



Australian Government

Department of Education, Employment and Workplace Relations

MEM18039B Diagnose and rectify track type undercarriage

Release: 1

MEM18039B Diagnose and rectify track type undercarriage

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers assessing, repairing or replacing, and maintaining track assemblies.
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Application of the Unit

Application of the unit	This unit also refers to mobile plant equipment that uses crawler belts and/or chain links. It mainly applies to work conducted in the field. Band: A Unit Weight: 4
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
Path 1	MEM09002B	Interpret technical drawing
	MEM12023A	Perform engineering measurements
	MEM18001C	Use hand tools
	MEM18002B	Use power tools/hand held operations

Prerequisite units		
	MEM18055B	Dismantle, replace and assemble engineering components

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Assess track assembly	1.1.Track type undercarriage operating principles and terminology are understood. 1.2.Links, pins, sprockets, idlers, rollers, pads, etc. are assessed for wear/damage/reuse/replacement; and corrective action is determined. 1.3.Track frame alignment is checked and variances from specifications correctly are determined.
2. Rectify and maintain track assemblies	2.1.Safety procedures associated with removal and replacement of track undercarriage components are followed. 2.2.Track tension is correctly set to specification. 2.3.Clearances are adjusted to specification.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Look for evidence that confirms skills in:

- reading, interpreting and following information on written job instructions, specifications, standard operating procedures, charts, lists, drawings and other applicable reference documents
- planning and sequencing operations
- checking task-related information
- checking for conformance to specification
- checking track type undercarriage components for wear and damage using appropriate tools
- identifying worn or damaged components for repair or replacement
- checking the track frame for alignment
- identifying variations from alignment specifications
- removing and replacing track undercarriage components
- setting track tension to specification
- adjusting clearances to specification
- undertaking calculations and numerical operations within the scope of this unit
- recording and reporting service activities

REQUIRED SKILLS AND KNOWLEDGE**Required knowledge**

Look for evidence that confirms knowledge of:

- the operating principles of track type undercarriage
- the procedures, tools, techniques and equipment for checking track type undercarriage components for wear
- the reasons for selecting the chosen tools, techniques and equipment
- the specifications of the track type undercarriage components
- the action to be taken to overcome the wear and/or damage detected
- the procedures, tools, techniques and equipment for aligning track frames
- the procedures for removing and replacing track type undercarriage components
- the precautions to be taken when removing and replacing track type undercarriage components
- the procedures for setting track tension
- the procedures for adjusting clearances
- hazards and control measures associate with testing and rectifying track type undercarriage, including housekeeping
- safe work practices and procedures

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

A person who demonstrates competency in this unit must be able to diagnose and rectify track type undercarriage. Competency in this unit cannot be claimed until all prerequisites have been satisfied.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

Assessors must be satisfied that the candidate can competently and consistently perform all elements of the unit as specified by the criteria, including required knowledge, and be capable of applying the competency in new and different situations and contexts.

Context of and specific resources for assessment

This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.

This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with diagnosing and rectifying track type undercarriage, or other units requiring the exercise of the skills and knowledge covered by this unit.

Method of assessment

Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency. The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.

EVIDENCE GUIDE**Guidance information for
assessment****Range Statement****RANGE STATEMENT**

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Unit Sector(s)

Unit sector	
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Co-requisite units

Co-requisite units		

Competency field

Competency field	Maintenance and diagnostics
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