



Australian Government

Assessment Requirements for AURMTE101 Test engines using a dynamometer

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

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:

- carry out dynamometer testing on at least two different engines.

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 test engines using a dynamometer, including:
 - information provided by customer and supervisors
 - manufacturer specifications and procedures or equivalent documentation
 - test information and workplace instructions, including:
 - category regulations and component supplier specifications, including allowable quality, materials, equipment and specifications
- workplace procedures required to test engines using a dynamometer, including:
 - establishing serviceability of tools and equipment
 - documentation procedures, including:
 - dynamometer test results
 - 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 testing engines using a dynamometer, including procedures for:

- connecting and securing engines to dynamometers
- dealing with exhaust gases from engines
- dealing with high levels of noise
- environmental requirements, including procedures for trapping, storing and disposing of fluids released during engine testing
- application, purpose and operation of engine dynamometers, including associated hardware and software
- dynamometer testing parameters, including:
 - run-in period for new engines
- engine and chassis dynamometer testing procedures, including:
 - dynamometer preparation procedures
 - engine connection and securing procedures
 - vehicle connection and securing procedures
 - test environment correction factors
 - dynamometer data interpretation and analysis, including:
 - recommendations for engine configuration and/or modifications to improve performance
- required checks of engine and vehicle, including:
 - engine oil level and condition
 - cooling system condition and coolant level
 - exhaust extraction system connection
 - drive shaft condition and connection
- operator dynamometer maintenance procedures
- engine performance and dynamometer terminology.

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 engines that they have tested using a dynamometer, 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
- two different engines requiring testing using a dynamometer
- engine or chassis dynamometer

- tools and equipment appropriate for connecting, securing and disconnecting engines to dynamometers.

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>