



Australian Government

Department of Education, Employment and Workplace Relations

AUM4009A Maintain plant, tooling, equipment or systems

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit describes the application of the required skills and knowledge to maintain and service 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. Develop preventative and remedial maintenance plans for plant, tooling, equipment or systems	1.1. Applicable organisational requirements relevant to the maintenance of plant, tooling, equipment or systems are verified and complied with throughout the work activity 1.2. Instructions, plans and/or workplace check sheets are read and interpreted to identify processes and materials to complete work tasks 1.3. Plant/tooling/equipment or system to be maintained is identified 1.4. Preventative maintenance requirements are identified from manufacturer recommendations and an analysis of the operational performance and maintenance history of the actual, or similar, plant, tooling, equipment or systems is made 1.5. Preventative maintenance plans, schedules and procedures are developed, based on the analysis of preventative maintenance requirements 1.6. Documentation for periodic schedules of preventative maintenance are prepared 1.7. Remedial maintenance plans for emergency breakdown situations are developed in cooperation with production and engineering staff and submitted for the approval of appropriate personnel 1.8. Approved preventative and remedial maintenance plans are distributed to appropriate personnel
2. Control and coordinate maintenance operations	2.1. Relevant production and maintenance staff are made aware of approved preventative and remedial maintenance plans and are trained in the necessary procedures 2.2. Preventative and remedial maintenance operations are monitored against the approved plans and corrective action taken where procedures are not being correctly followed 2.3. Preventative and remedial maintenance plans and related documentation are reviewed periodically in conjunction with production and maintenance staff 2.4. Reports and summaries of maintenance operations are prepared
3. Conduct preventative maintenance procedures on plant,	3.1. Preventative maintenance is conducted in conjunction with production staff in accordance with prescribed preventative maintenance policies and

ELEMENT	PERFORMANCE CRITERIA
tooling, equipment or systems	procedures 3.2.Relevant parts of plant, tooling, equipment or systems are visually or physically checked for signs of deformation, wear, defects or damage 3.3.Relevant parts of plant, tooling, equipment or systems are functionally checked for correct performance 3.4.Identified requirements for adjustment, cleaning, repair, replacement, or modification of plant, tooling, equipment or systems are reported to appropriate personnel and action taken 3.5.Patterns of maintenance requirements of the plant, tooling, equipment or systems identified during the course of routine preventative maintenance are reported and, where appropriate, recommendations made to appropriate personnel of suggested changes to preventative maintenance schedules and/or procedures 3.6.Preventative maintenance activities and resultant action are documented
4. Monitor performance of plant, tooling, equipment and systems	4.1.Critical performance measures/observations of the operation of plant, tooling, equipment and/or systems are taken in conjunction with production staff and recorded 4.2.Recorded performance measures/observations are compared against allowable tolerance levels and out-of-tolerance measures/observations, then noted and reported for further investigation
5. Conduct adjustments to service of plant, tooling, equipment or systems	5.1.Checks and adjustments are made to plant, tooling, equipment and/or systems 5.2.Greasing, lubrication and other regular servicing of plant, tooling, equipment or systems is carried out to organisational or manufacturer requirements 5.3.Adjustments and/or servicing of plant, tooling, equipment or systems are documented
6. Document maintenance procedures and outcomes	6.1.Routine, emergency and preventative maintenance activities are documented 6.2.Performance measures, critical deviations from the norm and any follow-up action taken in respect of the operations of plant, tooling, equipment or systems are documented 6.3.Defects, worn parts and equipment or malfunctioning plant, tooling, equipment or system

ELEMENT	PERFORMANCE CRITERIA
	detected during the course of maintenance and service activities are reported and any necessary action initiated

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 tools and equipment
- apply teamwork to a range of situations, including the servicing of 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 tools and equipment are maintained to required levels of functionality
- 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.
- 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 practices and organisation policies and procedures for maintaining 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:
 - maintaining 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

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| | <ul style="list-style-type: none">• 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. |
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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.

Organisational 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.

Maintenance of plant, tooling, equipment or systems may include:

the preventative and remedial maintenance of plant or components thereof, tooling, equipment or systems, which are required in the design, development and production of motor vehicles.

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 equipment and materials.

Preventative maintenance may include:

the maintenance undertaken daily, weekly, monthly, annual or on other schedules, designed to provide regular systematic inspection and

RANGE STATEMENT

	servicing thereby facilitating reliable operation.
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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