



Australian Government

AURLTX104 Diagnose complex faults in light vehicle automatic transmission and driveline systems

Release: 1

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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 diagnose complex faults in light vehicle automatic transmission and driveline systems, including drive shafts and final drives, and determine the repair action necessary to restore system performance. It involves confirming the existence of a fault, choosing the diagnostic procedure and tools, applying the diagnostic procedure, reporting conclusions and making repair recommendations. Complex faults are outside the normal scope of a technician's diagnosis and repair work. They include intermittent faults, multi-system faults, faults introduced as a result of system repairs, and indirect faults caused by the influence of external systems, requiring the application of complex diagnostic processes to resolve.

This unit applies to those in the automotive service and repair industry. The transmission and driveline systems include those of light vehicles or light commercial vehicles.

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

Unit Sector

Mechanical - Light Vehicle 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. Identify and confirm the work requirement	1.1 Determine nature and objective of diagnostic requirements from workplace instructions 1.2 Confirm existence of fault in light vehicle automatic transmission or driveline system from direct or indirect evidence 1.3 Identify hazards associated with the work and manage

ELEMENTS	PERFORMANCE CRITERIA
	risks according to workplace procedures, and safety and environmental requirements
2. Prepare to diagnose complex faults	2.1 Access and interpret manufacturer specifications and other technical information for automatic transmission or driveline system 2.2 Identify diagnostic procedures and options 2.3 Identify and select diagnostic method sequence, tests and testing processes from the range of available options 2.4 Obtain and prepare testing equipment according to manufacturer specifications and workplace procedures 2.5 Identify, select and prepare tools, equipment and materials required to support the diagnostic process for use
3. Apply diagnostic procedures	3.1 Follow selected diagnostic process and carry out testing according to manufacturer specifications, workplace procedures, and safety and environmental requirements 3.2 Verify diagnostic findings, as required, by using alternative or optional process according to manufacturer specifications and workplace procedures 3.3 Draw conclusions from findings and document according to workplace procedures 3.4 Provide conclusions to required personnel or customer to confirm further action to be taken
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	<ul style="list-style-type: none"> • Locates required sources of information efficiently • Applies diagnostic skills to different vehicles.
Numeracy	<ul style="list-style-type: none"> • Measures transmission and driveline system components and uses basic mathematical operations, including addition and

SKILL	DESCRIPTION
	subtraction <ul style="list-style-type: none">• Calculates deviations and tolerances from manufacturer specifications.
Oral communication	<ul style="list-style-type: none">• Clarifies instructions• Obtains information from customers and supervisors.
Reading	<ul style="list-style-type: none">• Identifies, organises and interprets technical information from manufacturer and workshop literature when seeking light vehicle automatic transmission and driveline system specifications and procedures.
Planning and organising	<ul style="list-style-type: none">• Plans own work requirements• Prioritises actions to achieve required outcomes• Ensures tasks are completed within workplace timeframes.
Technology	<ul style="list-style-type: none">• Uses precision measuring equipment• Uses specialised diagnostic equipment.

Unit Mapping Information

Supersedes and is equivalent to AURLTX004 Diagnose complex faults in light vehicle automatic transmission and driveline systems.

Links

Companion Volume Implementation Guide is found on VETNet -

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