



Australian Government

MEM20027 Maintain and service mechanical locking devices

Release: 1

MEM20027 Maintain and service mechanical locking devices

Modification History

Release 1. Supersedes and is equivalent to MEM20006 Maintain and service mechanical locking devices.

Application

This unit of competency defines the skills and knowledge required to carry out maintenance of a range of mechanical locks and locking systems in commercial, industrial and domestic environments.

It covers the ability to identify maintenance requirements, use safe and efficient work practices to inspect, service and repair mechanical locks/locking systems, and accurately document and maintain information systems.

Where maintenance and servicing of safes is required, unit MEM20032 Service and repair fire and security containers should also be selected.

Where maintenance and servicing of automotive locks is required, unit MEM20033 Service and repair mechanical automotive locking systems, unit MEM20018 Identify and program transponder keys, unit MEM20019 Service automotive transponder systems using diagnostic equipment and unit MEM20020 Use EEPROM programmers to service automotive transponder systems, should also be selected as appropriate.

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

Band: A

Unit Weight: 6

Pre-requisite Unit

MEM11011 Undertake manual handling

MEM13015 Work safely and effectively in manufacturing and engineering

MEM16006 Organise and communicate information

MEM18001 Use hand tools

MEM20023 Assemble and test lock mechanisms

Competency Field

Locksmithing

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
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 Select and use personal protective equipment (PPE) in accordance with SOPs 1.4 Review work order, identify job requirements and follow up with appropriate personnel about items requiring clarification
2. Prepare for maintenance	2.1 Identify mechanical locks or locking systems to be serviced or repaired and confirm in accordance with work order 2.2 Select tools, equipment and materials appropriate to job requirements and check for operational effectiveness in accordance with manufacturer specifications 2.3 Identify potential and existing risks and hazards associated with maintenance activities and control in accordance with SOPs
3. Maintain mechanical lock and/or locking system	3.1 Access mechanical locks or locking systems identified for maintenance with minimal disruption to client, services or normal work routines 3.2 Conduct checks on mechanical locks or locking systems and components to identify any damage, friction or sticking in accordance with manufacturer specifications 3.3 Service mechanical locks or locking systems and components and repair in accordance with manufacturer specifications and work order 3.4 Identify fault and replace components, as required, to ensure effective operational capability in accordance with work order, legislative requirements and SOPs 3.5 Report complex faults or repair requirements outside area of responsibility or competence to appropriate personnel for specialist advice in accordance with SOPs
4. Complete maintenance	4.1 Reassemble serviced and repaired mechanical locks or locking systems and check for correct operation and serviceability in accordance with manufacturer specifications 4.2 Communicate work completion to appropriate personnel in accordance with SOPs 4.3 Complete and process documentation in a prompt and accurate

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	manner in accordance with industry and legislative requirements and SOPs 4.4 Clean work area, tools and equipment and store in accordance with SOPs 4.5 Collect waste from service and repair activities, and comply with organisational and environmental requirements for treatment, disposal or recycling

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

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.

Personal protective equipment (PPE) includes one or more of the following:	• face shields, goggles and safety glasses • hearing protection • dust masks and respirators • high visibility vests or clothing • head protection • sun protection, hats and sunscreen • gloves and knee pads • safety footwear • witches hats • warning signs and warning tapes • temporary safety barriers • fire extinguisher • first aid kit.
Work order includes one or more of the	• work schedules, completion dates, job requirements and tasks • specific client requirements

following:	• access to site and specific site requirements • resource requirements • work health and safety (WHS) requirements and compliance with relevant legislation • budget allocations and warranties • service information.
Appropriate personnel include one or more of the following:	• installer • subcontractor • technician • supervisor • manager • client.
Mechanical locks and/or locking systems include one or more of the following:	• night latches • deadlocks • lever and cylinder mortice locks • tubular deadbolts • key in knob • key in lever • tie bolts • exit devices • door control devices • lockable bolts • window locks • high security cylinders for commercial applications • exposed wheel combination locks • mechanical digital • tubular locks.
Tools and equipment include one or more of the following:	• hand tools • fixing tools • strippers • router • file • ladder and hoist • drop sheet • batteries • master key plans • personal protective equipment (PPE) • communications equipment • cleaning equipment.
Materials include one or more of the	• graphite powder • oil, silicon, dry lube and grease

following:	• cleaning compounds.
Risks and hazards include one or more of the following:	• non-compliance with building codes and regulations • exposed electrical wiring • manual handling • asbestos • dust • noise • live power • vermin • water • glass fibre • building debris • natural and other gas build-up.
Maintenance includes one or more of the following:	• cleaning • inspection • lubrication • routine repairs • identification of worn parts • confirming operation • adjustments • key cutting • replacement of worn parts.
Access includes one or more of the following:	• disassembly • use of access code • access token • keys.
Disruptions include one or more of the following:	• security • time • access • noise • use of communications equipment • business operations.
Safe operating practices include one or more of the following:	• working safely around electrical wiring and cables • working safely around tools and equipment • recognising hazards and following emergency procedures • awareness of electrical hazards • following confined spaces procedures.
Documentation includes one or more of the following:	• completion of documentation • mechanical lock • locking system • problems or faults

	• warranty conditions and allowances • recommendation for repairs • parts replaced • components replaced • materials used • recommendations for future operation and maintenance • costings.
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Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM20006 Maintain and service mechanical locking devices.

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 MEM20027 Maintain and service mechanical locking devices

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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 and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- interpreting and following specifications, charts and diagrams and communicating in a clear and concise manner when maintaining and servicing mechanical locking devices
- identifying work health and safety (WHS) hazards and risks and implementing appropriate risk control measures and procedures
- selecting the appropriate tools and equipment to complete the task
- carrying out routine maintenance on mechanical locking devices on at least two occasions
- cleaning worksite in accordance with original presentation, client requirements, industry standards and SOPs
- completing all documentation in accordance with SOPs.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

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)
- types, functions, specifications and operational principles of mechanical locks and/or locking systems
- types of information on work orders and other documentation requirements
- maintenance requirements of mechanical locks and locking systems and associated tools, equipment and materials requirements
- common mechanical lock and locking system faults
- tests to confirm lock operation
- procedures to disassemble and reassemble mechanical locks
- technical terminology
- types of doors and windows and mechanical locking system applications
- hazards and control measures associated with maintaining and servicing mechanical locking devices.

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Assessment Conditions

- Assessors must:
 - have vocational competency in maintaining and servicing mechanical locking devices 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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