



Australian Government

Department of Education, Employment and Workplace Relations

AURV327466AA Repair aluminium body panels (finishing)

Release: 1

AURV327466AA Repair aluminium body panels (finishing)

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the competence required to carry out repairs of aluminium panels applying finishing and heat shrinking techniques.
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Application of the Unit

Application of the unit	The unit includes identification and confirmation of work requirement, preparation for work, repair and checking of body panels and completion of work finalisation processes, including clean-up and documentation. Work requires individuals to demonstrate judgement and problem-solving skills in managing own work activities and contributing to a productive team environment. Work is carried out in accordance with award provisions.
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Licensing/Regulatory Information

Not Applicable

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 essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and 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 the job requirements, including method, materials and equipment. 1.2. Job specifications are read and interpreted. 1.3. OH&S requirements, including dust and fume collection, breathing apparatus, eye and ear personal protection needs are observed throughout the work. 1.4. Material for repair is selected. 1.5. Equipment and tooling are identified and checked for safe and effective operation. 1.6. Procedures are determined to minimise waste material. 1.7. Procedures are identified for maximising energy efficiency while completing the job.
2. Carry out finishing	2.1. Information is accessed and interpreted from manufacturer/component supplier specifications. 2.2. Components are repaired using approved methods and equipment in accordance with manufacturer/component supplier specification. 2.3. Where repair of components includes disturbance to electrical, mechanical, air conditioning systems or trim, authorised assistance is sought. 2.4. Repair activities are carried out according to industry regulations/guidelines, OH&S legislation, and enterprise procedures/policies. 2.5. Repairs are checked to specification and workplace/equipment records are completed to worksite requirements.
3. Carry out heat shrinking operations	3.1. Information is accessed and interpreted from manufacturer/component supplier specifications. 3.2. Components are repaired using approved methods and equipment in accordance with manufacturer/component supplier specification. 3.3. Where repair of components includes disturbance to electrical, mechanical, air conditioning systems or trim, authorised assistance is sought. 3.4. Repair activities are carried out according to industry regulations/guidelines, OH&S legislation, and enterprise procedures/policies. 3.5. Repairs are checked to specification and workplace/

ELEMENT	PERFORMANCE CRITERIA
	equipment records are completed to worksite requirements.
4. Clean up work area and maintain equipment	4.1. Material that can be reused is collected and stored. 4.2. Waste and scrap is removed following workplace and environmental procedure. 4.3. Equipment and work area are cleaned and inspected for serviceable condition in accordance with workplace procedures. 4.4. Unserviceable equipment is tagged and faults identified in accordance with workplace requirements. 4.5. Operator maintenance is completed in accordance with manufacturer/component supplier specifications and worksite procedures. 4.6. Tooling is maintained 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

- apply research and interpretive skills sufficient to locate, interpret and apply manufacturer/component supplier procedures, workplace policies and procedures
- apply analytical skills required for identification and analysis of technical information
- apply plain English literacy and communication skills in relation to dealing with customers and team members
- apply questioning and active listening skills for example when obtaining information from customers
- apply oral communication skills sufficient to convey information and concepts to customers
- apply planning and organising skills to own work activities, including making good use of time and resources, sorting out priorities and monitoring one's own performance
- interact effectively with other persons both on a one-to-one basis and in groups, including understanding and responding to the needs of a customer and working effectively as a member of a team to achieve a shared goal

REQUIRED SKILLS AND KNOWLEDGE

- establish safe and effective work processes which anticipate and/or resolve problems and downtime, to systematically develop solutions to avoid or minimise reworking and avoid wastage
- use mathematical ideas and techniques to calculate time, assess tolerances, apply accurate measurements, calculate material requirements and establish quality checks
- use workplace technology related to aluminium finishing of body parts, including the use of specialist tooling, measuring equipment and communication devices and the reporting/ recording of results

Required knowledge

A working knowledge of:

- OH&S regulations/requirements, equipment, material and personal safety requirements
- technical information
- material types and stress limits
- heat shrinking methods and techniques
- aluminium finishing methods and techniques
- work organisation and planning processes
- enterprise quality processes

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

It is essential that competence is fully observed and there is ability to transfer competence to changing circumstances and to respond to unusual situations in the critical aspects of:

- observing safety procedures and requirements
- communicating effectively with others involved in or affected by the work
- selecting methods and techniques appropriate to the circumstances
- completing preparatory activity in a systematic manner
- applying vehicle protection methods
- completing finishing repair of a panel containing a split of 250mm
- completing workplace/equipment records.

Context of, and specific resources for assessment

Application of competence is to be assessed in the workplace or simulated worksite.

Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints.

Assessment is to comply with regulatory requirements, including Australian Standards.

The following resources should be made available:

- workplace location or simulated workplace
- materials relevant to aluminium finishing of body parts
- equipment, hand and power tooling appropriate to aluminium finishing of body parts
- activities covering mandatory task requirements
- specifications and work instructions.

Method of assessment

- Assessment must satisfy the endorsed assessment guidelines of the automotive industry's RS&R Training Package.
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge.
- Assessment must be by direct observation of tasks, with

EVIDENCE GUIDE	
	questioning on underpinning knowledge and it must also reinforce the integration of key competencies. • Assessment may be applied under project related conditions and require evidence of process. • Assessment must confirm a reasonable inference that competence is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances. • It is preferable that assessment reflects a process rather than an event and occurs over a period of time to cover varying quality circumstances. Evidence of performance may be provided by customers, team leaders/members or other persons subject to agreed authentication arrangements. • 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	

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.	
Panel repair (aluminium finishing)	Panel repair (aluminium finishing) covers finishing of aluminium panels using no fillers to repair splits/tears and dents.
Panels	Panels are of aluminium construction.
Repair methods	Repair methods are to include panel stripping and preparation, heat shrinking, welding (TIG and MIG), annealing, planishing and file finishing.
OH&S	OH&S requirements are to be in accordance with

RANGE STATEMENT	
	legislation/regulations/codes of practice and enterprise safety policies and procedures. This may include protective clothing and equipment, use of tooling and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, enterprise first aid, hazard control and hazardous materials and substances.
Personal protective equipment	Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices.
Safe operating procedures	Safe operating procedures are to include, but are not limited to operational risk assessment and treatments associated with vehicular movement, toxic substances, electrical safety, machinery movement and operation, manual and mechanical lifting and shifting, working in proximity to others and worksite visitors.
Emergency procedures	Emergency procedures related to this unit are to include, but are not limited to emergency shutdown and stopping of equipment, extinguishing fires, enterprise first aid requirements and worksite evacuation.
Environmental requirements	Environmental requirements are to include but are not limited to waste management, noise, dust and clean-up management.
Quality requirements	Quality requirements are to include, but are not limited to regulations, including Australian Standards, internal company quality policy and standards and enterprise operations and procedures.
Statutory/regulatory authorities	Statutory/regulatory authorities may include Federal, State/Territory and local authorities administering acts, regulations and codes of practice.
Tooling and equipment	Tooling and equipment may include hand tooling, power tooling and equipment, templates, welding equipment, heat shrinking equipment, vehicle protection, specialist tooling and lifting

RANGE STATEMENT	
	equipment.
Materials	Materials may include welding consumables, filling materials and cleaning materials.
Communications	Communications are to include, but are not limited to verbal and visual instructions and fault reporting and may include worksite specific instructions, written instructions, plans or instructions related to job/task, telephones and pagers.
Information/documents	Sources of information/documents may include: • verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets, diagrams or sketches • safe work procedures related to finishing of aluminium body panels • regulatory/legislative requirements pertaining to automotive industry, including Australian Design Rules • engineer's design specifications and instructions • organisation work specifications and requirements • instructions issued by authorised enterprise or external persons • Australian Standards.

Unit Sector(s)

Unit sector	Vehicle body
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Co-requisite units

Co-requisite units	
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Co-requisite units		

Competency field

Competency field	
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