
**AUTOMOTIVE ELECTRICAL AND
ELECTRONICS**
**Describe removal and installation of
body components in terms of electronic
integrity of vehicles**

level:	5
credit:	2
final date for comment:	December 2008
expiry date:	December 2009
sub-field:	Motor Industry
purpose:	People credited with this unit standard are able to demonstrate knowledge of electronic integration with vehicle body components, and the removal and installation of body components in terms of electronic integrity of vehicles.
entry information:	Recommended: Unit 3877, <i>Demonstrate knowledge of protecting vehicle electronics in the motor industry</i> , or demonstrate equivalent knowledge and skills.
accreditation option:	Evaluation of documentation and visit by NZQA and industry.
moderation option:	A centrally established and directed national moderation system has been set up by the NZ Motor Industry Training Organisation.
special notes:	<ol style="list-style-type: none">1 The following legislation must be consulted and followed where applicable: Consumer Guarantees Act 1993; Fair Trading Act 1986.2 To describe the effects of removing and replacing body components on vehicle's electronic integrity, evidence of performance may be provided by completing research into current vehicle body systems and/or electronic components to agreed authentication arrangements.

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Elements and Performance Criteria

element 1

Demonstrate knowledge of electronic integration with vehicle body components.

performance criteria

- 1.1 Electronic system functionality incorporated in body components is described according to the manufacturers' descriptions.
- Range: includes but is not limited to
seats – adjustment, heating;
doors – remote control, keyless entry;
dash and driver console assemblies – entertainment system,
cruise control, instruments, warning systems, in-vehicle
navigation, climate control; mobile phone, information system;
security system; electric windows and sunroof; lighting.
- 1.2 Integration of air bag and electronically sensed seat belt retention systems used in body components is described according to the manufacturers' specifications.
- Range: may include but is not limited to – steering wheel, dash, doors,
pillars, bumpers and/or front panels, side panels.
- 1.3 The use of electronic antennas encapsulated in windscreens and backlights is explained according to the manufacturers' specifications.
- 1.4 Faults that can occur when removing and/or replacing body components attached to electronic components are explained according to the manufacturers' manual explanations.
- Range: faults include but are not limited to – information and/or memory
loss, system malfunction, component damage, wiring and/or
connector damage.

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element 2

Demonstrate knowledge of the removal and installation of body components in terms of electronic integrity of vehicles.

performance criteria

- 2.1 The importance of retaining system memory before body components are removed is explained according to the vehicle manufacturers' instructions.
- 2.2 The use of current conductive adhesives is explained according to the manufacturers' specifications.
- 2.3 Procedures to remove and store electronic components that have been removed from body components are described according to the vehicle manufacturers' specifications.
- 2.4 Requirements to reinstall, connect, and test electronic components and/or circuitry during and/or after body component replacement are identified according to the vehicle manufacturers' instructions.

Comments on this unit standard

Please contact the NZ Motor Industry Training Organisation jlane@mito.org.nz if you wish to suggest changes to the content of this unit standard.

Please Note

Providers must be accredited by the Qualifications Authority or a delegated inter-institutional body before they can register credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be accredited by the Qualifications Authority before they can register credits from assessment against unit standards.

Accredited providers and Industry Training Organisations assessing against unit standards must engage with the moderation system that applies to those standards.

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Accreditation requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for providers wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

This unit standard is covered by AMAP 0014 which can be accessed at <http://www.nzqa.govt.nz/site/framework/search.html>.