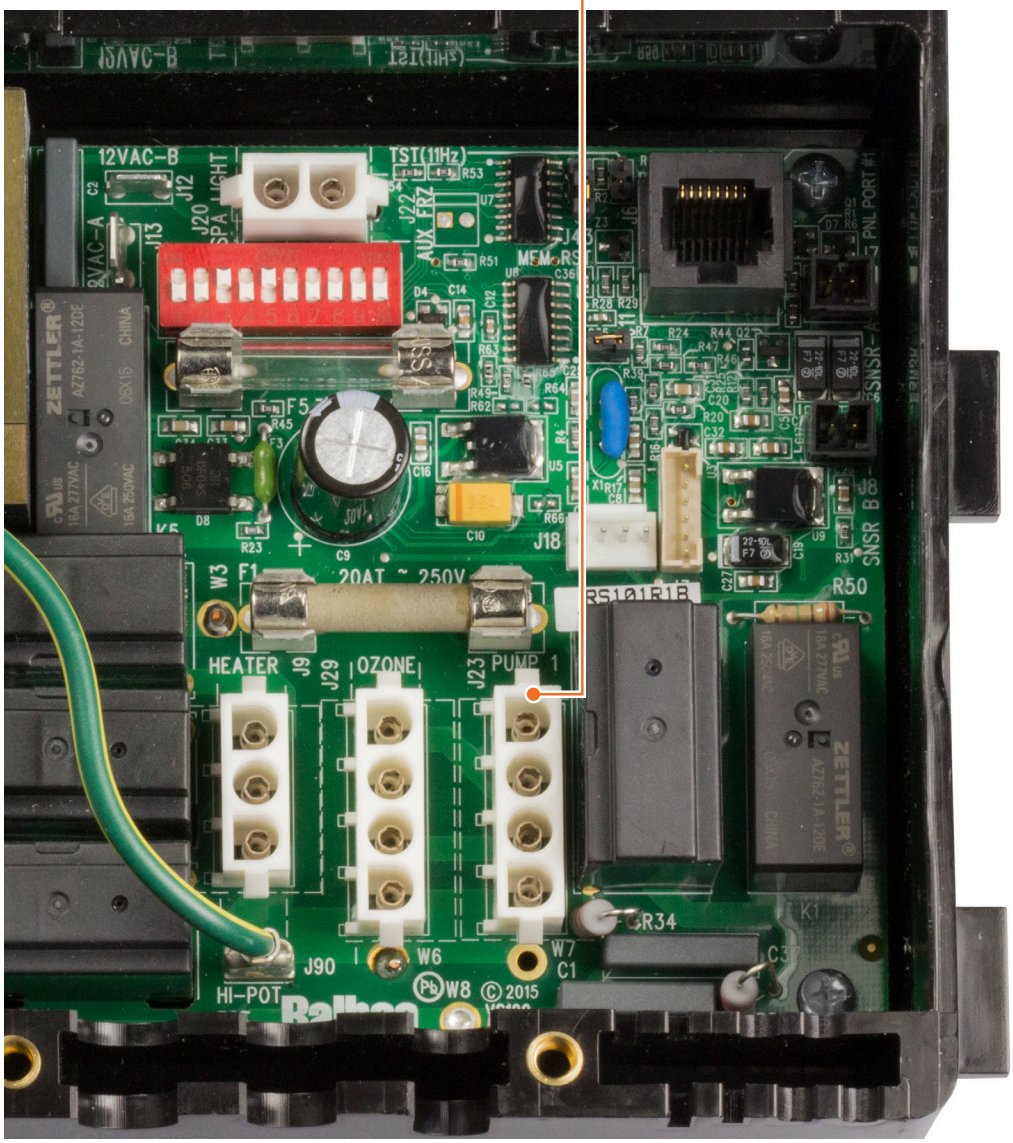
Ozone Generator

* An ozone generator is an optional component. The system may not have one.

STEP 6

A - Power OFF GFCI.

B - Reconnect the pump plug to the spa pack circuit board at J23.



C - Power ON GFCI.

D - If the GFCI trips when you push the pump button, replace the pump.

If the GFCI does not trip, leave the pump plugged into the spa pack circuit board and move to step 7.

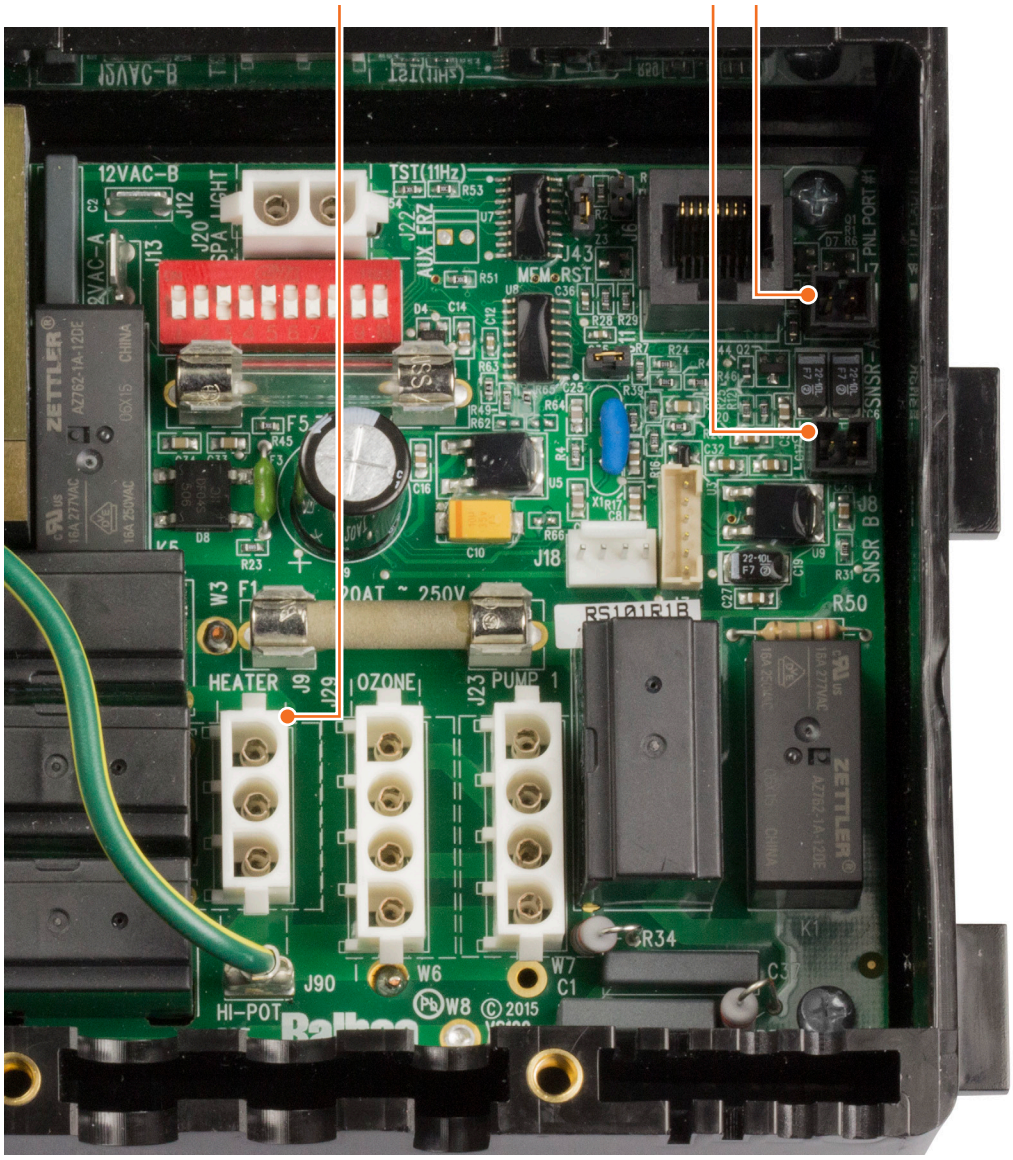
Pump models vary.
Your pump may look different.

Pump

STEP 7

A - Power OFF GFCI.

B - Reconnect the heater to the spa pack circuit board. The heater has three connectors.



C - Power ON GFCI.

D - If the GFCI trips when you push the pump button, replace the heater.

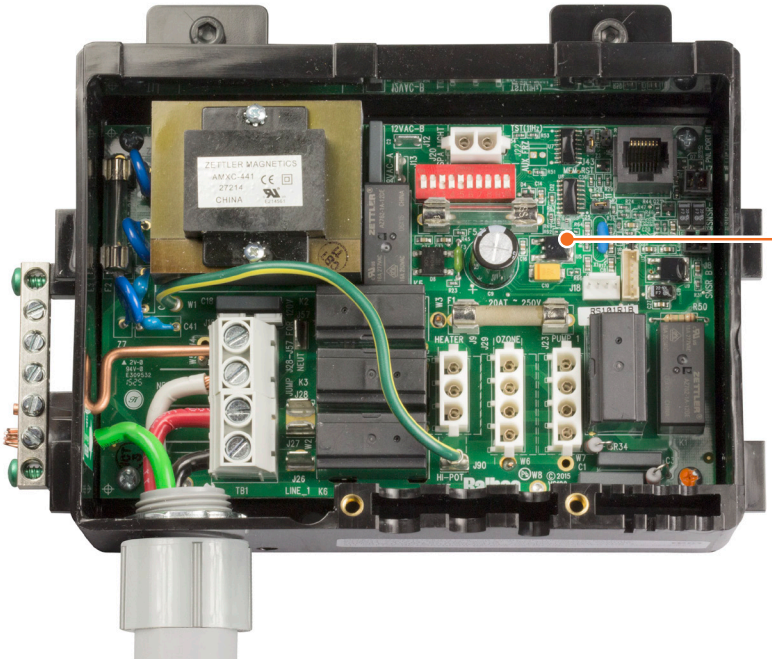
If the GFCI does not trip, leave the heater plugged into the spa pack circuit board and move to step 8.

Heater

STEP 8

After completing steps 1 - 7 and the GFCI continues to trip when you push the pump button.

- Either the spa pack circuit board is damaged, replace the spa pack.
- Or the house circuitry is malfunctioning, have an electrician service your house wiring. Email a clear picture of the entire spa pack circuit board to the customer service representative. Quite often they can detect the problem by reviewing the picture.



Spa Pack Circuit Board

Spa Pack