## 14. Competency Profile (CP)

SECTION	(G)Wholesale And Retail Trade; Repair Of Motor Vehicles And Motorcycles		
GROUP	(452) Maintenance And Repair Of Motor Vehicles		
AREA	Automotive Spray Painting		
NOSS TITLE	Automotive Refinishing (AR)		
NOSS LEVEL	Three (3)	NOSS CODE	G452-005-3:2019

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
1. Automotive Paint Mixing & Colour Matching  G452-005-3:2019-C01	Automotive Paint Mixing & Colour Matching is a scope of competency to prepare the primer, base coat, clear coat and colour matching for painting by using the correct choice of hardeners, thinners and mixing ratios, an ideal viscosity and chemical combination can be achieved for perfect paint application.  The person who is competent	Perform primer mixing.	<ul> <li>1.1 Primer type identified and prepared in accordance with the painting job requirement.</li> <li>1.2 Primer, hardener/activator and thinner mixed in accordance with the primer mixing requirement.</li> <li>1.3 Primer mixture viscosity confirmed in accordance with the workshop manual.</li> <li>1.4 Primer mixing report prepared in accordance with the workshop manual.</li> <li>1.5 Primer mixture prepared in a spray painting container in accordance with the workshop manual</li> </ul>
	in this CU shall be able to perform primer mixing, perform basecoat mixing, perform clear coat mixing and perform colour matching mixing.  The outcome of this competency is to ensure the mixing ratio and the	2. Perform basecoat mixing.	<ul> <li>2.1 Paint type and colour code identified and prepared in accordance with the painting job requirement.</li> <li>2.2 Colour spray testing performed on test panel in confirmation with the painting job requirement.</li> <li>2.3 Colour and thinner mixed in accordance with the colour mixing requirement.</li> <li>2.4 Colour mixture viscosity confirmed in accordance with the workshop manual.</li> </ul>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
	preparation of the paint mixture are in order and ready to use in accordance with Technical Data Sheet (TDS) in		2.5 Colour mixture prepared in a spray painting container in accordance with the workshop manual
	accordance with the workshop manual.	3. Perform clear coat mixing.	<ul> <li>3.1 Clear coat type identified and prepared in accordance with the painting job requirement.</li> <li>3.2 Clear coat, hardener and thinner mixed in accordance with the clear coat mixing requirement.</li> <li>3.3 Clear coat mixture viscosity confirmed in accordance with the workshop manual.</li> <li>3.4 Clear coat mixture prepared in a spray painting container in accordance with the workshop manual</li> </ul>
		4. Perform colour matching.	<ul> <li>4.1 Sample colour identified in accordance with the painting job requirement.</li> <li>4.2 Paint type, colour code, colour variants and colour formula identified and prepared in accordance with the painting job requirement.</li> <li>4.3 Colour and thinner mixed in accordance with the colour formula.</li> <li>4.4 Colour mixture viscosity confirmed in accordance with the workshop manual.</li> <li>4.5 Colour spray testing performed on test panel in confirmation with the painting job requirement.</li> <li>4.6 Colour mixture prepared in a spray painting container in accordance with the workshop manual Colour mixture</li> </ul>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			viscosity confirmed in accordance with the workshop manual. 4.7 Colour mixture prepared in a spray painting container in accordance with the workshop manual
2. Automotive Surface Preparation G452-005- 3:2019-C02	Automotive Surface Preparation is a scope of competency to prepare the vehicle for painting/refinishing, properly clean a vehicle using soap, water, air pressure, and a waxgrease remover, evaluate the condition of the vehicles paint, properly prepare and treat bare metal surfaces, correctly sand and featheredge surfaces, apply an undercoat and mask a vehicle properly.  The person who is competent in this CU shall be able to perform substrate treatment, perform putty application and perform primer surfacer.	Perform substrate treatment.	<ul> <li>1.1 Vehicle are washed and cleaned from dirt and grimed in accordance with the workshop manual.</li> <li>1.2 Masking and sanding process performed in accordance with the workshop manual.</li> <li>1.3 Cleaning and degreasing process performed in accordance with the primer application process.</li> <li>1.4 Substrate primer applied on the surface of the vehicle in accordance with the workshop manual and painting requirement.</li> <li>1.5 Curing process performed in accordance with the workshop manual.</li> <li>1.6 Substrate primer sanding process performed in accordance with the workshop manual</li> <li>1.7 Cleaning and degreasing process after substrate primer sanding process performed in accordance with the primer application process.</li> </ul>
	The outcome of this competency is to ensure the vehicle are prepared to be paint properly and the painting process will not facing any	2. Perform putty application.	<ul><li>2.1 Putty application performed on the surface of the vehicle in accordance with the workshop manual and painting requirement.</li><li>2.2 Putty sanding process performed in</li></ul>

	CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
		defect or irregularities in accordance with the workshop manual.		accordance with the workshop manual.  2.3 Cleaning and degreasing process after putty sanding process performed in accordance with the primer application process.
			3. Perform primer surfacer.	<ul> <li>3.1 Primer surfacer masking process performed in accordance with the workshop manual.</li> <li>3.2 Surfacer primer applied on the surface of the vehicle in accordance with the workshop manual and painting requirement.</li> <li>3.3 Primer surfacer sanding process performed in accordance with the workshop manual and painting requirement.</li> <li>3.4 Curing process performed in accordance with the workshop manual.</li> <li>3.5 Cleaning and degreasing process performed in accordance with the primer application process.</li> </ul>
3.	Automotive Painting Works G452-005- 3:2019-C03	Automotive Painting Works is a scope of competency to perform spray painting on a vehicle according to the requirement of customer, by complying with the proper technique and process of spray painting.	Perform basecoat painting.	<ul> <li>1.1 Cleaning and degreasing process performed in accordance with the base coat painting requirement.</li> <li>1.2 Spray gun prepared and setup with selected base coat mixture in accordance with the painting job requirement.</li> <li>1.3 Base coat painting performed using control technique on a vehicle panel</li> </ul>
		The person who is competent		according to the (TDS)  1.4 Curing process performed in accordance

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
	in this CU shall be able to perform basecoat painting, perform clear coat painting and perform wash and polish vehicle.  The outcome of this competency is to ensure the painting process are following and complying all the necessarily techniques and achieve the customer satisfaction in accordance with workshop manual.	2. Perform clear coat painting.	with the base coat painting requirement.  1.5 Quality of base coat colour spraying inspected in accordance with the workshop manual.  1.6 Types of base coat painting defect determined in accordance with the workshop manual.  1.7 Base coat painting defect report prepared in accordance with the workshop manual  2.1 Spray gun prepared and setup with selected clear coat mixture in accordance with the painting job requirement.  2.2 Clear coat painting performed using control technique on a vehicle panel according to the workshop manual.  2.3 Curing process performed in accordance with the base coat painting requirement.  2.4 Quality of clear coat colour spraying inspected in accordance with the workshop manual.  2.5 Types of clear coat painting defect determined in accordance with the workshop manual.  2.6 Clear coat painting defect report prepared in accordance with the workshop manual.
		3. Perform wash and polish vehicle.	3.1 Cleaning and degreasing process performed in accordance with the wash and polish vehicle requirement.
			3.2 Car washing activities executed in accordance with the automotive painting works requirement.

	LE & CU ODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
				<ul> <li>3.3 Polishing activities executed in accordance with the automotive painting works requirement.</li> <li>3.4 Vehicle inspected for cleanness in accordance with the automotive painting works requirement.</li> </ul>
4. Automor Finishin G452-0 3:2019-	ng Works	Automotive Paint Finishing Works is a scope of competency to perform paint defect inspection and repair it according to the customer requirement. The activities will not cover overall of the vehicle but only in the area of	1. Inspect paint defect.	<ul> <li>1.1 Vehicle paint quality check performed in accordance with the workshop manual.</li> <li>1.2 Painting defect identified in accordance with the automotive paint finishing works requirement.</li> <li>1.3 Painting defect area marked in accordance with the automotive paint finishing works requirement.</li> </ul>
		defect of the vehicle. Colour matching are the main focus of this activities where the painter must get the similar colours of the overall of the vehicle.	2. Touch-up paint defect.	<ul> <li>2.1 Vehicle defect paint panel disassemble from the vehicle in accordance with automotive paint finishing works requirement.</li> <li>2.2 Colour matching process performed in accordance with automotive paint finishing works requirement.</li> </ul>
		The person who is competent in this CU shall be able to inspect paint defect, touch-up paint defect and perform wash and polish vehicle.  The outcome of this competency is to ensure the defect of the paint on vehicle could be repaired and the		<ul> <li>2.3 Spray gun prepared and setup with selected colour mixture in accordance with the painting job requirement.</li> <li>2.4 Colour painting performed using control technique on a vehicle panel in accordance with the workshop manual.</li> <li>2.5 Clear coat painting performed using control technique on a vehicle panel according to the workshop manual.</li> <li>2.6 Curing process performed in accordance</li> </ul>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
	colour of the area that newly paint are matched with the overall vehicle colour in		with the workshop manual.  2.7 Vehicle body panel assembled to vehicle in accordance with the workshop manual.
	accordance with the workshop manual.	3. Perform wash and polish vehicle.	<ul> <li>3.1 Cleaning and degreasing process performed in accordance with the automotive paint finishing works requirement.</li> <li>3.2 Perform car washing in accordance with the automotive paint finishing works requirement.</li> <li>3.3 Perform polishing activities in accordance with the automotive paint finishing works requirement.</li> <li>3.4 Vehicle inspected for cleanness in accordance with the automotive paint finishing works requirement.</li> </ul>
5. Automotive Refinishing Supervision G452-005- 3:2019-C05	Automotive Refinishing Supervision is to administer and supervise the whole work process in work place.  The person who is competent in this CU shall be able to prepare workshop work schedule, conduct briefing	Prepare workshop work schedule.  2. Conduct briefing	<ul> <li>1.1 Workshop manpower capacity and resources are identified.</li> <li>1.2 Workshop manpower requirements are determined in accordance with job requirements.</li> <li>1.3 Workshop work schedule is analysed in accordance with job requirements.</li> <li>1.4 Workshop work schedule is prepared in in accordance with job requirements.</li> </ul>
	session, prepare workshop sectional operation budget information, monitor workshop staff performance, coordinate workshop staff training, monitor workshop	2. Conduct briefing session.	<ul><li>2.1 Staff briefing requirements is determined in accordance with company standard practice.</li><li>2.2 Items to brief are identified in accordance with briefing session requirements.</li><li>2.3 Staff briefing is conducted in accordance</li></ul>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
	safety and monitor workshop environment quality.  The outcome of this competency is to provide perform supervisory skills so that the workshop is administered professionally in accordance with company requirements in accordance with workshop manual.	3. Prepare workshop sectional operation budget information.	with company operating procedure.  2.4 Information delivered and explained clearly.  2.5 Delivered information interpreted and acted upon by subordinates in accordance with job requirements.  3.1 Previous year workshop sectional operation budget is analysed in accordance with budget preparation requirements.  3.2 Yearly workshop manpower requirement is determined in accordance with company annual planning.  3.3 Forecasted workshop expenditure is determined in accordance with company budget requirements.  3.4 Workshop sectional operation budget is prepared in accordance with section operation plan.
		4. Monitor workshop staff performance.	<ul> <li>4.1 Standard performance guidelines are identified in accordance with appraisal requirements.</li> <li>4.2 Method of monitoring workshop staff performance is identified.</li> <li>4.3 Actual productivity is observed.</li> <li>4.4 Previous year workshop personnel appraisal is analysed in accordance with human resource guidelines.</li> <li>4.5 Workshop personnel appraisal session is coordinated in accordance with human resource guidelines.</li> </ul>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
		5. Coordinate workshop staff training.	<ul> <li>4.6 Workshop personnel appraisal recommendation is carried out in accordance with the company operating procedures.</li> <li>4.7 Workshop personnel appraisal report are prepared and presented in accordance with human resource guidelines.</li> <li>5.1 Training Need Analysis (TNA) conducted as per company requirements.</li> <li>5.2 Training Need Identification (TNI) determined in accordance with TNA finding.</li> <li>5.3 Logistic of training is coordinated in accordance with company SOP.</li> <li>5.4 Workshop staff training is coordinated in</li> </ul>
		6. Monitor workshop safety.	accordance with the training need.  6.1 Workshop safety requirements are determined in accordance with company SOP.  6.2 Workshop safety compliance is monitored in accordance with company regulations.  6.3 Workshop safety measures are enforced in accordance with occupational safety & health act and regulations.
		7. Monitor workshop environment quality.	<ul> <li>7.1 Environment quality requirements are determined in accordance with relevant authority regulations.</li> <li>7.2 Environment quality compliance is monitored in accordance with company requirements.</li> <li>7.3 Environment quality measure is enforced</li> </ul>

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			in accordance with environmental quality act.
6. Automotive Custom Painting G452-005- 3:2019-E01	Automotive Custom Painting is an aesthetic skill of painting on vehicle or other working piece. This skill is also can be use on various object thus that can be created by the person own creativity suing the air brush or the water transfer printing.  The person who is competent in this CU shall be able to perform airbrush technique, perform water transfer printing technique and perform finishing work.	Perform airbrush technique.	<ul> <li>1.1 Design identified in accordance with the customer requirements.</li> <li>1.2 Template designing executed in accordance with the customer requirements.</li> <li>1.3 Background colour application executed in accordance with the airbrush technique requirement.</li> <li>1.4 Template design applied onto the surface in accordance with the airbrush technique requirement.</li> <li>1.5 Masking and sanding process executed in accordance with the workshop manual.</li> <li>1.6 Airbrushing painting executed in accordance with the workshop manual.</li> <li>1.7 Clear coat painting executed using control technique on a vehicle panel according to</li> </ul>
	The outcome of this competency is to do customize painting job on the vehicle or parts of any other applicable surfaces in accordance with the workshop manual.	Perform water transfer printing technique.	the workshop manual.  2.1 Water transfer design identified in accordance with the customer requirements.  2.2 Background colour application executed in accordance with the water transfer printing technique requirement  2.3 Hydrographic film type identified in accordance with the water transfer printing technique requirement  2.4 Water transfer dipping tank prepared in accordance with the water transfer

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
			printing technique requirement  2.5 Hydrographic film applied onto water surface in accordance with the water transfer printing technique requirement  2.6 Activator applied onto hydrographic film in accordance with the water transfer printing technique requirement  2.7 Vehicle panel dipped into the dipping tank in accordance with the water transfer printing technique requirement  2.8 Clear coat painting executed using control technique on a vehicle panel according to the workshop manual.  2.9 Curing process performed in accordance with the workshop manual.
		3. Perform finishing work.	<ul><li>3.1 Clear coat surface sand down executed in accordance with the workshop manual.</li><li>3.2 Clear coat works executed in accordance with the workshop manual.</li><li>3.3 Curing process performed in accordance with the workshop manual.</li></ul>
			3.4 Surface polishing executed in accordance with the workshop manual.

CU TITLE & CU CODE	CU DESCRIPTOR	WORK ACTIVITIES	PERFORMANCE CRITERIA
7. Automotive Panel & Parts Replacement Work.  G452-005- 3:2019-E02	Automotive Panel & Parts Replacement Work is restoration work on scratch and dent on the outer surface of automotive panel. The restoration work includes beating and pulling the automotive panel.  The person who is competent in this CU shall be able to plan parts replacement activity, replace automotive panel and assemble automotive spare parts.  The outcome of this	Plan parts     replacement activity.      Replace automotive     panel.	<ul> <li>1.1 Vehicle condition checked according to job order received</li> <li>1.2 Level of damage checked according to vehicle condition</li> <li>1.3 Repair method confirmed according to body repair manual</li> <li>1.4 Tools and equipment confirmed according to work requirement</li> <li>1.5 Workshop safety rules and regulation complied according to body repair manual</li> <li>2.1 Types of automotive panel determined</li> <li>2.2 Personal Protective Equipment (PPE) used according to workshop manual</li> <li>2.3 Automotive panel parts removed according to body repair manual</li> <li>2.4 Automotive panel stored and arranged</li> </ul>
	competency is to ensure that the damaged panel and parts will be restored according to manufacturer specification in accordance with the workshop manual.	3 Assemble automotive spare parts.	according to its category and workshop layout  3.1 Types of automotive spare parts determined  3.2 Personal Protective Equipment (PPE) used according to workshop manual  3.3 Automotive spare parts removed according to body repair manual  3.4 Spare parts stored and arranged according to its category and workshop layout