



Australian Government

MEM03002 Perform precision assembly

Release: 1

MEM03002 Perform precision assembly

Modification History

Release 1. Supersedes and is equivalent to MEM03002B Perform precision assembly

Application

This unit of competency defines the skills and knowledge required to assemble and test complex engineering components and mechanical assemblies in a production manufacturing environment.

Assembly activities typically involve build-to-order work and/or low volume and/or complex assemblies and/or long assembly timeframes.

Where the interpretation of technical drawings is required unit MEM09002 Interpret technical drawing should also be selected.

Where the selection and use of manual handling is required unit MEM11011 Undertake manual handling should also be selected.

Where the selection and use of engineering measuring equipment is required unit MEM12023 Perform engineering measurements should also be selected.

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

Band: A

Unit Weight: 4

Pre-requisite Unit

MEM13015	Work safely and effectively in manufacturing and engineering
MEM16006	Organise and communicate information
MEM18001	Use hand tools

Competency Field

Assembly

Elements and Performance Criteria

Elements describe the essential outcomes.

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

- | | | | |
|---|--|-----|---|
| 1 | Determine job requirements | 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, sketches, job sheets or work instructions |
| 2 | Plan precision assembly | 2.1 | Check all components/sub-assemblies against job sheet, assembly list or equivalent instructions |
| | | 2.2 | Carry out fitting requirements and sequential assembly planning where applicable |
| | | 2.3 | Select tools, equipment and components/sub-assemblies to meet job requirements |
| 3 | Assemble engineering components | 3.1 | Identify any defective or faulty components/sub-assemblies and take action according to SOPs |
| | | 3.2 | Prepare functional components/sub-assemblies for assembly |
| | | 3.3 | Apply assembly techniques and principles appropriate to the job requirements |
| | | 3.4 | Fit components of assembly to ensure correct positioning and conformance with specifications |
| | | 3.5 | Test assembly to ensure that components interface/interact according to operational specifications |
| 4 | Adjust mechanical assemblies | 4.1 | Perform final adjustments on assembly to ensure it meets operational specifications using predetermined standards of quality and safety |

Elements describe the essential outcomes.

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

- 4.2 Identify any faulty assemblies for rework by operator or, where the fault is outside the scope of the workstation, take appropriate action for fault correction by others
- 4.3 Mark the completed assembly following SOPs

5 Protect assembly from damage and complete documentation

- 5.1 Handle and store components and/or assemblies according to procedures and in a manner least likely to cause damage
- 5.2 Record information on assembly data production schedules, job sheets, checklists and other standard forms and templates

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.

**Components/
sub-assemblies include:**

- parts that make up the sub-assembly and components

Records/inputs includes one (1) or more of the following:

- production schedules
- job sheets
- checklists
- standard forms and templates

Adjustments include one (1) or more of the

- clearances
- mesh
- tension

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following:

- level
- alignment

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM03002B Perform precision assembly

Links

Companion Volume implementation guides are found in VETNet -

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