



Australian Government

AURATA001 Identify basic automotive faults using troubleshooting processes

Release: 1

AURATA001 Identify basic automotive faults using troubleshooting processes

Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to conduct basic troubleshooting processes to identify common automotive faults or problems based on evidence provided by customers.

It applies to those identifying basic automotive faults in agricultural machinery, heavy commercial vehicles, light vehicles, marine vessels, motorcycles, mobile plant machinery or outdoor power equipment in the automotive service and repair industry.

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

Competency Field

Common

Unit Sector

Technical

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold and italicised text is used, further information is detailed in the range of conditions section.
1. Confirm nature of fault or problem	1.1 Nature of customer enquiry or concern is determined using appropriate questioning techniques 1.2 Hazards associated with fault identification process are recognised and precautions are taken according to <i>safety</i>

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	<i>requirements</i> 1.3 Troubleshooting process options are researched and those most appropriate to the circumstances are selected 1.4 Tools and equipment are selected and checked for serviceability according to manufacturer procedures
2. Identify and report on fault	2.1 Automotive system or component relating to fault or problem is identified 2.2 Troubleshooting processes that identify likely cause of fault or problem are followed according to workplace procedures and without causing damage to components or systems 2.3 Information and support to assist in the fault identification process are sought as required 2.4 Report is forwarded to appropriate persons for action according to workplace procedures
3. Complete work processes	3.1 Final inspection is made to ensure work is to workplace expectations and vehicle or equipment is presented ready for use 3.2 Tools and equipment are checked and stored, and faulty electrical equipment is identified, tagged and according to workplace procedures 3.3 Workplace documentation is processed according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance and are not explicit in the performance criteria.

Skills	Description
Learning skills to:	identify own skills and abilities required to perform the job and learning opportunities to gain necessary troubleshooting skills.
Reading skills to:	- interpret safety and workplace requirements required to complete the job task - interpret testing and troubleshooting procedures and flowcharts from manufacturer and workplace instructions and job requirements.
Oral communication skills	- seek information from customers - speak clearly to be understood using appropriate automotive

to:	technical terms • give feedback to confirm clear understanding.
Planning and organising skills to:	• plan the sequence of work tasks to ensure an efficient job outcome.
Self-management skills to:	• select and use appropriate equipment, materials, processes and procedures • follow workplace documentation, such as codes of practice or operating procedures.
Technology skills to:	• use tools and equipment relating to troubleshooting processes.

Range of Conditions

This section specifies 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.

Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Safety requirements</i> must include:	• work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for selecting and using personal protective equipment (PPE).
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Unit Mapping Information

Equivalent to AURATA2001 Identify basic automotive faults using troubleshooting processes

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1>

Assessment Requirements for AURATA001 Identify basic automotive faults using troubleshooting processes

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Performance Evidence

Before competency can be determined, individuals must demonstrate they can perform the following according to the standard defined in the unit's elements and performance criteria, range of conditions and foundation skills:

- follow basic troubleshooting processes to identify a basic and familiar automotive fault in three of the following systems:
 - engine
 - engine management system
 - manual transmission
 - automatic transmission
 - driveline
 - final drive
 - braking system
 - hydraulic system
 - electrical system, excluding engine management
 - steering or suspension system
 - wheels and tyres
- report findings on the identified faults in the above systems.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to identifying basic automotive faults using troubleshooting processes, including procedures for selecting and using personal protective equipment (PPE)
- basic troubleshooting techniques and processes, including:
 - customer questioning skills to facilitate identification of vehicle system fault

- use of simple diagnostic charts
- procedures for reporting and documenting findings.

Assessment Conditions

Assessors must satisfy NVR/AQTF assessor requirements.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessment must include direct observation of tasks.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the basic faults they have identified in vehicles or machinery using troubleshooting processes, e.g. repair orders.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- automotive repair workplace or simulated workplace
- vehicles and components with basic faults
- equipment appropriate for troubleshooting basic automotive faults
- vehicle, machinery and equipment specifications.

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