FIX IT UP!
Bruce Turner
Elementary Electrical

If there's one area where I'm not comfortable talking about do-it-yourself, it's electrical work. People watch a professional change an outlet or light switch and think, "Hey, I could do that!"

Don't be fooled. Electricity is our friend, but it's also indisputably dangerous. The rules are absolute, and if you don't follow them to the letter, you can shock or burn yourself, fry your wiring or even start a fire. I have seasoned builders on my crews, guys who have worn tool belts every day for ten years or more, who aren't comfortable re-wiring a switch.

But while I recommend having a pro do your wiring work, there are definitely electrically-related maintenance tasks you can perform without fear – resetting circuit breakers, for example.

Most modern homes and electrical systems are protected by an electrical panel with a bank of circuit breakers. Their function is overload protection – anytime there's too much demand on a circuit, the breaker trips to protect it and the power goes off in that part of the house. Know where your breaker box is, so you can turn your own circuits back on.

It's easy. When you look at the breaker panel, you'll see all the switches set to ON. When a breaker pops, it doesn't always click over to OFF – it will more likely flip to the middle. To reset it, first flip it over to OFF and then click it on again. The electricity should instantly resume in the appropriate area. If the breaker pops again, it means there's still an overload or short in that circuit. Turn things off or unplug them and reset the breaker again. If the problem continues, call an electrician.

Every breaker protects a different circuit in your home, and by code there should be a list or legend posted inside your breaker box that tells you which breaker corresponds to which room or area of the house. If you don't have one, or it has worn or washed away, you've got a project for the weekend – mapping your circuit breakers. Turn on lights in every room and recruit your spouse or other partner to watch what happens when you turn off each breaker. Then write down what each breaker connects and post the list inside your box.

Many outlets installed in places like kitchens and bathrooms, where there's a danger of electrocution, have their own circuit breakers installed. They're called GFCIs – ground fault circuit interruptors – and they're designed to protect people from the severe or even fatal shocks that can be caused by, for example, a hair dryer falling into a bathtub. The GFCI detects an overload or short and cuts the current instantly. A GFCI outlet has a little button in the middle that pops out, and to reset the outlet, you just push in the button until you feel a click. Electricians will frequently wire more than one outlet into a single GFCI, so if an outlet mysteriously stops working, check to see if another outlet in the room has a GFCI. Push the button and see if the dark outlet comes back to life.

Again, electrical work is only for the knowledgeable, but if you're determined to learn how, my favorite educational resource is a book called Wiring Simplified by Richter, Schwan and Hartwell. It's simple and clear in teaching those absolute rules. Make sure you're fully in command of the material before you open that outlet. Stay safe.

Bruce Turner is president of TurnerBuilt, Inc. in Half Moon Bay. He can be reached at bturner@turnerbuilt.com.