



**Australian Government**

# **AURTNA5001 Estimate and calculate costs to repair, maintain or modify a vehicle**

**Release 1**

## AURTNA5001 Estimate and calculate costs to repair, maintain or modify a vehicle

### Modification History

Release	Comment
Release 1	Replaces AURT577727B Estimate and calculate costs to repair, maintain or modify a vehicle Unit code updated to meet policy requirements Reference to OHS legislation replaced with new WHS legislation

### Unit Descriptor

<b>Unit descriptor</b>	<p>This unit of competency describes the skills and knowledge required to estimate and calculate the costs to repair, maintain or modify a vehicle taking into account materials, labour and overhead costs.</p> <p>It requires the ability to estimate and calculate costs, analyse information, and report and document the costs.</p> <p>No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.</p>
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### Application of the Unit

<b>Application of the unit</b>	<p>This unit applies to individuals who estimate and calculate the cost to repair, maintain or modify a vehicle in the vehicle repair and vehicle loss assessing industries. This calculation would normally be undertaken by the owner of the business as it incorporates materials, labour and overhead costs. Vehicles may include light vehicles, heavy vehicles, agricultural and plant equipment, recreational boats, recreational vehicles and motorcycles.</p>
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### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Not applicable.

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Gather information	1.1. Clarify the particular service required 1.2. Obtain and analyse details of the proposed service requirements 1.3. Obtain labour unit cost projections 1.4. Obtain and analyse logistic support contracts, supply agreements or equivalent 1.5. Obtain details of any proposed warehousing and physical distribution systems and related cost factors 1.6. Document and store information ready for retrieval and application
2. Estimate materials and labour	2.1. Estimate cost of repair time 2.2. Estimate labour requirements for direct services and related operations 2.3. Estimate cost of subcontractor work 2.4. Estimate type and cost of parts and materials according to industry and enterprise pricing standards 2.5. Document final estimate
3. Determine and calculate overheads	3.1. Determine components contributing to overhead costs 3.2. Calculate overhead costs to be attributed to the work in accordance with commercial and enterprise procedures
4. Calculate costs	4.1. Cost repair time in accordance with enterprise procedures 4.2. Cost direct labour costs and subcontractor work 4.3. Cost parts and materials 4.4. Calculate total job cost, including overheads and mark-up percentages in accordance with enterprise procedures 4.5. Calculate total service cost 4.6. Note potential quotation variations 4.7. Record cost calculations
5. Document and verify details	5.1. Document details of costs and charges in accordance with enterprise procedures 5.2. Verify costs, calculations and other details with relevant enterprise person 5.3. Document and file details for future reference and in

ELEMENT	PERFORMANCE CRITERIA
	accordance with enterprise 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 use internet and other workplace technology related to calculating work costs
- communication skills to the level required to verify costs with others, to report work outcomes and problems, and to relate to people from a range of social, cultural and ethnic backgrounds and of varying physical and mental abilities
- literacy skills to the level required to undertake costing research, and to document and report findings
- numeracy skills to the level required to estimate and calculate labour, materials and on-costs and to validate work costs
- problem-solving skills to the level required to anticipate costing problems and to avoid reworking, wastage, and planning and scheduling problems
- team skills to the level required to work effectively and cooperatively with others to optimise workflow and productivity

#### Required knowledge

Required knowledge includes:

- methods and processes for identifying, apportioning, summarising and validating total costs for work
- components of labour costs
- current assessing and quoting methodologies
- commercial approaches to warehousing and physical distribution and costing
- manufacturer and component supplier specifications and manuals, including costing catalogues
- applicable commonwealth, state or territory legislation, regulations, standards and codes of practice, including workplace health and safety (WHS), personal safety and environment, relevant to calculating vehicle repair, maintenance and modification costs
- organisational policies and procedures, including quality requirements, reporting and recording procedures, related to calculating vehicle repair, maintenance and

<b>REQUIRED SKILLS AND KNOWLEDGE</b>
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modification costs
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## Evidence Guide

<b>EVIDENCE GUIDE</b>
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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.
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<b>EVIDENCE GUIDE</b>	
<b>Critical aspects of evidence</b>	<p>Assessors must be satisfied that the candidate can competently and consistently:</p> <ul style="list-style-type: none"> <li>• observe safety procedures and requirements</li> <li>• communicate effectively with others involved in or affected by the work</li> <li>• select appropriate methods and techniques</li> <li>• interpret proposals, specifications and instructions for the work</li> <li>• obtain information relevant to the determination of costs</li> <li>• calculate and cost accurately the quantities of parts and materials, the amount of labour and time required to complete the work, and overheads for a range of vehicle repair, maintenance and modification quotes</li> <li>• document the process and outcomes in accordance with enterprise practice.</li> </ul>
<b>Context of assessment</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• vehicles requiring repair that can be used for quotations</li> <li>• appropriate worksite and costing details</li> <li>• manufacturer and component costs, labour rates, commercial and industry information</li> <li>• Repair Times manuals</li> <li>• equipment, including calculators, computer and software</li> <li>• internet access</li> <li>• enterprise procedures.</li> </ul> </li> </ul>
<b>Method of assessment</b>	<ul style="list-style-type: none"> <li>• Assessment must satisfy the endorsed Assessment Guidelines of this Training Package.</li> <li>• Assessment methods must confirm consistency and</li> </ul>

<b>EVIDENCE GUIDE</b>	
	<p>accuracy of performance (over time and in a range of workplace relevant contexts) together with application of Required Skills and Knowledge.</p> <ul style="list-style-type: none"> <li>• Assessment methods must be by direct observation of tasks and include questioning on Required Skills and Knowledge to ensure its correct interpretation and application.</li> <li>• Assessment may be applied under project-related conditions (real or simulated) and require evidence of process.</li> <li>• 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.</li> <li>• Competence in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role.</li> </ul>
<b>Specific resource requirements for this unit</b>	Assessment processes and techniques must be culturally sensitive and appropriate to the language and literacy capacity of the candidate and the work being performed.

## Range Statement

<b>RANGE STATEMENT</b>	
<p>The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. 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.</p>	
<b>Service requirements</b>	<p>Service requirements may include:</p> <ul style="list-style-type: none"> <li>• specialised work</li> <li>• subcontracting</li> <li>• replacement parts</li> <li>• repair timeframe</li> </ul>
<b>Overhead costs</b>	<p>Overhead costs may include:</p> <ul style="list-style-type: none"> <li>• rental and leasing costs</li> <li>• utilities</li> </ul>



<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• non-production resources</li> <li>• depreciation of plant and equipment</li> <li>• warehousing margins</li> <li>• warehousing costs</li> <li>• insurance and other costs incurred by doing business</li> <li>• material/supply costs, including catalogues, contracts, standing agreements, market rates and warehousing margins</li> </ul>
<b>Information/documents</b>	<p>Information/documents may include:</p> <ul style="list-style-type: none"> <li>• Motor Vehicle Insurance and Repair Industry Code of Conduct</li> <li>• verbal, written and graphical instructions</li> <li>• parts listing prices and catalogues</li> <li>• inventory systems</li> <li>• material safety data sheets (MSDS)</li> <li>• diagrams or sketches</li> <li>• safe work procedures for inspection of vehicles for saleable components</li> <li>• engineer's design specifications and instructions</li> <li>• workplace specifications and requirements</li> <li>• instructions issued by authorised enterprise or external persons</li> <li>• Australian standards</li> <li>• current driver's licence</li> </ul>
<b>Legislative requirements</b>	<p>Legislative requirements are to be in accordance with applicable commonwealth, state or territory legislation, regulations, certification requirements and codes of practice, and may include:</p> <ul style="list-style-type: none"> <li>• award and enterprise agreements</li> <li>• industrial relations</li> <li>• Australian standards</li> <li>• Australian Design Rules</li> <li>• confidentiality and privacy</li> <li>• WHS</li> <li>• the environment</li> <li>• equal opportunity</li> <li>• anti-discrimination</li> <li>• duty of care</li> </ul>

<b>RANGE STATEMENT</b>	
<b>WHS requirements</b>	<p>WHS requirements are to be in accordance with applicable commonwealth, state or territory legislation and regulations, and organisational safety policies and procedures, and may include:</p> <ul style="list-style-type: none"> <li>• personal protective equipment and clothing</li> <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>
<b>Environmental requirements</b>	<p>Environmental requirements may include:</p> <ul style="list-style-type: none"> <li>• waste management</li> <li>• noise</li> <li>• dust</li> <li>• clean-up management</li> </ul>
<b>Organisational policies and procedures</b>	<p>Organisational policies and procedures may include:</p> <ul style="list-style-type: none"> <li>• financial management</li> <li>• cost and apportioning overheads</li> <li>• labour employment costs, including awards and contracts</li> <li>• quality policies and procedures, including Australian standards</li> <li>• WHS, 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)

<b>Unit sector</b>	Mechanical Miscellaneous
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## Co-requisite units

Not applicable.

## Competency field

<b>Competency field</b>	Loss Assessment or Repair Quoting
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