

There are three types of ground fault circuit interrupters; receptacle, circuit breaker and portable.

### Receptacle GFCI



-Receptacle GFCI's fit into the standard outlet box found throughout the home. Not only can this type protect against ground-faults, but also can protect other electrical outlets further "down stream" within the branch circuit. A ground fault receptacle is equipped with a test and reset button allowing you to test if your ground fault is working properly.

### Circuit Breaker GFCI



-Circuit breakers give protection against selected circuits installed within a panel. In the case of a ground-fault, it will not only shut off electricity but also will trip when a short circuit or overload occurs.

### Portable GFCI



-Portable ground fault circuit interrupters act as a normal outlet plugging into a receptacle allowing another appliance or electronic to be plugged into it. An extension cord combined with a GFCI gives you flexibility using receptacles which are unprotected.

Your body can provide an unintentional course for an electric current. In most cases, the person would serve as the conduit resulting in being burned, injured, severely shocked or even electrocuted.

Electricity works by the flow of electrons forced by voltage through a current running from a negative source to a positive. If an electric current is leaking from somewhere, electricity follows the path of something considered to be grounded, or cannot hold a charge. If an object is grounded it is incapable of holding electric charge and is given the term of an insulator.

In other words, an insulator is not an electricity conductor. Insulators (Porcelain, plastic, rubber, glass and composite polymer materials, i.e. wood, brick) are unable to conduct flow of electricity due to the lack of electrons present, causing an object to be considered grounded.

For example, your toaster shorted out having wires inside touching the cage made out of aluminum, i.e. one of the best conductors of electricity. You touched the toaster. Unless an insulator is separating you from the floor, you stand the chance of shock or even electrocution.

A good way to prevent something like this from happening is by installing a ground fault circuit interrupter (GFCI). Kitchens, bathrooms, crawl spaces, outdoor receptacles and unfurnished basements are the most common places for GFCI's. Homes built to comply with the National Electric Code require GFCI's in these areas.

Information obtained from the U.S. Consumer Product Safety Commission