Safely Installing a Generator

Before installing your backup generator, follow all instructions in the manufacturer’s written documentation, such as an operating manual, and all local building codes, especially regarding placement of the unit and safe electrical connections. Not following these precautions may result in hazardous conditions, including the possibility of carbon monoxide poisoning or electrocution.

- **NEVER** try to power home wiring by plugging the generator into a wall outlet, a practice known as "backfeeding." This is extremely dangerous and presents an electrocution risk to utility workers and neighbors served by the same circuit. It also bypasses some of the built-in household circuit protection devices.

- Locate the generator outside of your home and far away from windows, doors and vents. **NEVER LOCATE A GENERATOR INSIDE YOUR HOME.**

- Operate the generator on a dry surface where water cannot reach it, or puddle around it or drain under it.

- If you must use a generator in wet conditions, protect the generator from moisture (as described in the owner’s manual) to help avoid shock or electrocution hazard. This should be done without operating the generator indoors or near openings to any building that can be occupied in order to help avoid CO hazards.

- Direct exhaust away from windows, doors and vents.

- Do not operate a generator in partially enclosed spaces, even if using fans or opening doors and windows for ventilation.

When connecting appliances to the generator using an extension cord, follow these steps:

- Use heavy-duty extension cords that are specifically designed for outdoor use.

- Make sure the wattage rating for each cord exceeds the total wattage of all appliances connected to it.

- Use extension cords that are long enough to allow the generator to be placed outdoors and far away from windows, doors and vents to the home or to other structures that could be occupied.

- Check that the entire length of each cord is free of cuts or tears and that the plug has all three (or four) prongs.

- Protect the cord from getting pinched or crushed, and follow all cord safety labels including any limits on cord length.

**Warning Signs of Carbon Monoxide Poisoning**

Using a backup generator presents the risk of CO poisoning or even death. Because you cannot see, smell or taste CO, it is important to be aware of the symptoms of CO poisoning. Install CO detectors/alarms throughout your home to ensure you are aware of the presence of CO gas. You cannot see, smell or taste CO.

Symptoms of low-level CO poisoning can be similar to those of common illnesses, such as a cold, flu or food poisoning. These include:

- Headache
- Dizziness
- Nausea
- Fainting
- Shortness of breath
- Weakness

If you experience any of these symptoms, get outside to fresh air immediately and call 911 for emergency medical attention.
Your generator: Do the math

Decide now which appliances can run off your generator.

**KEY:**

- **Appliance** (Model specification)
- Approximate running wattage

**Fuel tank:**
- 1 gallon of gas will power a 3,000-watt generator for about 3½ hours.
- 5 gallons of gas will power a 5,600-watt generator for about 8 hours.

**Sources:** Honda; American Red Cross; University of Minnesota Extension Service; Capital Electric Cooperative