Specification of Competency Standards
for the Automotive
Unit of Competency

Functional Area - Vehicle Servicing

Title	Identify the structure and operating principle of motorcycle systems and components
Code	111666L2
Range	This unit of competency is applicable in workplaces in relation to the vehicle parts management and motorcycle servicing. Practitioners should be able to identify the structure and operating principle of motorcycles and associated components and explain their effects on vehicle safety and performance.
Level	2
Credit	3 *(For Reference Only)*
Competency	**Performance Requirements** 1. Knowledge (The system layouts and functions of various types of motorcycles, including engine-powered motorcycles and electric motorcycles, and their major components) • Demonstrate the system layouts of various motorcycle types and the location of their major components. • Understand the functions of the major components and their effects on vehicle safety and performance. • Identify the low-voltage and high-voltage circuits on various types of motorcycles, including the components and circuit diagrams. • Understand the definitions of low-voltage and high-voltage electrical systems onboard 2. Performance (Master the relevant legal requirements and the operating principle of motorcycles and components) • Explain the operating principle of various major systems and components of motorcycles, such as: ◦ Engine and mechanical components, including emission control systems ◦ Fuel supply and metering systems ◦ Engine management systems ◦ Brake systems ◦ Steering systems ◦ Suspension systems ◦ Transmission systems ◦ Electrical systems ◦ REESS, including battery types and management system (for electric motorcycle only) ◦ Power management for propulsion system (for electric motorcycle only) ◦ Propulsion system ◦ Advanced electronic control systems ◦ Body and chassis components ◦ Other related systems • Differentiate the low-voltage and high-voltage electrical systems onboard, their applications and safety awareness.
Assessment Criteria	The integrated outcome requirement of this unit of competency is that the assessee shall prove that he/she is:

	• Capable of clearly identifying the system layouts and circuitries, locations, functions, construction and operating principles of various motorcycle systems and components. • Capable of differentiating the low-voltage and high-voltage electrical systems physically and the associated safety awareness.
Remark	(This UoC replaced 108642L1)