Title	Repair plastic components in the motor and related industries		
Level	4	Credits	4

Purpose	This unit standard is for people in the motor and related industries. People credited with this unit standard are able to: determine if repair or restoration of an automotive plastic component is possible or feasible, and make a recommendation; repair a damaged automotive plastic component and restore the shape of a distorted automotive plastic component.

Classification	Motor Industry > Automotive Plastic Repair

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

Entry information	
Recommended skills and knowledge	Unit 23741, Demonstrate knowledge of plastics and plastic composite repairs used in the motor and related industries.

#### Explanatory notes

- 1 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/use of suitable tools and equipment).
- 2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the current version of including updated amendments to, and replacements of – Health and Safety at Work Act 2015, Resource Management Act 1991.
- 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.

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 Range

Types of plastic materials may include but are not limited to – Acrylonitrile-butadinestyrene (ABS); Polyethylene (PE); Polypropylene (PP); Polyvinyl Chloride (PVC); Polyamide (PA); Polymethyl Methacrylate (PMMA); Thermoplastic Polyurethane (TPU); Urethane (U); Sheet Moulded Compound (SMC); Carbon Fibre; Polycarbonate (PC); Thermoplastic Polyolefin (TPO).

# **Outcomes and evidence requirements**

### Outcome 1

Determine if repair or restoration of an automotive plastic component is possible or feasible and make a recommendation.

### **Evidence requirements**

- 1.1 The plastic is identified and the feasibility of a repair is determined.
  - Range factors may include but are not limited to type of material; type and extent of repair required; manufacturer repair standards; cost of repair; availability and cost of a replacement.
- 1.2 A recommendation, based on the feasibility of repairing the plastic component, is presented to the customer or supervisor.

# Outcome 2

Repair a damaged automotive plastic component.

Range may include but is not limited to – plastic welding, bonding, sealing.

### **Evidence requirements**

- 2.1 Suitable tools, equipment, and materials are selected and used to enable the repair to be carried out.
- 2.2 The damaged part is prepared and repaired in accordance with the plastic repair instructions for the type of repair and material used, and without departing from any of the component's original design characteristics.
  - Range may include but is not limited to vehicle manufacturer instructions, repair material supplier instructions.
- 2.3 Arrangements are made for the repair to be painted.

# Outcome 3

Restore the shape of a distorted automotive plastic component.

# **Evidence requirements**

- 3.1 Suitable tools and equipment are selected and used to enable the restoration work to be carried out.
- 3.2 The component shape is permanently restored by heating, clamping, and cooling.
- 3.3 Disused plastic components and materials are disposed of.

Replacement information	This unit standard and unit standard 23741 replaced unit standard 876.

Planned review date	31 December 2022
---------------------	------------------

# Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 May 2007	31 December 2019
Review	2	16 February 2017	N/A

Consent and Moderation Requirements (CMR) reference

0014

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

# 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 (CMRs). 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.

# Comments on this unit standard

Please contact MITO New Zealand Incorporated <u>info@mito.org.nz</u> if you wish to suggest changes to the content of this unit standard.