Specification of Competency Standards
for the Automotive
Unit of Competency

Functional Area - Vehicle Servicing

Title	Use general welding equipment
Code	111668L2
Range	This unit of competency is applicable in vehicle body servicing and vehicle body assembling workshops. Practitioners should be able to use welding equipment correctly under instructions, such as Oxyacetylene Welding/cutting, Gas Metal Arc Welding (MIG/TIG) and Resistance Spot Welding (SPOT) to perform general welding process and the relevant requirements on safety and health regulations.
Level	2
Credit	3 *(For Reference Only)*

Competency	**Performance Requirements**
	1. Knowledge (Equipment and safety rules of Oxyacetylene Welding, MIG/TIG and SPOT)
	• Identify the hazards caused by the process of Oxyacetylene Welding/ cutting, MIG/TIG and SPOT, such as:
	  ○ electric shock
	  ○ fire and explosion
	  ○ gas and smoke
	  ○ harmful to eyesight
	  ○ being burnt.
	• Understand the code of practice and safety guidelines on the operation of Oxyacetylene Welding/ cutting, MIG/TIG and SPOT.
	• Understand the welding parameters affecting weld seams, such as:
	  ○ Gas flow
	  ○ Welding current
	  ○ Welding speed
	  ○ Welding voltage
	  ○ The angle of welding gun.
	• Understanding of the relevant requirements on safety and health regulations.
	2. Performance (Use welding equipment to conduct welding)
	• Examine the condition of the workplace to ensure that welding work is performed in a suitable working environment and appropriate protective measures are adopted.
	• Select welding equipment and materials such as welding rods correctly.
	• Operate welding equipment and employ correct welding method and procedure to prevent any flaws on the surface of the welding seams.
	• Use suitable tools for grinding.
	• Examine the welding joints upon completion of work.
	• Comply with the legislative requirements of Oxyacetylene Welding, MIG/TIG and SPOT, as well as relevant working, safety and health guidelines.

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 using welding equipment to carry out welding procedure complying with the relevant requirements on safety and health regulations safely in accordance with the instructions in the manufacturer's user manual; and selecting suitable materials and tools necessary for welding process; and • Capable of checking the welding seams upon completion of work.
Remark	The relevant ordinances/rules involved in this unit of competency are as follows: • Code of Practice-Safety and Health at Work for Gas Welding and Flame Cutting • Code of Practice-Safety and Health at Work for Manual Electric Arc Welding • Dangerous Goods Ordinance ◦ (This UoC replaced 108643L2)