Australian Government

MEM18064 Maintain instrumentation system components

Release: 1

MEM18064 Maintain instrumentation system components

Modification History

Release 1. Supersedes and is equivalent to MEM18064B Maintain instrumentation system components

Application

This unit of competency defines the skills and knowledge required to maintain instrument system components of a primarily mechanical nature.

Application of this unit would involve identifying instrumentation system components as well as inspecting and assessing component condition/operation using instrumentation principles and methods and interpreting information from data sheets and circuit diagrams in order to make repairs and replacements to predetermined site or manufacturer specifications.

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

Band: **A**

Unit Weight: **6**

Pre-requisite Unit

MEM09002	Interpret technical drawing
MEM11011	Undertake manual handling
MEM12002	Perform electrical/electronic measurement
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
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 instrumentation system components**	2.1	Identify system components through interpreting the characteristics and operational function of each system component
		2.2	Inspect the operational function of each component and test in accordance with procedures
		2.3	Assess operation of each component against specifications
3	**Identify, repair/replace faulty instrumentation system components**	3.1	Localise/isolate faulty system components and confirm the malfunction by inspection and testing using appropriate techniques, procedures and safety requirements
		3.2	Dismantle faulty system components and repair according to manufacturers'/site specifications
		3.3	Select replacement parts from manufacturer catalogues and listings to required specifications
		3.4	Reassemble system components and test for correct operation and assessment against specifications
		3.5	Confirm correct operation of the instrumentation system according to SOPs
		3.6	Adopt appropriate follow-up procedures
		3.7	Complete service reports in accordance with 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.

Application includes one (1) or more of the following:

- fixed plant and equipment
- mobile plant and equipment
- marine installations
- machine and process operations

Components include one (1) or more of the following:

- sensors
- transmitters
- converters
- indicators
- analysers
- controllers
- transducers
- power supplies
- removable circuit boards
- sensor units associated with determining/controlling density, level, flow, temperature and composition of a range of materials

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM18064B Maintain instrumentation system components

Links

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