



Australian Government

**Assessment Requirements for AURHTD003
Diagnose and repair heavy commercial
vehicle suspension systems**

Release: 1

Assessment Requirements for AURHTD003 Diagnose and repair heavy commercial vehicle suspension systems

Modification History

Release	Comment
Release 1	New unit of competency.

Performance Evidence

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

- diagnose and repair a fault in:
 - the following two heavy commercial vehicle suspension systems:
 - leaf spring suspension
 - air spring suspension
 - one of the following heavy commercial vehicle suspension systems:
 - equaliser beam suspension
 - torsion bar suspension
 - electronically controlled suspension.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to diagnosing and repairing heavy vehicle suspension systems, including procedures for:
 - working with stored energy in springs, air springs, accumulators and torsion bars
 - lifting, supporting and manual handling heavy vehicle suspension systems
- operating principles of heavy vehicle suspensions and associated components, including:
 - rigid and independent suspensions
 - sprung and unsprung mass
 - ride and curb height
 - spring dampers

- spring types
- application, purpose and operation of heavy vehicle suspension systems and components, including:
 - air spring suspension
 - leaf spring suspension, including:
 - front suspension
 - rear suspension, including single and tandem axle
 - equaliser beam suspension
 - torsion bar suspension
 - electronically controlled suspension
- diagnostic testing procedures for heavy vehicle suspension systems, including:
 - component wear analysis
 - checking axle alignment
 - checking fluid leaks
 - checking air leaks
 - checking ride and curb height
 - control system tests
- repair procedures for heavy vehicle suspension systems, including procedures for:
 - removing, repairing and replacing suspension components, and springs and spring dampers
 - aligning axles
- post-repair testing procedures for heavy vehicle suspension systems.

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 heavy vehicle 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
- heavy commercial vehicles with faults in the different suspension systems listed in the performance evidence
- diagnostic equipment for heavy commercial vehicle suspension systems

- tools, equipment and materials appropriate for repairing and adjusting heavy commercial vehicle suspension systems.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>

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