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

Purpose	This unit standard is for people who work in the gasfitting industry. People credited with this unit standard are able to: – identify and test control and safety devices in gas appliances; and – maintain control and safety devices in gas appliances.

Classification	Plumbing, Gasfitting and Drainlaying > Gasfitting

Available grade	Achieved

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.

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	23 November 2017	31 December 2028
Review	2	25 July 2024	31 December 2028

Consent and Moderation Requirements (CMR) reference	0003

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.