



Australian Government

AUMATK010 Manufacture and modify vehicle plant, tools, equipment and systems

Release: 1

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Modification History

Release	Comment
Release 1	Unit updated to reflect the new standards for Training Packages Replaces AUMATK4010 Manufacture or modify plant, tooling, equipment or systems

Application

This unit describes the performance outcomes required to manufacture or modify plant, tools, equipment and systems used in the design, development and production of motor vehicles.

It applies to those in an automotive manufacturing environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Competency Field

Manufacturing - Common

Unit Sector

Technical - Tools and Equipment

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section
1. Plan the job	1.1 <i>Instructions</i> and plans are interpreted to identify required processes and materials 1.2 Requirements for the manufacture or modification are confirmed with engineering personnel 1.3 Fabrication and machining processes and instructions are determined and clarified with relevant personnel 1.4 Work plan, timelines and list of required resources are

Elements	Performance Criteria
	developed and communicated to relevant personnel
2. Produce parts for plant and equipment	2.1 Specifications for parts are used to determine dimensions and processes for manufacture or modification 2.2 Materials, tools, equipment and assembly or fabrication jigs or fixtures are selected and prepared to specification 2.3 Components or parts are manufactured or modified according to specifications and workplace procedures
3. Modify tools, jigs and fixtures	3.1 Specifications for modifications of tools, jigs or fixtures are used to determine the dimensions and processes 3.2 Materials, tools, equipment and assembly or fabrication jigs are selected and prepared 3.3 Modifications are conducted according to specifications and workplace procedures
4. Fabricate or modify plant and equipment	4.1 Specifications for manufactured or modified plant, tool, equipment or system are interpreted 4.2 Materials, parts, sub-assemblies, tools, equipment and assembly or fabrication jigs are selected and prepared 4.3 Plant, tools and equipment are fabricated, machined and assembled according to workplace procedures
5. Check and test parts	5.1 Test equipment and rigs are used to confirm serviceability of manufactured or modified plant, tools and equipment 5.2 Completed plant, tools and equipment are tagged, sealed or packaged, and dispatched to store or production area
6. Complete workplace documentation	6.1 Manufacturing details or modifications to the plant, tools and equipment are documented according to workplace procedures 6.2 Documentation is stored and distributed according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Skills	Description
Reading skills to:	- interpret manufacture or modification instructions, schedules, reports, manuals and plans - interpret repair procedures and specifications.

Writing skills to:	• document manufacture and modification plans • record and report manufacturing or modification outcomes • complete material lists and timetables.
Oral communication skills to:	• communicate ideas with team members • discuss plans and schedules with relevant personnel.
Numeracy skills to:	• interpret part specifications • determine schedule timelines and associated costs • calculate material requirements • use calibrating measuring tools and equipment.
Planning and organising skills to:	• manage time when planning, preparing and organising work priorities.

Range of Conditions

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Instructions</i> must include:	• job sheets and work plans • manufacturer instructions • reporting and communications • specifications and drawings • use and operation of tools and equipment • workplace instructions.
<i>Workplace procedures</i> must include:	• equipment use • quality standards • recording and reporting • work health and safety (WHS) requirements.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=bd587669-08b3-4cd5-85f0-f9fa0c6304c1>

Assessment Requirements for AUMATK010 Manufacture and modify vehicle plant, tools, equipment and systems

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Performance Evidence

Before competency can be determined, individuals must have competently manufactured or modified plant, tools, equipment and systems on a minimum of two occasions.

Individuals must demonstrate they can:

- discuss modifications with production and maintenance personnel
- manufacture or modify plant, tools, equipment or systems according to work health and safety (WHS) requirements and workplace procedures
- test manufactured or modified plant, tools, equipment and systems
- interpret performance results
- prepare reports of test results
- achieve work quality goals relating to the manufacture and modification of plant, tools, equipment and systems
- complete work area housekeeping.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- WHS requirements relevant to manufacturing or modifying plant, tools, equipment and systems
- methods of preparing, testing and calibrating equipment
- types of tools, equipment and procedures and their safe use, operation and maintenance
- techniques for identifying and resolving problems
- procedures for recording and reporting workplace records and information.

Assessment Conditions

Assessors must satisfy SNR/AQTF assessor requirements.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the plant, tools, equipment or systems they have manufactured and modified, e.g. work orders.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- automotive manufacturing workplace or simulated workplace
- tools and equipment to manufacture or modify plant, tools, equipment and systems
- plant, tools, equipment and systems requiring manufacture or modification
- workplace instructions, work plans and specifications
- WHS requirements when manufacturing and modifying tools and systems
- workplace procedures relating to manufacturing and modifying tools and systems.

Links

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