



**Australian Government**

# **AUR31520 Certificate III in Automotive Diesel Engine Technology**

**Release 1**

# AUR31520 Certificate III in Automotive Diesel Engine Technology

## Modification History

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

## Qualification Description

This qualification reflects the role of individuals who perform a range of tasks on a variety of diesel engines and associated systems in the automotive retail, service and repair industry.

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

## Entry Requirements

Nil.

## Packaging Rules

**Total number of units = 28**

**14 core units**, plus

**14 elective units**, of which:

- all 14 units may be from the elective units listed below
- up to 5 units may be from a Certificate II qualification or above in this Training Package or another endorsed Training Package or accredited course.

Elective units chosen must be relevant to the work environment and the qualification, maintain the overall integrity of the AQF alignment, not duplicate the outcome of another unit chosen for the qualification, and contribute to a valid vocational outcome.

### Core Units

AURAEA002 Follow environmental and sustainability best practice in an automotive workplace

AURASA102 Follow safe working practices in an automotive workplace

AURETR112 Test and repair basic electrical circuits

AURETR125 Test, charge and replace batteries and jump-start vehicles

AURHTE102 Diagnose and repair heavy vehicle compression ignition engines

AURHTF102 Diagnose and repair heavy vehicle diesel fuel injection systems  
AURTTA104 Carry out servicing operations  
AURTTA118 Develop and carry out diagnostic test strategies  
AURTTE104 Inspect and service engines  
AURTTK001 Use and maintain measuring equipment in an automotive workplace  
AURTTK102 Use and maintain tools and equipment in an automotive workplace  
AURTTM004 Assemble engine blocks and sub-assemblies  
AURTTM008 Dismantle and evaluate engine blocks and sub-assemblies  
AURTTM011 Recondition engine cylinder heads

### **Elective Units**

AURAF103 Communicate effectively in an automotive workplace  
AURAMA001 Work effectively with others in an automotive workplace  
AURETR124 Diagnose and repair compression ignition engine management systems  
AURETR128 Diagnose and repair instruments and warning systems  
AURETR129 Diagnose and repair charging systems  
AURETR130 Diagnose and repair starting systems  
AURETR132 Diagnose and repair automotive electrical systems  
AURHTE001 Remove and install heavy vehicle engine assemblies  
AURHTX104 Diagnose and repair heavy vehicle clutch systems  
AURHTZ101 Diagnose and repair heavy vehicle emission control systems  
AURMTE101 Test engines using a dynamometer  
AURTTA009 Carry out mechanical pre-repair operations  
AURTTA105 Select and use bearings, seals, gaskets, sealants and adhesives  
AURTTF102 Inspect and service diesel fuel injection systems  
AURTTF105 Diagnose and repair engine forced-induction systems  
AURTTL001 Inspect and service CNG fuel systems  
AURTTL102 Diagnose and repair CNG fuel systems  
AURVTW101 Carry out manual metal arc welding on components  
AURVTW103 Carry out advanced gas metal arc welding on vehicle body sections  
AURVTW109 Carry out basic gas metal arc welding  
MEM05006 Perform brazing and or silver soldering\*  
MEM05007 Perform manual heating and thermal cutting\*  
MEM09002 Interpret technical drawing\*  
MEM11011 Undertake manual handling\*  
MEM12023 Perform engineering measurements\*  
MEM12024 Perform computations\*  
MEM13015 Work safely and effectively in manufacturing and engineering  
MEM14006 Plan work activities\*  
MEM16006 Organise and communicate information\*  
MEM18001 Use hand tools\*

## MEM27004 Maintain and repair engine lubrication systems\*

\*Note the following prerequisite unit requirements.

| UNIT IN THIS QUALIFICATION                          | PREREQUISITE UNIT(S)  |
|---|---|
| MEM05006 Perform brazing and or silver soldering    | MEM11011 Undertake manual handling<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information  |
| MEM05007 Perform manual heating and thermal cutting | MEM09002 Interpret technical drawing<br>MEM11011 Undertake manual handling<br>MEM12023 Perform engineering measurements<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information |
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| MEM11011 Undertake manual handling                  | MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information  |
| MEM12023 Perform engineering measurements           | MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information  |
| MEM12024 Perform computations                       | MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information  |
| MEM14006 Plan work activities                       | MEM13015 Work safely and effectively in manufacturing and engineering   |

| <b>UNIT IN THIS QUALIFICATION</b>                       | <b>PREREQUISITE UNIT(S)</b>  |
|---|--|
|   | MEM16006 Organise and communicate information  |
| MEM16006 Organise and communicate information           | MEM13015 Work safely and effectively in manufacturing and engineering  |
| MEM18001 Use hand tools                                 | MEM11011 Undertake manual handling<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM16006 Organise and communicate information   |
| MEM27004 Maintain and repair engine lubrication systems | MEM09002 Interpret technical drawing<br>MEM11011 Undertake manual handling<br>MEM12023 Perform engineering measurements<br>MEM12024 Perform computations<br>MEM13015 Work safely and effectively in manufacturing and engineering<br>MEM14006 Plan work activities<br>MEM16006 Organise and communicate information<br>MEM18001 Use hand tools |

## Qualification Mapping Information

Supersedes and is equivalent to AUR31516 Certificate III in Automotive Diesel Engine Technology.

## Links

Companion Volume Implementation Guide is found on VETNet -

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