Specification of Competency Standards
for the Automotive
Unit of Competency

Functional Area - Vehicle Servicing

Title	Conduct fuel purging procedures for component dismantling on liquefied petroleum gas system
Code	111726L3
Range	This unit of competency is applicable in the designated work bay of vehicle service workshops. Practitioners should be able to conduct the fuel purging procedures safely for allowing the subsequent component dismantling work according to the instructions in the vehicle manufacturer's service manual and relevant requirements on environmental protection, occupational safety and health regulations. They should also be able to conduct verification test and complete simple fault report upon completion of work.
Level	3
Credit	3 *(For Reference Only)*
Competency	**Performance Requirements** 1. Knowledge (Structure and operating principles of various liquefied petroleum gas systems on vehicles) • Good understanding of the nature and characteristics of liquefied petroleum gas for vehicular application, the handling and safety precautions. • Good understanding of the structure and operating principles of various types of liquefied petroleum gas systems (e.g., mixer, injection, etc.) • Master the application of special service tools for purging of liquefied petroleum gas in the system, including but not limited to the gas leakage detector, pressurised inert gas, system pressure gauges and hand valves, and gas extraction system. • With reference to the corresponding vehicle manufacturer's service manual, master the fuel purging procedures for different types of liquefied petroleum gas systems. • Good understanding of relevant laws and regulations governing the handling of vehicle liquefied petroleum gas. • Understanding of the relevant legal requirements on road and vehicle safety and environmental protection. 2. Performance (Conduct fuel purging for various liquefied petroleum gas systems on vehicles) • Correctly apply the special service tools for gas leakage testing and the gas extraction system throughout the purging process. • Accurately determine the inert gas pressure to conduct the push-back action for the fuel lines 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, including the use of special tool set to conduct the purging procedures for the liquefied petroleum gas injection system. • Conduct the correct purging procedures for the liquefied petroleum gas mixer system 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 effectiveness of the purging action and provide simple fault report for abnormalities. • Handle liquefied petroleum gas system components according to relevant local statutory requirements.

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 purging process in an appropriate workplace and applying relevant safety measures to ensure a combustible gas-free environment throughout the process; • Capable of accurately determining the correct push-back pressure of inert gas and correctly applying the special service tools for the purging process of the liquefied petroleum gas injection system; • Capable of safely conducting the purging procedures for 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 simple fault report for abnormalities 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 comprehensive knowledge of inspecting and repairing various types of fuel systems on liquefied petroleum gas vehicles. When conducting the work on the liquefied petroleum gas fuel system, the practitioner concerned should be a recognised competent person in liquefied petroleum gas vehicles. The major legislation/rules involved in this unit of competency are as follows: • Road Traffic (Construction and Maintenance of Vehicles) Regulations • Gas Safety Ordinance