



**Australian Government**

# **AUMFTK001 Test automotive production components, equipment and systems**

**Release: 1**

# AUMFTK001 Test automotive production components, equipment and systems

## Modification History

| Release   | Comment                                                                                                                                                                 |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Release 1 | Unit updated to reflect the new standards for Training Packages<br>Replaces AUMFTK5001 Establish a test or trial for components of plant, tooling, equipment or systems |

## Application

This unit describes the performance outcomes required to design and establish a test of components, plant, tools, equipment, product and systems used in the production of motor vehicles.

It applies to those in an automotive manufacturing environment and involves the application of skills and knowledge at a specialist level.

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

## Competency Field

Manufacturing - Passenger Vehicle

## 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. Identify test objectives              | 1.1 Workplace procedures to test and trial components of plant, tools, equipment, product or systems are identified and verified<br>1.2 <b><i>Instructions</i></b> and work plans are interpreted to identify processes and materials to be used in testing |

| Elements                                   | Performance Criteria                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                            | 1.3 Materials and components to be tested are obtained<br>1.4 Test objectives are identified and confirmed with appropriate personnel                                                                                                                                                                                        |
| 2. Determine test methodology              | 2.1 Sequence and specified procedures for test are determined according to workplace procedures and manufacturer instructions<br>2.2 Test tools and equipment are identified and obtained according to job requirements<br>2.3 <b>Stakeholders</b> are identified and consulted and test is modified to incorporate feedback |
| 3. Identify and allocate resources to test | 3.1 Resources and appropriate personnel required to test material or component are identified and allocated<br>3.2 Test plan is prepared according to workplace procedures, and confirmed with relevant stakeholders                                                                                                         |
| 4. Monitor test                            | 4.1 Testing is monitored according to workplace procedures<br>4.2 Support is provided to personnel conducting the test<br>4.3 Modifications to test plan are proposed to stakeholders and accepted changes are implemented                                                                                                   |
| 5. Complete work processes                 | 5.1 Feedback from involved stakeholders is sought on test or trial and integrated into procedure documentation<br>5.2 Test procedures are documented and recorded according to workplace procedures<br>5.3 Test reports are distributed according to work plan and workplace procedures                                      |

## Foundation Skills

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

| Skills                        | Description                                                                                                                                                                 |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading skills to:            | <ul style="list-style-type: none"><li>interpret instructions, schedules, reports, operating manuals and work plans</li><li>review test results and documentation.</li></ul> |
| Writing skills to:            | <ul style="list-style-type: none"><li>develop and document test plans</li><li>complete test report.</li></ul>                                                               |
| Oral communication skills to: | <ul style="list-style-type: none"><li>allocate tasks to team members</li><li>communicate test results between team members</li></ul>                                        |

| Skills               | Description                                                                                                     |
|----------------------|-----------------------------------------------------------------------------------------------------------------|
|                      | <ul style="list-style-type: none"><li>• discuss work plans and schedules with relevant personnel.</li></ul>     |
| Numeracy skills to:  | <ul style="list-style-type: none"><li>• interpret test specifications</li><li>• analyse test results.</li></ul> |
| Teamwork skills to:  | <ul style="list-style-type: none"><li>• work with others to set up and conduct a test.</li></ul>                |
| Digital literacy to: | <ul style="list-style-type: none"><li>• use electronic tools and equipment.</li></ul>                           |

## 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.

|                                   |                                                                                                                                                                                                                                                                        |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Instructions</b> must include: | <ul style="list-style-type: none"><li>• manufacturer instructions for test components</li><li>• specifications and drawings</li><li>• test and trial requirements</li><li>• procedures for the operation of tools and equipment</li><li>• test instructions.</li></ul> |
| <b>Stakeholders</b> must include: | <ul style="list-style-type: none"><li>• design engineers</li><li>• resource and budget managers.</li></ul>                                                                                                                                                             |

## 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 AUMFTK001 Test automotive production components, equipment and systems

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## Performance Evidence

Before competency can be determined, individuals must have competently performed testing on a minimum of two occasions.

Individuals must demonstrate they can:

- test components of plant, tools, equipment, product or systems according to required workplace test and trial procedures
- complete test record work sheets
- communicate test results with co-workers
- establish and monitor tests or trials and review and report test results
- modify test activities to cater for variations in workplace.

## Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) requirements and workplace procedures to test components, plant, tools, equipment, product and systems
- industry standards and codes of practice relating to testing components, equipment and systems
- types and operation of common automotive production components, equipment and systems
- types and limitations of common testing techniques for automotive production components, equipment and systems
- procedures for testing automotive production components, equipment and systems
- processes for recording and reporting test outcomes
- test work sheets and records.

## 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 automotive production components, equipment and systems that they have tested, e.g. test work sheets.

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
- vehicle automotive production components, equipment and systems requiring testing
- test equipment required for the testing of automotive production components, equipment and systems
- test plan, instructions and procedures relating to tests of components, equipment and systems.

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