



**Australian Government**

# **AURETH101 Depower and reinitialise battery electric vehicles**

**Release: 1**

# AURETH101 Depower and reinitialise battery electric vehicles

## Modification History

Release	Comments
Release 1	This version first released with AUR Automotive Retail, Service and Repair Training Package Version 6.0

## Application

This unit describes the skills and knowledge required to depower and reinitialise battery electric vehicles (BEVs). It involves ensuring the vehicle high voltage (HV) rechargeable energy storage system (RESS) is isolated before commencing any service or repair work. It also involves calibrating vehicle systems that may need resetting once the energy storage system is reinitialised. Importance is placed in the unit on applying RESS and separated extra low voltage (SELV) electrical safety procedures.

The unit applies to those who work in the automotive service and repair industry.

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

## Unit Sector

Electrical Technical – Hybrid Vehicle and Battery Vehicle

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare to depower and reinitialise BEV	1.1 Identify job requirements from workplace instructions 1.2 Identify required information for servicing activity 1.3 Identify hazards associated with the work, assess potential risks and implement control measures in line with workplace policies and procedures 1.4 Identify tools and equipment required for servicing activity and establish serviceability according to workplace procedures
2. Deactivate vehicle RESS	2.1 Locate and disconnect SELV supply according to manufacturer specifications

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	<p>2.2 Locate and remove RESS service plug or manual service disconnect to depower vehicle HV RESS according to manufacturer specifications</p> <p>2.3 Stabilise vehicle is stabilised ensure zero residual voltage according to manufacturer procedures</p> <p>2.4 Secure and retain RESS service plug or manual service disconnect to prevent refitting by third party</p>
3. Reinitialise vehicle RESS	<p>3.1 Reconnect SELV and RESS service plug or manual service disconnect in the correct order and reactivate vehicle</p> <p>3.2 Carry out diagnostic tests to ensure correct recalibration of subsystems affected by depower process according to manufacturer procedures</p> <p>3.3 Check RESS and vehicle subsystems for correct operation</p> <p>3.4 Report post-reactivation faults according to workplace procedures</p>
4. Complete work processes	<p>4.1 Conduct final inspection according to workplace procedures and confirm vehicle is ready for use</p> <p>4.2 Clear work area and dispose of or recycle materials according to workplace procedures</p> <p>4.3 Complete documentation according to workplace procedures</p>

## Foundation Skills

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

<b>SKILL</b>	<b>DESCRIPTION</b>
Learning	<ul style="list-style-type: none"> <li>Locates required sources of information efficiently</li> </ul>
Reading	<ul style="list-style-type: none"> <li>Interprets text, symbols and diagrams in depowering and reinitialising information in manufacturer specifications, and workplace instructions and procedures</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Listens to workplace instructions and ask questions to clarify job requirements</li> <li>Participates in verbal exchanges when depowering and reinitialising BEVs</li> </ul>
Numeracy	<ul style="list-style-type: none"> <li>Matches electrical components and part identification numbers to workplace instructions, vehicle and component part lists, and manufacturer specifications</li> </ul>

SKILL	DESCRIPTION
	<ul style="list-style-type: none"> <li>• Interprets vehicle electrical measurements and readings on digital and analogue gauges</li> <li>• Interprets measurements of residual voltage and high voltages relating to BEVs</li> </ul>
Planning and organising	<ul style="list-style-type: none"> <li>• Plans own work requirements</li> <li>• Prioritises actions to achieve required outcomes</li> <li>• Ensures tasks are completed within workplace timeframes</li> </ul>
Problem solving	<ul style="list-style-type: none"> <li>• Identifies faults in reinitialising process that need to be reported</li> </ul>
Technology	<ul style="list-style-type: none"> <li>• Uses specialised tools</li> </ul>

## Unit Mapping Information

Supersedes and is equivalent to AURETH001 Depower and reinitialise battery electric vehicles.

## Links

Companion Volume Implementation Guide is found on VETNet -

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