



Australian Government

**Assessment Requirements for MEM18005
Perform fault diagnosis, installation and
removal of bearings**

Release: 2

Assessment Requirements for MEM18005 Perform fault diagnosis, installation and removal of bearings

Modification History

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM18005 Perform fault diagnosis, installation and removal of bearings (Release 1).

Release 1. Supersedes and is equivalent to MEM18005B Perform fault diagnosis, installation and removal of bearings.

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 and drawings to perform fault diagnosis, installation and removal of bearings
- performing routine bearing checks during operation and non-operation by observing, listening, feeling and the use of appropriate test equipment appropriate to the installation; checking seal for seal and wear leaks and lubricating devices for correct operation
- performing fault diagnosis of bearings using diagnostic techniques and equipment and testing bearings for correct function/malfunction according to manufacturers' specifications
- identifying faulty bearings and causes of failure and taking remedial action to avoid recurrences
- removing bearings from shafts and bearing housings using appropriate fitting techniques and principles, tools, equipment and procedures; and inspecting condition, including measuring bearings and components to specified tolerances and repairing, where appropriate
- installing rotational plain bearings by sizing for correct clearances, lubricating, fitting, tensioning down and running according to specifications and procedures
- installing anti-friction bearings, including ball and roller by determining bearing inside/outside diameters, checking shafts and housings size for correct fit and clearances using appropriate fitting techniques and principles, tools and equipment and seal and cap bearings to specifications, where required
- undertaking numerical operations, calculations and formulae for diagnosing, installing and removal of bearings.

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)
- procedures for:
 - checking bearings and seals
 - checking bearing lubrication/lubrication devices
 - determining the appropriate clearances for a range of plain bearings
 - ‘sizing’ plain bearings
- manufacturer specifications
- engineering principles relating to fault diagnosis, installation and removal of bearings
- reasons for deciding to replace/not replace given bearings
- common causes of bearing failure and their indicators
- lubricants and lubrication requirements.

Assessment Conditions

- Assessors must:
 - have vocational competency in performing fault diagnosis, installation and removal of bearings 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>