



Australian Government

AURTTK001 Use and maintain measuring equipment in an automotive workplace

Release: 1

AURTTK001 Use and maintain measuring equipment in an automotive workplace

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to select, use, maintain and store automotive measuring equipment. It involves selecting and maintaining measuring equipment, and using measuring equipment to determine length, width, angles, ovality, depth, out of square, clearances, run-out, pressure and temperature of automotive components and materials.

It applies to those working in all sectors of the automotive industry. This unit does not apply to electrical measuring equipment that measures voltage, resistance or current flow.

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

Competency Field

Mechanical Miscellaneous

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 and italicised text is used, further information is detailed in the range of conditions section.
1 Select and use measuring equipment	1.1 Job requirements are determined from workplace instructions 1.2 Measuring equipment is selected to meet job requirements 1.3 Measuring equipment is checked for serviceability and

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	calibration according to manufacturer and workplace procedures 1.4 Hazards associated with the work are identified and risks are managed 1.5 Measuring equipment is used according to manufacturer and safety requirements
2 Service, maintain and store measuring equipment	2.1 Measuring equipment is serviced, calibrated and maintained according to workplace and manufacturer schedules and procedures to ensure safe and accurate operation, within scope of own responsibility 2.2 Damaged, worn or inaccurate measuring equipment is tagged and removed from the workplace and reported according to workplace procedures 2.3 Remaining measuring equipment is cleaned, checked and stored 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 measuring equipment information from manufacturer instruction manuals.
Writing skills to:	- legibly and accurately tag faulty measuring equipment - complete measuring equipment service and maintenance schedules.
Numeracy skills to:	- use basic mathematical operations, including addition and subtraction, to calculate distance, area and volume - understand metric units of measurements and decimal increments.
Planning and organising skills to:	plan own work requirements and prioritise actions to achieve required outcomes and ensure tasks are completed within workplace timeframes.

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 safe operating procedures for specific measuring equipment.
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Unit Mapping Information

Equivalent to AURTTK2001 Use and maintain measuring equipment in an automotive workplace

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 AURTTK001 Use and maintain measuring equipment in an automotive workplace

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Performance Evidence

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

- use and maintain each of the following pieces of measuring equipment:
 - inside and outside micrometers
 - vernier calipers
 - dial indicators
 - steel rulers
 - squares
 - straight edges
 - feeler gauges
 - pressure gauges
 - temperature gauges.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to using and maintaining measuring equipment, including safe operating procedures for specific measuring equipment
- types, uses, limitations and operation of measuring equipment specified in the performance evidence, including:
 - using metric and imperial units of measurement
 - using analogue and digital measuring equipment
- procedures for selecting measuring equipment suitable to job requirements
- identification and tagging procedures for faulty measuring equipment

- basic maintenance, adjustment, calibration and storage procedures for measuring equipment.

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 measuring equipment that they have used and maintained, e.g. repair orders with calculated tolerances.

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 repair workplace or simulated workplace
- workplace instructions
- measuring equipment specified in the performance evidence requiring maintenance
- vehicles, components or materials that require the use of automotive measuring equipment
- material relevant to maintaining automotive measuring equipment, including:
 - measuring equipment operating instructions or manuals
 - relevant measuring equipment and adjusting or calibration equipment
 - tagging material.

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