Testing A "Plug Style" Balboa Transformer

"Defending The Transformer“ [click for more troubleshooting]

Balboa has 2 types of "Plug Style" board transformers. Both can be checked by using ohms (resistance). A multimeter is required for testing.

1st Transformer 9 Pin plug connector 120v. P/N 30274-1 Color wires black, white, 2 yellows. Some 240v systems have the white wire not in the plug connector but loose and tied to the neutral bar. P/N 30274-2

Primary side (incoming power) Wires black and white

Resistance should be 40 to 50 ohms.

Secondary side (outgoing power) Wires are both yellows

Resistance should be .5 to 1 ohm.

After verifying the correct ohm value, check between either a black and a yellow, or a white and a yellow, you should read no ohm value at all. Check one Primary side wire to ground also check one Secondary side wire to ground, any reading to ground transformer bad.

2nd Transformer 6 pin plug connector 120v, has 2 blue connectors. Color wires, blue, white, red, brown, yellow. P/N 30270-1

Primary side (incoming power) Wires blue and white.

Resistance should be 15 to 25 ohms

Secondary side (outgoing power) Wires, brown, yellow, red.

Resistance between brown and red, and yellow and red. Should be .4 ohms to .9 ohms
Resistance between brown and yellow should be .4 to .9 ohms

After verifying the correct ohm value, check between a Primary wire and a Secondary wire, you should read no ohm value, Also check a Primary wire and a Secondary wire to ground.

3rd Transformer 6 pin plug connector 240v has 1 blue connector, Color wires, blue white, red, brown, yellow. P/N 30270-2

Primary side (incoming power) Wires blue and white

Resistance should be 67 to 78 ohms
Secondary side (outgoing power) Wires, brown, yellow, red.

Resistance between brown and red, and yellow and red. Should be .4 ohms to .9 ohms
Resistance between brown and yellow should be .4 to .9 ohms.

After verifying correct ohm value check between a Primary wire and a Secondary wire, you should read no ohm value,
Also have them check a Primary wire and a Secondary wire to ground.

If any reading you get is not within the specs specified then the transformer has a high potential of being bad. Any reading at all that you get ohming out the Primary and Secondary side together means the transformer is bad. Any and all reading to ground the transformer is bad.