



Australian Government

AURTTX104 Inspect and service hydrostatic transmissions

Release: 1

AURTTX104 Inspect and service hydrostatic transmissions

Modification History

Release	Comments
Release 1	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.0

Application

This unit describes the skills and knowledge required to inspect and service hydrostatic transmissions and associated components. It involves preparing for the task, inspecting the transmission and components, reporting the inspection findings, servicing and adjusting the transmission, and completing workplace processes and documentation.

The unit applies to those working in the automotive service and repair industry. The hydrostatic transmissions include those of agricultural machinery, mobile plant machinery or outdoor power equipment.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Unit Sector

Mechanical Miscellaneous Technical - Transmission

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to inspect and service hydrostatic transmission	1.1 Determine job requirements from workplace instructions 1.2 Source and interpret servicing information 1.3 Identify hazards associated with the work and manage risks 1.4 Select and check tools, equipment and materials for serviceability
2. Inspect hydrostatic transmission	2.1 Carry out inspection according to manufacturer specifications, workplace procedures, and safety and environmental requirements 2.2 Compare inspection results with manufacturer specifications 2.3 Report recommendations for required repairs or adjustments

ELEMENTS	PERFORMANCE CRITERIA
	according to workplace procedures
3. Service hydrostatic transmission	3.1 Carry out service and adjustments according to manufacturer specifications, workplace procedures, and safety and environmental requirements, and without causing damage to components or systems 3.2 Carry out post-service testing according to workplace procedures
4. Complete work processes	4.1 Conduct final inspection according to workplace procedures and confirm vehicle is ready for use 4.2 Clear work area and dispose of or recycle materials according to workplace procedures 4.3 Complete documentation according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

SKILL	DESCRIPTION
Learning	Locates required sources of information efficiently.
Numeracy	- Uses mathematical operations, including addition and subtraction, to determine liquid quantities - Interprets pressure gauges and units of pressure.
Oral communication	Clarifies instructions.
Reading	Interprets information from manufacturer and workshop literature when seeking service procedures and specifications relating to hydrostatic transmissions.
Problem solving	Refers problems outside area of responsibility to required person.

Unit Mapping Information

Supersedes and is equivalent to AURTTX004 Inspect and service hydrostatic transmissions.

Links

Companion Volume Implementation Guide is found on VETNet -

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

Assessment Requirements for AURTTX104 Inspect and service hydrostatic transmissions

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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:

- inspect and service the hydrostatic transmissions of at least two different pieces of machinery.

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 inspect and service hydrostatic transmissions, including:
 - information provided by customer and supervisors
 - manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to inspect and service hydrostatic transmissions including:
 - establishing serviceability of tools and equipment
 - documentation procedures, including:
 - inspection findings and recommendations for required repair or adjustment
 - housekeeping procedures, including:
 - examination of tools and equipment
 - storage of equipment
 - identification, tagging and isolation of faulty equipment
 - disposal of excess materials
 - recycling procedures
- work health and safety (WHS) requirements relating to inspecting and servicing hydrostatic transmissions, including procedures for:
 - working with high oil pressures
 - working with stored hydraulic accumulator pressures
 - isolating and stabilising machinery

- environmental requirements, including procedures for trapping, storing and disposing of oil released from hydrostatic transmissions
- identification, function and basic operation of hydrostatic transmission and components, including:
 - charge pump
 - main pump
 - drive motor
 - filters
 - hydraulic lines
 - heat exchanger
 - reservoir
 - control valve
- types and applications of hydraulic oil
- inspection procedures for hydrostatic transmissions, including:
 - hydraulic oil sampling
 - oil leaks
 - pressure checks as required
- service and adjustment procedures for hydrostatic transmissions, including
 - adjusting or replenishing oil level as required
 - replacing filters as required
- post-service 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.

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:

- mechanical repair workplace or simulated workplace
- workplace instructions
- manufacturer hydrostatic transmission specifications
- two different machinery with hydrostatic transmissions requiring servicing
- tools, equipment and materials appropriate for inspecting and servicing hydrostatic transmissions.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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