



**Australian Government**

# **Assessment Requirements for AURTTX106**

## **Diagnose and repair hydrostatic transmissions**

**Release: 1**

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## **Assessment Requirements for AURTTX106 Diagnose and repair hydrostatic transmissions**

### **Modification History**

<b>Release</b>	<b>Comments</b>
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:

- 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**

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 diagnose and repair hydrostatic transmissions, including:
    - information provided by customers and supervisors
    - manufacturer specifications and procedures or equivalent documentation
  - workplace procedures required to diagnose and repair hydrostatic transmissions, including:
    - establishing serviceability of tools and equipment
    - documentation procedures
    - housekeeping procedures, including:
      - examination of tools and equipment
      - storage of equipment
      - identification, tagging and isolation of faulty equipment
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- disposal of excess materials
  - recycling procedures
  - workplace health and safety (WHS) 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 relating to diagnosing and repairing hydrostatic transmissions, 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
  - 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**

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.

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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.

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>

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