

Title	Test and maintain gas appliance control and safety devices		
Level	4	Credits	5

Purpose	<p>This unit standard is for people who work in the gasfitting industry.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – identify and test control and safety devices in gas appliances; and – maintain control and safety devices in gas appliances.
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Classification	Plumbing, Gasfitting and Drainlaying > Gasfitting
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Available grade	Achieved
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Guidance Information

1 References

Building Act 2004;

Electricity Act 1992;

Gas Act 1992;

Gas (Safety and Measurement) Regulations 2010;

Health and Safety at Work Act 2015;

Plumbers, Gasfitters, and Drainlayers Act 2006;

Plumbers, Gasfitters, and Drainlayers Regulations 2010;

The following standard, which is available at available at

<http://www.standards.govt.nz>:

AS/NZS5601.1:2013 *Gas installation*;

The following clause, and any related compliance documents, which are available at

<https://www.building.govt.nz/>:

New Zealand Building Code Clause G11 Gas as an Energy Source;

and all subsequent amendments and replacements.

2 Range

Ignition devices – piezo, manual spark, automatic spark, hot surface, flash tube;

pressure control devices – pressure regulators, relief valves, over pressure protection device, under pressure protection device;

Flame failure devices – thermoelectric, flame rectification, photocell detection;

thermostats – rod and tube, bi-metal switch, liquid expansion, thermistor;

Other control devices including but not limited to – vitiation cutoffs, tip-over switches, pressure switches, solenoids, overheat protection devices, new and emerging technologies where relevant.

- 3 Credit for this unit standard does not entitle the candidate to legally perform certain aspects of this work unless registered or supervised by a registered person under the provisions of the Electricity Act 1992.
- 4 This unit standard requires the application of theory as included in the Plumbers, Gasfitters, and Drainlayers Regulations 2010.
- 5 Definitions
Maintain may refer to all or any of – repair, upgrade, alter, remove, replace.
Other services refers to any existing installed services.
- 6 All practical activities are to be carried out in a way that avoids harm to people and damage to property, other services, materials, tools, and equipment.

Outcomes and performance criteria

Outcome 1

Identify and test control and safety devices in gas appliances.

Performance criteria

- 1.1 Identify control and safety devices in terms of their type and functions.
- 1.2 Test control and safety devices to determine their serviceability in accordance with the type of device.

Range two each of – ignition, flame fail, temperature control;
 one each of – pressure regulation, multi-function control valve,
 protection;
 two further control and safety devices.

Outcome 2

Maintain control and safety devices in gas appliances.

Range at least one device from each of – ignition, flame fail, pressure regulation, multi-function control valve, protection, temperature control.

Performance criteria

- 2.1 Assess control and safety devices to identify correct operation in accordance with maintenance requirements.
- 2.2 Identify faults in terms of the nature of the fault and possible means of rectification.
- 2.3 Rectify faults in accordance with manufacturer instructions and maintenance requirements.

- 2.4 Re-commission and retest control and safety devices in accordance with manufacturer instructions, maintenance requirements, and relevant standards and codes.

Replacement information	This unit standard and unit standard 30705 replaced unit standard 21899.
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Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	23 November 2017	N/A

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

Comments on this unit standard

Please contact The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.