



Australian Government

Department of Education, Employment and Workplace Relations

MEM20002A Assemble and test lock mechanisms

Release: 1

MEM20002A Assemble and test lock mechanisms

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers manually assembling key mechanisms.
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Application of the Unit

Application of the unit	This unit applies to assembly operations that are essentially manual in nature and require the application of accepted locksmithing principles and practices. Assembly activities typically involve built-to-order work and/or low volume and/or complex assemblies and/or long assembly timeframes. This unit could apply to assembly of cylinders within a masterkey system and individually keyed cylinders. Work may involve manual adjustments of locking assemblies to correct clearances and alignments to predetermined standards of quality and safety. Applications of this unit may also require varying levels of measurement competencies. Where this is the case, Unit MEM12023A (Perform engineering measurements) or Unit MEM12003B (Perform precision mechanical measurement) should also be selected as appropriate. Band: A Unit Weight: 6
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		
Path 1	MEM20001A	Produce keys

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. Identify key mechanism features and assembly requirements	1.1. Assembly specifications are identified from instructions and documentation. 1.2. Appropriate authorisations are obtained, signatures checked and order confirmed. 1.3. Appropriate assembly sequence/method is planned in accordance with instructions and manufacturer documentation.
2. Prepare to assemble lock mechanisms	2.1. Lock mechanisms are disassembled, if necessary. 2.2. Components and parts are compiled in accordance with assembly specifications. 2.3. Tools, equipment and materials are selected to suit job requirements. 2.4. Work area is prepared and components are arranged in accordance with organisational procedures and selected assembly technique. 2.5. Defective or faulty parts are identified and processed according to organisational procedures.
3. Assemble lock mechanisms	3.1. Locksmithing techniques and principles are applied appropriate to assembly activity. 3.2. Records/data are maintained or processed in accordance with organisational requirements. 3.3. Component parts are fitted to ensure correct positioning and conformance with specifications. 3.4. Locking mechanism is correctly marked/ tagged/ identified as appropriate in accordance with organisational procedure. 3.5. Components and/or assembly are handled and stored in a manner least likely to cause damage and in accordance with organisational procedure.
4. Identify the combination of an assembled mechanism	4.1. The lock mechanism and construction is correctly identified using appropriate method. 4.2. Lock mechanism is decoded (internal locking components).
5. Check finished products	5.1. Operation of the lock mechanism and key is checked for conformance to specifications. 5.2. Faults in lock mechanism or key operation are identified and rectified.
6. Mark, package and label products	6.1. Products are stamped with correct door and key reference information in accordance with

ELEMENT	PERFORMANCE CRITERIA
	organisational procedures. 6.2. Stamping equipment is selected and used correctly. 6.3. Products are grouped, packaged and labelled for installation in accordance with organisational procedures.

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:

- checking components/parts against key schedule/job sheet, assembly list or equivalent instructions
- planning assembly sequence
- decoding key mechanisms

Required knowledge

Look for evidence that confirms knowledge of:

- types of mechanical locking devices
- information on handwritten and computer generated pinning charts, key and door schedules, hardware chart, mechanical locking devices, mechanisms and components
- the importance of obtaining authorisations
- the difference between levers and key blanks
- fitting requirements and sequence of assembly
- tools, equipment and materials for assembling lock mechanisms
- door and key reference information and stamping methods

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 assemble locking devices and produce keys from locks. 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 assembling locking devices, 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.

Assembly specifications	Required components and parts, door handing, timeframe for completion, keying instructions and fitting requirements
Documentation	Door and key schedules, job sheet, pinning charts, hardware charts, manufacturer documentation
Lock mechanisms	Pin and disc tumbler cylinders, lever and warded locks
Components and parts	Wafers, springs, key blanks, plugs, levers, housings, pins, cams and screws, circlips and tails
Tools and equipment	Jigs, followers, tweezers, screwdrivers, circlip pliers, files, wire wheel
Materials	Graphite, Teflon and silicone based lubricants
Reference information	System member, rank, key issue, dealer identification
Stamping equipment	Dedicated stamping machine, hand stamps, stamping block

Unit Sector(s)

Unit sector	
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Co-requisite units

Co-requisite units		

Competency field

Competency field	Locksmithing
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