



Australian Government

Department of Education, Employment and Workplace Relations

AUM4010A Repair plant, tooling, equipment or systems

Revision Number: 1

AUM4010A Repair plant, tooling, equipment or systems

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the required skills and knowledge to repair plant, tooling, equipment or systems required for the design, development and production of motor vehicles. No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.
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Application of the Unit

Application of the unit	The unit applies to the automotive and related component manufacturing environment and involves application of skills and knowledge to be used within the scope of the person's job and authority.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		
	Nil	Nil
	Nil	Nil

Employability Skills Information

Employability skills	This unit contains Employability Skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Identify faulty plant, tooling, equipment or systems	1.1. Applicable OHS and organisation requirements relevant to the repair of plant, tooling, equipment or systems are verified and complied with throughout the work activity 1.2. Instructions and plans are read and interpreted to identify processes and materials to complete work tasks 1.3. Reported defects and malfunctions or out-of-tolerance performance of plant, tooling, equipment or systems are investigated and potential faults identified 1.4. Parts, plant, tooling, equipment and systems are visually inspected and/or operated through specified test procedures to establish serviceability or to confirm defects in accordance with prescribed requirements 1.5. Faulty plant, tooling, equipment and systems are identified and the nature of the fault confirmed, reported and documented 1.6. An action plan/flow chart for the removal and/or repair and replacement of the faulty plant, tooling, equipment or system is developed in conjunction with the relevant production and maintenance staff
2. Remove faulty plant, tooling, equipment or systems	2.1. If necessary, the faulty plant, tooling, equipment or system is removed in accordance with the agreed action plan and organisational procedures 2.2. Where required, temporary replacement of the faulty plant, tooling equipment or system is made pending repair and/or permanent replacement 2.3. The faulty plant, tooling, equipment or system is transported to the repair area using appropriate materials handling equipment
3. Diagnose faults in plant, tooling, equipment or systems	3.1. Available information from maintenance records and test results is used, where necessary, to assist in fault determination 3.2. Available fault diagnosis guides are used, where appropriate, to assist in the determination of faults 3.3. Faults are located, causes identified and fault rectification requirements determined to assist in planning the repair 3.4. Specialist advice is obtained, where necessary, to

ELEMENT	PERFORMANCE CRITERIA
	assist with, or confirm, the fault rectification strategy
4. Repair faults in plant, tooling, equipment or systems	4.1. In accordance with the repair strategy, faulty plant, tooling and equipment or systems are dismantled 4.2. Component parts are assessed for wear and serviceability 4.3. Repair methodology is determined 4.4. Parts requiring specialist repair are tagged, and repair instructions are accurately specified and entered on a database in accordance with organisational procedures 4.5. Component parts are repaired, modified and/or replaced 4.6. Plant, tooling and equipment are assembled
5. Reinstall plant, tooling, equipment and systems	5.1. A plan for the re-installation of new or repaired plant, tooling, equipment or systems is developed in conjunction with the relevant production staff 5.2. New or repaired plant, tooling, equipment or system is re-installed 5.3. Installed new or repaired plant, tooling and equipment is visually checked to ensure it is correctly fitted
6. Calibrate, adjust and/or test plant, tooling, equipment or systems	6.1. Installed new or repaired plant, tooling and equipment is calibration verified, adjusted and/or tested through its operational cycle 6.2. Details of the repair, the results of re-commissioning tests and the confirmation of serviceability are documented

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the essential skills and knowledge and their level, required for this unit.

Required skills

- speak clearly and directly in order to communicate the condition of repaired items and systems
- apply teamwork to a range of situations, including the reinstallation of plant, tooling, equipment and systems
- solve problems particularly in teams in order to meet performance indicators
- show initiative in adapting to changing work conditions or contexts particularly when working across a variety of work areas
- access, interpret and apply information on relevant organisation policies, procedures and instructions, particularly to ensure adherence to OHS and organisation requirements
- manage time when planning, preparing and organising work priorities
- take responsibility for organising own work priorities.

Required knowledge

- relevant Occupational Health and Safety and Environmental legislation, regulations, standards and codes of practice and organisation policies and procedures needed to carry out work in a manner which ensures the safety of people, equipment and the environment.
- methods of preparing and/or calibrating equipment
- interpreting performance results
- operation of systems and components
- organisational supply/replenishment systems and processes for materials, equipment and tools
- types of tools and equipment and procedures for their safe use, operation and maintenance
- environmental protection requirements relating to the disposal of waste material
- established communication channels and protocols
- problem identification and resolution
- procedures for the recording, reporting and maintenance of organisation records and information.

Evidence Guide

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Evidence of the following is essential:

- compliance with relevant legislation, regulations, standards, codes of practice and established safe work practices and organisation policies and procedures for the repair of plant, tooling, equipment, product, or systems
- maintaining a working knowledge of current organisation inventory procedures
- working and communicating effectively and positively with others involved in the work
- applying, within authority, the requirements of the job or work role in relation to:
- repairing plant, tooling, equipment and/or systems effectively
- preparing reports of results
- achieving work quality goals
- completing work area housekeeping requirements including the documentation of project activity and process outcomes

Context of and specific resources for assessment

- assessment of the competency should take place in a safe working environment in a passenger motor vehicle manufacturing plant or simulated environment using tools/equipment/machinery required for the production process without undue disruption to the production process
- assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- assessment methods must confirm consistency and accuracy of performance (over time and in a range of organisation relevant contexts) together with application of underpinning knowledge

EVIDENCE GUIDE	
	• assessment methods must be by direct observation of tasks and include questioning on underpinning knowledge to ensure its correct interpretation and application • assessment may be applied under project related conditions (real or simulated) and require evidence of process • assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.

Range Statement

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

OHS requirements may include:

Legislation and regulations, organisational safety policies and procedures and may include: the use of personal protective equipment and clothing, rescue services, fire fighting organisation and equipment, first aid equipment, hazard and risk control and elimination, systems covering the use of hazardous materials and substances and manual handling procedures including lifting and carrying.

Organisation requirements may include:

- access and equity principles and practices
- environmental management (waste disposal, recycling and re-use guidelines)
- emergency and evacuation procedures
- equipment use procedures
- ethical standards
- legal obligations
- maintenance and storage procedures
- OHS requirements
- organisational and site guidelines
- policies and procedures relating to own role and responsibility
- procedural manuals
- quality assurance guidelines
- quality and continuous improvement processes and standards
- recording and reporting guidelines.

Instructions may include:

- organisation procedures relating to the use and operation of tools and equipment
- departmental requirements
- organisation instructions, including job sheets, plans, specifications, drawings and designs
- organisation procedures relating to reporting and communications
- manufacturers' instructions for the use of

RANGE STATEMENT

	equipment and materials.
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Unit Sector(s)

Unit sector	Automotive Manufacturing
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Competency field

Competency field	Passenger Motor Vehicle
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Co-requisite units

Co-requisite units		
	Nil	Nil
	Nil	Nil