

Title	Demonstrate knowledge of workshop and paint curing equipment in the automotive refinishing industry		
Level	3	Credits	3

Purpose	This theory-based unit standard is for people who wish to enter or are employed in the automotive refinishing industry. People credited with this unit standard are able to demonstrate knowledge of workshop equipment and paint curing equipment in an automotive refinishing workshop.
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Classification	Motor Industry > Automotive Refinishing
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Available grade	Achieved
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Guidance Information

- 1 Legislation and references
Performance of the outcome of this unit standard must comply with the following:
Hazardous Substances and New Organisms Act 1996;
Health and Safety at Work Act 2015;
Spray Coating Regulations 1962.
- 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 which are documented in memo or manual format and are available in the workplace. These requirements include but are not limited to – company specifications and procedures, work instructions, manufacturer specifications, product quality specifications and legislative requirements.
Service information may include but is not limited to – technical information of a vehicle, machine, or product detailing operation; installation and servicing procedures; manufacturer instructions and specifications; technical terms and descriptions; and detailed illustrations. This may be accessed from the manufacturer.
- 4 Assessment
Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable manufacturer's specifications, service information, company and legislative requirements.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of workshop equipment in an automotive refinishing workshop.

Performance criteria

1.1 Purpose and the uses of equipment are identified.

Range may include but is not limited to – compressors, spray booths, dust extraction systems, oil lubricating systems, air cleaning systems, air dryers, air line system.
evidence of six is required.

1.2 Workshop equipment operation is described.

Range may include but is not limited to – compressors, spray booths, preparation booths, aqua-dry units for waterborne paints, dust extraction systems both on and off the machine, air line and air cleaning systems, gun wash machines for solvent and waterborne paints, air dryers, air line system, floor jack, dustless dry sanding system.
evidence of ten is required.

1.3 Causes of air pressure drop between the compressor and air outlet are identified.

1.4 The reasons for following equipment manufacturer's instructions and/or specifications are described.

Outcome 2

Demonstrate knowledge of paint curing equipment in an automotive refinishing workshop.

Performance criteria

2.1 Paint curing equipment is identified.

Range may include but is not limited to – infra-red, gas, ultra-violet (UV) cure, bake oven, heat lamps, air movers.
evidence of four is required.

2.2 The way that infra-red and UV curing equipment operates is described.

Range may include but is not limited to – medium wave, short wave, long wave, bank, arch, single, UV.
evidence of four is required.

2.3 The way that bake ovens operate is described.

Range may include but is not limited to – gas, diesel, oven controls, direct and indirect heating, speed of baking process, heat exchanger. evidence of five required.

2.4 Temperature ranges, flash-off, and drying times for different paint types and equipment are identified.

Range equipment includes but is not limited to – bake oven, infra-red, UV, gas infra-red.
paint includes but is not limited to – two pack paints, single pack paints, UV paints, waterborne materials, effect of additives.

2.5 The effect of heat on vehicle plastics, alternative fuel and/or power systems, supplementary restraint systems, and on-board computers are identified.

Replacement information	This unit standard and unit standard 24011 replaced unit standard 5713 and unit standard 5714.
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Planned review date	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 2018
Revision	3	19 January 2017	31 December 2027
Review	4	25 May 2023	N/A

Consent and Moderation Requirements (CMR) reference	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 if you wish to suggest changes to the content of this unit standard.