



Australian Government

MEM27011 Maintain track type undercarriage on mobile plant

Release: 1

MEM27011 Maintain track type undercarriage on mobile plant

Modification History

Release 1. Supersedes and is equivalent to MEM18039B Diagnose and rectify track type undercarriage

Application

This unit of competency defines the skills and knowledge required to maintain track assemblies, including checking components, clearances, tension and replacing any faulty components.

It covers mobile plant equipment that uses crawler belts and/or chain links.

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.

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 track assembly	2.1	Apply operating principles and terminology of track type undercarriage in assessing track assembly
		2.2	Inspect for wear or damage and determine if component requires repair or replacement
		2.3	Check track frame alignment and determine variances from specifications
3	Rectify and maintain track assemblies	3.1	Remove, repair or replace faulty track undercarriage components
		3.2	Set track tension to specification
		3.3	Adjust clearances to specification
		3.4	Record all service/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.

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

- links
- pins
- sprockets
- idlers
- rollers and pads
- track chains
- tensioners
- sensors and monitoring module

Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM18039B Diagnose and rectify track type undercarriage

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for MEM27011 Maintain track type undercarriage on mobile plant

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting specifications, charts, lists, drawings and other applicable reference documents to diagnose and rectify track type undercarriage
- checking track type undercarriage for compliance with specifications
- identifying components present in the track type undercarriage system
- inspecting track type undercarriage components for wear and damage and identifying worn or damaged parts for repair or replacement using appropriate tools, equipment and techniques
- undertaking calculations and numerical operations associated with diagnosing and rectifying track type undercarriage
- checking the track frame for alignment and identifying variations from alignment specifications
- removing and replacing track undercarriage components using appropriate tools, equipment and techniques
- setting track tension and adjusting clearances to specifications
- recording/reporting all service/work activities in accordance with SOPs.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- operating principles of track type undercarriage
- procedures for:
 - checking track type undercarriage components for wear and tools, techniques and equipment
 - aligning track frames and tools, techniques and equipment
 - removing and replacing track type undercarriage components and precautions to be taken

- setting track tension and adjusting clearances setting track tension and adjusting clearances
- reasons for selecting the chosen tools, techniques and equipment
- specifications of the track type undercarriage components
- action to be taken to overcome the wear and/or damage detected.

Assessment Conditions

- Assessors must:
 - have vocational competency in maintaining track type undercarriage on mobile plant at least to the level being assessed with relevant industry knowledge and experience
 - satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires
- Where possible assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

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