



**Australian Government**

# **AURLLD3001 Determine compliance of steering and suspension modifications**

**Release 1**

## AURLLD3001 Determine compliance of steering and suspension modifications

### Modification History

| Release   | Comment                                                                                                                                                                                                                                                                  |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Release 1 | <p>Replaces AURT316316A Determine compliance of steering and suspension modifications</p> <p>Unit code updated to meet policy requirements</p> <p>Reference to OHS legislation replaced with new WHS legislation</p> <p>Licensing statement added to unit descriptor</p> |

### Unit Descriptor

|                 |                                                                                                                                                                                                                                                                                                                                                                                                |
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| Unit descriptor | <p>This unit covers the competence required to advise customers whether their proposed or actual steering and suspension modifications comply with Australian Design Rules for normal road usage.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit in some jurisdictions. Users are advised to check with the relevant regulatory authority.</p> |
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## Application of the Unit

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Application of the unit</b> | <p>The unit includes identification and confirmation of work requirement, preparation for work, clarification of the customers' needs, the analysis of needs/proposals against Australian Design Rules requirements, recommendation as to a compliant plan of action and completion of work finalisation processes, including clean-up and documentation.</p> <p>The unit applies to steering and suspension systems fitted to a range of light vehicles, which includes 4WD vehicles and light commercial vehicles.</p> <p>Work requires individuals to demonstrate discretion, judgement and problem-solving skills in managing own work activities and contributing to a productive team environment.</p> |
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## Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Not applicable.

## Employability Skills Information

|                             |                                          |
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| <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. 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. Clarify details of steering and suspension modifications                                                 | <ul style="list-style-type: none"><li>1.1. Confirmation is sought, through discussion with the customer, if steering and suspension modifications are actual or proposed</li><li>1.2. Reasons for modifications are discussed and confirmed with the customer</li><li>1.3. Modification specifications and dimensions are determined and documented</li><li>1.4. Non-standard steering and suspension components are identified</li></ul> |
| 2. Determine specific Australian Design Rules information relating to steering and suspension modifications | <ul style="list-style-type: none"><li>2.1. Australian Design Rules bulletin applicable to modifications is identified</li><li>2.2. Section providing a ruling on the legality of modifications is identified</li><li>2.3. Any ruling against modifications is interpreted</li><li>2.4. Interpretation of the ruling made in relation to modifications is clarified and discussed with customer</li></ul>                                  |
| 3. Recommend a plan of action to achieve customer requirements                                              | <ul style="list-style-type: none"><li>3.1. Implications of non-compliance with a specific Australian Design Rules is discussed with the customer</li><li>3.2. Suitable plan of action to meet Australian Design Rules requirements is discussed and clarified with customer</li></ul>                                                                                                                                                     |

## 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 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 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 correctly calculate time, assess tolerances, apply accurate measurements, calculate material requirements and establish quality checks
- use workplace technology related to determining compliance of steering and suspension modifications, including the use of measuring equipment, electronics, computerised technology and communication devices and the documenting/recording of results

#### Required knowledge

A working knowledge of:

- WHS regulations/requirements, equipment, material and personal safety requirements
- purpose and format of Australian Design Rules
- contents of Australian Design Rules relative to steering and suspension systems
- enterprise procedures for determining compliance or non-compliance
- enterprise procedures for making recommendations to resolve non-compliance situations
- 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
- completing preparatory activity in a systematic manner
- locating and interpreting Australian Design Rules in relation to a customer suspension modifications
- discussing Australian Design Rules interpretations at an understandable level with customer
- making recommendations to avoid non-compliance situations
- recommending a plan of action to provide a compliant response to customer's needs

##### 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
- material relevant to determining compliance of steering and suspension modifications
- equipment and tooling appropriate to determining compliance of steering and suspension modifications
- 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

## Range Statement

| <b>RANGE STATEMENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| <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> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Steering and suspension modification</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | Types of steering and suspension modification may include lowered or raised normal ride heights, increased track width, variations between front and rear ride heights and reductions in ground clearance due to fitting non-standard components                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Work requirements</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>• Work involves ability to access technical information from published Australian Design Rules bulletins and interpret the content applicable to a customer specific steering and suspension modifications</li> <li>• Work includes ability to be able to explain in 'easy to understand terms' mandatory requirements to customer and be able to discuss implications of non-compliance findings</li> <li>• Competence may be demonstrated in a variety of workplaces involved with specific steering and suspension procedures, such as: service stations, dealerships, road-side repairers and automotive after-market specialists</li> </ul> |
| <b>WHS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | WHS requirements are to be in accordance with legislation/regulations/codes of practice and enterprise safety policies and procedures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Personal protective equipment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Safe operating procedures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Safe operating procedures are to include, but are not limited to operational risk assessment and treatments associated with vehicular movement and working in proximity to others and site visitors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Emergency procedures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Emergency procedures related to this unit are to include but may not be limited to enterprise first aid requirements and site evacuation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Environmental requirements</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Environmental requirements are to include but are not limited to clean-up management                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Quality requirements</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Quality requirements are to include, but are not limited to regulations, including Australian Standards, internal company                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| <b>RANGE STATEMENT</b>                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         | quality policy and standards and enterprise operations and procedures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Statutory/regulatory authorities</b> | Statutory/regulatory authorities may include Federal, State/Territory and local authorities administering acts, regulations and codes of practice                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Tooling and equipment</b>            | Tooling and equipment may include road springs, shock absorbers, sway bars and bump stops                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Communications</b>                   | Communications are to include but are not limited to verbal and visual instructions and fault documenting and may include site specific instructions, written instructions, plans or instructions related to job/task, telephones and pagers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Information/documents</b>            | Sources of information/documents may include: <ul style="list-style-type: none"><li>• verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets, diagrams or sketches</li><li>• safe work procedures related to determining compliance of steering and suspension modifications</li><li>• regulatory/legislative requirements pertaining to automotive industry, including Australian Design Rules</li><li>• engineer's design specifications and instructions</li><li>• organisation work specifications and requirements</li><li>• instructions issued by authorised enterprise or external persons</li><li>• Australian Standards</li></ul> |

## Unit Sector(s)

|                    |                            |
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| <b>Unit sector</b> | Mechanical - Light Vehicle |
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## Co-requisite units

Not applicable.

## Competency field

|                  |                                     |
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| Competency field | Technical - Steering and Suspension |
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