



### Generator Safety Tips:

Portable generators can cause serious injury if not installed and used properly. *Portable Generators are not designed to be plugged into a normal power outlet.* Doing so can send power back to the power lines which may increase the 'backfeed' to thousands of volts, injuring utilities crewmen working on the lines far from your home.

The **ONLY safe way to hook up a generator to a house is to have a licensed electrician install a transfer switch.**

The switch prevents dangerous backfeeds and transfers the power from utility lines to the generator. The transfer switch should be near your circuit breaker box.

**Do not use a generator indoors or in a garage.** It produces Carbon Monoxide, a deadly, odorless gas. The generator should be in a dry, well-ventilated area, such as under a carport or in an open shed.

**Do not store gasoline indoors or try to refuel the generator while it is in use.**

**Know the output rating of your generator to keep from overloading it.** Doing so may damage the appliances connected to the generator.



For further information installing a generator correctly, and other generator safety issues contact:

Electric Engineering  
535-1305 or 535-1370  
or email  
[eleceng@hsvutil.org](mailto:eleceng@hsvutil.org)

# Prevent Electrical Accidents During Outages:



## How to Safely Use Your Portable Generator



In spite of our efforts to maintain reliability, power outages happen. Whether they are storm related or the result of an equipment failure, power outages happen and you should always be prepared for such events. That means flashlights with fresh batteries or a more significant power source, such as a generator. If you chose the route of a generator, be prepared to spend money on equipment that you may or may not use. **Most importantly**, be aware of the proper usage of the equipment so you do not endanger your family, neighbors, or utility workers.



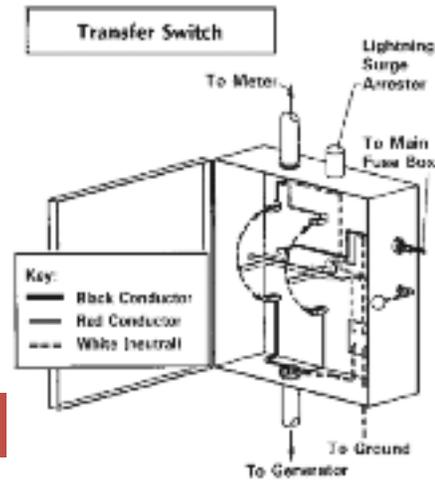
## Purchasing a Generator

If you choose to buy a generator, make sure you get one that is listed with the Underwriter's Laboratory (UL) or Factory Mutual (FM). These units have been tested and approved. By following all instructions and using the generator in a safe environment, you can expect years of emergency power supply from your unit.

Before buying, look at the labels on the devices you plan to connect to the generator to determine the amount of power that will be needed to operate the equipment. For lighting, the wattage of the light bulb indicates the power needed. Appliances and equipment usually have labels indicating power requirements on them. Choose a generator that produces **more** power than will be drawn by the combination of lighting, appliances, and equipment you plan to connect to the generator, including the initial surge when it is turned on. If your generator does not produce adequate power for all your needs, plan to stagger the operating times for various equipment. If you cannot determine the amount of power you will need, ask an electrician to determine that for you. If your equipment draws more power than the generator can produce, you may blow a fuse on the generator or damage the connected equipment.

## Using A Generator

Follow the directions supplied with the generator. Under **no circumstances** should portable generators be used indoors, including inside a garage. Adequate ventilation is necessary, and proper refueling practices, as described in the owner's manual, must be followed. It is a good idea to install one or more Carbon Monoxide (CO) alarms inside your home (following manufacturer's installation directions). If CO gas from the generator enters your home and poses a health risk, the alarm will sound to warn you. Many home fires and deaths from carbon monoxide poisoning have occurred from using a generator improperly.



Generator Connection Requirements

Be sure to let the generator cool down before refueling. Store fuel for the generator in an approved safety can. Use the type of fuel recommended in the instructions or on the generator label. Local laws may restrict the amount of fuel you may store, or the storage location. Ask your fire department for additional information about local regulations. Do not store fuel in a garage, basement or anywhere inside a home, as vapors can be released that may cause illness and are a potential fire or explosion hazard.

## Why Shouldn't I Hook Up a Portable Generator Directly to My Home's Wiring?

The safest thing to do is plug the equipment you want to power directly into the outlets on the generator. There are several reasons why you should not have a portable generator installed directly to your home's electrical service.

Home-use (non-industrial) portable generators do not supply enough amperage to supply sufficient power for today's homes (that is, to air conditioning, lighting, appliances, and other electronic equipment). Unless your home's power supply was installed with a disconnect to the main power feeding lines, power you put into your home from a generator could backfeed into the main line and cause problems for Huntsville Utilities, your neighbors, or yourself.

"Backfeeding" is supplying electrical power from a generator at the residence into the incoming utility lines. Simply connecting a cord from the generator to a point on the permanent wiring system and backfeeding power is an unsafe method to supply a building during an utility outage. Improper connection methods not only endanger the building occupants but pose a serious hazard to Huntsville Utilities workers as well. In 2005, several utility workers were killed helping restore power after Hurricanes Katrina and Rita when generators were improperly connected to homes and backfed current resulting in electrocutions of workers. When properly used, generators can supply safe power during emergency situations. Please follow the manufacturer's instructions for installation and operation if you chose this alternative power source...for your safety as well as others.

