Some Bargains Are Dangerous

In challenging economic times, it makes sense for consumers to seek out the best deal. But bargains may give buyers more than they truly "bargain" for when it comes to counterfeit electronic components.

Many counterfeit electronics look exactly like the real thing on the outside. But on the inside, it's a completely different story. Often, these products are manufactured using inferior materials and are missing critical safety features. They are sold at reduced prices, luring consumers into a purchase, and revealing only later how costly these products really are. Counterfeit circuit breakers, power strips, extension cords, batteries and holiday lights can and, in some instances, have caused fires, explosions, shocks and electrocutions, resulting in grave injuries.

And as some consumers have found when purchasing knockoff products such as purses, clothing or perfume, it can be extremely difficult to detect any differences other than the price.

Counterfeit products seized to date have contained false trademarks from nearly 100 North American, Asian or European companies. The FBI, the Consumer Product Safety Commission (CPSC) and other law enforcement agencies have made the seizure of counterfeit products a high priority as the problem continues to grow. Seizures of counterfeit electronics tripled between 2005 and 2008. And since 2008, Immigration and Customs Enforcement Agencies have conducted 1,300 seizures of products involving more than 5.6 million counterfeit semiconductor devices. (Semiconductors are used in many technologies and improper parts can disrupt the reliable operation of thousands of products). The CPSC has recalled more than one million counterfeit electrical products in recent years, including circuit breakers that did not trip when overloaded; cell phone batteries without a safety device in the circuitry to prevent overcharging; and extension cords with mislabeled, undersized wiring that overheated.

An electronic part is designated as counterfeit when characteristics such as manufacturer, part number, date code (or lot code) have been falsely represented. Counterfeit electronics have been discovered in a wide range of industries, including computer technology, telecommunications, aviation and automotive industries. They have also made their way into the U.S. military system. These fake parts can range from inexpensive capacitors and resistors to microprocessors, assemblies and even entire systems.

The Consumer Product Safety Commission suggests a number of ways to avoid electronic hazards. No matter what the nature of the holiday may be, there is a colored light sold to accent the celebration. Whether the lights are red, white and blue, orange and black, or New Year's Eve silver and gold, holiday lights are often targets for counterfeiters. These lights may appear legitimate, but may not pass even minimum safety tests.

To be safe, it may be prudent for consumers to avoid no-name electrical products or products sold at deep discount stores and flea markets. Each package should contain manufacturer's contact information, as well as usage and warning labels, and trade-marked logos that look slightly off may signal a high-jacked brand. Look for a certification label from an independent testing lab such as UL (Underwriters Laboratories) or ETL (Electrical Testing Laboratories) on the package and on the product itself. Products with this certification label meet current industry safety standards. For extension cords, look for a permanently attached certification label on the cord near the plug. For power strips and surge protectors, inspect the underside of the casing and make certain that it is marked with the manufacturer's name and the testing lab.

For the best results, electrical products should be purchased directly from the manufacturer, a reputable distributor or retailer.

And, as in most cases, if a deal sounds too good to be true, it may be because it is too good to be true. Rock-bottom prices may be another sign of an unsafe and counterfeit product.