

*BEING SAFE WITH  
ELECTRICITY*



KEEP THIS IN  
A SAFE PLACE  
AND REFER  
TO IT OFTEN

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## INTRODUCTION

This is Network Waitaki's guide to living safely with electricity. It contains important phone numbers, so keep it in a handy place for easy reference. It also contains some tips which may prevent electricity-related incidents and it explains what to do in the event of any emergency. Please read this brochure to ensure you're aware of the safety issues when using electricity, and if you have any queries regarding your electricity supply call Network Waitaki on **03 433 0065** or **0800 440 220**

Or for Electricity Account queries your Electricity retailer

Contact Energy      0800 809 000

Meridian Energy      0800 496 496

Trust Power          0800 87 87 87

Genesis Power        0800 300 400

Mighty River Power   0800 10 18 10

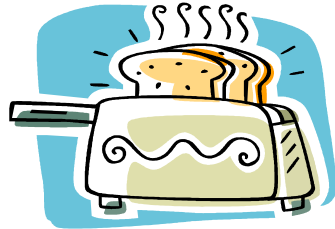
## ELECTRICITY SAFETY

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It's easy to take electricity for granted. It's safe, versatile and economical to use. We plug appliances in and switch them on and off many times each day, almost automatically. But familiarity can lead to accidents, so read through the following points to help ensure you stay safe.

### **ALWAYS:**

- Keep electrical appliances dry and clear of water, both inside and outside, and follow the manufacturer's instructions when using appliances specifically designed to be used in water.
- Make sure hands are dry when touching electrical appliances, sockets and switches.
- Check there are no worn, broken or loose parts before you plug in appliances or switch them on.
- Replace cracked or broken power sockets or plugs.
- Follow the manufacturer's instructions including any warning labels.
- Before unplugging an appliance or removing an extension cord, turn off the switch at the socket.
- Remove plugs from sockets by holding the plug, and pulling it out.



### **IF YOU HAVE YOUNG CHILDREN:**

- Keep appliance cords away from where children can pull on them.
- Always choose shuttered sockets and recessed outlets when undertaking new or replacement electrical work.
- Use plastic socket protectors in all unused power sockets without safety shutters.
- Always supervise children when using electrical appliances, especially toasters, heaters and fans.
- Never let children plug in or remove appliances from power sockets.
- Never leave metal objects such as screwdrivers, utensils such as cutlery where children may place them in power sockets.
- You could consider the fitting of RCD's (more information on Pg 10)

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- Check all electric cords when uncoiled for any damaged or exposed wires, or fraying or split leads. Dispose of any damaged leads or have them professionally repaired.
  - Follow the “Heater Metre Rule” - Heaters can be a fire hazard and should be kept at least one metre away from curtains, clothing, bedding, rugs and furniture.
  - Limit the number of appliances plugged into an outlet or extension cord to avoid overloading. Only use one heater per outlet.
  - Don’t use damaged appliances, or appliances with frayed leads or loose parts.
  - Never wash electrical equipment or appliances, even if unplugged. Just wipe over with a dry cloth. When cleaning dishwasher safe appliances, follow the manufacturer’s instructions.

**You can do some electrical work in your own home if you have the skills and knowledge to do the job safely and legally.**

**All work must be carried out in accordance with Electrical Codes of Practice, 50 & 51. For more information on this call the Energy Safety Service on 04 472 0030 or visit their website at [www.ess.govt.nz](http://www.ess.govt.nz).**

**Alternatively call a licensed electrical worker.**

#### **WHAT TO DO IN THE EVENT OF AN ELECTRICAL ACCIDENT:**

If a person comes into direct contact with electricity he/she can suffer a range of injuries, such as burns, or they may stop breathing or have a heart attack. An electric shock can be fatal. The extent of the injuries will depend on the strength of the voltage and current, how long the person was exposed to it, and how well the a person was insulated ( for example whether they were standing on a wooden surface or wearing rubber soled shoes.)

#### **IMPORTANT**

**If the injured person is still in contact with a live electrical source, do not touch them.**

**First switch the power off, or if this is not possible, use a dry wooden broom handle to push them free.**

**CALL AN AMBULANCE IMMEDIATELY  
DIAL 111**

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## **IF YOUR ELECTRICITY SUPPLY IS STOPPED OR INTERRUPTED**

Your power supply can be interrupted for a number of reasons including electrical faults, adverse weather conditions and disconnections.

### **YOUR AREA HAS NO POWER**

If neighbouring houses are without lights and streetlights are not on, it is likely that there is a power cut to your area. General power cuts to a town or city are usually picked up quickly. The local lines company will be working on restoring power as soon as it is aware there is a fault. If you live in a remote or rural area, it pays to call your local faults number to ensure the fault has been logged. The operator will be able to tell you the status of the fault. Call 03 433 0065 or 0800 440 220. If there is a fault, you should turn off appliances. Heaters and stoves may present a fire hazard, and some appliances can be damaged when the power comes back on.

### **YOUR HOUSE HAS NO POWER**

If your power goes off suddenly but your neighbours' lights are still on, the circuit breaker on your main switchboard may have tripped or your fuses may need changing.

Check your main switchboard, (see the instruction on page 7).

If your main switchboard appears to be in order, you may have a fault in the supply to your premises Call 03 433 0065 or 0800 440 220

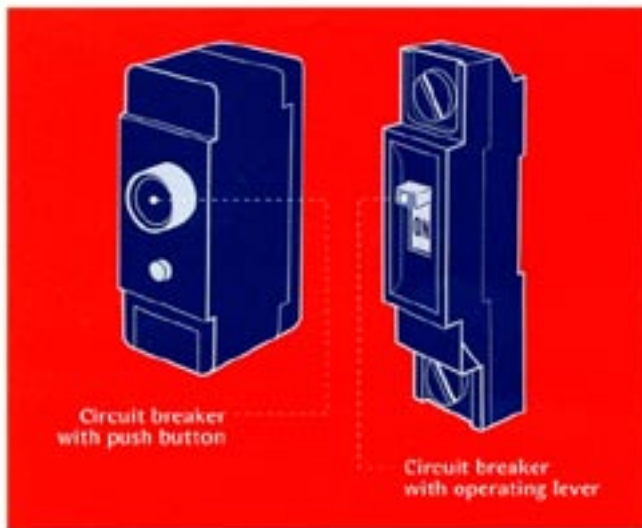
#### **REMEMBER**

**Always keep a torch handy in case there is a power cut.  
Check your torch and batteries regularly.**

**Take extreme care when using candles.**

**NEVER LET CHILDREN USE CANDLES  
UNSUPERVISED**

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1. Look for the circuit breaker where the lever is in the “off” position or where the button has popped out.
  2. Push the operating lever to the ‘off’ position then to the ‘on’ position or push in the button on the circuit breaker.
  3. If the circuit breaker continues to trip, switch off and unplug all appliances on that circuit breaker. Turn off all switches at the power socket and all lights on that circuit.
  4. If the circuit breaker still continues to trip, call a licensed electrical worker.



## **CERTIFICATE OF COMPLIANCE**

Licensed electrical workers must issue a Certificate of Compliance (CoC) to customers when doing any fixed wiring work, including fitting new light fittings or socket outlets, except like for like replacements.

The CoC indicates that the work done is electrically safe, has been carried out in accordance with New Zealand’s electrical safety standards and codes, and that the work has been tested.

The CoC is an important record of the work done on your property, so keep it in a safe place. It may be required for an insurance claim, or when selling your home.

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## CHANGING YOUR FUSES

**If you are unsure how to change fuses, call a licensed electrical worker for advice or assistance.**

Before checking and or changing the fuses on your main switchboard, please read the following.

1. If you suspect a blown fuse, switch off and unplug all appliances on the faulty circuit. If there are switches on the power sockets, turn them off. If a lighting circuit has failed, turn off all light switches if you don't, the fuse is likely to blow again as soon as you turn the main switch back on.
2. Turn off the main electricity switch—this may be in the main switchboard or on a separate switch nearby.
3. Open or take off the switchboard cover. On the switchboard, the fuses should be labelled as to the circuits they control ( such as 5 amp lighting or 10 amp sockets). This will help you to check which fuse has blown.
4. Look for scorch marks around the fuse carrier as this could point to the fuse that has blown. If there are no marks, inspect each fuse wire in turn, removing one fuse carrier at a time and replacing each after inspection, before checking the next fuse carrier.
5. Replacing the fuse. There are a number of different fuses. If you are not sure which type you have, examine one of the intact fuses in your switchboard and copy the way the wiring runs in the carrier.

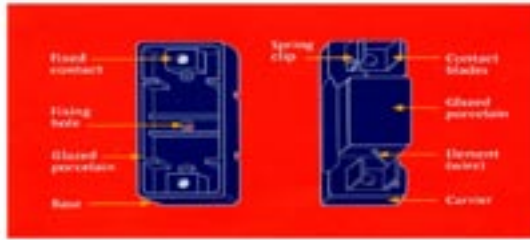
**Never replace fuse wire with a higher current rating wire, as this can cause damage to wiring, or even a fire. The correct current rating is generally indicated on the front of the fuse carrier.**

6. The most common type of fuse consists of a base and a carrier with two contact blades to hold the fuse wire, separated by an insulating material. Feed the wire across the carrier (either through a hole or slot) and attach it to the contacts by screws or clips. Attach the wire to the other end and cut it off neatly.
7. Replace the fuse carrier and turn on the main power switch.
8. Check all appliances, lights and flexible cords that were in use on the circuit when it failed, and have any equipment repaired if necessary before using this equipment again.

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Also check you are not over-loading the circuit with appliances as this is another cause of blown fuses.

9. If the fuse still blows, call a licensed electrical worker.



#### HELPFUL HINT

It is recommended that circuit breakers replace wired fuses on older switchboards. Plug-in circuit breakers, which fit many existing fuse bases, give better protection from faults, and unlike fuses can be reset rather than having to be replaced.

### YOU HAVE NO HOT WATER

If there is power to the rest of the house but you have no hot water, before calling your retailer answer the questions below:

1. Was there any hot water at all when you went to use it or have you run out ?
2. Have you run out of hot water before ? If this is a constant problem you may need to consider a larger hot water cylinder or your thermostat may be set too low.
3. Have you used more hot water than normal such as extra baths or laundry, or had people staying?
4. Have you recently changed energy pricing plans ?

If you haven't changed pricing plans recently and haven't used more hot water than normal, then you may have a fault with your hot water cylinder. You will need to call a licensed electrical worker.

If you have recently changed pricing plans, call your electricity retailer.

### YOUR POWER HAS BEEN DISCONNECTED

If your power has been disconnected and you are not sure of the reason, please call your electricity retailer who will establish the cause of the disconnection. See page 3 for phone numbers.

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## PROTECTING YOURSELF

RCDs (residual current devices) in your electrical wiring provide protection by rapidly disconnecting the electricity supply in many situations where someone could otherwise receive a fatal shock. (Fuses and circuit breakers do not provide this protection).

Installing RCDs may prevent injuries and they are now required on all new circuits which originate at the switchboard and supply lights or sockets in the home.

Only an RCD-protected outlet may be installed in a bathroom, although shaver outlets with isolating transformers are permitted.

RCD socket outlets may be installed to replace an existing outlet. Portable RCDs are also available and it is possible to have an RCD (or an isolating transformer) when using portable electrical appliances outdoors—such as power tools, concrete mixers or electric lawn mowers.

From 1 January 2003, all new domestic lighting and socket outlet circuits come with built in RCD protection.

Call a licensed electrical worker if you wish to install RCDs in your home.

## PROTECTING YOUR EQUIPMENT FROM SPIKES & SURGES

Electricity spikes and surges cause rapid fluctuations in power supplies. They can occur for a number of reasons including lightning strikes, trees touching or falling on power lines, or by neighbouring large-scale users switching equipment on and off.

To reduce the possibility of any damage caused by spikes or surges, Network Waitaki recommends that you consider surge protection for the following equipment and appliances:

- Computers, especially if you use a modem
- Stereo equipment
- Television and video equipment
- Cordless phones
- Washing machines and dishwashers
- Any other expensive electronic equipment



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The amount of protection you need depends on the sensitivity, importance and value of the equipment. Equipment with more features and controls typically has more sensitive components and requires more sophisticated protection.

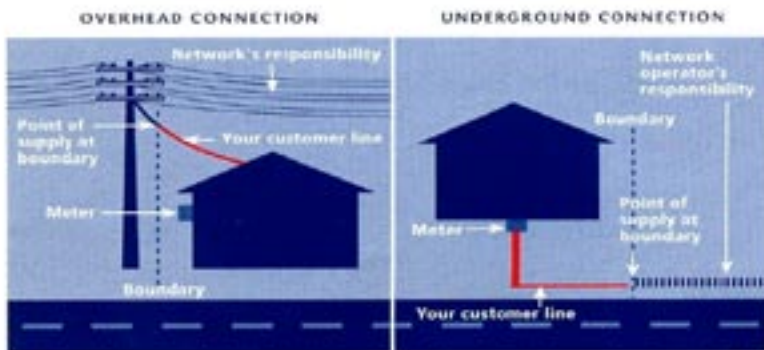
There are three kinds of filter you can use to protect equipment from spikes and surges:

- A phone filter will prevent spikes and surges travelling into your appliances through phone sockets.
- A power filter will prevent spikes and surges travelling into your appliances through power sockets.
- A power/phone filter provides an overall level of protection, preventing spikes and surges travelling through both phone sockets and power sockets.

Filters can be purchased from your local electrical store.

Network Waitaki also recommends that you check your Home and Contents Insurance policies. Insurance cover can be purchased for any damage or loss suffered due to failure, interruptions or fluctuations in your electricity supply. Talk to your Insurance agent or company for more information.

## YOUR RESPONSIBILITIES



*This diagram shows who owns which part of the power supply system at your premises. Note that all electricity past the point of supply is your responsibility.*

All electricity customers have certain responsibilities relating to electricity services and electricity supply equipment (“electricity supply equipment” includes service mains, wires, equipment, meters and any other assets relating to the supply of energy).

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Customers' responsibilities include:

- Any repairs and/or maintenance that may be needed to your own meter box or meter board and any switchboard or other wiring.
- Ensuring all electricity supply equipment and appliances on your property comply with all relevant legal and network connection requirements.
- Repairs and maintenance to all electricity supply equipment and appliances that are located past the point of supply on your property . (see diagram on page 11)
- All electricity past the meter and electricity services past the point of supply on your property.
- Maintaining the clearances between your service main and any building on your property, and/or the ground and trees as required by law. If you do not maintain these clearances after being asked to do so, you will be liable for the costs of maintaining these clearances and any repairs that result from the clearances not being maintained.

To comply with these responsibilities you may need the assistance of a licensed electrical worker.



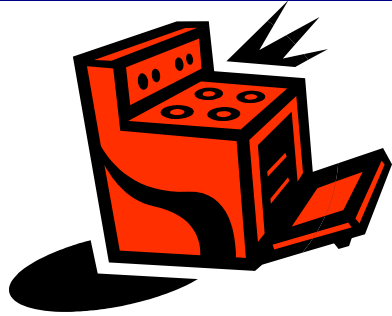
## TREES

Always plant trees well away from power lines and keep branches trimmed and clear of the lines. Never cut or trim a tree that could fall onto power lines. Before you climb any tree, be sure no power lines run through it or near it. Even if power lines aren't touching the tree, they could touch it after you weight is added to a branch. Always locate underground cables and services, such as water, gas and sewer before digging.

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## STOVES

Cords from electrical appliances, such as kettles and toasters, should be kept well away from stovetops. So should anything that can burn easily, such as tea towels, plastic containers or paper towels.



## CLOTHES DRYERS

**Always clean the lint filter from your clothes dryer before you use it.**

Lint build-up can cause a fire by creating an elevated temperature in the drum.

Never place flammable items such as rubber, fiberglass, plastic, or items containing oils or petroleum based products in the dryer.

Follow the manufacturer's instructions when installing the dryer.

Ensure the dryer completes its cool-down phase. Clothes removed from the dryer should be spread out to cool.



## RECREATIONAL SAFETY

Caravans—Electrical installations in caravans must be maintained in a safe conditions. Always have a current warrant of electrical fitness. You can get one from a licensed electrical inspector.

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Only use approved cords, plugs and sockets to hook up your caravan. If you're using a caravan at home, get a licensed electrical worker to install the right socket for the caravan's power supply lead.

Always switch off the supply box before plugging in your caravan and check you are disconnected before driving off.

If you want to run appliances in the caravan's awning always use an RCD or isolating transformer. If you are using an extension cord take care it does not get damaged.

Store power leads neatly rolled, to avoid kinks or damage. Always completely uncoil power leads before using them.



## **ELECTRIC BLANKETS**

Each season, before using your electric blanket check for damage or wear and check again each time you change the sheets. Inspect the cord, control switch and plug for any damage and look for any kinks, worn or exposed wires, scorch marks, or breaks in the heating element.

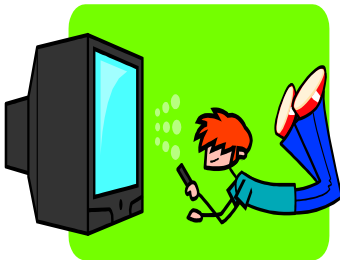
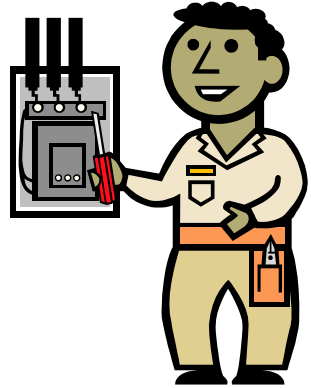
To check, turn the blanket on for 15 minutes on the highest setting (don't leave the room) and then turn it off. Run your hand over the blanket and feel for hot spots. A hot spot means the heating coil has been kinked or damaged. This could lead to fire or electric shock. Take it to a licensed electrical worker for repair or replace it with a new one.

Use an electric blanket only to warm the bed. Switch it off before you get in, so as to avoid overheating. Overheating can be life threatening, especially

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for the very young, ill, or elderly.

When fitting the blanket, ensure it is flat on the bed as creasing can damage the heating elements. Secure the blanket firmly using the attached ties. Pins or sharp objects should not be used. Keep the cord and control switch clear of the bed so they don't get damaged.



Network Waitaki on 03 433 0065 or 0800 440 220

Or for Electricity Account queries your electricity retailer

Contact Energy 0800 809 000

Meridian Energy 0800 496 496

Trust Power 0800 87 87 87



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