



Australian Government

Assessment Requirements for AURLTQ001 Diagnose and repair light vehicle final drive assemblies

Release: 1

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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 two of the following light vehicle final drive assemblies:
 - removable carrier housing (banjo) type
 - integral carrier housing type.

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 light vehicle final drive assemblies, including procedures for working with hazardous oils
- environmental procedures for trapping, storing and disposing of oils released from final drive assemblies
- operating principles of light vehicle final drive assemblies and associated components, including:
 - final drive gears, including:
 - gear types
 - gear ratios and torque reduction and multiplication
 - differential function
- application, purpose and operation of the following components of light vehicle final drive assemblies and components, including:
 - removable carrier housing (banjo) type final drives
 - integral carrier housing type final drives
 - transaxle final drives

- differentials, including limited slip differentials
- axle shafts for rigid axles, including:
 - semi floating live axles
 - three quarter floating live axles
 - fully floating live axles
- diagnostic testing procedures for light vehicle final drive assemblies, including:
 - road testing procedures, including:
 - final drive assembly noise diagnostic
 - wheel bearing noise diagnostic
 - pre-dismantling inspection procedures
- repair procedures for light vehicle final drive assemblies, including procedures for:
 - dismantling final drive assemblies
 - inspecting final drive assemblies
 - reassembling and adjusting pinion depth, pinion bearing preload, crown wheel and pinion backlash, side bearing preload and crown wheel and pinion tooth contact
 - repairing wheel bearings of rear wheel drive light vehicles
- post-repair testing procedures for light vehicle final drive assemblies.

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 light vehicle final drive assemblies 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 light vehicle final drive assembly specifications
- two different light vehicles:
 - one with faults in its removable carrier housing (banjo) type final drive assembly
 - one with faults in its integral carrier housing type final drive assembly
- diagnostic equipment for light vehicle final drive assemblies
- tools, equipment and materials appropriate for light vehicle final drive assemblies.

Links

Companion Volume implementation guides are found in VETNet -

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

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