

Title	Demonstrate knowledge of the gasfitting of LPG cylinder systems for gas installations in mobile applications		
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 the components of LPG cylinder supply systems for gas installations in mobile applications; – demonstrate knowledge of the installation of LPG cylinder supply systems for gas installations in mobile applications; – demonstrate knowledge of the commissioning of LPG cylinder supply systems for gas installations in mobile applications; and – demonstrate knowledge of regulatory requirements applicable to the gasfitting of LPG cylinder systems for gas installations in mobile applications.
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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

Gas Act 1992;

Gas (Safety and Measurement) Regulations 2010;

Hazardous Substances (Compressed Gases) Regulations 2004;

Health and Safety at Work Act 2015;

The following standards, which are available at <http://www.standards.govt.nz>:

AS/NZS 1596:2014, *The storage and handling of LP Gas*,

NZS 5601.1:2013 *Gas installation*,

NZS 5601.2:2013 *Gas installations - Part 2: LP Gas installations in caravans and boats for non-propulsive purposes*;

The following codes of practice, which are available at <http://www.gasnz.org.nz/lpg-association-of-new-zealand/lpga/codes-of-practice>:

LPG Association Code of Practice No. 2 *Installation and maintenance of twin 45kg LPG cylinder systems*,

LPG Association Code of Practice No. 5 *Installation and maintenance of LPG multi-cylinder systems*;

and all subsequent amendments and replacements.

Where there is content in codes and standards that applies to both mobile and fixed LPG cylinder systems, assessment against this standard is to focus on the unique attributes of mobile installations.

- 2 Range
LPG cylinder supply systems may include any combination of – single cylinder, multiple cylinder, auto-changeover regulator.
- 3 Definitions
LPG cylinder systems – cylinders and associated fittings including pigtails, regulators, manifolds, condensate trap/drain, and where necessary system pipework.
Mobile applications – installations of LPG for non propulsive purposes in boats, caravans, food trucks, floating restaurants, motorhomes, motor caravans, catering things. Demonstration of only one is required.
- 4 Recommended skills and knowledge for the unit standard: Unit 30720, *Demonstrate knowledge of the gasfitting of LPG cylinder systems for gas installations in buildings*; and Unit 30721, *Install LPG cylinder systems for gas installations in buildings*.

Outcomes and performance criteria

Outcome 1

Identify the components of LPG cylinder supply systems for gas installations in mobile applications.

Performance criteria

- 1.1 Identify systems that serve different applications.
- 1.2 Identify the components of LPG cylinder systems and their functions.

Range may include but is not limited to – LPG cylinders, changeover regulators, excess flow valves, flexible hoses, single and two stage regulation, condensate trap, cylinder connections relief valves, relief pipes, vibration and support.

Outcome 2

Demonstrate knowledge of the installation of LPG cylinder supply systems for gas installations in mobile applications.

Performance criteria

- 2.1 Calculate capacities of systems in accordance with maximum appliance load.
- 2.2 Establish appropriate location of systems in accordance with relevant standards and codes.
- 2.3 Explain installation of systems in accordance with relevant standards and codes.

- 2.4 Explain the requirements for securing and physical protection of installed systems.
- 2.5 Explain the requirements for gas detection and ventilation.
- 2.6 Explain special considerations relating to the process of leakage testing and purging of mobile installations.
- 2.7 Describe the installation of pipework in mobile installations.
Range permitted materials, vibration, penetrations.
- 2.8 Describe installation of appliances in mobile applications.
Range vibration, securing.
- 2.9 Explain requirements for fluing and ventilation in mobile applications.

Outcome 3

Demonstrate knowledge of the commissioning of LPG cylinder supply systems for gas installations in mobile applications.

Performance criteria

- 3.1 Explain commissioning of systems in accordance with relevant standards and codes.
Range must include but is not limited to – checking and adjusting supply regulator working pressures.
- 3.2 Describe documentation to be completed in accordance with relevant standards and codes.
Range may include but is not limited to – gas certificates, guarantees, checklists, site certification.
- 3.3 Explain the consumer instruction process to be followed on completion of installation and commissioning.

Outcome 4

Demonstrate knowledge of regulatory requirements applicable to the gasfitting of LPG cylinder systems for gas installations in mobile applications.

Performance criteria

- 4.1 Describe legislation, standards, and codes in terms of their application to the gasfitting of LPG cylinder systems for gas installations in mobile applications.

Replacement information	This unit standard, unit standard 30720, unit standard 30721, and unit standard 30723 replaced unit standard 21897.
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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.