Specification of Competency Standards
for the Automotive
Unit of Competency

Functional Area - Vehicle Servicing

Title	Conduct safety setup for the service of the high-voltage electrical system of electrified vehicles
Code	111688L2
Range	This unit of competency is applicable in vehicle service workshops. Practitioners should be able to set up a safe working environment with suitable tools for the service of the high-voltage electrical system of hybrid electric and electrified vehicles according to the instructions in the corresponding vehicle manufacturer's service manual and the relevant requirements on environmental protection, occupational safety and health regulations. They should also be able to handle potential hazards on the systems and provide written report upon completion of work.
Level	2
Credit	3 *(For Reference Only)*
Competency	**Performance Requirements** 1. Knowledge (Personal protection and first-aid equipment, service tools and equipment, workplace setup requirements for hybrid electric and electrified vehicles, such as battery electric vehicles, hydrogen fuel cell electric vehicles, battery electric motorcycles, etc.) • Understand the hazards and safety precautions for the service of high-voltage electrical systems of hybrid electric and electrified vehicles. • Identify the functions, serviceability test and application of personal protection and first-aid equipment, service tools and equipment for conducting the service. • Understand the requirements on workplace setup for the service according to the instructions in the corresponding vehicle manufacturer's service manual and guidelines of occupational safety and health • Understand the relevant legal requirements on road and vehicle safety and environmental protection. 2. Performance (Perform the safety setup for the service of the high-voltage electrical system of hybrid electric and electrified vehicles) • According to the maintenance requirements of manufacturers, periodically inspect the adaptability and serviceability of personal protection and first-aid equipment, service tools and equipment for the service, such as insulating gloves and footwear, safety mats, face shields, automated external defibrillators, insulated rescue hooks, insulation testers, insulated hand tools and equipment, etc. • According to the instructions in the corresponding vehicle manufacturer's service manual and the requirements of occupational safety and health as well as that of environmental protection, set up an isolated servicing area with barricades and warning signage for the service, and identify the suitable location for temporarily keeping away the key fobs and cards from the vehicles. • Determine the effectiveness of the safety setup and provide written report focusing on the deficiencies and corresponding actions taken.
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 inspecting the adaptability and serviceability of personal protection and first aid equipment, service tools and equipment for the service of high-voltage electrical systems of hybrid electric and

	electrified vehicles according to the instructions of manufacturers and the relevant requirements on occupational safety and health regulations; • Capable of setting up a safe working environment for the service of high-voltage electrical systems of electrified vehicles according to the instructions in the electrified vehicle manufacturer's service manual and the relevant requirements on environmental protection, occupational safety and health regulations; and • Capable of reviewing the effectiveness of the safety setup for the service of high-voltage electrical systems of electrified vehicles and providing working report.
Remark	The credit value of this unit of competency is set on the presumption that the practitioner concerned has already possessed general knowledge of the servicing of hybrid electric and electrified 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 Ordinance