

Ground Fault Circuit Interrupt

Kitchen or bathroom lights and power out? Likely the GFCI has tripped. See the **YELLOW** highlighted section below.

A GFCI outlet (GFCI stands for **Ground Fault Circuit Interrupt**) is a special electrical outlet device that provides much greater protection from electrical shock than a standard electrical outlet does.



When you look at a normal 120-volt outlet in the United States, there are two vertical slots and then a round hole centered below them. The left slot is slightly larger than the right.

The left slot is called "neutral," the right slot is called "hot" and the hole below them is called "ground." If an appliance is working properly, all electricity that the appliance uses will flow from hot to neutral.

A GFCI **monitors the amount of current flowing from hot to neutral**. If there is any **imbalance**, it **trips the circuit**. It is able to sense a mismatch as small as 4 or 5 milliamps, and it can react as quickly as one-thirtieth of a second.

A GFI Outlet is a potentially life-saving feature in your home. The following example illustrates the importance of a GFI. If you were to plug in a small appliance with an electrical problem, the GFI outlet would trip almost immediately. You may be thinking, "okay, no big deal", but if you attempted to plug in the same electrical appliance (without a GFI) while touching your water faucet, the electrical current would travel through your body and into the water faucet, which could result in burns, electrical shock or death.

The GFCI can sense the current flowing through you because not all of the current is flowing from hot to neutral as it expects -- some of it is flowing through you to ground. As soon as the GFCI senses that, it trips the circuit and cuts off the electricity.

It is now code that all electrical outlets within six feet of a water source must be GFCI. Think **bathrooms and kitchens**. Sometimes they are each individual GFCI outlets and sometimes just one is and controls all the others. In bathrooms all the electrical power

including the lights are wired into the GFCI. If it trips, because of excess moisture, all the power in the room will go off. That typically means the lights also.

To locate the outlet with the tripped GFI, look for the one with a small button popped out. Remember, when a GFI trips, it will trip any and all outlets connected to that GFI. Most kitchen and bathrooms in new homes have multiple (visible) GFI outlets, so it shouldn't be too hard to find the GFI that's tripped in one of these rooms. ***Once you have located the outlet with the tripped GFI, simply push the button back into place. You should hear a small click.***

if you are unsure why yours has tripped and wish to be safe, we recommend you follow the steps listed below.

- Unplug everything on that circuit. (the things that aren't working)
- Try resetting the GFI again. If the GFI resets, one of the items plugged in along the circuit may be bad.
- Try plugging the items back in one at a time until the GFI trips again. Whatever item trips the GFI is most likely defective. Don't use this item again until it's replaced.
- If you are able to reset the GFI and none of the items tripped it again, that's okay too. Remember we said a storm or some other temporary electrical anomaly can also trip the GFI.

UL 943 Self-Test GFCI End of Life standards state that when a self-test GFCI reaches end of life it must either deny power with inability to reset, give a visual or audible indication, or trip with reset ability subject to the next test cycle or repeat tripping. ***If you cannot reset it the GFCI may have simply worn out. If it will not reset e mail the office.***