



**Australian Government**

**Assessment Requirements for AURLTQ102  
Diagnose and repair light vehicle drive  
shafts**

**Release: 1**

# Assessment Requirements for AURLTQ102 Diagnose and repair light vehicle drive shafts

## Modification History

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

## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- diagnose and repair drive shafts in two different light vehicles, in which the work must involve:
  - one rear wheel drive vehicle with drive shaft with universal joints, including removing the drive shaft from vehicle, replacing one universal joint, and refitting the drive shaft
  - one front wheel drive vehicle with constant velocity joint drive shaft, including removing the drive shaft from the vehicle and refitting it
- carry out a diagnostic test in the course of the above for at least one of the following faults:
  - abnormal drive shaft noise
  - vibrations.

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- methods to locate and interpret information required to diagnose and repair light vehicle drive shafts, including:
  - information provided by customers and supervisors
  - manufacturer specifications and procedures or equivalent documentation
- workplace procedures required to diagnose and repair light vehicle drive shafts, including:
  - establishing serviceability of tools and equipment
  - documentation procedures
  - housekeeping procedures, including:
    - examination of tools and equipment
    - storage of equipment
    - identification, tagging and isolation of faulty equipment

- disposal of excess materials
- recycling procedures
- workplace health and safety (WHS) requirements relating to diagnosing and repairing light vehicle drive shafts, including procedures for working with hazardous oils
- environmental requirements relating to diagnosing and repairing light vehicle drive shafts, including procedures for trapping, storing and disposing of oils released from drive shafts
- operating principles of light vehicle drive shafts and associated components, including:
  - torque reaction of rear axle housings
  - torque steer
- purpose and operation of light vehicle drive shafts and components, including:
  - propeller shafts, including:
    - single and multi-piece shafts
    - universal joints, including cross and yoke joints, double cardan joints and Lobro joints
    - velocity fluctuation of universal joints
    - shaft alignment
  - constant velocity joints, including:
    - Birfield joints
    - double offset joints
    - tripod joints
- diagnostic testing procedures for light vehicle drive shafts, including road testing procedures for:
  - drive shaft noise diagnostic
  - vibration
- repair procedures for light vehicle drive shafts, including procedures for:
  - dismantling drive shafts
  - inspecting drive shafts
  - reassembling and aligning components
- post-repair testing procedures for light vehicle drive shafts.

## Assessment Conditions

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 light vehicle drive shafts 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 light vehicle drive shaft specifications
- light vehicle with front engine and rear wheel drive
- light vehicle with front wheel drive constant velocity joint drive shaft
- diagnostic equipment for light vehicle drive shafts
- tools, equipment and materials tools appropriate for repairing light vehicle drive shafts.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## **Links**

Companion Volume Implementation Guide is found on VETNet -

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