



Australian Government

Assessment Requirements for MEM27003 Overhaul engine fuel system components

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MEM18027C Overhaul engine fuel system components

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 service documents for overhauling engine fuel system components
- dismantling the engine fuel system components using specialised tools and test equipment and checking parts visually for abnormal wear or defects
- identifying parts according to their original location in the pump/injector and protecting and storing them as required for reassembly
- undertaking calculations and numerical operations for overhauling engine fuel system components
- measuring and recording fuel system components using appropriate measuring equipment
- assessing components and parts for serviceability or replacement
- reconditioning, assembling and replacing components according to manufacturer specifications
- testing operation of reconditioned components to specifications.

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)
- sequence for disassembling engine fuel components
- specialised tools required and their application
- common defects, examples and causes of abnormal wear
- characteristics of surface finishes and wear patterns for fuel system components
- method of cleaning fuel system components
- appropriate solvents for cleaning fuel systems
- procedures for:
 - cleaning, protecting and storing fuel system components
 - marking fuel system components in readiness for reassembly

- recording fuel system component measurements
- reconditioning and/or replacing faulty fuel system components
- assembling and testing fuel system components
- setting fuel system components
- measuring instruments to be used to measure fuel system components and reasons for selecting the chosen measuring instruments
- principles of operation of diesel fuel systems
- specifications of the fuel system components
- tools, techniques and equipment required to carry out fuel system component tests.

Assessment Conditions

- Assessors must:
 - have vocational competency in overhauling engine fuel system components 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>