

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Check and repair vehicle intelligent control systems and devices
Code	108729L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check, repair and adjust various kinds of vehicle intelligent control systems and devices safely according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct basic adjustments and tests on components upon completion of work. Provide written report after the work.
Level	3
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of various types of vehicle electronic control systems and devices)</p> <ul style="list-style-type: none"> • Master the structure and basic operating principles of various types of vehicle intelligent control systems and devices, such as: <ul style="list-style-type: none"> ○ Surround Sensor (Laser System) ○ Intelligent Body Stability System ○ Pre-collision Warning System ○ Pre-collision Brake System ○ Smart Parking Assist System ○ Active Lane Keeping System ○ Intelligent Lighting System • With reference to the requirements in the servicing manual provided by the vehicle manufacturer or parts supplier, master the general checking and repairing procedure for various types of vehicle electronic/data control systems and devices. • Understand the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair various types of vehicle electronic control systems and devices)</p> <ul style="list-style-type: none"> • According to the instructions in the servicing manual provided by vehicle manufacturer or parts supplier and the requirements of occupational safety and health as well as that of environmental protection, safely check, repair and adjust various types of vehicle intelligent control systems and devices, including: <ul style="list-style-type: none"> ○ Capable of identifying the common faults in various types of vehicle intelligent control systems and devices by visual inspection ○ Use general tools and instruments to check and measure various types of vehicle intelligent control systems and devices as well as rectify typical system fault ○ According to inspection result, repair the parts of various types of vehicle intelligent control systems and devices as well as circuit/data systems, including dismantle, replace, re-assemble and adjust relevant system components and accessories ○ According to instructions, measure and adjust the operation and effectiveness of various types of vehicle intelligent control systems. • After the repair work, provide written report focusing on: <ul style="list-style-type: none"> ○ Abnormalities ○ Measured data

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	<ul style="list-style-type: none">○ Major decisions
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none">• Capable of checking, repairing and adjusting general vehicle intelligent control systems and devices safely according to the instructions in the servicing manual provided by vehicle manufacturer or parts supplier and the relevant requirements on environment, occupational safety and health regulations; and• Capable of conducting basic adjustments and tests on components upon completion of work and providing written report.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle electronic and electrical system servicing.</p>