Australian Government

MEM20020 Use EEPROM programmers to service automotive transponder systems

Release: 1

MEM20020 Use EEPROM programmers to service automotive transponder systems

Modification History

Release 1. Supersedes but is not equivalent to MEM20013 Service automotive transponder systems.

Application

This unit of competency defines the skills and knowledge required to use electrically erasable programmable read-only memory (EEPROM) programmers to identify, analyse, encode and re-encode (program) automotive transponder security systems on commercial and private use vehicles.

It applies to locksmiths using EEPROM programmers to program automotive transponder keys and associated equipment.

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

Band: This unit has dual status and is to be regarded as both a Specialisation band A unit and Specialisation band B unit for progression to C5 (AQF level V).

Unit Weight**:** 2

Pre-requisite Unit

MEM13015 Work safely and effectively in manufacturing and engineering

MEM16006 Organise and communicate information

MEM18001 Use hand tools

MEM20015 Produce hand cut keys

MEM20016 Produce keys by cutting to code

MEM20017 Produce keys by duplication

MEM20018 Identify and program transponder keys

MEM20019 Service automotive transponder systems using diagnostic equipment

MEM20023 Assemble and test lock mechanisms

MEM20025 Gain entry

MEM20031 Gain entry and reinstate automotive locking systems

Competency Field

Locksmithing

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential *outcomes.*	*Performance criteria describe the performance needed to demonstrate achievement of the element.*
1. Identify service and repair requirements	1.1 Follow standard operating procedures (SOPs) and comply with work, health and safety (WHS) requirements at all times 1.2 Establish ownership and verify in accordance with organisational and industry procedures 1.3 Obtain system and component specifications and other relevant information from appropriate sources and in accordance with organisational and customer requirements 1.4 Establish nature of damage in accordance with organisational procedures, established inspection, diagnostic techniques and original specifications 1.5 Establish service requirements and other information relevant to task in accordance with customer needs, organisational and manufacturer specifications and legislation, codes, regulations and standards
2. Service automotive transponder system	2.1 Select and use appropriate personal protective equipment (PPE) 2.2 Identify risks and hazards and make area safe 2.3 Apply specific isolation and safety measures with special regard to associated equipment 2.4 Select tools, equipment, materials and consumables, check for serviceability and use in accordance with manufacturer specifications and SOPs
3. Program transponder keys	3.1 Identify personal limitations in programming and seek assistance from appropriate sources 3.2 Establish programming requirements in accordance with SOPs and supplier requirements 3.3 Program EEPROM to suit transponder keys 3.4 Test system function to ensure correct operation
4. Finalise servicing process	4.1 Clean work area, tools and equipment and store in accordance with SOPs 4.2 Complete documentation and process in accordance with legislative and organisational requirements

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.	
Appropriate sources of information include one or more of the following:	• catalogues • manufacturer manuals • drawings • detailed sketches • technical sketches • associated data sheets • industry software and websites.
Other information includes one or more of the following:	• timeframes • access and site information • specific client requests • warranties and service information • work health and safety (WHS) requirements.
Customer requirements include one or more of the following:	• function and capabilities • access issues • service and maintenance requirements • product operation and warranty information.
Risks and hazards include one or more of the following:	• unique dangers arising from working on the roadside • non-compliance with manufacturer recommendations • materials handling • environmental hazards • physical hazards.
Associated equipment includes one or more of the following:	• electronic immobilisers • anti-theft devices.
Tools and equipment include one or more of the following:	• hand tools • specialist diagnostic equipment • electrically erasable programmable read-only memory (EEPROM) encoding equipment • soldering equipment.

Documentation includes one or more of the following:	• job sheets • invoices • warranties.

Unit Mapping Information

No equivalent unit.

Links

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