



Generator safety and use



Stay safe with generators

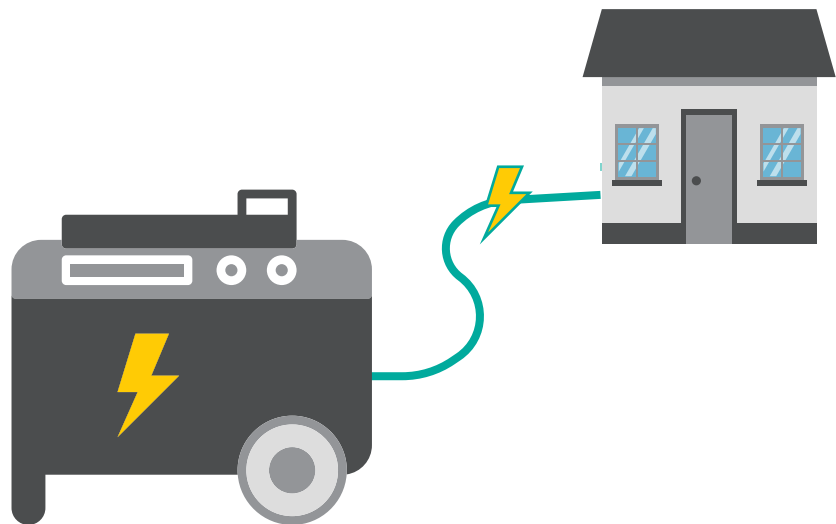
MainPower is committed to providing a safe and reliable electricity supply to all customers, however there may be times when your power supply may be interrupted. This fact sheet is designed to inform you about using generators safely in the event of a power outage.

Portable generators

Occasionally unplanned power outages can happen because of a number of reasons, including wind or snowstorms, earthquakes, vehicle accidents, and more. It might also be due to planned maintenance on the network.

Portable generators (stand-alone type not requiring an electrician) can be useful to maintain critical 'plug-in' type appliances until the power supply is restored.

Generators may be hazardous if used incorrectly. The following tips, and detailed understanding of your specific generator's instructions, can help avoid dangerous situations.



Tips for portable generators

- Don't plug a generator into your home's wiring without dedicated mains parallel generation wiring. Without this wiring, the power from your generator will 'backfeed' into power lines.
- Appliances can be plugged directly into the generator but always read the manufacturer's instructions carefully and don't forget to use a heavy-duty extension cord rated for outdoor use.
- Always follow the manufacturer's recommendations for earthing the generator (where specified).
- Petrol and diesel-powered generators produce deadly carbon monoxide fumes, so always run portable generators outside the house—never inside or in a garage. Keep generators well away from open windows to minimise the possibility of deadly exhaust fumes entering the home.

What will a small generator run?

- Follow the manufacturer's recommendations for proper use and capacity, and don't try to connect lots of appliances at once.
- Each generator has a rated power wattage which provides a limit on the total appliance load it will safely power.
- Overloading the generator can result in damage to appliances it is powering.
- Rotate the use of larger appliance items. This allows the use of a smaller generator which costs less to buy and is easier to move.



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Standby generators

Standby generators are designed to provide large amounts of power and are typically used in a business or commercial operation.

Remember

- Standby generators are permanently connected to electrical installation wiring. Wiring alterations to accommodate standby generators must be done by a licensed electrician, requires independent electrical inspection, and the issue of a Record of Inspection (RoI).
- Installations have either an automatic or manual changeover switch that disconnects the incoming mains supply and couples the generator to the installation wiring. This changeover must occur to stop electricity backfeeding into MainPower lines and putting the lives of line workers at risk.
- Automatic changeover must be approved by MainPower before installation to ensure no possibility of backfeeds. Contact one of our friendly Network Service Representatives on 0800 30 90 80, who can advise on forms required for automatic changeover.
- Manual changeover switching, using a 'mains/generator' changeover switch, generally does not need pre-approval by MainPower.
- To limit the load to the maximum load rating of the generator, the installation wiring is split into essential and non-essential sections so that only the essential loads are supplied by the generator. Connected loads must not exceed the maximum rating of the generator.
- There are electrical wiring standards and regulations that must be followed when installing standby generators. Licensed electricians should be aware of these requirements.
- To make sure that you are not billed for using standby generation, the connection must be on the installation side of the electricity revenue meter. Generators designed to start automatically in the event of a power outage should be test-run on load at periodic intervals, e.g. monthly. The best way to ensure that a generator will start and changeover if the mains supply fails is to turn off the building main switch. Generators should be regularly serviced by a specialist company.

General safety tips

- Don't trust your senses to protect you from the carbon monoxide produced by running a generator. When buying a generator, it is recommended to also buy a battery-operated carbon monoxide detector/alarm. This works like a smoke alarm and will sound an alert if carbon monoxide levels become dangerous.
- Think about your neighbours; a running generator can be loud so try to locate it where it will cause least disturbance.

How MainPower can help

We can assist customers affected by a power outage by:

- Estimating the required size of the generator,
- Connecting the generator to the supply,
- Disconnecting the generator from the supply.

Contact details:

Website mainpower.co.nz
Email info@mainpower.co.nz
Phone 0800 30 90 80

Need a generator?

The following hire companies service North Canterbury.

Aggreko (03 344 1500)
39 Braeburn Drive, Hornby, Christchurch

Amberley Hire & Landscape Supplies (03 314 8665)
15 Markham Street, Amberley

Hirepool Equipment Hire (03 313 4518)
16 Kingsford Smith Drive, Rangiora

Kennards Hire (03 313 7080)
19 Southbrook Road, Rangiora

Southbrook Hire (03 313 7336)
12 Newnham Street, Rangiora