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| <b>Title</b> | <b>Fault-find, repair, and re-commission electric lighting</b> |                |          |
| <b>Level</b> | <b>3</b>   | <b>Credits</b> | <b>4</b> |

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| <b>Purpose</b> | <p>This unit standard covers the repair of electric lighting and is intended for people who wish to qualify as electricians or electrical service technicians.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> <li>– fault-find electric lighting;</li> <li>– repair electric lighting; and</li> <li>– re-commission electric lighting.</li> </ul> |
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| <b>Classification</b> | Electrical Engineering > Electrical Installation and Maintenance |
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| <b>Available grade</b> | Achieved |
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### Guidance Information

- 1 This unit standard has been developed for learning and assessment on-job.
- 2 Achievement of this unit standard does not by itself imply that trainees may legally perform prescribed electrical work in their own right. Until they are registered and licensed under the Electricity Act 1992, trainees are assisting, and must work under the supervision of a Supervisor of Electrical Work when carrying out prescribed electrical work. If the prescribed electrical work in question is carried out for reward the Supervisor of Electrical Work must hold a valid practising licence.
- 3 References  
 Electricity Act 1992;  
 Electricity (Safety) Regulations 2010;  
 Health and Safety at Work Act 2015;  
 AS/NZS 3000:2018, *Electrical installations (known as the Australian/New Zealand Wiring Rules)*, including Amendment 1;  
 AS/NZS 3760:2010, *In-service safety inspection and testing of electrical equipment*, including Amendment 1;  
 and all subsequent amendments and replacements.
- 4 Definitions  
 The term *current regulations and standards* is used in this unit standard to refer to the requirements of the above references.  
 The term *safe and sound practice* relating to the installation of electrical equipment is defined in AS/NZS 3000:2018.

**5 Range**

- a Demonstration of *safe working practices* and installation in accordance with *safe and sound practice* are essential components of assessment of this unit standard. Additional care should be taken when working with lights that operate at high voltage or contain capacitors.
- b Types of lighting – incandescent, halogen, fluorescent, sodium vapour, mercury vapour, metal halide, neon; evidence is required for three different types with genuine faults.

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**Outcomes and performance criteria****Outcome 1**

Fault-find electric lighting.

**Performance criteria**

- 1.1 Fault-finding demonstrates electrical safe working practices.
- 1.2 Fault-finding demonstrates a logical technique of analysing symptoms and making measurements where necessary, to locate the fault and identify faulty components.
- 1.3 Assessment of viability of repair takes into account component availability, cost and time of repair, cost of replacement, and supervisor or customer instructions.

**Outcome 2**

Repair electric lighting.

**Performance criteria**

- 2.1 Workmanship and replacement materials comply with current regulations and standards, and where light fittings have been repaired, the repair includes safety testing as required by current regulations and standards.

**Outcome 3**

Re-commission electric lighting.

**Performance criteria**

- 3.1 Re-commissioning complies with manufacturer's instructions.
- 3.2 Re-commissioning leaves lighting as close as possible to its original condition taking account of its age.
- 3.3 Testing confirms that all requirements of current regulations and standards have been met, and that cabling and fittings are safe to reconnect to the mains.
- 3.4 Re-commissioning is documented according to company requirements.

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| <b>Replacement information</b> | This unit standard replaced unit standard 5915 and unit standard 5916. |
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**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

#### Status information and last date for assessment for superseded versions

| Process               | Version | Date            | Last Date for Assessment |
|-----------------------|---------|-----------------|--------------------------|
| Registration          | 1       | 28 June 1999    | 31 December 2013         |
| Revision              | 2       | 3 April 2001    | 31 December 2013         |
| Review                | 3       | 26 May 2005     | 31 December 2027         |
| Rollover and Revision | 4       | 15 March 2012   | 31 December 2027         |
| Revision              | 5       | 15 January 2014 | 31 December 2027         |
| Rollover and Revision | 6       | 28 January 2021 | 31 December 2027         |
| Review                | 7       | 25 May 2023     | 31 December 2027         |

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| <b>Consent and Moderation Requirements (CMR) reference</b> | 0003 |
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.