



**Australian Government**

# **Assessment Requirements for AURHTD004 Carry out heavy vehicle wheel alignment operations**

**Release: 1**

# Assessment Requirements for AURHTD004 Carry out heavy vehicle wheel alignment operations

## 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 standard defined in this unit's elements, performance criteria, range of conditions and foundation skills:

- align the wheels on at least three different heavy vehicles, in which the work must involve measuring, recording and adjusting the following angles to manufacturer specifications:
  - camber
  - caster
  - king pin inclination (KPI)
  - toe (toe-in and toe-out)
  - toe-out on turns.

## Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to heavy vehicle wheel alignment operations, including procedures for raising and supporting heavy vehicles or machinery
- application, purpose and operating principles of steering geometry and wheel alignment angles, including:
  - Ackermann principle of steering
  - camber
  - caster
  - KPI
  - toe-in and toe-out
  - toe-out on turns
  - steering axis inclination

- two wheel and twin four wheel steer
- vehicle pre-alignment inspection procedures, including:
  - analysing tyre wear
  - inflating tyre
  - adjusting wheel bearing
  - inspecting steering and suspension
  - determining wheel run-out
  - determining vehicle height
  - checking chassis and axle alignment
- wheel alignment equipment types, application and operation
- procedures for measuring and adjusting steering angles, including:
  - camber
  - caster
  - toe-in and toe-out
  - toe-out on turns
- post-wheel alignment testing procedures for heavy vehicles.

## 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 wheel alignments that they have carried out, 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 wheel alignment specifications
- three different heavy vehicles requiring wheel alignment
- wheel alignment equipment for heavy vehicles
- tools, equipment and materials appropriate for carrying out wheel alignment operations on heavy vehicles.

## Links

Companion Volume implementation guides are found in VETNet -

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

Companion Volume implementation guides are found in VETNet -

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