



Australian Government

Assessment Requirements for AURHTD104 Carry out heavy vehicle wheel alignment operations

Release: 1

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Modification History

Release	Comments
Release 1	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.0

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- align wheels on all steerable axles of at least three different heavy vehicles.

In the course of the above, the candidate must measure each of the following steering angles, and make adjustments where required by job specifications:

- camber
- caster
- king pin inclination (KPI)
- toe (toe-in and toe-out)
- toe-out on turns.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- methods to locate and interpret information required to carry out heavy vehicle wheel alignment, including:
 - manufacturer specifications and procedures
- workplace procedures required to carry out heavy vehicle wheel alignment, including:
 - establishing serviceability of tools and equipment
 - pre and post wheel alignment procedures
 - documentation procedures
 - housekeeping procedures, including:
 - examination of tools and equipment
 - storage of equipment
 - identification, tagging and isolation of faulty equipment

- disposal of excess materials
 - recycling procedures
- workplace health and safety (WHS) requirements relating to heavy vehicle wheel alignment operations, including:
 - procedures for raising and supporting heavy vehicles or machinery
- 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
- types and operation of wheel alignment systems, including:
 - laser aligners
 - visual aligners
 - camera aligners
- 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

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.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

Companion Volume Implementation Guide is found on VETNet -

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