



Australian Government

AURHTD001 Inspect heavy commercial vehicle suspension systems

Release: 1

AURHTD001 Inspect heavy commercial vehicle suspension systems

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to inspect heavy commercial vehicle suspension systems according to manufacturer specifications. It involves preparing for the task, inspecting the system, and completing workplace processes and documentation.

It applies to those undertaking a Vocational Education and Training in Schools (VETiS) or pre-vocational qualification as preparation to entering the automotive service and repair or automotive manufacturing industry.

The unit is designed for use in a highly supervised context and is not suitable for use in a vocational qualification.

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

Competency Field

Mechanical - Heavy Vehicle

Unit Sector

Technical - Steering and Suspension

Elements and Performance Criteria

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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.

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1. Prepare to inspect suspension system	1.1 Task instruction is interpreted and vehicle to be worked on is identified 1.2 Inspection information is sourced and interpreted 1.3 Potential hazards and risks associated with task are identified and reported to workplace supervisor 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
3. Complete work processes	3.1 Final inspection is made to ensure work meets task instruction and workplace standards, 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 information.
Reading skills to:	interpret key information from manufacturer and workshop literature when seeking inspection procedures and specifications relating to suspension systems.
Writing skills to:	legibly and accurately fill out workplace documentation using correct industry terminology and conventions.
Oral communication skills to:	participate effectively in verbal exchanges using questioning and active listening to request, clarify and clearly convey

Skills	Description
	information.
Numeracy skills to:	use basic mathematical operations, including addition and subtraction, to compare component wear against manufacturer specifications.

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>Safety requirements</i> must include:	- work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for: - working with stored energy in springs, air springs and torsion bars - lifting and supporting vehicles.
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Unit Mapping Information

Equivalent to AURHTD2001 Inspect and service heavy commercial vehicle suspension system

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 AURHTD001 Inspect heavy commercial vehicle 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 one heavy commercial vehicle, including:
 - springs
 - spring dampers
 - arms, mountings and bushings
 - vehicle curb height.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- workplace health and safety (WHS) and occupational health and safety (OHS) requirements relating to inspecting heavy commercial vehicle suspension systems, including procedures for:
 - working with stored energy in springs, air springs and torsion bars
 - lifting and supporting vehicles
- identification and function of major suspension system components, including:
 - airbag, coil spring, leaf spring and torsion bar
 - spring dampers
 - pneumatic, mechanical and rubber suspension
 - lateral and longitudinal arms
 - self-levelling device, ride control, height control
- basic operation of suspension systems, including:
 - leaf spring
 - equaliser beam

- rubber block
- torsion bar
- air spring
- inspection procedures for suspension systems, including front and rear suspension.

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 vehicle suspension systems that they have inspected, 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 workplace or simulated workplace
- task instructions
- manufacturer suspension system specifications
- one heavy commercial vehicle with front and rear suspension systems
- tools, equipment and materials appropriate for inspecting heavy commercial vehicle suspension systems.

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