

<b>Title</b>	<b>Test for, and rectify faults and refit a vehicle or machine heater assembly</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>4</b>

<b>Purpose</b>	This unit standard is for people who work in the automotive repair industry. People credited with this unit standard are able to test for faults in, and rectify faults and refit, a vehicle or machine heater assembly.
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<b>Classification</b>	Motor Industry > Automotive Radiator Repair
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation relevant to this unit standard includes but is not limited to – Health and Safety in Employment Act 1992, Resource Management Act 1991, Lead Process Regulations 1950.
- 2 Definitions  
*Company requirements* refer to instructions to staff on policy and procedures which are documented in memo or manual format and are available in the workplace. These requirements include but are not limited to – company specifications and procedures, work instructions, manufacturer specifications, product quality specifications, and legislative requirements.  
*Suitable tools and equipment* means industry approved tools and equipment that are recognised within the industry as being the most suited to complete the task in a professional and competent manner with due regard to safe working practices.
- 3 Recommended entry information: Unit 24453, *Inspect, test and rectify faults in a vehicle or machine radiator*.

### Outcomes and performance criteria

#### Outcome 1

Test for faults in a vehicle or machine heater assembly.

#### Performance criteria

- 1.1 Heater operation is checked and tested in accordance with company requirements.
- 1.2 Leaks are identified within the heater assembly, and the method of repair verified, in accordance with company requirements.

- 1.3 Suitable tools and equipment are selected and used to test for faults in a heater assembly in accordance with company requirements.
- 1.4 Heater unit is removed from vehicle in accordance with company requirements.
- 1.5 Heater unit is pressure tested, and leaks and blockages identified, in accordance with company requirements.
- Range may include but is not limited to – leaking, blocked, baffle seal failure.
- 1.6 The viability of repairing or replacing parts is determined in accordance with company requirements.
- 1.7 Safe working practices are observed throughout the task in accordance with legislative requirements.
- Range personal safety, safety of others, vehicle or machine safety, workshop safety, environmental safety, tools and equipment safety.

## **Outcome 2**

Rectify faults and refit a vehicle or machine heater assembly.

### **Performance criteria**

- 2.1 Suitable tools and equipment are selected and used that will enable the heater unit to be repaired in accordance with company requirements.
- 2.2 Heater unit is marked and dismantled, and parts stored securely, in accordance with company requirements.
- Range pipe position and angles.
- 2.3 Blockages in the heater assembly are identified and cleared in accordance with company requirements until no blockage remains.
- Range flushed, rod out, compressed air.
- 2.4 Leaks in heater core are identified and soldered in accordance with company requirements.
- 2.5 Leaks in the tank are identified and repaired or replaced in accordance with company requirements.
- Range repairs may include but are not limited to – soldered, brazed, welded; replacement tank.

- 2.6 Heater unit is tested and confirmed as operating in accordance with company requirements.
- Range pressure tested; no leaks, blockages, or contamination in the system.
- 2.7 Heater unit is reassembled and refitted to vehicle in accordance with company requirements.
- 2.8 Tools, materials and equipment are cleaned and put away in their places, and the work area is clean in accordance with company requirements.
- 2.9 Safe working practices are observed throughout the task in accordance with legislative requirements.
- Range personal safety, safety of others, vehicle or machine safety, workshop safety, environmental safety, tools and equipment safety.

**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	29 May 1996	31 December 2020
Revision	2	14 November 2000	31 December 2020
Revision	3	16 October 2003	31 December 2020
Review	4	25 January 2008	31 December 2020
Review	5	26 April 2018	31 December 2020

<b>Consent and Moderation Requirements (CMR) reference</b>	0014
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.