



Australian Government

AURTTA008 Produce patterns and templates

Release: 1

AURTTA008 Produce patterns and templates

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to produce patterns and templates for manufacturing parts or assisting the fitting of accessories. It involves preparing for the task, planning the process, plotting the dimensions and completing the pattern or template, and completing workplace processes and documentation.

It applies to those working in the automotive service and repair industry.

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

Competency Field

Mechanical Miscellaneous

Unit Sector

Technical

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 and italicised text is used, further information is detailed in the range of conditions section.

Elements Elements describe the essential outcomes.	Performance Criteria Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
1. Prepare for production of pattern or template	1.1 Job requirements are determined from workplace instructions 1.2 Size requirements are checked in relation to production process and finishing capacity of workplace 1.3 Type and quantity of patterns and templates to be produced are identified and materials are obtained 1.4 Hazards associated with the work are identified and risks are managed 1.5 Tools, equipment and materials are selected and checked for serviceability
2. Plan process	2.1 Material required for pattern or template is identified for approximate size and characteristics 2.2 Required instruments and equipment are identified, located and assembled 2.3 Drawings and related specifications are identified and interpreted 2.4 Procedures for using pattern development instruments and tooling are confirmed, and equipment and tooling are prepared for use
3. Plot dimensions	3.1 Equipment and tooling are used according to workplace procedures 3.2 Each dimension is measured, exploded and plotted, while maintaining angles, arcs and curves 3.3 Visual inspection and measurements are used to compare pattern dimensions and shapes with drawings and specifications
4. Complete pattern or template	4.1 Pattern or template is completed according to safety requirements and ensuring that it indicates completion date and original drawing details 4.2 Required workplace approval of pattern or template is obtained 4.3 Plans are marked with notations according to workplace procedures 4.4 Plans are copied and filed according to workplace procedures
5. Complete work processes	5.1 Final inspection is made to ensure work is to workplace expectations and pattern or template is presented ready for use 5.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected 5.3 Tools and equipment are checked and stored according to workplace procedures 5.4 Workplace documentation is processed according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance and are not explicit in the performance criteria.

Skills	Description
Learning skills to:	locate appropriate sources of information efficiently.
Reading skills to:	interpret technical information and terminology relating to patterns and templates.
Writing skills to:	- produce patterns and templates using symbols, codes, legends and diagrammatic representations - legibly and accurately fill out workplace documentation using correct industry terminology and conventions.
Oral communication skills to:	clarify instructions.
Numeracy skills to:	- use basic mathematical operations, including addition, subtraction, multiplication and division, to calculate: - angles, arcs and curves - tolerances and deviations from manufacturer specifications.
Planning and organising skills to:	plan own work requirements and prioritise and sequence actions to achieve required outcomes and ensure tasks are completed within workplace timeframes.
Technology skills to:	use drawing tools and equipment to produce patterns and templates.

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>Safety requirements</i> must include:	work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for using sharp cutting tools and equipment.
<i>Notation</i> must include:	- authorship - process or customer requirements - authorisation - review dates.

Unit Mapping Information

Equivalent to AURTTA2008 Produce patterns and templates

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>

Assessment Requirements for AURTTA008 Produce patterns and templates

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Performance Evidence

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- produce three different patterns and three different templates for manufacturing parts or for assisting with fitting accessories.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to producing patterns and templates, including procedures for using sharp cutting tools and equipment
- types, characteristics, uses and limitations of pattern and template materials
- procedures for selecting most suitable mediums and materials for pattern and template design
- pattern and template production techniques and procedures
- tools, equipment and machinery to measure, mark out and produce patterns and templates
- procedures for using and applying jigs and fixtures.

Assessment Conditions

Assessors must satisfy NVR/AQTF assessor requirements.

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

Assessment must include direct observation of tasks.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the patterns and templates that they have produced, e.g. repair 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 workplace or simulated workplace
- workplace instructions
- materials for producing automotive patterns and templates
- tools and equipment to measure, mark out and produce patterns and templates.

Links

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