



Emergency Generators

When using an emergency generator during a power failure, extreme care must be taken to ensure your safety as well as others who might be working to restore your power. **NEVER CONNECT YOUR GENERATOR TO THE HOUSE CURRENT.** All permanent connections must be made by a licensed electrician. If not properly connected, a generator may feed electrical current to service wires and place power company service personnel in danger.

When using a portable generator, plug the appliance directly into the generator. Other safety tips are listed below:

- **Do not** operate your generator inside the home. It must be located in a well ventilated area with air flow sufficient for cooling the engine and exhausting carbon monoxide fumes.
- Cover you generator and protect it from the elements to prevent electrical shorting and rusting. Make sure that nothing comes in contact with the exhaust system and that the exhaust is kept clear.
- **Do not** overload you generator. It must have a maximum wattage rating greater than your anticipated requirement.
- **Never** put fuel in your generator while it is running or the exhaust is still hot. The heat from the exhaust may ignite the fumes from the fuel.
- **Never** store gasoline inside you home or in an area where open flame is present, such as a water heater or other appliance with a pilot light or gas burner.

Frequently Asked Questions About Generators

1. What size generator do I need?

Depending on their wattage output, generators will run anything from a small lamp to a number of large appliances. The following chart can be used as a guide to help you to determine what size generator you will need for the items you wish to operate. Most “total electric homes” of 1,200 to 3,000 square feet would require a 3,000 or 5,000 watt generator (not including the air conditioning/heating system). Some appliances, such as air conditioners, heaters, refrigerators, pumps, and other motors, require more wattage at startup than a reduced wattage to operate. The startup wattage should be considered when determining the size of the generator. Wattages on the following chart are averages. Check your appliance label for accurate wattage.

<u>Appliances</u>	<u>Run Wattage</u>	<u>Start Wattage</u>
Light Bulb	40-100 Watts	N/A
Television	400 Watts	N/A
Microwave	800-1000 Watts	N/A
Toaster Oven	1500 Watts	N/A
Portable Heater (5,000 BTU)	1500 Watts	1800 Watts
Refrigerator/Freezer	1000Watts	3000 Watts
Water Heater	3500-4500 Watts	N/A
Coffee Maker	1300 Watts	N/A
Air Conditioning (20,000 BTU)	3200 Watts	7500 Watts
Electronic Blanket	500 Watts	N/A
Clothes Washer	1000 Watts	3500 Watts

2. What is the difference between rated maximum watts?

A generator’s wattage is the amount of power produced continuously, while maximum wattage is the power produced for short periods of time (such as a motor starting)

3. How are generators protected from overload?

Most generators feature AC circuit breakers. In the event of overloading, the circuit breaker will shut the unit down and trip. If this occurs, the overload condition must be corrected and the circuit breaker reset.

4. How long will my generator run?

Runtime will vary depending on several factors. The fuel tank capacity and how hard the generators works are the greatest factors in determining the runtime of your generator. Most new generators will provide information on fuel consumption and various load percentages, as well as the capacity of your fuel tank. With these two pieces of information, you can determine the runtime of your generator. Example: If your generator uses 1 gallon of fuel per hour at full load, and the fuel tank capacity is 8 gallons, then you can operate you generator at full load for 8 hours. **Remember, never fuel a generator while it is running or while the exhaust system is hot.** You should also exercise you generator on a regular basis to ensure its operating condition.

5. What kind of extension cords should I use?

Since your generators will be outside, you should be use an extension cord rated for outdoor use. Make sure that the extension cord is rated for the wattage of the appliance or appliances that you will be using.