AURETR021 Inspect, service and repair electronic management, monitoring and tracking systems

Release: 1

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Modification History

Release	Comment
Release 1	New unit of competency.

Application

This unit describes the performance outcomes required to inspect, service and repair electronic monitoring, management and tracking systems fitted to heavy vehicles or machinery. It involves preparing for the task, inspecting the systems, repairing the systems, and completing workplace processes and documentation, including any associated recommendations for further action.

It applies to those working in the automotive service and repair industry. The electronic management, monitoring and tracking systems include those in heavy vehicles, agricultural machinery or mobile plant machinery.

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

Competency Field

Electrical

Unit Sector

Technical - Electrical and Electronic

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. Prepare to inspect, service and repair	1.1 Job requirements are determined according to workplace instructions

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.
electronic management, monitoring and tracking system	1.2 Inspection, servicing and repair procedures are accessed and interpreted 1.3 Hazards associated with the work are identified and risks are managed 1.4 Tools and electrical test equipment are selected and checked for serviceability
2. Inspect and test system	2.1 System is inspected and tested according to workplace procedures and *safety requirements* 2.2 Circuits are tested according to workplace procedures and without causing damage to components or systems 2.3 Inspection results are compared with manufacturer specifications 2.4 Inspection findings are reported according to workplace procedures, including recommendations for required repairs or adjustments
3. Service and repair system	3.1 System is serviced and repaired according to manufacturer and component specifications, workplace procedures, and safety and *environmental requirements*, and without causing damage to components or systems 3.2 System is performance tested and final adjustments are made 3.3 Post-repair testing is carried out to confirm system is operating to manufacturer specifications, any reported problems are resolved, and no other problems are present
4. Complete work processes	4.1 Final inspection is made to ensure work is to workplace expectations and vehicle or machinery is presented ready for use with protective guards, safety features and cowlings in place 4.2 Work area is cleaned, waste and non-recyclable materials are disposed of and recyclable material is collected 4.3 Tools and equipment are checked and stored and any faulty electrical equipment is identified, tagged and isolated according to workplace procedures 4.4 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:	• locate appropriate sources of information efficiently.
Reading skills to:	• interpret text, symbols and diagrams in manufacturer specifications and workplace procedures.
Writing skills to:	• legibly and accurately fill out workplace documentation when reporting diagnostic findings, making repair recommendations, and recording parts and material used.
Oral communication skills to:	• clarify instructions and report inspection findings to appropriate personnel.
Numeracy skills to:	• interpret vehicle electrical measurements and readings on digital and analogue gauges • measure voltage, current and resistance and use basic mathematical operations, including addition and subtraction, to calculate deviations from manufacturer specifications.
Technology skills to:	• use specialised tools and electrical test equipment, including scan tools.

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.

Safety requirements must include:	• work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for:
	  • selecting and using personal protective equipment (PPE), including clothing, and eye and hand protection
	  • working safely with high current electrical systems.

Environmental requirements must include:	• procedures:
	  • found in safety data sheets (SDS) relating to toxic and corrosive substances
	  • for recycling and disposing of replaced electronic management, monitoring and tracking system components.

Unit Mapping Information

Equivalent to AURETR3021 Inspect, service and repair electronic management, monitoring and tracking systems

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b4278d82-d487-4070-a8c4-78045ec695b1

Mining and Automotive Skills Alliance