



**Australian Government**

# **MEM18055 Dismantle, replace and assemble engineering components**

**Release: 1**

# MEM18055 Dismantle, replace and assemble engineering components

## Modification History

Release 1. Supersedes and is equivalent to MEM18055B Dismantle, replace and assemble engineering components

## Application

This unit of competency defines the skills and knowledge required to dismantle, identify faulty components, select replacements and assemble engineering components into assemblies or sub-assemblies in accordance with standard operating procedures (SOPs).

It also applies to the straightforward removal and replacement of pre-manufactured bearings and seals.

Where precision mechanical measurement is required unit MEM12003 Perform precision mechanical measurement should also be selected.

Where fitting techniques and principles are required to assess component condition, and/or modify components to achieve precision fits unit MEM18006 Perform precision fitting of engineering components should also be selected.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

**Band: A**

**Unit Weight: 3**

## Pre-requisite Unit

MEM09002	Interpret technical drawing
MEM11011	Undertake manual handling
MEM12023	Perform engineering measurements
MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools
MEM18002	Use power tools/hand held operations

## Competency Field

Maintenance and diagnostics

### Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1	<b>Determine job requirements</b>	1.1	Follow standard operating procedures (SOPs)
		1.2	Comply with work health and safety (WHS) requirements at all times
		1.3	Use appropriate personal protective equipment (PPE) in accordance with SOPs
		1.4	Identify job requirements from specifications, drawings, job sheets or work instructions
2	<b>Dismantle engineering components</b>	2.1	Inspect engineering components and analyse task requirements
		2.2	Dismantle components using appropriate tools and techniques
		2.3	Mark components for identification, where required
3	<b>Identify faulty components and select replacement parts</b>	3.1	Obtain and interpret specifications for components from appropriate source
		3.2	Identify out-of-specification, damaged or faulty components
		3.3	Identify faulty components for repair, replacement or adjustment
		3.4	Select replacement and/or repaired parts for reassembly
4	<b>Assemble engineering components into assemblies or</b>	4.1	Prepare, assemble and adjust components using fastening equipment and methods using appropriate tools, equipment and techniques which ensures compliance to specifications

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

**sub-assemblies**

- |     |   |
|-----|---|
| 4.2 | Select and apply lubrication, packing and sealing materials   |
| 4.3 | Inspect, test and adjust final component assembly, as necessary, for compliance with operational specifications and return to use according to SOPs |

## Foundation Skills

This section describes those required skills (reading, writing, oral communication and numeracy) that are essential to workplace performance in this unit of competency.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

## Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

**Engineering components include one (1) or more of the following:**

- couplings
- universal joints
- pumps employing shafts
- pre-manufactured bearings and seals
- lubricants
- fasteners
- gaskets

**Appropriate tools and equipment include one (1) or more of the following:**

- a range of hand and power tools
- bearing pullers
- special purpose dismantling and assembly tools

## Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM18055B Dismantle, replace and assemble engineering components

## Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>