

Information Safety

SaskPower receives many calls from customers requesting information about portable generators.

We're pleased to provide important safety information to answer our customers' questions about their connection and operation.

If you require further information, check the blue pages of your phone book — we're listed under SaskPower, Gas and Electric Inspections — or call our head office location at (306) 566-2500.

We also have brochures available with safety information about furnaces and chimneys, carbon monoxide and propane: call us if you'd like to receive one.

Portable generators come in various sizes and are generally rated in watts or amperes. Before purchasing a generator, consider what you wish to supply with it. By checking the wattage on the lamps/fixtures you plan to use, you can determine their running wattage.

Information Operating

- Never operate a generator in your house, garage, or other enclosed building: burning fuel in unventilated areas creates carbon monoxide (CO) — a colourless, odourless and deadly gas.
- Stored fuel creates a fire/explosion hazard. The National Fire Code states that only five litres may be stored in a residential dwelling or 30 litres in a garage/shed. A typical 3500 watt generator burns about two litres of fuel/hour at full load. Call your local Fire Department for requirements in your area.
- Starting motor-driven appliances may be a problem. Check with an electrical contractor or generator supplier to ensure adequate start-up power is available.
- Wear electrically insulated workboots when near an operating generator.

Information Wiring

- Splicing into house wiring can cause fires if done incorrectly. SaskPower recommends a licenced electrical contractor install the wiring necessary to connect your generator.
- The wiring from the transfer switch to the outside of your home/business is considered permanent, so extension cords are not allowed. Some transfer switches have a recessed male connector on the side from which a properly sized cord can be connected and run to your generator.
- Permanent wiring from the transfer switch to the outside of your home/business **must** be sized to the output rating of your generator. Typically, the permanent wiring terminates in a recessed male connector on the exterior of your building, from which you may use a cord to connect the portable generator.

Information Appliance

Some customers may fuel their natural gas appliances with propane, or use a stand-by heater.

It is critical to have a licenced gas contractor convert your appliances because:

- Some appliances cannot be converted to other fuels due to fixed primary air settings, burning configurations or certification.
- Propane weighs more than natural gas, is more volatile, and contains over twice as much heat content, so the valves and orifices designed for natural gas will not perform correctly with propane. An unprofessional conversion can cause carbon monoxide dangers and/or explosions/fires in your home.
- Propane and natural gas-fueled heaters **must** be installed by a licenced gas contractor and all stand-by heaters **must** be installed according to applicable codes.
- Propane and natural gas-fueled appliances typically use Class B vents/chimneys, which cannot withstand the heat required to vent oil, wood or coal-fired appliances.

Information Switch

According to the Canadian Electrical Code, a **transfer switch** must be used when connecting a portable generator to a wiring system. This ensures your system is connected to either the utility supply or the portable generator, **but never both at the same time**. Without a transfer switch, the portable generator will backfeed to the utility powerlines, creating a high-voltage hazard for our linemen.

Be sure you purchase a safety-approved switch that's been certified from an organization such as the Canadian Standards Association (CSA). If you are not familiar with the certification organization on the label, call your local SaskPower Electric Inspections or your electrical contractor.

The transfer switch must equal or exceed the output of your generator. Two types of transfer switches are available:

- A two-pole transfer switch is used if the generator was manufactured with the "neutral floating."
- A three-pole transfer switch is used if the generator was manufactured with the "neutral bonded to the frame."

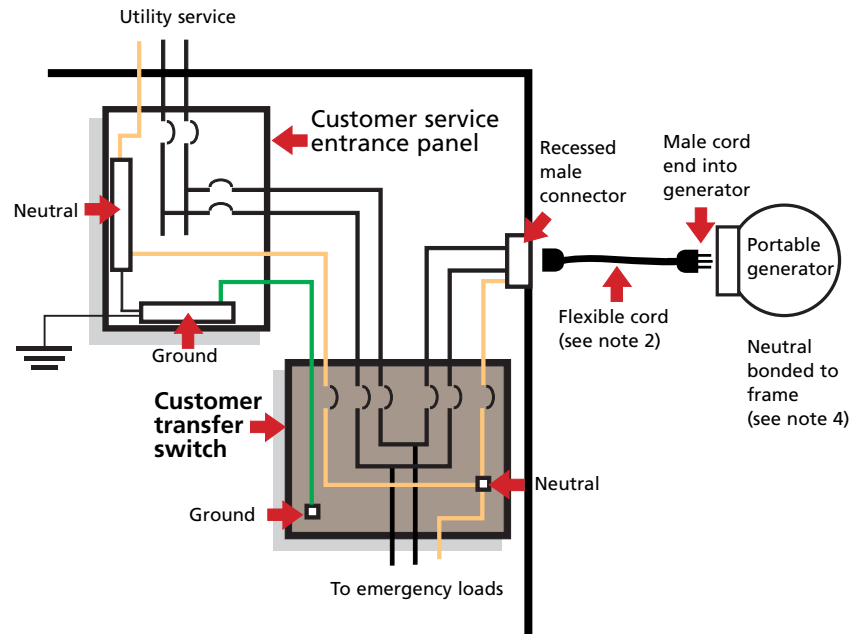
Refer to diagrams on reverse: they show typical installation configurations.

Typical household appliance power requirements: totaling the running watts estimates the size of generator.

Appliance	Start-up Watts	Running Watts
Refrigerator	2500	800
Furnace	1400	700
Microwave	•	750
Radio	•	100
Coffee Maker	•	850
Well Pump	2000	750
Sump Pump	1400	750
Oil Furnace	3100	235

Residential Service

Customer transfer switch required

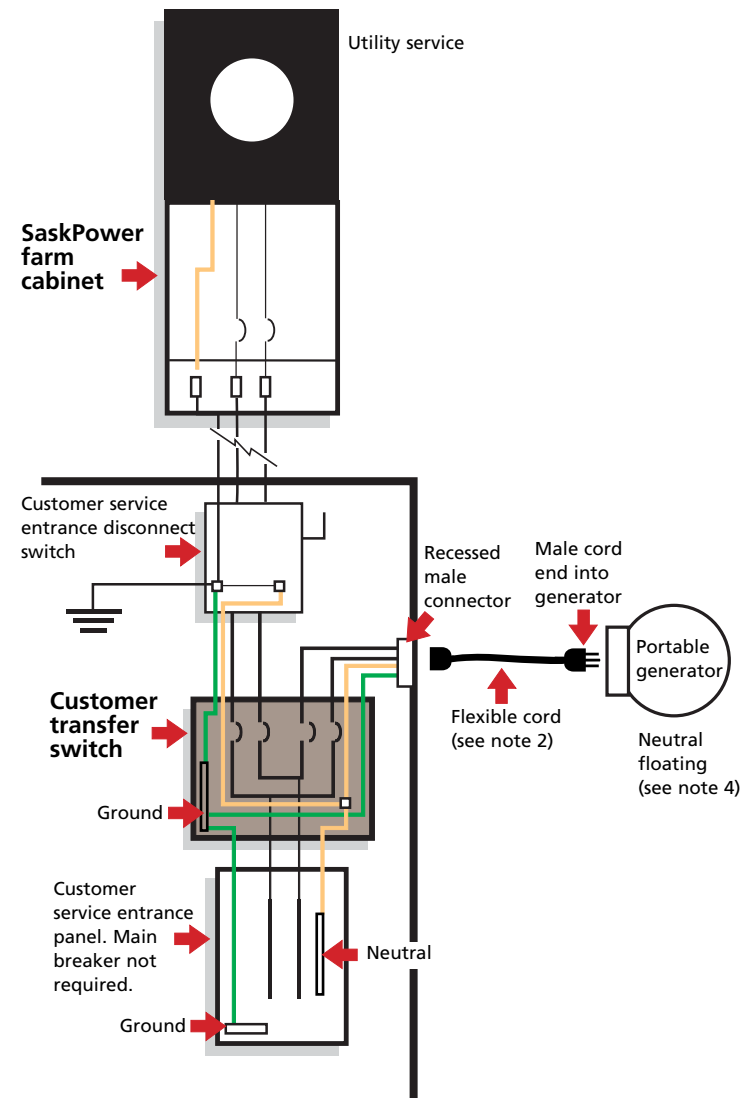


A SaskPower Electrical Permit is required to install a portable generator.

The above diagrams show typical installation configurations. For other installation configurations, contact your electrical contractor or a SaskPower Gas and Electric Inspections office.

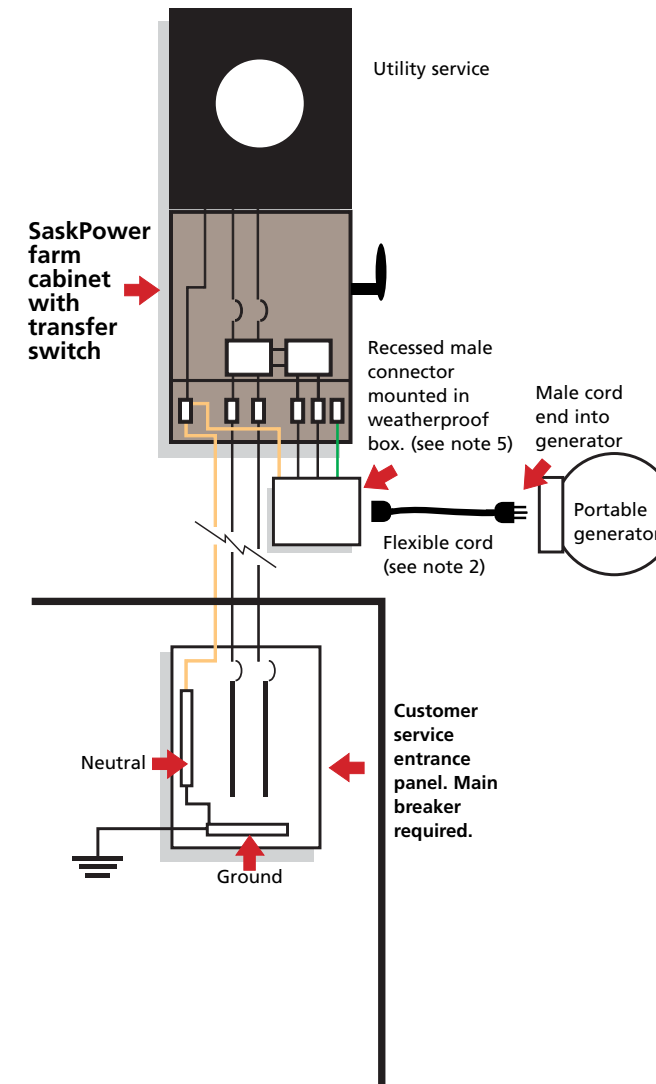
Farm Service

Using customer transfer switch



Farm Service

Using SaskPower transfer switch



NOTES:

- 1) Rewiring or tampering with a generator unit voids CSA certification.
- 2) Conductors must be sized to match the maximum output of generator.
- 3) Follow generator manufacturer's installation and operation instructions.
- 4) A three-pole transfer switch must be used when the generator neutral is bonded to frame.
- 5) Check with your local SaskPower District Office to obtain permission to install this connector on transformer pole.

Safety Portable Generators

Up to 12 kilowatts in size, rated 240 volts or less

