

Using Generators for Electrical Power

Tips

- Gasoline engines produce carbon monoxide. Don't run them in an enclosed area.
- Check the oil level in the engine before using it. Continue to check it on a regular basis (for example, each time you refuel).
- Let the engine cool off before refueling.
- The generator should be kept a safe distance from structures because of engine heat.
- Place the generator on a level surface to keep oil at the proper level throughout the engine.
- Water will damage generators as well as produce an electrical hazard, so keep the generator dry.
- A voltage drop may occur, which can generate excess heat in the wire, if the extension cord between the generator and an appliance is too long. A voltage drop also can result from using an extension cord with too small a wire size. If the extension cord becomes very warm, it is inadequate.
- Connect the appliance directly to the generator.
- You should not try to directly connect generators to your electrical supply box, unless your electrical supply box has specifically labeled connections for that purpose.
- Ground the generator as stated in the instructions. If you use an extension cord, use one with a ground plug (one that has three prongs).
- Make sure the generator is running smoothly before the AC (alternating current) circuit on the generator is turned on or before you plug in the appliance.
- An appliance that has a heating element, such as a toaster or hair dryer, consumes a large amount of current. It's best to avoid using these types of items.
- If an appliance is wet or damaged, it may not be in good working order. Using the appliance may damage the generator.
- Some generators have the ability to produce 115/120 volts or 220 volts. Select the outlet that corresponds to the voltage requirement of the appliance.

Emergency generators become popular after disasters. They can help save food in freezers and refrigerators, but they also may be dangerous if not used properly.

The capacity of a generator usually is stated in watts. For example, you may have a 2,000-watt generator. This is the same as a 2-kilowatt (kW) generator, because 1,000 watts is equal to 1 kilowatt.

Watts is an electrical term determined by multiplying volts times amps. For example, if an appliance requires 120 volts and uses 10 amps, this appliance requires 1,200 watts.

This information should be on the nameplate of the appliance. If you do not know the wattage requirement of an appliance, do not plug it into a generator.

By this formula, you can determine what you can run on your generator. For example, an appliance that requires 1,200 watts and one requiring 600 watts could be run together on a 2,000-watt generator. Keep in mind, however, that appliances with motors require more electrical current to start than they do after they are running. So, for example, if you're plugging in a refrigerator and other appliances, start the refrigerator first and allow it to begin running before you plug in another appliance.

Visit our website: www.lsuagcenter.com

Revised by: Daniel Thomas, Ph.D.
Author: Lynn Hannaman, Ph.D.

Louisiana State University Agricultural Center
William B. Richardson, Chancellor
Louisiana Agricultural Experiment Station
John S. Russin, Interim Vice Chancellor and Director
Louisiana Cooperative Extension Service
Paul D. Coreil, Vice Chancellor and Director
Pub. 2949-O 5/11

The LSU AgCenter is a statewide campus of the LSU System and provides equal opportunities in programs and employment.

