Australian Government

MEM18020 Maintain hydraulic system components

Release: 2

MEM18020 Maintain hydraulic system components

Modification History

Release 2. Quantum of hours of workplace practice removed. Supersedes and is equivalent to MEM18020 Maintain hydraulic system components (Release 1).

Release 1. Supersedes and is equivalent to MEM18020B Maintain hydraulic system components.

Application

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

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

Where straightforward removals/replacement of components from a hydraulic 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

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

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 hydraulic 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 and repair or replace faulty hydraulic 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 test for correct operation and assessment against specifications
	3.5 Confirm correct operation of the hydraulic 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.

Hydraulic system components include one (1) or more of the following:	• static and dynamic seals • linear and semi-rotary actuators • fixed and variable displacement pumps • pressure, directional and flow control valves • hydraulic motors • reservoirs • contamination control components (filtration) • fluid conductors/fittings • other associated equipment

Unit Mapping Information

Release 2. Supersedes and is equivalent to MEM18020 Maintain hydraulic system components (Release 1).

Release 1. Supersedes and is equivalent to MEM18020B Maintain hydraulic system components.

Links

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