



Australian Government

AURVTN3031 Conduct major sectional repairs

Release 1

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Modification History

Release	Comment
Release 1	Replaces AURV326708A Carry out major sectional repair Performance Criteria and Range Statement updated to reflect repairs to vehicle body skirt and rails

Unit Descriptor

Unit descriptor	This unit describes the performance outcomes required to carry out sectional repairs and replacement operations on vehicles with major damage, including structural components, rails and pillars. The unit involves identifying and confirming work requirements, preparing for work, selecting the repair method, removing damaged components, repairing damaged sections and components, replacing and aligning new or repaired components, and undertaking completion processes, including clean-up and documentation. Licensing, legislative, regulatory or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority.
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Application of the Unit

Application of the unit	Work applies to vehicle body repair technicians conducting body or component repairs to a range of vehicles, including light vehicles, commercial vehicles, heavy vehicles, and agricultural and recreational vehicles. Work requires individuals to demonstrate judgement and problem-solving skills in managing own work activities and contributing to a productive team environment.
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability skills	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 required performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for work	1.1. Work instructions are used to determine job requirements, including method, materials and equipment 1.2. Workplace health and safety (WHS) requirements and personal protective equipment (PPE) needs are observed throughout the work 1.3. Materials for repair are selected 1.4. Tools and equipment are identified and checked for safe and effective operation 1.5. Procedures are determined to minimise waste material and maximise energy efficiency while completing the job 1.6. Workplace communication policies are followed
2. Perform major sectional repairs	2.1. Sections not subject to repair are protected using approved methods and equipment 2.2. Damaged sections are removed using approved methods and equipment 2.3. Damaged surfaces are restored to a condition suitable for the fitting of new sections 2.4. Replacement sections are aligned and secured according to original equipment manufacturer (OEM) specification 2.5. Sections are refitted using approved repair methods, materials and equipment 2.6. Sealant is selected and applied according to manufacturer and component supplier specification for type, application method and sealant thickness 2.7. Major sectional repairs are completed without causing damage to other components or systems 2.8. Removal and fitting activities are carried out according to industry regulations, statutory and regulatory authorities' guidelines, WHS legislation, and workplace policies and procedures
3. Clean up work area and maintain equipment	3.1. Material that can be reused is collected and stored according to workplace sustainability practices 3.2. Waste and scrap are removed following workplace and environmental requirements and procedures 3.3. Equipment and work area are cleaned and inspected for serviceable condition according to workplace procedures 3.4. Faulty equipment is identified and tagged according to workplace policy 3.5. Maintenance activities are completed according to manufacturer and component supplier specifications and

	workplace procedures 3.6.Tools are maintained according to workplace procedures
4. Finalise repair processes	4.1.Repair information and documents are completed according to workplace policies and procedures 4.2.Repair quality requirements are checked against manufacturer and workplace quality standards

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- communication skills to follow workplace verbal instructions
- initiative and enterprise skills to recognise a workplace problem or potential problem and take action
- learning skills to identify sources of repair information, assistance and expert knowledge, to expand skills, knowledge and understanding
- literacy skills to:
 - understand quality procedures
 - read and follow information in written job instructions, specifications, standard operating procedures, charts, lists, drawings and other reference documents
 - obtain and record required repair procedures and parts
- numeracy skills to interpret vehicle repair measuring equipment
- planning and organising skills to:
 - plan repair requirement and follow job repair specification
 - plan own work requirements and prioritise actions to achieve required outcomes and ensure tasks are completed on time
 - identify risk factors and take action to minimise them
- problem-solving skills to:
 - refer problems outside area of responsibility to appropriate person
 - seek information and assistance as required to solve problems
- self-management skills to:
 - select and use appropriate repair equipment, materials, processes and procedures
 - recognise own limitations and seek advice
 - follow workplace policies and documentation, such as manufacturer specification, industry codes of practice and workplace procedures
- teamwork skills to apply knowledge of own role to complete activities efficiently to support team activities and tasks
- technical skills to use workplace tools and equipment relating to major sectional repairs, including the use of specialist tools
- technology skills to:
 - operate body repair equipment
 - use technology to collect and provide information on repair processes

Required knowledge

- workplace repair equipment
- OEM-recommended repair procedures

REQUIRED SKILLS AND KNOWLEDGE

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

- personal protective equipment
- types of steels and repair characteristics
- sectional repair procedure to skirt, rail or pillar
- manufacturer and component supplier specifications
- procedures for the correct use of tools and equipment
- alignment methods techniques and procedures
- welding and attachment procedures
- bonding and sealant methods and procedures
- vehicle or component protection procedures

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, the 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

The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria and required skills and knowledge.

A person who demonstrates competency in this unit must be able to:

- observe safety procedures and requirements
- apply vehicle or component protection methods
- access repair information and identify approved sectioning method and location
- select the repair method most appropriate to the circumstances
- complete major sectional repairs which, at a minimum, are to sectionalise a skirt, rail or pillar section or equivalent
- complete workplace and equipment documentation.

Context of, and specific resources for assessment

Competency is to be assessed in the workplace or a simulated workplace environment that accurately reflects performance in a real workplace setting.

Assessment is to occur:

- using standard workplace practices and procedures
- following safety requirements
- applying environmental constraints.

Assessment is to comply with relevant:

- regulatory requirements
- Australian standards
- industry codes of practice.

The following resources must be made available for the assessment of this unit:

- workplace location or simulated workplace
- materials relevant to major sectional repair
- equipment, hand and power tools appropriate to major sectional repair
- vehicle specifications and work instructions.

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Overview of assessment**Method of assessment**

Assessment must satisfy the endorsed Assessment Guidelines of this Training Package.

Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with the application of required skills and knowledge.

Assessment methods must be by direct observation of tasks and include questioning on required skills and knowledge to ensure correct interpretation and application.

Competence in this unit may be assessed in conjunction with other units which together form part of a holistic work role.

Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate the needs of diverse clients.

Assessment processes and techniques must be culturally sensitive and appropriate to the language, literacy and numeracy capacity of the candidate and the work being performed.

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, 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.

<i>Workplace health and safety requirements</i> may include:	• correct use of tools and equipment • first aid equipment • equipment safety • safe handling of material • hazard control, including control of hazardous materials and toxic substances • personal safety • use of fire-fighting equipment • workplace environment • workplace safety.
<i>Personal protective equipment:</i>	• is that prescribed under legislation, regulations, codes of practice, and workplace policies and practices • may include: • dust and fume collection equipment • breathing apparatus • eye protection • hearing protection • personal protective clothing • safety footwear.
<i>Materials</i> may include:	• cleaning materials • sealants • welding consumables.
<i>Tools and equipment</i> may include:	• clamps and anchoring devices • hand tools • heating and welding equipment, including oxy-acetylene, MIG and TIG • lifting and hydraulic push and pull equipment • measuring system • power tools and equipment • vehicle alignment jiggling systems.
<i>Communication</i> may include:	• faults reporting • OEM-recommended repair procedures • repair plans and instructions

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	• verbal instructions • visual instructions • workplace instructions • written instructions.
<i>Repair methods</i> may include:	• under-body or frame measurements • alignment equipment • jiggling systems • pre-repair activities • hydraulic reforming • sectional repair • visual and physical examination • panel beating • welding • mechanical fastening • riveting • metal cutting • bonding • removal and replacement of: • mechanical units • suspension, steering, transmissions and other assemblies and components • heating • metal finishing • filling.
<i>Major sectional repairs</i> may include:	• body rails • body pillars • radiator support • double panel section • box section panels • sill panels • quarter panels • vehicle chassis or frame • turrets • high stress steel (HSS) sections.

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<i>Statutory and regulatory authorities</i> may include:	• federal, state or territory, and local authorities administering Acts • Australian Design Rules • industry codes of practice.
<i>Environmental requirements</i> may include:	• waste management • noise control • dust control • clean-up management.
<i>Equipment</i> may include:	• hand tools • power tools and equipment • heating equipment • welding equipment, including MIG, TIG and SPOT • lifting equipment • hydraulic push and pull equipment • measuring system • vehicle alignment bench • clamping and anchoring systems • bonding and sealant.
<i>Information and documents</i> may include:	• verbal or written job sheets and work orders • graphical instructions • work schedules, plans and specifications • workplace and vehicle manuals and bulletins • material safety data sheets (MSDS) • diagrams and sketches • safe work procedures • regulatory and legislative requirements • Australian Design Rules • OEM specifications • engineer's design specifications and instructions • workplace specifications and quality requirements • Australian standards.
<i>Quality requirements</i> may include:	• OEM quality specifications • industry codes of practice • workplace quality and operations procedures.

Unit Sector(s)

Competency field	Vehicle Body
Unit sector	Technical – Body

Custom Content Section

Not applicable.