

Title	Remove, refit, and test electrical and electronic components for automotive reglazing		
Level	3	Credits	5

Purpose	<p>A person credited with this standard can:</p> <ul style="list-style-type: none"> • remove automotive electrical and electronic components to prepare for reglazing; • refit and test components following automotive reglazing; and • clean, store, and maintain equipment used to remove, refit, and test vehicle components.
----------------	--

Classification	Glass and Glazing > Automotive Reglazing
-----------------------	--

Available grade	Achieved
------------------------	----------

Guidance Information

1 Assessment

This unit standard must be assessed under the supervision of a commercially competent practitioner in workplace conditions that reflect:

- current health, safety, industry, and workplace requirements; and
- industry requirements for commercially acceptable timeframes.

Evidence generated for assessment against this standard must be verified by a person who has current expertise in the automotive glazing trades and has had the opportunity to regularly observe the candidate in the workplace carry out removal, refitting, and testing of automotive electrical and electronic components during reglazing.

Range must include a minimum of three different components and may include – demister, aerial, rain sensor, light sensor, forward facing camera, central locking, heated front windscreen components, electric window components, door lock components; must include two Advanced Driver Assistance Systems (ADAS) adaptive, automated, monitoring, and warning.

2 Definitions

Electrical component – is a powered component that does not possess a micro-chip, e.g. demister, aerial, heated front windscreen, electric window motors.

Electronic component – is a powered component that contains a micro-chip or processor, e.g. Advanced Driver Assistance Systems (ADAS), rain sensor module, central locking and electric window switch packs.

Personal protective equipment – refers to anything used or worn by a person (including clothing) to minimise risks to the person's health and safety; air-supplied respiratory equipment.

Worksite requirements – refer to procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, safety procedures and guidelines, equipment operating procedures, codes of practice, quality management practices and standards, procedures to comply with legislative and local body requirements.

- 3 Removal, refit, and testing must be completed without injury to personnel or damage to products and equipment. Personal protective equipment must be used to meet regulatory and worksite requirements.
- 4 Evidence generated for assessment against this standard must reflect workplace and industry requirements specified in:
 - *Land Transport Rule: Vehicle Repair 1998* – Rule 34001/1998.
 - statutory and regulatory requirements applicable to the automotive reglazing industry.
 - documented worksite specifications, procedures, and practices.
 - manufacturer recommendations, specifications, and technical data sheets.
 - applicable material safety data sheets.
- 5 Reference
Land Transport Safety Authority of New Zealand, *Land Transport Rule Vehicle Repair 1998*: Rule 34001, available at <https://www.nzta.govt.nz/resources/rules/vehicle-repair-1998/>.

Outcomes and performance criteria

Outcome 1

Remove automotive electrical and electronic components to prepare for reglazing.

Performance criteria

- 1.1 Determine which components should be removed to prepare for reglazing.
- 1.2 Prepare the vehicle for removal of components.
 - Range must include – pre-scan of ADAS components to determine no faults are present.
- 1.3 Select and prepare required personal protective equipment, materials, and equipment to meet health and safety requirements.
- 1.4 Select and prepare materials and equipment required for component removal.
- 1.5 Check the operation of the components that will be removed against the vehicle specifications, report and record any defects.

- 1.6 Remove and store electrical and electronic components to prevent them being damaged.

Outcome 2

Refit and test components following automotive reglazing.

Performance criteria

- 2.1 Check the component for obvious damage, missing parts, and meet vehicle specifications against worksite requirements, report and record any non-conformance.
- 2.2 Refit electrical and electronic components to meet the job specification.
- 2.3 Calibrate components to meet vehicle manufacturers specification, and workplace requirements.
- Range must include either – calibration in-house or arrange calibration by vehicle dealership.
- 2.4 Test the components through their full range of operation, identify and report non-conforming components.
- 2.5 Replace and recalibrate components.
- 2.6 Provide warranty and safety information to the vehicle owner.

Outcome 3

Clean, store, and maintain equipment used to remove, refit, and test vehicle components.

Performance criteria

- 3.1 Identify and store re-useable materials.
- 3.2 Remove and dispose of waste materials.
- 3.3 Clear, clean, and inspect the work area.
- 3.4 Undertake equipment maintenance procedures.
- Range equipment includes – tools, electronic component diagnostic tools and software.

3.5 Clean and store tools, plant, and equipment used to remove, refit, and test vehicle components.

Range plant includes – any machinery, vehicle, vessel, aircraft, equipment (including personal protective equipment), appliance, container, implement, or tool; any component of any of those things; anything fitted or connected to any of those things; personal protective equipment includes – anything used or worn by a person (including clothing) to minimise risks to the person's health and safety; air-supplied respiratory equipment.

Planned review date	31 December 2026
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	20 April 2006	31 December 2013
Review	2	20 November 2009	31 December 2017
Review	3	18 June 2015	31 December 2024
Review	4	24 February 2022	N/A
Revision	5	25 August 2022	N/A

Consent and Moderation Requirements (CMR) reference	0073
--	------

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

Comments on this unit standard

Please contact the 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.