

Australian Government

Department of Education, Employment and Workplace Relations

# AURT237272A Service and repair trailers up to 4.5 tonnes

Release: 1



### AURT237272A Service and repair trailers up to 4.5 tonnes

# **Modification History**

Not Applicable

### **Unit Descriptor**

Unit descriptor	This unit of competency describes the skills and knowledge required to service and repair trailers with an aggregate trailer mass (ATM) of up to 4.5 tonnes.
	It requires the ability to identify and confirm work requirements, to use technical skills to service, repair and/or maintain trailers up to 4.5 tonnes, and to complete the work finalisation processes.
	Licensing, legislative, regulatory or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority.

# Application of the Unit

Application of the unit	This unit applies to individuals who undertake and document the adjustment, servicing and repair of trailers
	with an ATM of up to 4.5 tonnes. This includes trailers of varying types and in varying environments.

### **Licensing/Regulatory Information**

Refer to Unit Descriptor

# **Pre-Requisites**

Prerequisite units	

# **Employability Skills Information**

Employability skills	This unit contains employability skills.
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# **Elements and Performance Criteria Pre-Content**

Elements describe the	Performance criteria describe the performance needed to
	demonstrate achievement of the element. Assessment of
unit of competency.	performance is to be consistent with the evidence guide.

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for work	1.1.Confirm nature and scope of work to be carried out 1.2.Locate occupational health and safety (OHS) and workplace environmental and sustainable procedures and practices applicable to the work
	1.3. Source service procedures and relevant workshop manuals and manufacturer information
	1.4. Access and interpret state and territory regulations and requirements
	1.5. Check and prepare tools, equipment and materials
	1.6. Decide service and/or repair method in accordance with OHS, environmental and industry regulations and guidelines, and enterprise procedures
	1.7. Set up work area
2. Adjust trailer to suit individual applications	<ul><li>2.1. Identify trailer application</li><li>2.2. Use methods, equipment and tolerances suitable to</li><li>the trailer application and in accordance with</li></ul>

# **Elements and Performance Criteria**

		and guidelines, and enterprise procedures 1.7.Set up work area
2.	Adjust trailer to suit individual applications	<ul> <li>2.1.Identify trailer application</li> <li>2.2.Use methods, equipment and tolerances suitable to the trailer application and in accordance with manufacturer specifications to adjust suspension and chassis</li> <li>2.3.Carry out adjustment in accordance with manufacturer and component supplier specifications, and OHS and workplace environmental and sustainable procedures and practices</li> </ul>
3.	Test, service, repair and/or maintain trailer	<ul> <li>3.1.Select appropriate diagnostic test</li> <li>3.2.Undertake testing of trailer</li> <li>3.3.Identify service, repair and/or maintenance requirements</li> <li>3.4.Carry out brake adjustment, including handbrake</li> <li>3.5.Carry out bleeding of hydraulic braking system</li> <li>3.6.Carry out service, repair and/or maintenance using methods, equipment and tolerances suitable to the trailer application in accordance with manufacturer specifications and OHS and workplace environmental and sustainable procedures and practices</li> </ul>
4.	Verify system	<ul> <li>4.1. Apply and release brakes a number of times</li> <li>4.2. Test trailer lighting circuits</li> <li>4.3. Undertake visual and audible tests</li> <li>4.4. Repair and eliminate identified issues</li> <li>4.5. Organise for trailer to be tow tested</li> </ul>

EI	LEMENT	PERFORMANCE CRITERIA
5.	Clean up work area and maintain	5.1.Clean and inspect equipment and tooling according to workplace requirements
	equipment	5.2. Tag unserviceable equipment and faults identified in accordance with workplace requirements
		5.3. Finalise and process work completion documentation, update customer and warranty information and give to appropriate persons, as required
		5.4. Clean work area, dispose of waste and scrap, and store re-useable material, tools and equipment in accordance with workplace procedures

### **Required Skills and Knowledge**

#### **REQUIRED SKILLS AND KNOWLEDGE**

This section describes the skills and knowledge required for this unit.

#### **Required skills**

Required skills include:

- technical skills to the level required to service, repair and/or maintain trailers and components up to 4.5 tonnes, including use of workplace computerised technology for the testing, reporting and recording of results
- communication skills to the level required to confirm work requirements and specifications, to communicate effectively regarding work requirements with supervisor, other workers and customers, to relate to people from a range of social, cultural and ethnic backgrounds and of varying physical and mental abilities, and to report work outcomes and problems
- literacy skills to the level required to understand information related to work orders, including common industry terminology, plans and safety procedures, to interpret technical information and specifications, and to complete workplace documents
- numeracy skills to the level required to correctly calculate time, assess tolerances, apply accurate measurements, calculate material requirements and establish quality checks
- problem-solving skills to the level required to identify technical and procedural problems to avoid planning and scheduling problems and time and material wastage
- team skills to the level required to work effectively and cooperatively with others to optimise workflow and productivity

#### **REQUIRED SKILLS AND KNOWLEDGE**

#### **Required knowledge**

Required knowledge includes:

- types of load carrying trailers with a gross trailer mass rating (GTMR) or ATM up to 4.5 tonnes
- brake types
- electrical circuit types and related Australian Design Rules
- trailer service, repair and maintenance procedures applicable to the trailer type
- work organisation and planning processes
- transport regulations for each state and territory, including braking requirements for trailers with a GTMR or ATM up to 4.5 tonnes
- work organisation and planning processes
- documenting and reporting requirements/procedures
- service and repair manuals (hard copy and electronic)
- manufacturer and component supplier specifications, including workshop manuals and repair guides related to the servicing and repairing of trailers up to 4.5 tonnes and components
- applicable commonwealth, state or territory legislation, regulations, standards and codes of practice, including OHS, personal safety and environment, relevant to the servicing and repairing of trailers up to 4.5 tonnes and components
- organisational policies and procedures, including quality requirements and reporting and recording procedures, related to servicing and repairing of trailers up to 4.5 tonnes and components

# **Evidence Guide**

#### **EVIDENCE GUIDE**

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment		
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<ul> <li>Assessors must be satisfied that the candidate can competently and consistently:</li> <li>observe safety procedures and requirements</li> <li>communicate effectively with others involved in or affected by the work</li> <li>select servicing and repair methods and techniques appropriate to the circumstances and trailer type</li> <li>complete preparatory activity in a systematic manner</li> <li>adjust, service, repair and maintain three (3) different types of trailers</li> <li>complete workplace and equipment records and workplace clean-up requirements</li> <li>present trailer to customer or for storage in compliance with work requirements.</li> </ul>	
Context of, and specific resources for assessment	<ul> <li>The application of competency is to be assessed in the workplace or a simulated environment that reflects as far as possible the actual working environment.</li> <li>Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints.</li> <li>Assessment is to comply with relevant regulatory requirements, including specified Australian standards.</li> <li>Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability.</li> <li>The following resources should be made available: <ul> <li>a range of trailers up to 4.5 tonnes requiring servicing, repairing and/or maintaining</li> <li>specifications and work instructions</li> <li>equipment, hand and power tooling appropriate to servicing, repairing and/or maintaining trailers up to 4.5 tonnes</li> <li>relevant information, including manufacturer</li> </ul> </li> </ul>	

EVIDENCE GUIDE	
	specifications.
Method of assessment	<ul> <li>Assessment must satisfy the endorsed Assessment Guidelines of this Training Package.</li> <li>Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of Required Skills and Knowledge.</li> </ul>
	• Assessment methods must be by direct observation of tasks and include questioning on Required Skills and Knowledge to ensure its correct interpretation and application.
	• Assessment may be applied under project-related conditions (real or simulated) and require evidence of process.
	• Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.
	• Competence in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role.
Guidance information for assessment	Assessment processes and techniques must be culturally sensitive and appropriate to the language and literacy capacity of the candidate and the work being performed.

#### **EVIDENCE GUIDE**

# **Range Statement**

#### **RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Trailers	Trailers with a GTMR or ATM less than 4.5 tonnes may include:
	<ul><li> boat trailers</li><li> car trailers</li></ul>

RANGE STATEMENT	
	horse floats
	• plant trailers
	farm trailers
	mobile home carrier
	motor cycle trailers
	• box trailers
	caravan semi trailer
	• pig trailers
	dog trailers
Servicing, repair and/or	Servicing, repair and/or maintaining may include:
maintaining	• minor adjustments
	operational testing
	• replacement of fluids and filters
Tooling and equipment	Tooling and equipment may include:
	hand tools
	• testing equipment, including multimeters
	brake bleeding equipment
	• power tools
	• air tools
	• specialist tools and equipment
	lubricating equipment
	measuring equipment
	• pressure gauges
	• vacuum gauges
	manufacturer special stools
Materials	Materials may include:
	• spare parts
	lubricants
	• fluids
	cleaning materials
Safe operating procedures	Safe operating procedures may include:
	• operational risk assessment and treatments
	toxic substances
	electrical safety
	machinery movement and operation
	• manual and mechanical lifting and shifting
	• working in proximity to others

RANGE STATEMENT	
Information/documents	<ul> <li>Information/documents may include:</li> <li>verbal, written and graphical instructions issued by authorised internal and external persons</li> <li>parts listing prices and catalogues</li> <li>inventory systems</li> <li>Repair Times manuals</li> <li>material safety data sheets (MSDS)</li> <li>diagrams or sketches</li> <li>engineer's design specifications and instructions</li> <li>manufacturer specifications</li> <li>industry standards (e.g. American Boat and Yacht Council, National Marine, Manufacturer's Association and US Coast Guard)</li> <li>Australian Road Transport (ARTSA) - Brake Code of Practice</li> <li>Australian standards</li> <li>workplace specifications and requirements</li> <li>current driver's licence</li> </ul>
Legislative requirements	Legislative requirements are to be in accordance with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice, and may include: award and enterprise agreements industrial relations Australian standards Australian Design Rules confidentiality and privacy OHS the environment equal opportunity anti-discrimination duty of care
OHS requirements	OHS requirements are to be in accordance with applicable commonwealth, state or territory legislation and regulations, and organisational safety policies and procedures, and may include: • personal protective equipment and clothing

RANGE STATEMENT	
	<ul> <li>safety equipment</li> <li>first aid equipment</li> <li>hazard and risk control</li> <li>elimination of hazardous materials and substances</li> <li>manual handling, including shifting, lifting and carrying</li> <li>emergency procedures</li> <li>road rules</li> <li>safe driving policy</li> </ul>
Environmental requirements	Environmental requirements may include: • waste management • noise • dust • clean-up management
Organisational policies and procedures	<ul> <li>Organisational policies and procedures may include:</li> <li>quality policies and procedures, including Australian standards</li> <li>OHS, sustainability, environment, equal opportunity and anti-discrimination</li> <li>manufacturer specifications and industry codes of practice</li> <li>safe work procedures</li> <li>reporting and recording procedures</li> </ul>

# **Unit Sector(s)**

Unit sector	Trailer	
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# **Co-requisite units**

Co-requisite units		

Co-requisite units	

# **Competency field**

Competency field
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