

<b>Title</b>	<b>Identify and prevent corrosion in the motor industry</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	This unit standard is for people who work in the motor industry. Those credited with this unit standard are able to: demonstrate knowledge of corrosion; demonstrate knowledge of anti-corrosion procedures taken to protect vehicle bodies during and after manufacture; and carry out anti-corrosion procedures.
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<b>Classification</b>	Motor Industry > Vehicle Bodywork
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<b>Available grade</b>	Achieved
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**Explanatory notes**

- 1 The following legislation and regulations (and subsequent amendments) are relevant to this unit standard and must be followed where applicable:  
 Health and Safety in Employment Act, 1992;  
 Transport (Vehicle Standards) Regulations, 1990 and Guide to Vehicle Standards (MOT Guides 1 and 2), (available from Standards New Zealand, telephone 04 498 5991);  
 Ozone Layer Protection Act, 1996.
- 2 When the evidence requirements state 'company guidelines', it is assumed that it is to the same standard as the product and vehicle manufacturers' standards.

**Outcomes and evidence requirements**

**Outcome 1**

Demonstrate knowledge of corrosion.

**Evidence requirements**

- 1.1 Types of corrosion affecting vehicle bodies are identified.  
 Range pitting, galvanic, scale, electrolytic, corrosion fatigue.
- 1.2 Causes of corrosion on vehicle bodies are identified.  
 Range vehicle body design, salt air and water corrosion, environmental, incorrect anti-corrosion procedures during manufacture, incorrect repair procedures after manufacture, use of incompatible metals.

1.3 The effects and appearance of corrosion on metal used on vehicle bodies are identified.

Range ferrous and non-ferrous metals.

## Outcome 2

Demonstrate knowledge of anti-corrosion procedures taken to protect vehicle bodies during manufacture.

### Evidence requirements

2.1 Anti-corrosion protection procedures are identified according to manufacturer's specifications.

Range cathodic, anionic, galvanising, anti-corrosion paints and compounds, cavity wax.

2.2 Principles of cathodic protection and its application are identified according to vehicle manufacturer's specifications.

2.3 Principles of anionic protection and its application are identified according to vehicle manufacturer's specifications.

2.4 Principles of galvanising are identified according to vehicle manufacturer's specifications.

2.5 Principles of anti-corrosion fluids and their application are identified according to manufacturer's specifications.

2.6 Principles of body compounds and sealers and their application are identified according to manufacturer's specifications.

Range underseal, sealers, anti-chip coatings.

## Outcome 3

Demonstrate knowledge of anti-corrosion procedures taken to protect vehicle bodies after manufacture.

### Evidence requirements

3.1 The materials used to protect vehicles from corrosion are identified according to manufacturer's specifications.

Range anti-corrosion fluids, underseal, anti-corrosion paints, metal conditioners.

3.2 The uses of protective primers, paint coatings, and sealers when repairing vehicle bodies are identified according to manufacturer's specifications.

3.3 The importance of applying anti-corrosion procedures during and after repair is identified according to vehicle and paint manufacturers' specifications.

Range avoid corrosion, reinstate manufacturer's warranty, job standard, prolong vehicle body life.

3.4 Vehicle manufacturer's warranties regarding vehicle corrosion are identified according to manufacturer's specifications.

#### **Outcome 4**

Carry out anti-corrosion procedures.

#### **Evidence requirements**

4.1 Tools and materials that will enable anti-corrosion procedures to be carried out are identified, and are used according to manufacturers' specifications and the acceptable industry standard.

Range may include but are not limited to – screwdrivers, spray gun and attachments, paint brush, drill, sealer, grommets, anti-corrosive fluid, underseal, weld through primer, metal conditioner, anti-corrosive primers.

4.2 Access to hidden panels is obtained so that materials can be applied according to vehicle and material manufacturers' specifications.

Range may include but are not limited to – interior trim, guard liners, body holes.

4.3 Anti-corrosion procedures during and after repair are carried out according to vehicle and material manufacturers' specifications.

4.4 Metal is treated during repair according to vehicle manufacturer's specifications.

Range may include but are not limited to – sealing, weld through primer, anti-corrosive fluid, underseal, metal conditioner, anti-corrosive primers.

4.5 Safe working practices are carried out throughout the task.

Range personal safety; safety of other people; vehicle safety; workshop safety; environmental safety; tool, equipment, and machine safety.

4.6 Work is completed to the acceptable industry standard and in an acceptable industry time.

<b>Replacement information</b>	This unit standard has been replaced by unit standard 23998, and unit standard 23999.
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**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	29 January 1996	31 December 2016
Review	2	20 December 1998	31 December 2016
Revision	3	16 October 2003	31 December 2016
Review	4	26 November 2007	31 December 2020
Rollover	5	19 November 2010	31 December 2020
Rollover	6	22 August 2014	31 December 2020

<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>.

#### Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.