



Australian Government

Department of Education, Employment and Workplace Relations

AURV328166A Repair and align motorcycle frames

Release: 1

AURV328166A Repair and align motorcycle frames

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the competence required to carry out inspection and determine repairs required, replace and repair components and align motorcycle frame/components.
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Application of the Unit

Application of the unit	<p>The unit includes identification and confirmation of work requirement, preparation for work, the replacement, repair and alignment of frames and completion of work finalisation processes, including clean-up and documentation.</p> <p>This competence unit applies to all types of motorcycle frames, including for those with side cars and carrying compartments.</p> <p>Work requires individuals to demonstrate judgement and problem-solving skills in managing own work activities and contributing to a productive team environment.</p> <p>Work is carried out in accordance with award provisions.</p>
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

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 to undertake frame alignment and repair	<p>1.1. The nature and scope of the work requirements are identified and confirmed.</p> <p>1.2. OH&S requirements, including individual State/Territory regulatory requirements and personal protection needs are observed throughout the work.</p> <p>1.3. Procedures and information such as workshop manuals and specifications, and tooling, are sourced.</p> <p>1.4. Method options are analysed and those most appropriate to the circumstances are selected and prepared.</p> <p>1.5. Technical and/or calibration requirements for frame alignment and repair are sourced and support equipment is identified and prepared.</p>
2. Inspect and measure to determine repair requirements	<p>2.1. Information is accessed and interpreted from manufacturer/ component supplier specifications.</p> <p>2.2. Detailed inspection report is prepared to guide the assessment of repair options.</p> <p>2.3. Work is completed without causing damage to any component or system.</p> <p>2.4. Inspection activities are carried out according to industry regulations/guidelines, OH&S legislation, and enterprise procedures/policies.</p> <p>2.5. Results of inspection are documented/processed in accordance with enterprise requirements.</p>
3. Replace and repair frame components	<p>3.1. Information is accessed and interpreted from manufacturer/ component supplier specifications.</p> <p>3.2. Repair/replacement is completed without causing damage to any component or system.</p> <p>3.3. Replacement and repair activities are carried out according to industry regulations/guidelines, OH&S legislation, and enterprise procedures/policies.</p>
4. Align frame and components	<p>4.1. Information is accessed and interpreted from manufacturer/ component supplier specifications.</p> <p>4.2. Alignment of frame and components is carried out in accordance with vehicle manufacturer/component supplier specifications for methods, equipment used and tolerances.</p> <p>4.3. Alignment is completed without causing damage to any component or system.</p> <p>4.4. All alignment activities are carried out according to</p>

ELEMENT	PERFORMANCE CRITERIA
	industry regulations/guidelines, OH&S legislation, and enterprise procedures/policies.
5. Prepare frame for delivery to customer and/or storage	5.1.Alignment/repair documentation completed. 5.2.Final inspection is made to ensure protective guards, safety features and cowlings are in place 5.3.Final inspection is made to ensure work is to workplace expectations. 5.4.Frame is prepared and/or stored to workplace expectations. 5.5.Job card is processed 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
- 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

REQUIRED SKILLS AND KNOWLEDGE

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- use workplace technology related to repair and alignment of motorcycle frames, including specialist tooling, the use of measuring equipment, computerised technology 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
- industry code of practice
- principles of frame alignment and steering geometry as applied to motorcycles
- alignment procedures
- repair procedures
- enterprise quality procedures
- work organisation and planning processes

Evidence Guide

EVIDENCE GUIDE	
<p>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.</p>	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>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:</p> <ul style="list-style-type: none"> • 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 • accurately interpreting measurements • conducting the repair and alignment of a range of frames in accordance with the workplace and manufacturer/component supplier requirements • completing repair and alignment of frames and associated components within workplace timeframes • frame presentation to customer in compliance with workplace requirements • completing workplace documentation.
Context of, and specific resources for assessment	<p>Application of competence is to be assessed in the workplace or simulated worksite.</p> <p>Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints.</p> <p>Assessment is to comply with regulatory requirements, including Australian Standards.</p> <p>The following resources should be made available:</p> <ul style="list-style-type: none"> • workplace location or simulated workplace • materials relevant to repair and alignment of motorcycle frames • equipment, hand and power tooling appropriate to repair and alignment of motorcycle frames • activities covering mandatory task requirements • specifications and work instructions.
Method of assessment	<ul style="list-style-type: none"> • Assessment must satisfy the endorsed assessment

EVIDENCE GUIDE	
	<p>guidelines of the automotive industry's RS&R Training Package.</p> <ul style="list-style-type: none"> • Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge. • Assessment must be by direct observation of tasks, with 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	
<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. 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.</p>	
Repairs and alignment methods	<p>Repair and alignment methods are to include:</p> <ul style="list-style-type: none"> • visual, aural and functional assessment (including damage, wear and breakage) • using principles, angles and geometry of

RANGE STATEMENT	
	vehicle wheel and frame alignment.
OH&S	OH&S requirements are to be in accordance with 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, specialist tooling for

RANGE STATEMENT	
	removal/adjustment, measuring equipment, pressing equipment, heating equipment, pullers, welders - MMAW, oxy, GMAW, GTAW, lifting equipment, testing equipment and air operated equipment.
Materials	Materials may include spare parts 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	<p>Sources of information/documents may include:</p> <ul style="list-style-type: none"> • 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 repair and alignment of motorcycle frames • 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		

Competency field

Competency field	
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