



**Australian Government**

# **AURTTA010 Service and repair trailers up to 4.5 tonnes**

**Release: 1**

# AURTTA010 Service and repair trailers up to 4.5 tonnes

## Modification History

| Release   | Comment                 |
|-----------|-------------------------|
| Release 1 | New unit of competency. |

## Application

This unit describes the performance outcomes required to service and repair trailers with an aggregate trailer mass (ATM) of up to 4.5 tonnes. It involves servicing the suspension, brakes, axles, couplings and electrical systems, and completing workplace processes and documentation, including any associated recommendations for further action.

It applies to those working in the automotive service and repair industry. The trailers include those of agricultural machinery, heavy commercial vehicles, light vehicles, marine vessels, mobile plant machinery 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 service and repair trailer up to 4.5 tonnes | 1.1 Job requirements are determined from workplace instructions<br>1.2 Service, repair and adjustment procedures and information are sourced and interpreted<br>1.3 Hazards associated with the work are identified and risks are |

| <b>Elements</b>                                                 | <b>Performance Criteria</b>                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
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|                                                                 | managed<br>1.4 Tools, equipment and materials are selected and checked for serviceability                                                                                                                                                                                                                                                                                                                                 |
| 2. Inspect trailer to determine service and repair requirements | 2.1 <b>Inspection</b> is carried out according to manufacturer specifications, workplace procedures and <b>safety requirements</b><br>2.2 Inspection results are compared with manufacturer specifications<br>2.3 Inspection findings are reported according to workplace procedures, and include recommendations for necessary repairs or adjustments                                                                    |
| 3. Carry out service and repair activities                      | 3.1 Trailer service and repair requirements are determined from workplace instructions and inspection results<br>3.2 Service, repair and adjustments are carried out to manufacturer specifications, workplace procedures, and safety and <b>environmental requirements</b> , and without causing damage to components or systems<br>3.3 Post-service and repair testing is carried out according to workplace procedures |
| 4. Complete work processes                                      | 4.1 Final inspection is made to ensure work is to workplace expectations and trailer is presented ready for use<br>4.2 Work area is cleaned, waste and non-recyclable materials are disposed of and recyclable material is collected<br>4.3 Tools and equipment are checked and stored according to workplace procedures<br>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.

| <b>Skills</b>       | <b>Description</b>                                                                                                                                                    |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Learning skills to: | <ul style="list-style-type: none"> <li>locate appropriate information efficiently.</li> </ul>                                                                         |
| Reading skills to:  | <ul style="list-style-type: none"> <li>interpret information from manufacturer and workshop literature when seeking trailer procedures and specifications.</li> </ul> |

| Skills              | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Writing skills to:  | <ul style="list-style-type: none"> <li>legibly and accurately fill out workplace documentation when reporting inspection findings, making recommendations, and recording parts and material used.</li> </ul>                                                                                                                                                                                                                                                      |
| Numeracy skills to: | <ul style="list-style-type: none"> <li>measure trailer components and use basic mathematical operations, including addition and subtraction, to:               <ul style="list-style-type: none"> <li>calculate distances, tolerances and deviations from manufacturer specifications</li> <li>measure trailer and vehicle ride heights with rulers and tape measures</li> </ul> </li> <li>compare inspection findings to manufacturer specifications.</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><i>Inspection</i></b> must include:                 | <ul style="list-style-type: none"> <li>vehicle hitch, trailer coupling and securing chains</li> <li>electrical systems</li> <li>brake system</li> <li>chassis and suspension system</li> <li>axles and wheel hubs</li> <li>tyres.</li> </ul>                                                                                                                        |
| <b><i>Safety requirements</i></b> must include:        | <ul style="list-style-type: none"> <li>work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for:               <ul style="list-style-type: none"> <li>lifting and supporting trailers</li> <li>handling and controlling brake dust and brake fluids</li> <li>working with stored energy.</li> </ul> </li> </ul> |
| <b><i>Environmental requirements</i></b> must include: | <ul style="list-style-type: none"> <li>procedures for trapping, storing and disposing of hazardous materials and substances released from braking systems, including lubricants, brake fluid, brake dust and fibres.</li> </ul>                                                                                                                                     |

## Unit Mapping Information

Equivalent to AURTTA2010 Service and repair trailers up to 4.5 tonnes

## 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 AURTTA010 Service and repair trailers up to 4.5 tonnes

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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:

- service, repair and adjust two different trailers with an aggregate trailer mass (ATM) up to 4.5 tonnes, in which the work must involve:
  - repacking wheel bearings
  - inspecting and adjusting brakes
  - inspecting and servicing suspension
  - coupling and securing chains
  - inspecting vehicle hitch, trailer coupling and securing chains
  - inspecting and servicing electrical system.

### Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to servicing and repairing trailers up to 4.5 tonnes, including procedures for:
  - lifting and supporting trailers
  - handling and controlling brake dust and brake fluids
  - working with stored energy
- environmental requirements, including procedures for trapping, storing and disposing of hazardous materials and substances released from braking systems, including lubricants, brake fluid, brake dust and fibres
- identification, purpose and basic operation of trailer systems, including:
  - braking systems, including:
    - hydraulic

- electrical
- mechanical
- electrical wiring circuits
- trailer service and repair procedures, including:
  - wheel bearings
  - suspension system
  - braking system
  - lighting system
  - vehicle hitch and trailer coupling types and securing chains
  - 5<sup>th</sup> wheel trailer couplings
- post-service and repair testing procedures for trailers, including stationary and mobile performance tests.

## 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 trailers that they have serviced and repaired, 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 trailer specifications
- two different trailers with an ATM up to 4.5 tonnes requiring service and repair
- tools, equipment and materials appropriate for servicing and repairing trailers up to 4.5 tonnes.

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