

Title	Repair and replace a damaged non-structural aluminium panel on a motor vehicle		
Level	4	Credits	6

Purpose	This unit standard is for people who work in the automotive body industry. People credited with this unit standard are able to: repair a damaged non-structural aluminium panel; prepare to replace a damaged non-structural aluminium panel; and replace a non-structural aluminium panel.
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Classification	Motor Industry > Collision Repair
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Available grade	Achieved
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Guidance Information

- 1 Legislation and references
Performance of the outcomes of this unit standard must comply with the following:
Health and Safety at Work Act 2015;
Land Transport Rule: Vehicle Repair 1998.
- 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.

Land Transport Rules are available online at <https://www.nzta.govt.nz/>.
- 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 – vehicle structural repairer code of practice, 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.
Suitable tools and equipment means industry approved tools and equipment that are recognised within the industry as being the most suited to complete the task in a professional and competent manner with due regard to safe working practices.

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 (this includes the knowledge and/or use of suitable tools and equipment).

Evidence of 3 aluminium panels is required.

5 Recommended skills and knowledge

Unit 23996, *Demonstrate knowledge of repairing and replacing damaged non-structural motor vehicle aluminium panels*, or demonstrate equivalent knowledge and skills.

Outcomes and performance criteria

Outcome 1

Repair a damaged non-structural aluminium panel.

Performance criteria

- 1.1 Damage is assessed, and stretching and tearing are noted, to enable panel to be returned to its original shape.
- 1.2 Suitable tools and equipment that enable the panel to be returned to its original shape are selected and used.
 - Range may include but is not limited to – hammers, mallet, dollies, body file, spoons, slappers, dual action (DA) sander, orbital sander, welding plant.
- 1.3 Damaged parts, fittings, protective coatings, sound deadener pads, or sealers are removed to enable the repair to be carried out.
- 1.4 Undamaged parts, trim, and fittings that may get damaged or interfere with carrying out the repair are protected and/or removed and stored without damage.
 - Range may include but is not limited to – door trims and fittings, lights, mouldings, guard liners, interior trim, handles, locks, wheels, bumpers, tow bars, glass.
- 1.5 Panel is returned to the original shape and blends into the surrounding undamaged area with no irregularities.
- 1.6 Tears in the metal are welded.
- 1.7 Adjacent panels or fittings are checked to ensure that there is no damage.
- 1.8 Undamaged parts that have been removed are refitted.

- 1.9 Protective coatings, sound deadener pads or sealers are replaced, and anti-corrosion procedures are carried out.

Outcome 2

Prepare to replace a damaged non-structural aluminium panel.

Performance criteria

- 2.1 Damage is assessed, and repair procedure is identified, to enable the panel to be replaced.
- Range sight, feel, filing, related damage, measurement.
- 2.2 Suitable tools and equipment to enable repair of related damage and replacement of the panel are selected.
- Range may include but is not limited to – hammers, mallet, dollies, body file, spoons, slappers, sockets, spanners, screwdrivers; welding plant, disk sander, DA sander, orbital sander, body jack.
- 2.3 Damaged parts, fittings, protective coatings, sound deadener pads or sealers are removed to enable the panel to be replaced.
- 2.4 Parts, trim, and fittings that may get damaged or interfere with carrying out the repair are protected and/or removed without damage.
- 2.5 Electronic systems are identified and protected.
- 2.6 Replacement panel is procured.

Outcome 3

Replace a non-structural aluminium panel.

Performance criteria

- 3.1 Method of attachment is identified, and damaged panel is removed, without damage to adjacent areas or fittings, and disposed of.
- 3.2 Related damage is repaired.
- 3.3 Surface that the replacement panel is to be attached to, and the replacement panel, are checked for irregularities and cleaned.
- 3.4 Priming and/or sealing is carried out.
- 3.5 Panel is aligned and attached.
- 3.6 Body measurements are checked to ensure that these are in accordance with vehicle manufacturer's specifications.

- 3.7 Adjacent panels, glass, trim, fittings, or vehicle electronics are checked to ensure that there is no damage.
- 3.8 Parts that were removed are test fitted, aligned, and operate correctly.
- 3.9 Protective coatings, sound deadener pads or sealers are replaced, and anti-corrosion procedures are carried out.

Replacement information	This unit standard and unit standard 23996 replaced unit standard 5780.
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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	8 December 2016	31 December 2027
Review	3	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.