

COMMITTEE: EL – 036
In-service Testing of Electrical Equipment

DR 05948

(Project ID: 4240)

Draft for Public Comment

Australian/New Zealand Standard

LIABLE TO ALTERATION – DO NOT USE AS A STANDARD

DATE OF ISSUE: 22nd February 2005

CLOSING DATE FOR COMMENT: 18th April 2005

DR 05948

**AS/NZS 3760 Part 2 - Safety inspection and testing: Second-hand
Equipment - prior to sale**

PRICE CODE :



**DRAFT FOR PUBLIC COMMENT
STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND**

Committee EL-036 - In-service Testing of Electrical Equipment

The committee responsible for the issue of this draft comprised representatives of organizations interested in the subject matter of the proposed Standard.

Comments are invited on the technical content and wording. Editorial matters (i.e. spelling, punctuation, grammar, formatting etc.) will be corrected before final publication.

The preferred method for submission of comment is to download the MS Word comment form found at:

<http://www.standards.com.au/catalogue/misc/Public%20Comment%20Form.doc>

This form also includes instructions and examples of comment submission.

Please provide supporting reasons and suggested wording for each comment submitted. Where you consider that specific content is too simplistic, too complex or too detailed, please provide an alternative.

If the draft is acceptable without change, an acknowledgement to that effect would be appreciated.

When completing the comment form, ensure that the number of this Draft, your name and organization (if applicable) is recorded. Please place relevant clause numbers beside each comment.

When completed, the form should be returned to the Project Manager, Nelson Procter, via email to nelson.procter@standards.co.nz

The co-ordination of the requirements of this draft with those of related Standards is of particular importance and you are invited to point out any areas where this may be necessary.

If email facilities are not available, the comment forms should be posted to

Nelson Procter
Standards New Zealand
Private Bag 2439
Wellington 6020
New Zealand

Attention is drawn to the fact that this document is a draft standard only and is liable to alteration in the light of comment received. It is not to be regarded as an Australian/New Zealand Standard until finally issued as such by Standards Australia and Standards New Zealand.

CONTENTS

PREFACE..... 4

INTRODUCTION..... 5

SECTION 1 SCOPE AND GENERAL..... 6

 1 SCOPE 6

 1.1 EXCEPTION..... 6

 1.2 GENERAL 6

 1.3 REFERENCED DOCUMENTS 6

 1.4 DEFINITIONS..... 6

SECTION 2 INSPECTIONS AND TESTS..... 7

 2 GENERAL..... 7

 2.1 PERSONNEL 7

 2.2 INSPECTION AND TESTING 7

 2.3 ACTION RESULTING FROM INSPECTION AND TESTING 7

 2.4 DOCUMENTATION REQUIREMENTS..... 7

APPENDIX A APPLIANCES WITH ADDITIONAL TESTING REQUIREMEMNTS 9

APPENDIX B EXAMPLES OF LABELS..... 11

APPENDIX C REGULATORY APPLICATION OF THIS STANDARD 12

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-036 In-service Testing of Electrical Equipment, as a part of the AS/NZS 3760 series of Standards.

It is provided to define more specifically than is discussed in the parent document the process of inspection and testing expected to be performed or arranged to be performed, before a second hand appliance is offered for sale.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard and subject to the same level of compliance as if it were in the body of the Standard, whereas an 'informative' appendix is provided for information and guidance, and may indicate good practice. Non-compliance with an informative appendix will not be seen as non-compliance with the Standard.

INTRODUCTION

Equipment offered for sale from a second hand agency shall be tested prior to re-sale for the safety of persons subsequently using the equipment, as required by Local Regulations.

For appliances with additional special requirements, this Standard provides details of additional relevant tests, necessary to confirm the operational safe working of the appliance, which are not limited to electrical shock including consideration of other hazards which may lead to damage or injuries.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard

**Safety inspection and testing:
second hand electrical equipment
- prior to sale**

SECTION 1 SCOPE AND GENERAL

1 SCOPE

This Standard specifies procedures for the safety inspection and testing of low voltage single phase and poly-phase (e.g. nominal 240V and 415V) electrical equipment, prior to being offered for sale, and includes equipment intended for both domestic and workplace environments.

1.1 EXCEPTION

This Standard shall not apply where an item has been treated in accordance with the provisions of AS/NZS 4701.

1.2 GENERAL

The inspection, testing and tagging regime described in AS/NZS 3760 Part 1 is specified as the primary means of confirming the electrical safety of items before re-sale.

1.2.1

For appliances with additional special requirements, this Standard provides details of additional relevant tests, necessary to confirm the operational safe working of the appliance, which are not limited to electrical shock including consideration of other hazards which may lead to damage or injuries. These are listed in Appendix A.

1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS

3551 Technical management programs for medical devices

3760.1 In-service safety inspection and testing of electrical equipment

4701 Requirements for domestic electrical appliances and equipment for reconditioning or parts recycling

1.4 DEFINITIONS

For the purpose of this Standard, the definition listed below and the relevant definitions listed in AS/NZS 3760 Part 1 shall apply.

1.4.1 *Second Hand Equipment*

Electrical equipment from any source which is not offered for sale as new equipment.

SECTION 2 INSPECTIONS AND TESTS

2 GENERAL

This section prescribes the inspection, testing and tagging operations which are to be performed on an item which is offered for sale as second hand equipment.

2.1 PERSONNEL

2.1.1

Inspection, testing and tagging functions shall be performed by a Competent Person as defined in AS/NZS 3760 Part 1, or in accordance with local Regulations.

2.2 INSPECTION AND TESTING

2.2.1 *Tag Removal*

As soon as possible after the item has been received, any tag affixed as a result of compliance with inspection and testing activities performed under AS/NZS 3760 Part 1 requirements shall be removed.

2.2.2 *Inspection*

Prior to sale, the equipment shall be inspected as required by AS/NZS 3760 Part 1

2.2.3 *Testing*

The testing action is an integral part of the inspection/testing process. and is intended to confirm the results of the visual inspection and detect the unobservable faults not found by the visual inspection process.

2.2.3.1

Following the visual inspection performed under Cl. 2.3.1, the item shall be tested in accordance with the requirements of AS/NZS 3760 part 1.

2.2.4 *Additional Testing*

Appliances listed in Appendix A shall have additional tests performed to confirm their functionality and electrical and mechanical safety. Appendix A provides for each such appliance, the tests required.

2.3 ACTION RESULTING FROM INSPECTION AND TESTING

2.3.1 *Non-compliant equipment*

Where inspection or testing identifies equipment which fails to comply with the criteria given in AS/NZS 3760 Part 1, the equipment shall be appropriately labeled to indicate that the equipment requires remedial action, and warn against further use. An example is provided in Appendix B2.

2.3.1.1

Should the owner wish to sell the product in a defective state, the provisions of AS/NZS 4701 shall be applied.

2.3.2 *Compliant equipment*

Following testing, the compliant equipment shall be fitted with a durable, non-reusable, non metallic tag. An example is provided in Appendix B3.

2.3.2.1

The tag shall include:

- (a) The name of the person or company who performed the tests; and
- (b) The test or inspection date.

2.4 DOCUMENTATION REQUIREMENTS

2.4.1

Electrical or occupational health and safety regulators may require documentation to be kept in some cases.

2.4.2

Where vendors perform voluntary additional inspections and tests, records of such should be kept.

2.4.3

Where records are kept, they should be retained for seven years, or such period as required by the specific regulations.

**APPENDIX A
APPLIANCES WITH ADDITIONAL TESTING REQUIREMENTS**

(Normative)

A 1 GENERAL

This Appendix lists and prescribes appliances requiring additional safety checks and prescribes those checks.

A 2 EQUIPMENT SCHEDULE

EQUIPMENT	ADDITIONAL TESTS
Child appealing appliances	This classification of equipment is considered to be intrinsically unsafe is not suitable for use and has not therefore been repaired.
Electric blankets	Repairs should be limited to the replacement of flexible cords, transformers, switches etc
Heating Appliances a) Handheld b) Portable c) Stationary	Airflow vents and dust build up should be cleared before re-assembly Check for sagging of heating elements (wire-wound elements without core support) For hair dryers, Check for warning label on supply flexible cord. Tilt switches, if fitted are operational.
Power tools Wet operation	Guards fitted and functional Restrictions on lock-on checked Operational switch checked. Protective shrouds surrounding switches are intact and not perished Airflow vents and dust build up should be cleared before re-assembly RCD protection integral, or for operation from an Isolation device
Motor Driven Appliances Washing machines Spin extractors Tumble driers	Check for correct operation of interlocks to prevent mechanical hazard Guards fitted and operational

<p>Vacuum cleaners Shavers, hair clippers Floor treatment machines Kitchen machines Food waste disposers Sewing machines Range hoods Massage appliances Air conditioners Pumps Ironers Projectors Refrigerators/freezers Lawnmowers Fans Amusement machines Toilets Lawn trimmers Scarifiers Garage doors/gates Blind drivers Vaporisers</p>	<p>Correct operation of entrapment protection system</p>
<p>Garden Tools Electric chain saws Hedge trimmers Weed eaters/line trimmers Lawn mowers Shredders/mulchers Concrete mixer Water blasters Pumps</p>	<p>Guards fitted and operational Switches are operational</p>

APPENDIX B
EXAMPLES OF LABELS
(Informative)

B 1 General

Examples of labels which may be affixed to equipment are provided below. These are for indicative purposes only, depicting a minimum information set for inclusion.

B 2 Labels for non-compliant equipment

<p>NOT TO BE USED</p> <p>UNTIL REPAIRED</p> <p>Job No.Date:</p>
--

B 2.1

The recommended colour scheme is for black text on red background.

B 3 Labels for compliant equipment

<p>COMPLIES WITH AS/NZS 3760.2:2005</p> <p>Testing performed by:</p> <p>Date:</p>
--

B 3.1

The recommended colour scheme is for black text on white background.

APPENDIX C
REGULATORY APPLICATION OF THIS STANDARD
(Informative)

C 1 GENERAL

Relevant regulatory authorities in the Australian States and Territories and in New Zealand may require compliance with this Standard under their various regulatory instruments.

The purpose of this Appendix is to provide contact details of the relevant authorities which enforce regulations relating to the in-service inspection and testing of electrical equipment in each of the Australian States and Territories and in New Zealand.

This information is accurate at the time of publication of this Standard. Users are advised to consult the relevant nominated regulatory authority for information current at the time of use.

C 2 REGULATORY AUTHORITIES

New South Wales

WorkCover NSW
92-100 Donnison Street, Gosford.

Postal Address: Locked Bag 2906, Lisarow NSW 2252
Client Contact Centre, Phone: 13 10 50
Website: www.workcover.nsw.gov.au

Victoria

Victorian WorkCover Authority
Level 24, 222 Exhibition St
Melbourne 3000

WorkCover Advisory Service
Ph (03) 9641 1555
Fax (03) 9641 1222
Website: www.workcover.vic.gov.au

Queensland

Street Address: Electrical Safety Office
Department of Industrial Relations
Level 6, Neville Bonner Building
75 William Street
Brisbane Qld 4000

Postal Address: GPO Box 69
Brisbane Qld 4001
Telephone: (07) 3237 0220
Facsimile: (07) 3237 0229
Website: www.eso.qld.gov.au.

Australian Capital Territory

ACTPLA
Street Address: Central Office, Ground Floor, North,
Dame Pattie Menzies House,
16 Challis Street Dickson
Telephone: (02) 6207 1926
Fax: (02) 6207 1925
Website: www.actpla.act.gov.au

ACT Workcover

Street Address: Level 4 Eclipse House
197 London Circuit
Canberra City ACT 2601

Postal Address: PO Box 224
Civic Square ACT 2608
Telephone: (02) 6205 0200
Facsimile: (02) 6205 0336
Website: www.workcover.act.gov.au

Commonwealth OH&S regulator, Comcare
Street Address: Level 1,
14 Moore St
Canberra ACT 2600

Postal Address: GPO Box 9905
Canberra ACT 2601
Telephone: 1300 366 979
Facsimile: (02) 6257 5634
Website: www.comcare.gov.au

Tasmania

Workplace Standards Tasmania
Street Address: 30 Gordons Hill Rd,
Rosny Park 7018

Postal Address: PO Box 56
Rosny Park TAS 7018
Telephone: 1300 366 322
Facsimile:
Website: www.wsa.tas.gov.au

Northern Territory

Electrical Safety Office
Street address: Minerals House
66 The Esplanade
Darwin NT 0800

Postal Address: GPO Box 4821
Darwin NT 0801
Telephone: (08) 8999 5010
Facsimile: (08) 8999 6260
Website: www.deet.nt.gov.au/wha/pages/electrical

South Australia

Office of the Technical Regulator (SA)
Level 19 Wakefield House
30 Wakefield Street
Adelaide SA 5000

Telephone: (08) 8226 5500
Facsimile: (08) 8226 5523
Website: www.technicalregulator.sa.gov.au

Western Australia

Electrical Work is also subject to the terms of the Occupational Safety and Health Act 1984 and the Occupational Safety and Health Regulations 1996, which are administered by WorkSafe Western Australia.
Energy Safety Directorate
Street Address: West Leederville Office (Head Office)

20 Southport Street
WEST LEEDERVILLE, Western Australia 6007

Phone: (08) 9422 5200
Facsimile: (08) 9422 5244
Website: www.energysafety.wa.gov.au

Work Safe Western Australia
Street Address: 5th Floor, 1260 Hay Street
WEST PERTH WA 6005

Postal Address: PO Box 294
WEST PERTH WA 6872
Telephone: (08) 9327 8777
Facsimile: (08) 9321 8973
Website: www.safetyline.wa.gov.au

New Zealand

The Energy Safety Service of the Ministry Of Economic Development is the Electrical Safety Regulator in New Zealand.

Energy Safety Service
33 Bowen Street
Wellington
New Zealand

Postal Address: PO Box 1473
Wellington,
New Zealand.
Telephone: + 64 4 472 0030
Facsimile: + 64 4 460 1365
Website: www.ess.govt.nz