



Australian Government

Assessment Requirements for AURTTX006 Diagnose and repair hydrostatic 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 the hydrostatic transmission systems of two different vehicles or machinery, including in three of the following components:
 - charge pump
 - main pump
 - drive motor
 - hydraulic lines
 - heat exchanger
 - control valve.

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 hydrostatic transmissions, including procedures for:
 - working with high pressure and stored energy hazards
 - isolating and stabilising machines
- environmental requirements, including procedures for trapping, storing and disposing of fluids released from hydrostatic transmissions
- operating principles of hydrostatic transmissions and associated components, including:
 - closed loop
 - charge circuitry
 - flushing circuit

- application, purpose and operation of hydrostatic transmissions and components, including:
 - charge pump
 - main pump, including pilot control systems
 - drive motor, including control systems
 - filtering
 - hydraulic lines
 - heat exchanger
 - reservoir
- diagnostic testing procedures for hydrostatic transmissions, including:
 - testing charging system
 - testing closed loop system
 - testing flushing system
 - measuring case drains
 - testing internal and external fluid leaks
 - checking abnormal noises and operation
 - using scan tools and multimeter
- repair procedures for hydrostatic transmissions, including procedures for:
 - isolating faults
 - dismantling components and parts
 - inspecting and evaluating worn components
 - repairing and replacing parts
- post-repair flow and pressure testing procedures for hydrostatic 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 hydrostatic 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
- workplace instructions
- manufacturer specifications for hydrostatic transmissions

- two different vehicles or machinery with faults in the hydrostatic transmission components specified in the performance evidence
- diagnostic equipment for hydrostatic transmissions
- tools, equipment and materials appropriate for repairing and adjusting hydrostatic transmissions.

Links

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

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