

<b>Title</b>	<b>Demonstrate knowledge of automotive spray guns, spraying and spray gun defects, and spray gun maintenance</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>2</b>

<b>Purpose</b>	People credited with this unit standard are able to demonstrate knowledge of: automotive spray guns; spraying and spray gun defects, and spray gun maintenance.
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<b>Classification</b>	Motor Industry > Automotive Refinishing
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation and references  
Performance of the outcome of this unit standard must comply with the following:  
Health and Safety at Work Act 2015.
- 2 Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.
- 3 Definitions  
*Company requirements* refer to instructions to staff on policy and procedures that are available in the workplace. These requirements may include – company policies and procedures, work instructions, product quality specifications and legislative requirements.  
*Service information* may include – technical information for a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions; technical terms and descriptions; and detailed illustrations.
- 4 Range  
Types of spray gun include – gravity, suction, pressure, high volume-low pressure, low volume-low pressure.
- 5 Assessment  
Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable manufacturers specifications, service information, company requirements and legislative requirements.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of automotive spray guns.

Range includes but not limited to – gravity fed, suction fed, pressure fed.

#### Performance criteria

1.1 Purpose and features of each type of spray gun is described.

1.2 How each spray gun works is described.

1.3 Operator's instructions are identified to establish the manufacturer's specifications for use.

Range air adjustment, fluid adjustment, air pressure adjustment, gun set up.

1.4 Spray gun setups for types of paint are described.

Range lacquer, enamel, basecoats, two pack paint, pearl, undercoat, fillers, sealers, waterborne paints; evidence of six required.

1.5 Spray gun parts are identified.

Range air cap, fluid tip, fluid needle, fluid packing and nut, seals, fan adjustment components, air valve components, air adjustment, fluid adjustment, air intake, air pressure gauge.

### Outcome 2

Demonstrate knowledge of spraying and spray gun defects, and spray gun maintenance.

#### Performance criteria

2.1 Methods of rectifying spray gun defects are described in accordance with spray gun manufacturer's recommendations.

Range fluid leakage, air leakage, top heavy and bottom heavy pattern, heavy left and right side patterns, heavy centre pattern, split spray pattern, paint starvation, air starvation, fluttery spray pattern.

2.2 Operator defects and their causes are identified.

Range dryspray, banding, heavy orange peel, runs, blisters, pinholes, uneven coating, dirt.

- 2.3 Procedures for cleaning, maintaining and lubricating a spray gun are described in accordance with spray gun manufacturer recommendations.

Range brushes, solvents compatible with the paint being used, cloths, compressed air supply, lubricants, spray gun cleaning machine, tools.

<b>Replacement information</b>	This unit standard and unit standard 24009 replaced unit standard 5712 and unit standard 5715.
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<b>Planned review date</b>	31 December 2027
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 November 2007	31 December 2018
Review	2	21 April 2016	31 December 2023
Review	3	10 December 2020	31 December 2027
Review	4	25 May 2023	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0014
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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 Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council [qualifications@hangaarorau.nz](mailto:qualifications@hangaarorau.nz) if you wish to suggest changes to the content of this unit standard.