



**Australian Government**

# **Assessment Requirements for MEM27028 Diagnose and rectify manual transmissions**

**Release: 1**

# Assessment Requirements for MEM27028 Diagnose and rectify manual transmissions

## Modification History

Release 1. Supersedes and is equivalent to MEM18042C Diagnose and rectify manual transmissions

## Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting specifications, charts, lists, drawings and other applicable reference documents to diagnose and rectify manual transmissions
- checking manual transmission for compliance with specifications using appropriate tools, techniques and test equipment
- undertaking calculation and numerical operations associated with diagnosing and rectifying manual transmissions
- testing the clutch/transmission components for compliance to specifications and identifying faulty components by using appropriate testing equipment and identifying components for reuse or replacement
- removing and refitting components to clutch/transmission assemblies and selecting replacement parts using manufacturer catalogues and data
- adjusting clutch and transmission components using appropriate tools, techniques and equipment
- operating the clutch/transmission assembly free of excessive noise and in compliance with specifications
- recording/reporting all service/work activities in accordance with SOPs.

## Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- principles of operation of a variety of clutches
- functions of the components of a variety of clutches
- principles of operation of manual transmissions
- concepts of gear ratios, torque multiplication and synchronisation
- procedures for:
  - checking clutches and transmissions for correct operation

- testing clutches and transmissions
- checking clutch and transmission components for wear and clearance
- removing, refitting and adjusting clutch and transmission components
- recording test and repair activities
- appropriate action to correct the faulty component(s)
- test equipment to be used in checking/testing clutches and transmissions for correct operation and reasons for selection
- tools, techniques and equipment to be used to determine component wear and clearance
- tools, techniques and equipment to be used to maintain and repair clutch and transmission assemblies
- effects of the adjustments on clutch and transmission operation
- clutch/transmission assembly specifications.

## Assessment Conditions

- Assessors must:
  - have vocational competency in diagnosing and rectifying manual transmissions at least to the level being assessed with relevant industry knowledge and experience
  - satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires
- Where possible assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

## Links

Companion Volume implementation guides are found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>