Australian Government

# MEM18018 Maintain pneumatic system components

**Release: 2**

# MEM18018 Maintain pneumatic system components

## Modification History

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM18018 Maintain pneumatic system components (Release 1).

Release 1. Supersedes and is equivalent to MEM18018C Maintain pneumatic system components.

## Application

This unit of competency defines the skills and knowledge required to check pneumatic system components, identify and repair or replace faulty components.

Pneumatic system components are identified and inspected and assessed using fluid power principles to predetermined specifications interpreted from data sheets and circuits diagrams.

Where straightforward removal/replacement of components from a pneumatic system is required unit MEM18055 Dismantle, replace and assemble engineering components and unit MEM18071 Connect and disconnect fluid conveying system components, should be selected as appropriate.

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

**Band**: **A**

**Unit Weight**: **4**

## Pre-requisite Unit

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| MEM09002 | Interpret technical drawing |
| MEM11011 | Undertake manual handling |
| MEM12023 | Perform engineering measurements |
| MEM12024 | Perform computations |
| MEM13015 | Work safely and effectively in manufacturing and engineering |
| MEM14006 | Plan work activities |
| MEM16006 | Organise and communicate information |
| MEM18001 | Use hand tools |
| MEM18002 | Use power tools/hand held operations |

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| MEM18003 | Use tools for precision work |
| MEM18006 | Perform precision fitting of engineering components |
| MEM18055 | Dismantle, replace and assemble engineering components |

## 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 | **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, drawings, job sheets or work instructions |
| 2 | **Check pneumatic system components** | 2.1 | Identify the characteristics and operational function of each system component |
| | | 2.2 | Inspect and test the operational function of each component |
| | | 2.3 | Assess correct operation of each component against specifications |
| 3 | **Identify, repair or replace faulty pneumatic system components** | 3.1 | Localise faulty system components and confirm malfunction by inspection and testing using fluid power principles, procedures and safety requirements |
| | | 3.2 | Dismantle faulty system components and repair to manufacturers'/site specifications |

| | |
|---|---|
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| | 3.3 Select replacement parts from appropriate sources |
| | 3.4 Reassemble system components and verify for correct operation and test against specifications |
| | 3.5 Confirm correct operation of the pneumatic system according to SOPs |
| | 3.6 Adopt appropriate follow-up procedures |
| | 3.7 Complete service reports |

## 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.

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|---|---|
| **Pneumatic system components include one (1) or more of the following:** | • static and dynamic seals<br>• linear and semi-rotary actuators<br>• pressure control valves<br>• directional control valves<br>• flow control valves<br>• normally open and closed timers<br>• counters<br>• pneumatic motors<br>• fluid conductors<br>• other associated equipment |

# Unit Mapping Information

Release 2. Supersedes and is equivalent to MEM18018 Maintain pneumatic system components (Release 1).

Release 1. Supersedes and is equivalent to MEM18018C Maintain pneumatic system components.

# Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2