



**Australian Government**

# **AURETU002 Recover vehicle refrigerants**

**Release: 1**

## AURETU002 Recover vehicle refrigerants

### Modification History

Release	Comment
Release 1	New unit of competency.

### Application

This unit describes the performance outcomes required to recover vehicle air conditioner refrigerants in designated recovery cylinders for disposal according to safety and environmental procedures while observing critical precautions, given that refrigerant may be flammable.

It applies to those working as vehicle dismantlers, automotive parts recycling contractors, and vehicle body repairers in automotive service and repair workplaces who are required to recover automotive air conditioning refrigerants. Automotive air conditioners, including heating, ventilation and air conditioning (HVAC) systems, include those in agricultural machinery, heavy commercial vehicles, light vehicles or mobile plant machinery.

Licensing requirements apply to this unit. Users are advised to check with the relevant regulatory authority. An Australian Refrigeration Council accredited (ARCtick) Restricted Refrigerant Recoverer licence is required for those carrying out this work.

### Competency Field

Electrical

### Unit Sector

Technical - Air Conditioning and HVAC

### 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 for refrigerant	1.1 Job requirements are determined from workplace instructions

<b>Elements</b> Elements describe the essential outcomes.	<b>Performance Criteria</b> 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.
recovery	1.2 Refrigerant recovery workplace procedures and relevant <i>code of practice</i> are accessed and interpreted 1.3 Hazards associated with the work are identified and risks are managed 1.4 Vehicle air conditioning system, components and refrigerant service ports are identified for refrigerant recovery 1.5 <b><i>Recovery equipment</i></b> , personal protective equipment (PPE) and firefighting equipment, are checked for serviceability according to manufacturer specifications and workplace procedures
2. Operate recovery equipment	2.1 Vehicle refrigerant is identified with a refrigerant identifier or analyser 2.2 Designated recovery cylinder is weighed to determine available capacity, and tare weight of cylinder is recorded 2.3 Recovery equipment is connected to vehicle according to manufacturer specifications, workplace procedures, and <b><i>safety and environmental requirements</i></b> 2.4 Refrigerant is recovered and transferred into designated recovery cylinder using recovery equipment according to manufacturer specifications, workplace procedures, and safety and environmental requirements 2.5 Problems are responded to appropriately and escalated according to workplace procedures
3. Complete work processes	3.1 Quantity and details of recovered refrigerant are recorded according to workplace procedures and regulatory requirements 3.2 Recovery equipment, hoses and recovery cylinder are shut down and disconnected, and cylinders capped, according to workplace procedures 3.3 Refrigerant is stored in designated recovery cylinder according to workplace procedures 3.4 Recovery equipment and tools are checked and stored, and faulty equipment is identified, tagged and isolated 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.

<b>Skills</b>	<b>Description</b>
Learning skills to:	<ul style="list-style-type: none"> <li>locate appropriate sources of information efficiently.</li> </ul>
Reading skills to:	<ul style="list-style-type: none"> <li>interpret text, symbols and diagrams in workplace and safe operating procedures and manufacturer specifications</li> <li>interpret critical precautions of the Australian automotive code of practice relating to automotive refrigerant recovery.</li> </ul>
Writing skills to:	<ul style="list-style-type: none"> <li>legibly and accurately enter information in regulatory reports and fill out other required workplace documentation.</li> </ul>
Oral communication skills to:	<ul style="list-style-type: none"> <li>ask questions to clarify job requirements.</li> </ul>
Numeracy skills to:	<ul style="list-style-type: none"> <li>match refrigerant types and identification numbers to workplace procedures and code of practice requirements</li> <li>interpret weight measurements, including tare and gross weights</li> <li>interpret readings on digital and analogue pressure gauges</li> <li>complete numerical data in documentation and charts.</li> </ul>
Planning and organising skills to:	<ul style="list-style-type: none"> <li>plan own work requirements and prioritise actions to achieve required outcomes and ensure tasks are completed within workplace timeframes.</li> </ul>
Technology skills to:	<ul style="list-style-type: none"> <li>use workplace technology and tools, such as refrigerant analyser, vacuum recovery equipment, and scales.</li> </ul>

## 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.

<b><i>Code of practice</i></b> must include:	<ul style="list-style-type: none"> <li>Australian automotive code of practice: Control of refrigerant gases during manufacture, installation, servicing or de-commissioning of motor vehicle air conditioners.</li> </ul>
<b><i>Recovery equipment</i></b> must include:	<ul style="list-style-type: none"> <li>refrigerant hose and coupler</li> <li>refrigerant recovery unit</li> <li>refrigerant scales</li> <li>refrigerant identifier or analyser</li> <li>designated and appropriately labelled recovery cylinders.</li> </ul>
<b><i>Safety and environmental requirements</i></b> must include:	<ul style="list-style-type: none"> <li>work health and safety (WHS) and occupational health and safety (OHS) requirements, including procedures for: <ul style="list-style-type: none"> <li>working with refrigerants at boiling point given risk of frostbite</li> </ul> </li> </ul>

	<ul style="list-style-type: none"><li>• working with system lubricants, including carcinogenic oils</li><li>• handling flammable refrigerants</li><li>• selecting and using PPE</li><li>• identifying firefighting equipment</li><li>• environmental requirements, including procedures for:<ul style="list-style-type: none"><li>• preventing loss of refrigerant to the atmosphere</li><li>• storing and transporting refrigerants.</li></ul></li></ul>
--	---

## Unit Mapping Information

Equivalent to AURETU2002 Recover vehicle refrigerants

## Links

Companion Volume implementation guides are found in VETNet -

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