



Australian Government

AURTTA005 Select and use bearings, seals, gaskets, sealants and adhesives

Release: 1

AURTTA005 Select and use bearings, seals, gaskets, sealants and adhesives

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to select and use bearings, seals, gaskets, sealants and adhesives in the automotive vehicle industry. It involves preparing for the task, selecting and using sealants and adhesives, preparing and installing bearings, seals and gaskets, and completing workplace processes and documentation.

It applies to those working in the automotive service and repair industry, It includes agricultural machinery, heavy commercial vehicles, light vehicle, marine vessels, mobile plant machinery, motorcycles or outdoor power equipment.

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.
1. Prepare to select and use bearings, seals, gaskets, sealants and	1.1 Job requirements are determined from workplace instructions 1.2 Procedures, information and specifications are sourced and identified

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.
adhesives	1.3 Hazards associated with the work are identified and risks are managed 1.4 Tools, equipment and materials are selected and checked for serviceability
2. Select and use sealants and adhesives	2.1 Sealants and adhesives appropriate for the job requirement are selected 2.2 Sealants and adhesives are used according to manufacturer specifications, workplace procedures, and <i>safety and environmental requirements</i> 2.3 Sealants and adhesives are stored according to manufacturer specifications and workplace procedures
3. Prepare and install bearings, seals and gaskets	3.1 Procedures and information for preparing, inspecting and installing bearings, seals and gaskets are identified and sourced 3.2 Bearings, seals and gaskets are installed, and bearings adjusted as required, according to manufacturer specifications and workplace procedures
4. Complete work processes	4.1 Final inspection is made to ensure work is to workplace expectations and vehicle is presented ready for use 4.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected 4.3 Tools and equipment are checked and stored according to workplace procedures 4.4 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 information from manufacturer and workshop literature when seeking specifications and procedures.
Writing skills to:	legibly and accurately fill out workplace documentation, including recording parts and material used.

Skills	Description
Oral communication skills to:	- clarify instructions - report inspection findings and make repair recommendations.
Numeracy skills to:	- measure and adjust automotive components and calculate distances, tolerances and deviations from manufacturer specifications - use basic mathematical operations, including addition and subtraction, to calculate sealant and adhesive volumes.
Planning and organising skills to:	plan own work requirements and prioritise actions to achieve required outcomes and ensure tasks are completed within workplace timeframes.
Technology skills to:	use precision tools and equipment, such as torque wrenches and dial gauges.

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 and environmental requirements</i> must include:	- work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for working safely with sealants and adhesives, lubricants and greases - environmental requirements, including procedures for trapping, storing and disposing of: - excess materials produced when applying sealants and adhesives - lubricants and greases released during work processes.
---	---

Unit Mapping Information

Equivalent to AURTTA2005 Select and use bearings, seals, gaskets, sealants and adhesives

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 AURTTA005 Select and use bearings, seals, gaskets, sealants and adhesives

Modification History

Release	Comment
Release 1	New unit of competency.

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:

- prepare and install:
 - two of the following bearing types:
 - roller type bearing
 - ball type bearing
 - plain type bearing
 - two different gaskets
 - two different seals
- select and use two different sealants and adhesives.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for working safely with sealants and adhesives, lubricants and greases
- environmental requirements, including procedures for trapping, storing and disposing of:
 - excess materials produced when applying sealants and adhesives
 - lubricants and greases released during work processes
- identification, application, function and operating principles, including:
 - bearings, including ball, roller and plain
 - seals, including lip, face, O ring, square section ring, and metal surface
 - gaskets, including treated paper, cork, composite materials, metal, synthetic, rubber, fibre, and nylon

- types, characteristics, uses and limitations of sealants and adhesives, including application techniques
- inspection, service, installation and adjustment procedures, including:
 - bearings, including:
 - roller types
 - ball types
 - plain types
 - seals and sealing surface condition
 - gaskets
- types and applications of bearing lubricants and greases.

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 bearings, seals, gaskets, sealants and adhesives they have selected and used, 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 repair workplace or simulated workplace
- workplace instructions
- manufacturer specifications relating to bearings, seals, gaskets, sealants and adhesives
- vehicle or equipment requiring the application of bearings, seals, gaskets, sealants and adhesives
- bearings, seals, gaskets, sealants and adhesives as specified in the performance evidence
- tools, equipment and material appropriate for installing bearings, seals and gaskets.

Links

Companion Volume implementation guides are found in VETNet -

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

Companion Volume implementation guides are found in VETNet -

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