



Electricity Industry Bulletin No: 57 March 2005

FOR THE ATTENTION OF ALL ELECTRICAL WORKERS

1. ASBESTOS—THE KILLER FIBRE

Asbestos was commonly used in building materials between the 1940s and late 1980s because of its durability, fire resistance and insulating properties.

Inhaling of asbestos fibres may result in asbestosis (a progressive scarring of lung tissue) and two forms of cancer – lung cancer and mesothelioma. Because the level of exposure that may cause health problems is unknown, any exposure to asbestos is to be avoided.

Electricians often work in areas where asbestos is present. In most cases it is either firmly bound such as cement sheet and 'Zelemite' panels. However, at times it is found more loosely bound, for example as an insert for a porcelain fuse or backing sheet for a molded switchboard. Old boiler installations and pipework lagging may also contain asbestos.

Either way you must assume that any dust nearby these installations could contain asbestos fibres. It follows that any work you do in these areas must avoid creating or disturbing any dust. The practices that could create or exaggerate the problem include drilling the product (black switchboard panels or soffit panelling) or replacing certain switchboards where an asbestos fire proof backing was used.

If you are performing work for a customer or if you employ someone to remove the asbestos, then it becomes a workplace and must be done in accordance with the *Workplace Health and Safety Regulations 1998* and the *Code of Practice for the Safe Removal of Asbestos* issued by Worksafe Australia. A copy of this code is available at www.nohsc.gov.au and additional reference material is also found on the Workplace Standards Tasmania website at www.wst.tas.gov.au

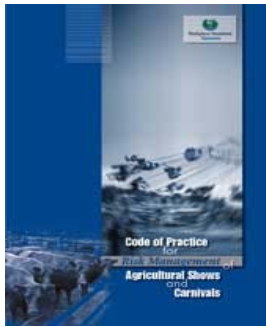
2. KLEENMAID RANGE MODEL CH605CE

An incident reported to Electricity Standards and Safety has highlighted the fact that electrical technicians are required to test electrical installations on completing their work. (This requirement is under AS/NZS 3000:2000 Section 6 *Testing and Verification*).

An electrical contractor recently installed the above electric range model and had followed the instructions A, N & E marked adjacent to the terminals. The label had been fixed incorrectly; it indicated the left hand terminal was the line terminal when in fact it was the appliance earth terminal. This resulted in the metal enclosure becoming alive. Testing electrical work on completion and before energizing is the only way to verify that the electrical installation is safe to connect and use.

If the electrical technician had walked away from the above incident without testing, then someone could have been electrocuted. Kleenmaid have taken action to verify the problem.

3. NEW CODE OF PRACTICE FOR AGRICULTURAL SHOWS AND CARNIVALS



Electrical contractors involved in setting up or installing electrical equipment at shows and carnivals are advised that a new code of practice for agricultural shows and carnivals has been launched.

The purpose of the *Code of Practice for Risk Management of Agricultural Shows and Carnivals* is to provide practical guidance to ensure that standards of management at agricultural shows and carnivals minimise the risk of injury or damage to persons or property from hazards existing at agricultural shows and carnivals.

AS/NZS 3002 *Electrical Installations – Shows and Carnivals* still applies and should be read in conjunction with this code.

Copies of the code can be downloaded from www.wst.tas.gov.au (search for 'agricultural shows and carnivals').

4. HEAT PUMPS : SPLIT SYSTEM INTERCONNECTING CABLE

Heat pumps are generally wired in one of two ways:

- the circuit supply cable is run to the outdoor unit first with an interconnecting cable to the indoor unit, or
- the circuit supply cable is run to the indoor unit first with an interconnecting cable to the outdoor unit

Regardless of which way the wiring is configured, the same rules apply.

Cable Sizing

In general, all electrical final sub circuit cables should maintain the same gauge throughout the circuit. Any reduction in the size of cable is usually via an appropriate protective device. Manufacturers advise that internal fuses in heat pumps are only to protect internal circuitry and components, and should not be relied upon for protecting external cables.

Clause 2.4.3.4 of AS/NZS 3000 (the Wiring Rules) does permit the breaking of gauge within a circuit, provided certain conditions are met (particularly short-circuit protection).

Cable Insulation Colours

Compliance inspectors have also discovered occasions where green and yellow wires were used as active conductors. This is extremely dangerous and contrary to the requirements of the Wiring Rules. Action will be taken against those found to perform this unsafe practice.

Who Can Install The Wiring

The installation of all circuit wiring, including the cable/s between the units, is electrical work and must be done by a licensed electrical contractor. Please do not place the air-conditioning installer or yourself in breach of the Act by asking unlicensed persons to install any circuit cables. An air-conditioning installer may assist a licensed electrician to pull cables down cavities or under floors, however final clipping and mechanical protection must be done by the electrician (or their apprentice).

5. INSULATED-PIN PLUGS



In April 2000, the Australian Standard AS/NZS 3112:2000 *Approval and test specification – Plugs and socket outlets* was amended requiring live pins of low

voltage flat pin plugs, up to and including 15A rating, to be insulated, effective from 3 April 2005. After this date non-insulated pins will not be compliant with the standard.

If you sell or hire out electrical equipment, then you should get the following fact sheets.

- Notice to Suppliers of Electrical Equipment – Requirements for Insulated-Pin Plugs, and
- Electrical Regulator Notice to Hirers of Electrical Equipment – Requirement for Insulated-Pin Plugs.

Contact Electricity Standards and Safety on 03 6233 7851 for your copies or visit our website www.wst.tas.gov.au/electricity (click on hot topics) to download a copy.

6. DIAL BEFORE YOU DIG

Electricity Standards and Safety would like to advise the electrical industry that all precautions need to be taken to avoid damage to services when electrical contractors are undertaking underground work.



With the advent of gas to Tasmania there is an additional service to look for.

Dial Before You Dig helps you locate underground pipelines in the area you are planning to dig. Call 1100 at least two working days before you start excavating. For more information, go to www.dialbeforeyoudig.com.au

Gas distribution mains pipelines are identified by field markers every 100 metres or kerbside markers every 50 metres.



Kerbside Marker



Field Marker

Service Operators are available between 8am and 5pm (est) Monday to Friday. In the event of damage occurring to gas infrastructure, contact the natural gas distributor, Powerco's 24 hour emergency number on 180 2111 or Emergency Services 000.

Please Dial 1100 Before You Dig to save time, money and potentially, lives.

7. ELECTRICAL LICENSING BOARD SURVEY RESULTS

Of the 3000 surveys sent to licensed electricians, 532 responded. This represents an 18% response rate, a pleasing result considering return rates for surveys are usually around 3%. Thanks to all who responded. Their survey will be discussed at the next meeting of the Electrical Licensing Board.

8. LICENCE NUMBER TO BE SHOWN IN WRITTEN ADVERTISEMENTS

Under section 45 of the *Electricity Industry Safety and Administration Act 1997*, the holder of an electrical contractor's licence must ensure that the licence number is shown in any written advertisement published in relation to the business conducted under the licence.

The licence number must also appear on any account or correspondence issued by the holder in relation to that business.

This correspondence includes:

- business cards
- internet home page or advertising
- invoices and accounts
- letter head
- office window or business signs, on or in front of the building
- pens, fridge magnets
- sponsorship banners or signs
- vehicle sign writing
- written media and brochure advertising
- yellow and big colour directories.

9. OCCUPATIONAL LICENSING BILL 2005 : PROGRESS REPORT

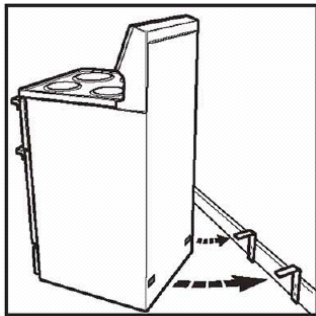
The period for public comment on the Occupational Licensing Bill 2005 ended on 31 January 2005, with a positive response. The scoping group is currently assessing the comments.

Twenty-three written responses were received. The Bill will be introduced into Parliament in the first half of this year. Some initial work has begun on the regulations and at this stage it is anticipated that these may be ready for introduction later in the Spring Session this year.





SIMPSON WESTINGHOUSE GAS AND ELECTRIC STOVES



Electrolux Home Products Pty Ltd is conducting a safety awareness campaign in relation to a range of Simpson gas and electric upright stoves manufactured between 1992 and 2000 and Westinghouse gas and electric stoves manufactured between 1983 and 2000. The purpose of the safety campaign is to make owners aware that restraining brackets must be fitted and the stove pushed back so that they are engaged. Additionally, Electrolux has advised that, on request, a warning level will be provided to remind users that excessive loads should not be placed on the open oven door or that children should not be allowed to climb onto the stove.

Excessive movement of the stove or climbing onto an open oven door may create a potentially dangerous situation. Upright stoves must be installed in accordance with manufacturers' instructions including the fitting of retaining brackets or other devices or methods as supplied or specified.

If you, as an installer, are aware of stoves incorrectly installed, you should encourage users to have the installation rectified. If you are in a dwelling for other reasons, take a few moments to discuss the issue with the owner. If the brackets are lost, new ones can be obtained at no charge by telephoning Electrolux at 1800 063 009. Other brands or models of stoves use a variety of anti-tipping methods, but the same principles apply as above.



Product	Defect
Dynalink Generators	Do not comply with Standards AS/NZS 3350-1, AS/NZS 3010-1987 and AS 2790-1989.
Compact Circuit Breakers	Error in the angle of a pin in a batch of the square shafts that fit inside the extended rotary handle.
Dell Adapters	Potential shock hazard if the end user uses power cords other than the one supplied with the adapter.
Dreamland Electric Blankets by Breville	Potential risk where the interconnecting flexible cord may fuse, causing scorching of bed linen.
Sunbeam Quantum Plastic Kettle	Heating element conductor wires not crimped to specifications.
Braun Shaver Models Syncro, Freeglide - Flex Cord & Plug	Plug pins may break off and remain wedged in the power supply socket. If an attempt is made to remove the pin without turning off the power supply the user may receive an electric shock.

For precise product information, defect details and consumer action, visit the Product Recalls Australia website at www.recalls.gov.au



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