



Australian Government

AURTTD003 Inspect suspension systems

Release: 1

AURTTD003 Inspect suspension systems

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to inspect and test front and rear suspension system components and assess their condition. It involves preparing for the task, inspecting the system, and completing workplace processes and documentation.

It applies to those working in the automotive service and repair industry. The suspension systems include those of heavy commercial vehicles or light vehicles.

This unit applies to those inspecting suspension systems prior to conducting a wheel alignment.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publications.

Competency Field

Mechanical Miscellaneous

Unit Sector

Technical - Steering and Suspension

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
1. Prepare to inspect suspension system	1.1 Job requirements are determined from workplace instructions 1.2 Inspection information is sourced and interpreted 1.3 Hazards associated with the work are identified and risks are

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
	managed 1.4 Tools, equipment and materials are selected and checked for serviceability
2. Inspect suspension system	2.1 Inspection is carried out according to manufacturer specifications, workplace procedures and safety requirements 2.2 Inspection results are compared with manufacturer specifications 2.3 Inspection findings are reported according to workplace procedures, including recommendations for necessary repairs or adjustments
3. Complete work processes	3.1 Final inspection is made to ensure work is to workplace expectations and vehicle is presented ready for use 3.2 Work area is cleaned, waste and non-recyclable materials are disposed of, and recyclable material is collected 3.3 Tools and equipment are checked and stored according to workplace procedures 3.4 Workplace documentation is processed according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance and are not explicit in the performance criteria.

Skills	Description
Learning skills to:	locate appropriate sources of information efficiently.
Reading skills to:	interpret information from manufacturer and workshop literature when seeking inspection procedures and specifications relating to suspension systems.
Writing skills to:	legibly and accurately fill out documentation when reporting inspection findings and making recommendations.
Oral communication skills to:	- clarify instructions - report inspection findings to appropriate personnel.
Numeracy skills to:	compare component wear against manufacturer specifications and use basic mathematical operations, including addition and subtraction, to calculate distances, tolerances and deviations from

Skills	Description
	manufacturer specifications.
Problem solving skills to:	refer problems outside area of responsibility to appropriate person.

Range of Conditions

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Inspection</i> must include:	visual, aural and functional assessments of front and rear suspension components, including for damage, corrosion, wear and leakage.
<i>Safety requirements</i> must include:	- work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for: - lifting and supporting vehicles - working with stored energy in springs and accumulators.

Unit Mapping Information

Equivalent to AURTTD2003 Inspect suspension systems

Links

Companion Volume implementation guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>

Assessment Requirements for AURTTD003 Inspect suspension systems

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Performance Evidence

Before competency can be determined, individuals must demonstrate they can perform the following according to the standard defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- inspect the front and rear suspension systems of two different vehicles.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to inspecting suspension systems, including procedures for:
 - lifting and supporting vehicles
 - working with stored energy in springs and accumulators
- identification and function of major front and rear suspension components, including:
 - control arms, bushes, links and rods
 - ball joints
 - struts and springs
 - leaf springs, hangers and shackles
 - torsion bars
 - air suspension
 - shock absorbers
 - height control systems
- basic operation of front and rear suspension systems
- inspection and reporting procedures for suspension systems and components, including:
 - component wear analysis
 - fluid leaks.

Assessment Conditions

Assessors must satisfy NVR/AQTF assessor requirements.

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

Assessment must include direct observation of tasks.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the suspension systems that they have worked on, e.g. repair orders.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- automotive repair workplace or simulated workplace
- workplace instructions
- manufacturer suspension system specifications
- two different vehicles with suspension systems requiring inspection prior to wheel alignment
- tools, equipment and materials appropriate for inspecting suspension systems.

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