

Assessment Requirements for AURKTX004 Diagnose and repair continuously variable transmissions

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 different machines with continuously variable transmissions
- remove, refit or replace one of the above transmissions.

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 continuously variable transmissions, including procedures for:
 - · tagging out and isolating machines, and wheel chocking
 - · working with high pressure fluid hazards
 - using lifting, jacking and supporting equipment
- environmental requirements, including procedures for trapping, storing and disposing of hydraulic fluid released from transmissions
- operating principles of continuously variable transmissions and associated components, including:
 - hydrostatic systems
 - countershaft transmissions
 - planetary transmissions
 - transmission control valves and solenoids
 - hydraulic circuits and schematics
 - electronic control system

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- application, purpose and operation of continuously variable transmissions and components, including:
 - power flows, including compound planetary transmissions
 - hydrostatic components
 - hydraulic components and hydraulic control components, including:
 - oil pumps
 - air pumps
 - filters
 - hydraulic valves
 - power train electronic control system
 - mechanical components, including clutch packs and compound gear sets
 - continuously variable electronic control system, including:
 - sensors
 - solenoids
 - electronic controllers
 - calibration
- diagnostic testing procedures for continuously variable transmissions that comply with manufacturer specifications, including:
 - accessing and interpreting scan tool system data, including:
 - diagnostic trouble codes (DTCs)
 - live data
 - freeze frame data
 - waveforms
- repair procedures for continuously variable transmissions, including procedures for removing, replacing and adjusting them
- post-repair testing procedures for continuously variable transmissions.

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 continuously variable transmissions 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

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- workplace instructions
- manufacturer continuously variable transmission specifications
- two different machines with continuously variable transmission faults
- diagnostic equipment for continuously variable transmissions
- tools, equipment and materials appropriate for repairing and adjusting continuously variable transmissions.

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-7804 5ec695b1

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