



Australian Government

MEM27013 Maintain steering systems

Release: 1

MEM27013 Maintain steering systems

Modification History

Release 1. Supersedes and is equivalent to MEM18041B Maintain steering systems

Application

This unit of competency defines the skills and knowledge required to assess steering system operation, and repair or replace faulty components on steering systems for vehicles, mobile plant and equipment.

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
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

Fixed and mobile plant

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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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 Assess steering system operation	2.1 Obtain relevant information and interpret prior to any testing
	2.2 Undertake performance tests on primary and/or emergency steering systems in accordance with prescribed procedures
	2.3 Determine and record flows and pressures angles using appropriate test equipment
	2.4 Identify available wheel and axle adjustments and specifications
	2.5 Isolate faults to component level and determine appropriate corrective action
	2.6 Repair or replace faulty components and component parts
	2.7 Apply power steering component functions, adjustment principles, terminology and applications when assessing steering system operation
3 Repair/replace faulty components	3.1 Determine component wear and clearances using appropriate test equipment and manufacturer recommendations
	3.2 Select replacement components using manufacturers' data
	3.3 Remove components and refit using appropriate tools, equipment and techniques

Elements describe the essential outcomes.

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

- 3.4 Undertake wheel and axle adjustments to comply with alignment specifications
- 3.5 Make adjustments to primary and/or emergency steering systems that makes the system compliant with specifications
- 3.6 Record all test and rectification activities

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.

- Steering system includes one (1) or more of the following:**
- manual
 - hydraulically assisted
 - full hydraulic
 - articulated and track type systems, including:
 - hydrostatic
 - clutch and differential steering

Unit Mapping Information

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Links

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

