Specification of Competency Standards
for the Automotive
Unit of Competency

Functional Area - Vehicle Servicing

Title	Dismantle, inspect and repair the components of liquefied petroleum gas systems onboard
Code	111683L2
Range	This unit of competency is applicable in the designated work bay of vehicle service workshops. Practitioners should be able to dismantle, inspect and repair the components of liquefied petroleum gas systems safely according to the instructions in the vehicle manufacturer's service manuals and relevant requirements on environmental protection, occupational safety and health regulations. They should also be able to conduct system tests and complete a simple fault report upon completion of work.
Level	2
Credit	3 *(For Reference Only)*
Competency	**Performance Requirements** 1. Knowledge (Structure and operating principles of various liquefied petroleum gas systems on vehicles) • Understanding of the nature and characteristics of liquefied petroleum gas for vehicular application, the handling and safety precautions. • Understanding of the structure and basic operating principles of various types of liquefied petroleum gas systems (e.g., mixer, injection, etc.) • Understanding of the application of liquefied petroleum gas concentration meters to ensure a combustible gas-free environment. • With reference to the corresponding vehicle manufacturer's service manual, understand the inspection and repair procedures of the system components of different types of liquefied petroleum gas systems. • Understanding of relevant laws and regulations governing the handling of vehicle liquefied petroleum gas and the relevant legal requirements on road and vehicle safety and environment protection. 2. Performance (Conduct dismantlement, inspection and repair for the system components of various liquefied petroleum gas systems on vehicles) • Correctly apply the liquefied petroleum gas concentration meter to ensure a combustible gas-free working environment. • Safely conduct the dismantlement and replacement of the system components of liquefied petroleum gas systems, including fuel tanks, according to the instructions in the corresponding vehicle manufacturer's service manual and the requirements of occupational health and safety and that of environmental protection. • Safely conduct inspection and repair of the system components of liquefied petroleum gas systems to serviceable conditions according to the instructions in the corresponding vehicle manufacturer's service manual and the requirements of occupational health and safety and that of environmental protection. • Accurately verify the serviceability of system components after the completion of repairing process and provide a simple fault report for abnormalities, measuring data and decisions made. • Handle liquefied gas system components according to relevant local statutory requirement.

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 arranging the dismantlement, inspection and repair of the liquefied petroleum gas system onboard and associated components in an appropriate workplace equipped with suitable special service tools and relevant safety measures to ensure a combustible gas-free environment throughout the process; • Capable of safely conducting the dismantlement and replacement of various types of liquefied petroleum gas system components, including fuel tanks, 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; • Capable of safely conducting the inspection and repair of the system components of various types of liquefied petroleum gas systems with reference to the instructions in the associated vehicle manufacturer's service manual and the relevant requirements on environmental protection, occupational safety and health regulations; and • Capable of providing a simple fault report for abnormalities, measuring data and decisions made upon completion of work.
Remark	The credit value of this unit of competency is set on the presumption that the practitioner concerned has already possessed good knowledge of inspecting and repairing various types of fuel systems on liquefied petroleum gas vehicles. When conducting the work on liquefied petroleum gas fuel system, the practitioner concerned should be a recognized competent person in liquefied petroleum gas vehicle. The major legislations/rules involved in this unit of competency are as follows: • Road Traffic (Construction and Maintenance of Vehicles) Regulations • Gas Safety Ordinance