

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Diagnose and rectify motorcycle electrical system faults
Code	108721L3
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to conduct fault diagnose on motorcycle electrical systems and implementing or arranging rectification according to the instructions in the motorcycle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct performance tests and providing written report upon completion of work.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and operating principles of motorcycle electrical systems)</p> <ul style="list-style-type: none"> • Master the structure and operating principles of motorcycle electrical systems, including: <ul style="list-style-type: none"> ○ Lighting ○ Security and alarm ○ Comfort and convenience ○ Electrical rider safety • Master the fault diagnosis process for motorcycle electrical systems with reference to the instructions in the motorcycle manufacturer's service manual and use of equipment, such as: <ul style="list-style-type: none"> ○ Multimeters ○ Battery testing equipment ○ Dedicated and computer based diagnostic equipment ○ Monitoring and instrumentation systems • Understand relevant legal requirements on road & safety and environment protection. <p>2. Performance (Conduct diagnosis and rectify motorcycle electrical systems faults)</p> <ul style="list-style-type: none"> • Accurately conduct fault diagnosis on motorcycle electrical systems according to the instructions in the manufacturer's service manual including the use of special equipment and instruments to assist the diagnosis, meeting the requirements of occupational health and safety and that of environmental protection. • According to the diagnostic result to implement the rectification work. • Conduct system performance and safety tests after the work and provide written report, focusing: <ul style="list-style-type: none"> ○ Abnormalities ○ Measuring data ○ 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 conducting fault diagnosis on motorcycle electrical systems according to the instructions in the manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations; and • Capable of conducting or arranging rectification according to diagnostic results; • Capable of conducting performance and safety tests and completing working report upon completion of work.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of operation of motorcycle electrical systems.</p> <p>The major legislations/code involved in this unit of competency are as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of Vehicles) Regulations.
--------	--