



Selling Safe Second-hand Electrical Appliances

This bulletin is intended to give guidance concerning safety to sellers of second-hand electrical appliances. It provides information on your responsibilities, as well as general safety advice. It is not intended to be a definitive description of the law, but is designed to help sellers consider how they can best ensure they sell only safe electrical appliances.

Electrical Appliance Safety - Your Responsibilities

The Electricity Regulations 1997 require that all electrical appliances 'must be designed, constructed, maintained, installed, and used ... so as to be electrically safe' or if 'sold second-hand, so as to comply with the testing requirements of Australian / New Zealand

Standard 3760: 1996 (AS/NZS 3760: 1996)'.

'Electrically safe' means that there is no significant risk of injury or death to any person or of damage to any property as a result of the use of the appliance or, the passage of electricity through that appliance.

If you sell second-hand electrical appliances you should ensure they are tested in accordance with the testing procedures set out in AS/NZS 3760: 1996.

Australian / New Zealand Standard 3760: 1996

AS/NZS 3760: 1996 includes advice on the following:

1 **Competent person** - the inspection and testing tasks specified in the Standard should be carried out by a 'competent person'. This is a person whom the person in charge of the premises ensures has acquired, through training, qualification, experience or a combination of these, the knowledge and skill to perform the tasks required correctly.

- 2 **Inspection** - checks should be made of appliances by a 'competent person' to ensure that:
- there is no obvious external damage
 - the accessories, connectors, plugs or outlet sockets have no damage or component defects
 - the inner cores of flexible supply cords are not exposed, and unprotected conductors or insulation tape are not present
 - flexible cords are effectively anchored
 - multi-boxes have an intact and legible warning about their maximum load
 - control knobs are secure and aligned
 - covers and guards are secure
 - mechanical safety features operate and ventilation and exhausts are unobstructed
 - controls and alarms are in good order and fuse ratings used are correct.

Continued over the page

For further information contact:

Energy Safety Service

33 Bowen Street

PO Box 1473 Wellington New Zealand

Tel +64-4-472 0030 Fax +64-4-460 1365

Industry free-fax: 0508 SAFE ENERGY
(0508 72 33 36)

Web site: www.consumer-ministry.govt.nz/ESS

Email: safe.energy@med.govt.nz



- 3 **Testing** - the following must be carried out (also by a 'competent person'):
- Protective earthing test - details of this test for protectively earthed appliances are given in Appendix A of the Standard
- Insulation resistance test - details of this test for double insulated appliances are given in Appendix B of the Standard
- Testing of isolation transformers - details are given in Appendix C of the Standard
- Test for operation of portable Residual Current Devices (RCD's) - details are given in Appendix D of the Standard.

It is recommended that, when a testing system is being set up, advice be obtained from a registered and licensed electrical worker.

Alternatively, you can arrange for the necessary electrical appliance testing to be undertaken directly by a registered and licensed electrical worker.

- 4 **Tagging** - appliances that pass the inspection and tests should be tagged to indicate that they have passed the tests required by the Standard. The tag should carry the name of the person who performed the testing and the date of the test. Appliances that do not pass should be withdrawn from service immediately; be labelled warning against further use; and sent for repair, disposal or destruction to an authorised repair agent or service personnel.

General Safety

You should always check with a registered and licensed electrical worker to ensure user safety.

- 5 **Rating** - the rating in amperes (amps) or the loading in watts (W) or volt-amperes (VA) should be marked on the appliance. Normal three-pin flat plugs on most appliances have a maximum rating of 10 amperes (2300 watts). Any appliance that has a rating above 10 amps (2300 watts) is normally designed to be fixed wired or to be supplied via a special plug and socket arrangement.
- 6 **Operating voltage** - the supply voltage in New Zealand is 230 volts. Any appliance designed for safe operation at this voltage should be marked with either '230V' or a range that includes 230 volts e.g. '220-240V'.

- 7 **Plugs** - appliances that do not have normal three-pin New Zealand style plugs should be treated with extreme caution as they are generally not designed for use in this country.
- 8 **Plug Adapters** - these may create a safety risk as they may not be made to New Zealand standards, and may permit the use of appliances that do not meet New Zealand standards.
- 9 **Toys** - these are only considered safe if they are supplied from a battery, or from the secondary side of a double-wound transformer with a secondary voltage of no more than 24 volts AC or 32 volts DC; and have a rating of less than 200 volt-amperes or 200 watts.
- 10 **Electrical Accessories** - the sale of second-hand older style accessories such as switches, ceiling roses and socket outlets should be avoided. Although they may appear to operate satisfactorily, they may be dangerous. For example, some older socket outlets may have spread earth pins which means that appliances plugged in and requiring an earth for safety will not have protection against short-circuit or electric shock. Older switches may have softened contacts due to overheating or ready access to live parts, and thus could present a fire or electric shock hazard.

Any person who is convicted of selling an unsafe electrical appliance is liable for a fine of up to \$10,000.

Copies of the Regulations and Electrical Codes of Practice (ECP's) can be viewed at the Energy Safety Service website at www.consumer-ministry.govt.nz

Copies of Standards, including AS/NZS 3760, are available for purchase from Standards New Zealand.