

Assessment Requirements for AURTTF002 Inspect and service diesel fuel injection systems

Release: 1

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Modification History

Release	Comment
Release 1	New unit of competency.

Performance Evidence

Before competency can be determined, individuals must demonstrate they can perform the following according to the standards defined in this unit's elements, performance criteria, range of conditions and foundation skills:

• inspect and service a diesel fuel injection system on two different vehicles or machinery.

Knowledge Evidence

Individuals must be able to demonstrate knowledge of:

- work health and safety (WHS) and occupational health and safety (OHS) requirements relating to inspecting and servicing diesel fuel injection systems, including procedures for:
 - working with high pressure diesel fuel systems
 - working with high voltage diesel fuel injectors
 - working with stored fuel pressures
 - engine start-up and shut-down
- environmental requirements, including procedures for trapping, storing and disposing of fluids released from fuel systems
- application, purpose and operation of air filter and air intake housing and ducting
- identification and function of mechanically controlled diesel fuel injection system and components, including:
 - types and applications of fuels, including diesel and biofuels
 - fuel tank and lines
 - fuel filters and sedimenter filters
 - fuel supply pumps
 - injection pumps, including:
 - in-line
 - rotary

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- · injector pipes
- injectors
- overflow or leak-off pipes
- identification and function of electronic diesel fuel injection systems and common rail fuel systems and components, including:
 - fuel tank and lines
 - fuel filters and sedimenter filter
 - fuel supply pumps
 - injection pumps
 - pressure and injector pipes
 - fuel rail
 - injectors
 - overflow or leak-off pipes
 - electronic control unit and sensors
- inspection procedures for diesel fuel injection systems, including procedures relating to leaks, damaged piping and sedimentary sight glasses
- service and adjustment procedures for diesel fuel injection systems, including:
 - servicing sedimenter filter
 - replacing fuel filter
 - bleeding fuel system as required
 - · servicing air filter and air intake housing and ducting
 - engine speed adjustments as required and operational testing
- post-service testing procedures for diesel fuel injection system.

Assessment Conditions

Assessors must satisfy NVR/AQTF assessor requirements.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessment must include direct observation of tasks.

Where assessment of competency includes third-party evidence, individuals must provide evidence that links them to the diesel fuel injection systems that they have worked on, e.g. repair orders.

Assessors must verify performance evidence through questioning on skills and knowledge to ensure correct interpretation and application.

The following resources must be made available:

- automotive repair workplace or simulated workplace
- workplace instructions
- manufacturer diesel fuel injection system specifications
- two different vehicles or machinery with diesel fuel injection systems requiring servicing

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• tools, equipment and materials appropriate for inspecting and servicing diesel fuel injection systems.

Links

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

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