

## Continuity Tests for the wiring, endcaps and bulbs run by an IceCap VHO Ballast

If it's a 660, if all the lamps flashed on then off, it's likely the ballast. If one or two of the lamps flashed on, it's likely the wiring or lamps. If you have swapped ballasts and it lights up, you know it's the ballast.

If it's a Model 430, the bulb that doesn't light is where to investigate. If all the lights flash on and off it's probably the ballast. Check the continuity using the procedure below if possible before sending it in to make certain.

An IceCap ballast will not work for a minute, more like a fraction of a second, before it shuts down. Unlike a conventional ballast that only know on and off, our ballast will not keep trying to run if it detects an open circuit. In this case, the problem could be a broken bulb filament. It could equally be a bulb not making contact with an endcap's pins.

For those with an OHM meter or continuity checker there's a quick test that can be performed to trouble shoot a system run by an IceCap VHO ballast. This is for situations where some of the lamps flash on and off for a split second while other lamps do nothing. The lamps that flash are fine. You need to check the other connections. With an IceCap, you need to power off and on again to check to see if it will work. Fixing it without powering off will not cause the lamps to light. Repeatedly turning it on and off quickly will cause a ballast failure so don't go crazy. Always call us when in doubt. 800-742-3227 ext. 25 for service. If you have another ballast of the same model, try switching ballasts to see if the problem follows the ballast. Otherwise, read on.

1. Disconnect from the power source (un-plug it).
2. Pull the harness connector off the ballast. You don't need the ballast or AC electricity to do this test.
3. With the endcaps MOUNTED and lamps in place, you can now test the entire system from the end of the harness (the male Molex connector, the part usually inside the ballast).

4. Use the two probes as follows:

For each pair of colored wires used in your application you want to test for continuity. To do this you insert the probes into the exposed Molex pins that are connected to the correct wires. Wires not used, like for a Model 660 using 2 or 3 lamps are ignored (these wires should be individually CAPPED OFF for possible use in the future).

5. If you find you have continuity (the signal from one blue wire, for example, goes down the wire, to the endcap, to the lamp's pin, across the filament, back to the pin, the endcap and to the blue wire and back to the connector) check the other pairs. If they all have continuity, the only other connections are the jumper wires. Check those lamps at that end by going pin to pin on the same end of the lamp.

6. If it shows continuity on all connections, your ballast needs to be sent in for a fast service. Send the ballast only and a note inside with your name, address and daytime phone number. Turnaround is 2 days or less.

[You will always get a small resistance reading through the circuit. A reading of 10 ohms or less is satisfactory. If there is a problem in one of the lines it will be obvious. You will see a drastic difference in readings. For example all your lines read less than 10 ohms except for one which reads completely open (infinite) or in the K-ohm range.]