

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Conduct fault diagnosis and analysis on vehicle anti-theft, audio and video systems
Code	108706L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to independently check, repairing, analysing and replacing vehicle anti-theft, audio and video systems 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 masterly. They should also be able to conduct system fine-tuning and evaluation 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 vehicle anti-theft, audio and video systems)</p> <ul style="list-style-type: none"> • Good understanding of relevant statutory requirements on vehicle anti-theft, audio and video systems. • Master the circuitry and operating principles of vehicle anti-theft, audio and video systems. • Understand the principles of radio, video and electricity. • Good understanding of the inspection and service procedure for vehicle anti-theft, audio and video systems according to the service manual provided by vehicle manufacturer or parts supplier. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Conduct fault diagnosis on vehicle anti-theft, audio and video systems)</p> <ul style="list-style-type: none"> • Safely conduct fault diagnosis on vehicle anti-theft, audio and video systems and repair them according to the information in the servicing manual provided by vehicle manufacturer or parts supplier and the requirements of occupational safety and health as well as environmental protection, including: <ul style="list-style-type: none"> ○ Find out common problems of vehicle anti-theft, audio and video systems by visual inspection ○ Select suitable tools and instruments to inspect and measure vehicle anti-theft, audio and video systems ○ Analyse and evaluate system faults according to the data obtained by measurement ○ Conduct repairing work for relevant systems according to different faults found; work may include dismantle, replace, re-assemble and fine-tune relevant system components and accessories ○ With the use of suitable tools or instruments, accurately test and evaluate if the operation and efficiency of relevant systems can meet the requirements ○ Provide written report and work record after confirming that rectification is done • Inspect and evaluate if the vehicle anti-theft, audio and video systems can meet the local statutory requirements. • Handle anti-theft systems according to security rules.
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 independently conducting complicated fault diagnosis on vehicle anti-theft, audio and video systems according to the instructions in the vehicle manufacturer's

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	<p>servicing manual and the relevant requirements on environment, occupational safety and health regulations;</p> <ul style="list-style-type: none">• Capable of implementing or arranging rectification work for relevant systems according to diagnostic results; and• Capable of conducting tests and evaluation on vehicle anti-theft, audio and video systems and providing written report upon completion of work.
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 vehicle electronic and electric systems servicing.</p>