



**Australian Government**

# **AURATA002 Read, interpret and apply engineering drawings**

**Release: 1**

# AURATA002 Read, interpret and apply engineering drawings

## Modification History

Release	Comment
Release 1	New unit of competency.

## Application

This unit describes the performance outcomes required to read, interpret and determine work task and material requirements from engineering drawings. It involves referring to engineering drawings of systems and components when fabricating, modifying and repairing vehicles or equipment.

It applies to those working on agricultural machinery, heavy commercial vehicles, light vehicles, marine vessels, motorcycles, mobile plant machinery or outdoor power equipment 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

Common

## 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.
1. Prepare for work	1.1 Workplace instructions are used to determine job requirements 1.2 Hazards are recognised and precautions are taken according to safety requirements 1.3 Engineering drawings are sourced that relate to the vehicle or

<b>Elements</b>	<b>Performance Criteria</b>
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	equipment being repaired, manufactured or modified 1.4 Engineering drawings are checked to ensure they are current and include latest amendments
2. Read and interpret engineering drawings	2.1 Symbols, codes, legends and diagrams in engineering drawings are identified and interpreted 2.2 Technical information, material specifications, finishes, dimensions and tolerances are identified and interpreted 2.3 Product, system and components represented by the drawing are identified and interpreted
3. Apply information from engineering drawings	3.1 Information from vehicle and equipment engineering drawings is applied to assist in the fabrication, modification and repair of vehicle and equipment systems and components 3.2 Specific customer and work task requirements are identified as required 3.3 Manufacturing processes are identified from drawings, and materials are selected according to customer requirements and workplace procedures
4. Complete work processes	4.1 Work order is prepared according to engineering drawings and workplace procedures 4.2 Engineering drawings are stored and version control maintained 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.

<b>Skills</b>	<b>Description</b>
Learning skills to:	<ul style="list-style-type: none"> <li>identify own skills and abilities required to carry out the work task and access learning opportunities to expand them.</li> </ul>
Reading skills to:	<ul style="list-style-type: none"> <li>interpret and understand a combination of graphical illustrations and technical terminology when viewing engineering drawings</li> <li>interpret technical information and terminology found in workshop manuals and automotive textbooks relating to vehicle and equipment engineering drawings.</li> </ul>
Writing skills to:	<ul style="list-style-type: none"> <li>legibly and accurately convey written ideas and information</li> </ul>

Skills	Description
	relating to engineering drawings, using vehicle component and system terminology.
Oral communication skills to:	<ul style="list-style-type: none"> <li>• communicate ideas and information when:               <ul style="list-style-type: none"> <li>• confirming work requirements and specifications</li> <li>• reporting work outcomes and problems.</li> </ul> </li> </ul>
Numeracy skills to:	<ul style="list-style-type: none"> <li>• use mathematical ideas and techniques to interpret engineering drawing specifications.</li> </ul>
Technology skills to:	<ul style="list-style-type: none"> <li>• use workplace technology to:               <ul style="list-style-type: none"> <li>• access engineering drawings</li> <li>• use specialist tooling, measuring equipment, computerised technology and communication devices</li> <li>• report and document results.</li> </ul> </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.

There is no Range of Conditions for this unit.

## Unit Mapping Information

Equivalent to AURATA2002 Read and interpret engineering drawings

## Links

Companion Volume implementation guides are found in VETNet -

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