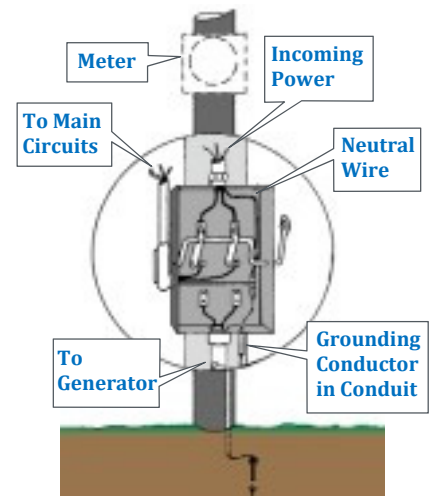


How to operate a portable generator *safely*

You can use a portable generator to supply electricity to your appliances if an emergency exists during a power outage. But if used improperly they can injure or even kill you and cooperative employees who are restoring power to your building. They can also damage the appliances you connect to them.

Generator sizes vary. Common units can be capable of handling anywhere from 5,000 to 20,000 watts (including starting surge requirements).

When connecting a generator to the main electrical supply for your house, the services of a qualified, licensed electrician must be utilized. Before connecting the generator, notify your electric cooperative.



Typical Manual, Double Throw Transfer Switch Installation for 120V/240V, Single-Phase Service

WARNING:

If you connect a portable electric generator to the main electrical supply coming into the house, the electrical generator could feed back into your electric cooperative's system and electrocute workers who are repairing the electrical lines.

To avoid back-feeding of electricity into the utility's system, you must have a qualified, licensed electrician install NEC compliant transfer equipment or transfer equipment (can be either automated or manual). Alternatively, a member can purchase a Generlink meter base automatic transfer switch and have the cooperative install it.

When installing a transfer switch, the meter base should not be used as a raceway to run wire from the transfer switch to the breaker panel or service disconnect.

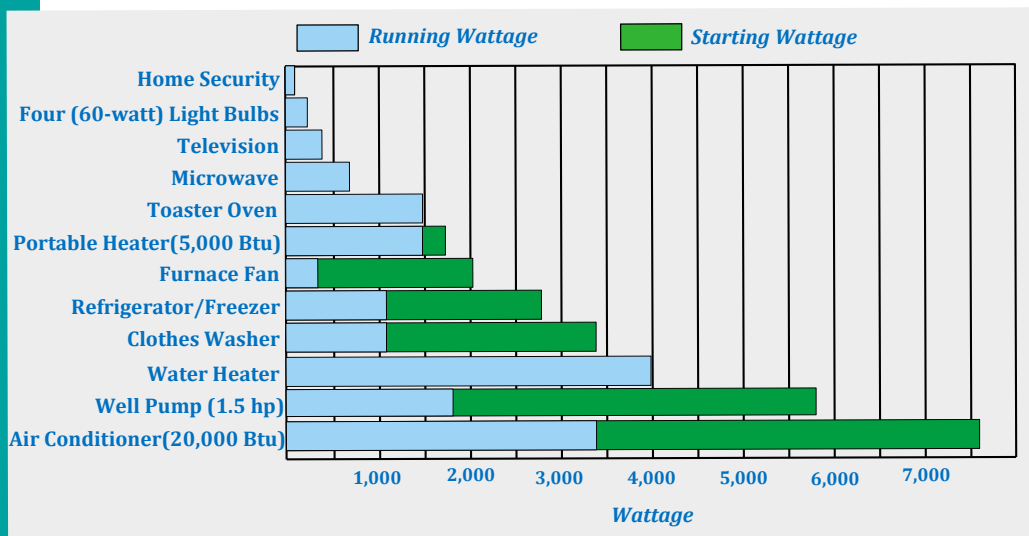
DETERMINING WATTAGE REQUIREMENTS

Never exceed the rated capacity of your generator. Overloading can cause serious damage to the generator or appliances. Before operating a generator, list all of the appliances that are going to

operate at the same time. Then determine the starting wattage requirements and the running wattage requirements. The starting load last only for a few seconds, but is very important when figuring your total

wattage to be used. Your generator must be rated to handle the total wattage.

Ratings shown here are samples. Wattage requirements vary with different brands of appliances. Be sure to check the nameplate on the appliances you plan to use. Always start your largest electric motor first, then plug in other items one at a time.





If you do this

This could happen

Unless you prevent it

- | | | |
|---|---|--|
| <ol style="list-style-type: none">1. Attempt to connect generator directly to the electrical system of any building.2. Fail to ground the generator's electrical system adequately.3. Operate generator in rain, wet, icy or flooded conditions.4. Use worn, damaged, undersized or ungrounded extension cords.5. Attempt to fill the fuel tank while the engine is running.6. Fail to ventilate generator by operating in an enclosed area.7. Tamper with factory set engine speed settings. | <ol style="list-style-type: none">1. You can injure or kill a cooperative employee servicing lines. The electricity you generate will back feed through the building's electrical system to the outside utility feed lines. Attempting to connect to the incoming utility service could result in electrocution. If your electric cooperative's line crew is restoring electrical service while your generator is connected to the incoming utility service, you could start a fire or seriously damage your building.2. Entire generator could become electrically charged and cause electrocution.3. Water conducts electricity. If water comes in contact with electricity to the generator's frame and other surfaces, it will cause an electrical shock to anyone touching them.4. Contact with worn or damaged extension cords could cause electrocution. Undersized extension cords could overheat wires or overheat attached items, resulting in fire. Use of ungrounded cord sets could prevent operation of circuit breakers and result in electrical shock.5. Gasoline and gasoline vapors can become ignited by coming in contact with hot components such as muffler, engine exhaust gases or from an electrical spark.6. Obstructing ventilation causes overheating and possible ignition of materials. You will produce toxic carbon monoxide exhaust fumes from the engine. Breathing exhaust fumes will cause serious injury or death.7. Tampering with engine speed adjustment could result in overheating of attachments and could cause a fire. | <ol style="list-style-type: none">1. A qualified, licensed electrician must install a double-pole, double-throw transfer switch to connect the generator to a building's electrical system. This is required by the National Electric Code. Connection must meet local ordinances. A minimum of 10-gauge wiring must be used.2. Make sure that the unit is connected to an appropriate electrical ground, in accordance with the National Electric Code. Follow instructions supplied with the generator.3. Operate generator in a clean, dry, well ventilated area. Make sure your hands are dry.4. Inspect extension cords before use and replace with new cords if required. Use proper size (wire gauge) cord set for application. Follow instructions supplied with your unit. Always use electrically grounded cord sets.5. Turn engine off and allow it to cool before adding fuel. Make sure there's a fire extinguisher in the immediate area certified to handle gasoline or fuel fires.6. Operate generator in a clean, dry, well ventilated area. Keep objects away from unit during operation. Do not operate unit in a confined area such as garages, basements, storage sheds, etc., which lack a steady exchange of air. Never operate unit in a location occupied by humans or animals. Keep children, pets and others away from where it's operating.7. Never attempt to "speed-up" the engine to obtain more performance. Both the output voltage and frequency will be thrown out of standard by this practice, endangering you and the attachments. |
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Your Touchstone Energy® Cooperative 