



Australian Government

Assessment Requirements for MEM18006 Perform precision fitting of engineering components

Release: 2

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Modification History

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM18006 Perform precision fitting of engineering components (Release 1).

Release 1. Supersedes and is equivalent to MEM18006C Repair and fit engineering 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
- assessing engineering components visually and dimensionally with appropriate testing and measuring equipment techniques for compliance to specifications
- repairing or replacing faulty components using appropriate tools, equipment and techniques
- assembling components using appropriate fitting techniques and principles
- recording approved modifications/alterations
- inspecting final assembly to check compliance to specifications
- returning the final assembly to service 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)
- tools and equipment used to dismantle, repair, assemble and fit engineering components
- consequences of having non-compliant components
- types of modifications/adjustments to components being repaired/fitted
- repair methods
- sources of replacement parts
- techniques for the production of engineering components
- assembly and fitting techniques
- machine backlash/recoil
- measuring equipment
- engineering components - shafts, single and multi-throw crankshafts, cams and journals, bearings and bearing surfaces, and keys

- squareness, roundness, concentricity, flatness, straightness, surface finish and angular correctness
- purpose, selection criteria and use of gland packing, jointing or gasket materials
- types and application of lubricants
- approval processes for documenting out-of-specification modifications
- commissioning and return to service procedures.

Assessment Conditions

- Assessors must:
 - have vocational competency in performing precision fitting of engineering 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.
- Assessment must occur in a functioning workplace. Where assessment in the workplace would be unsafe, impractical or threatens the environment, assessment must occur in a sufficiently rigorous simulated environment that reflects the circumstances that would be experienced in a functioning workplace. Assessment must cover all aspects of workplace performance, including 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>