

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Dismantle and repair electric and hybrid vehicle traction motors, electrical control and management systems
Code	108692L2
Range	This unit of competency is applicable in electric and hybrid vehicle servicing workshops. Practitioners should be able to dismantle and repair electric and hybrid vehicle traction motors, electrical control and management systems safely according to the instructions in the electric and hybrid vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct basic tests on components upon completion of work and providing written report.
Level	2
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Electric and hybrid vehicle traction motors, electrical control and management systems)</p> <ul style="list-style-type: none"> • Understand the structure and operation of the traction motors, electrical control and management systems of an electric and hybrid vehicle. • Understand the dismantle and repair procedure according to the instructions in the electric and hybrid vehicle manufacturer's service manual. • Know the tools and equipment to dismantle and repair of the traction motors, electrical control and management systems. • Understanding of the relevant legal requirements on road & vehicle safety, and environment protection. <p>2. Performance (Dismantle and repair electric and hybrid vehicle traction motors, electrical control and management systems)</p> <ul style="list-style-type: none"> • According to the instructions in the electrical and hybrid vehicle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, dismantle and repair the traction motors, electrical control and management systems of an electric and hybrid vehicle safely, including: <ul style="list-style-type: none"> ○ Capable of identifying the common faults in the components by visual inspection ○ Testing and assess the operation and effectiveness of the component. ○ Rectify typical system faults • Conduct performance and safety inspection after the work and provide written report focusing on: <ul style="list-style-type: none"> ○ Abnormalities ○ Measured 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 dismantling and repair electric and hybrid vehicle traction motors, electrical control and management systems safely according to the instructions in the electric and hybrid vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations; and • Capable of conducting basic tests on components upon completion of work and providing working report.

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 basic knowledge in operation of electric and hybrid vehicle.</p> <p>The major ordinance involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Relevant ordinances to the Road Traffic (Construction and Maintenance of vehicles) Regulations
--------	---