Specification of Competency Standards
for the Automotive
Unit of Competency

Functional Area - Vehicle Servicing

Title	Establish the testing procedure for vehicle performance
Code	111772L6
Range	This unit of competency is applicable to the senior engineering staff of the vehicle service and inspection departments. Practitioners should be able to master the standards and methodology of various vehicle performance tests for establishing the qualified testing procedure with approved testing equipment.
Level	6
Credit	6 *(For Reference Only)*
Competency	**Performance Requirements** 1. Knowledge (Standards and vehicle performance test) • Fully master the standard parameters (e.g., the manufacturer standard, approved international standard and respective regulations), testing methods and the requirements on the operating equipment and testing environments of various vehicle performance test items, such as: ◦ Braking efficiency ◦ Tilt limit of vehicle body ◦ Illumination and aim alignment ◦ Engine power and fuel consumption ◦ Exhaust emission ◦ Working noise ◦ Effectiveness of automatic shift ◦ Stability control ◦ Advanced driver-assistance system function ◦ Fuel cell and traction battery efficiencies (fuel cell electric vehicle specific) ◦ Traction motor power (electrified vehicle specific)

	2. Performance (Establish the testing procedure for vehicle performance)
	• Draw up the items for the vehicle performance test according to job requirements, such as the test of:
	  ○ Braking efficiency
	  ○ Vehicle body tilt
	  ○ Illumination and aim alignment
	  ○ Engine power and fuel consumption
	  ○ Exhaust emission
	  ○ Working noise
	  ○ Automatic shift
	  ○ Driving stability
	  ○ Advanced driver-assistance system
	  ○ Fuel cell and traction battery (fuel cell electric vehicle specific)
	  ○ Traction motor (electrified vehicle specific)
	• Establish testing procedure and supporting requirements, such as testing environment and setup, according to the characteristics and standard of various testing items, including:
	  ○ The specifications of testing equipment
	  ○ Obligatory preparation prior to test
	  ○ Testing procedure and safety measures
	  ○ Records of data and other information
	• Review the effectiveness of the methods and the testing procedure, and be able to make adjustments or improvements.

Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is: • Capable of mastering the standard and methods of various vehicle performance tests and establishing qualified testing procedures, including the preparation requirements prior to the test and environmental requirements to obtain recognised testing data; and • Capable of reviewing the effectiveness of the testing procedure and methodology, and making adjustments or improvements.
Remark	The credit value of this competency unit assumes that the practitioner possesses eminent knowledge of the structure of the car, the working principle and the testing of each system. (This UoC replaced 108745L6)