



Australian Government

Assessment Requirements for AURLTD003

Reset steering system alignment adjustments to customer specifications

Release: 1

Assessment Requirements for AURLTD003 Reset steering system alignment adjustments to customer specifications

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:

- reset the steering system alignment of two different vehicles, in which the work must involve measuring, recording and adjusting the following angles on all four wheels of each vehicle:
 - camber
 - caster
 - steering axis inclination (SAI)
 - 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 resetting steering system alignment, including procedures for using air jacks
- application, purpose and function of steering angles, including:
 - Ackermann principle of steering
 - camber
 - caster
 - SAI
 - thrust angle
 - toe-in and toe-out
 - toe-out on turns
 - included angle

- point of intersection
- scrub radius
- reasons for making non-standard alignment settings on driving and ride characteristics, including:
 - fitting modified road springs
 - fitting revised shock absorbers
 - fitting modified sway bars
 - altering ride height
 - fitting non-standard wheel and tyre combinations
 - variations to understeer and oversteer
 - off-road use
- vehicle wheel alignment pre-check procedures, including:
 - assessing steering system alignment adjustments against safety and Australian Design Rule (ADR) compliance
 - road testing
 - analysing tyre wear
 - determining wheel run-out
 - determining vehicle height
 - checking frame alignment
- types and operation of wheel alignment systems, including:
 - laser aligners
 - visual aligners
 - camera aligners
- wheel alignment checking procedures, including:
 - checking caster
 - checking camber
 - checking toe-in
 - checking toe-out on turns
- wheel alignment adjustment procedures, including:
 - adjusting caster
 - adjusting camber
 - adjusting toe-in
 - adjusting toe-out on turns.

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 steering 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 steering system alignment specifications
- Australian Design Rules
- two different vehicles requiring steering system adjustments to the angles specified in the performance evidence
- wheel alignment equipment
- tools, equipment and materials appropriate for adjusting steering system alignment.

Links

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

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