Specification of Competency Standards
for the Automotive
Unit of Competency

Functional Area - Vehicle Servicing

Title	Appreciate the safety precautions in the maintenance work for electric vehicle
Code	111692L2
Range	This unit of competency is applicable in electrified vehicle service workshops. Practitioners should be able to describe the health and safety awareness in relation to electric vehicle operation and the associated servicing activities, with reference to the instructions in the corresponding vehicle manufacturer's service manual and the relevant requirements on environmental protection, occupational safety and health regulations.
Level	2
Credit	1 *(For Reference Only)*
Competency	**Performance Requirements** 1. Knowledge (Health and safety awareness in relation to electric vehicles) • Understand the recognised competency requirements for electric vehicle servicing. • Differentiate the features and operating concepts amongst various types of electric vehicles. • Appreciate the potential risks and hazards associated with the electric vehicle operation and servicing, as well as corresponding safety management. • Understand the definitions of low-voltage and high-voltage electrical operating systems onboard. • Identify the proper maintenance procedures and safety requirements in electric vehicle servicing, as well as the associated safety setup, according to the instructions in the corresponding vehicle manufacturer's service manual and the requirements of occupational safety and health. • Understand the relevant legal requirements on road and vehicle safety, and environmental protection. 2. Performance (Safety practices of electric vehicle maintenance) • Illustrate the requirements of vocational qualification levels, roles and responsibilities in electric vehicle servicing. • Discern the types of electric vehicles, their features, operating concepts and system voltage levels, as well as related safety awareness. • Identify the potential risks and hazards associated with the electric vehicle operation and servicing, and the actions taken in an emergency. • Determine the necessity of high-voltage system isolation for electric vehicle system maintenance work. • Apply the safety precautions correctly prior to performing general maintenance procedures for the low-voltage operating systems onboard in the workplace with proper tools and equipment, safety setup and signage, according to the instructions in the corresponding vehicle manufacturer's service manual and the requirements of occupational safety and health.
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 depicting the requirements of competency and responsibility for electric vehicle servicing; • Capable of describing the types of electrified vehicles, their features, operating concepts and system voltage levels, as well as related safety awareness;

	• Capable of explicating the potential risks and hazards associated with the electric vehicle operation and servicing, and the necessary actions taken in an emergency; • Capable of differentiating the voltage levels of various operating systems of electric vehicles and identifying the high-voltage system isolation status correctly; and • Capable of applying safety precautions correctly prior to performing general maintenance procedures for the low-voltage operating systems of electric vehicles, such as cooling, steering, braking, suspension, etc., in the workplace with proper tools and safety setup, according to the instructions in the corresponding vehicle manufacturer's service manual, the associated safety guidelines and the requirements of occupational safety and health.
Remark	The credit value of this unit of competency is set on the presumption that the practitioner concerned has already possessed fundamental understanding of vehicles. The major ordinance involved in this unit of competency is as follows: • Relevant ordinances to the Road Traffic (Construction and Maintenance of vehicles) Regulations • Occupational Safety and Health