

Automotive Industry

Specification of Competency Standards

Version 2

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Chapter I

Preface

Background and Outlook of the Industry

Automotive Evolution

1. As production cost of vehicles has dropped because of mass production, and the purchasing power of Hong Kong citizens has increased following the economic development of Hong Kong, vehicles have become increasingly popular. Although Hong Kong's public transport network is well-developed, the fact that many families have moved to the New Territories and other remote areas due to the increasing local population, the development of new towns and improvement in road network connecting different districts and contributed to the growth of demand in vehicles. As at the end of 2017, the number of registered vehicles reached 750,000. The automotive industry has become one of the major industries in Hong Kong, which mainly comprises of automobile sales (imported by agents or parallel importer), spare parts sales and management, and automobile repairing services. Traditionally, automotive services include various categories such as mechanical, electrical, car body correction and painting, sewing, air conditioning, batteries, tires, and car body construction. The development of the automotive industry has also led to the rise of many related industries such as financial services, insurance, automobile testing, reception services for maintenance, accident claim evaluation, car beauty, scrap car processing, etc. Hence the rise and fall of the automotive industry would directly or indirectly affect livelihoods of many workers in related industries. The estimated number of practitioners in the automotive industry is about 20,000, but they have influence on Hong Kong citizens and are closely related to livelihoods of the people. In the following paragraphs, we will discuss the changes and outlook of the automotive industry from different perspectives.

2 Since the invention of the starter and silencer in the early 20th century, automobiles have become more user-friendly and comfortable. In the 1970s, cars became popular, and most of them were controlled by traditional mechanical system. In the 1980s, electronically control of automobile engines prevailed. The systems of gearboxes, brakes, exhaust gas treatment, air conditioners, etc. were electronically controlled, which generally requires 8-10 computers equipped on the car. Since the 1990s, the environmental awareness has been increasing and exhaust emission standards continued to tighten. In October 2018, Hong Kong began to implement the Euro 6 emission standard. Automobiles need a large number of sophisticated electronically controlled equipment in order to meet the requirements. Automotive design and maintenance are largely different from the past: from the use of one's sense and experience to fully relying on electronic instruments for diagnosis in vehicle examination, from renovation of vehicle parts to replacement of the entire module parts. The old maintenance technology / knowledge must be constantly updated to keep up with the development of the industry. In the 21st century, it is realized that global warming is irreversible while it can only be slowed down by reducing the emission of carbon dioxide through searching and adopting alternative fuel. At present, electricity is the alternative energy which can successfully apply and with better potential to develop. Therefore, governments and automobile manufacturers have put tremendous effort in promotion the development of electric vehicles so as to significantly reduce the use of petroleum-fueled vehicles in the next 10 to 20 years and replace them by electric vehicles (all-electric vehicles or plug-in hybrid), as such the number of electric vehicles will be bound to increase by ten times or even a hundred times. Modern technology has already realized small cars which powered by solely batteries. The development and popularization of

solely battery-powered commercial vehicles shall also be realized, perhaps in the next three to five years. On the other hand, based on the technological development of hybrid vehicles, it is expected that in the next 10 to 20 years, the heart of the petroleum-fueled vehicles including the engine, gearbox, differential and exhaust emission technologies will continue to improve. In addition, faster data transmission and larger memory capacity brought by well-developed internet communication nowadays, together with the trend of "Industry 4.0", big data has been adopted quietly in the automobile industry. The Internet of Things allows people, cars and roads to communicate. This not only facilitates partial realization of vehicle driving by artificial-intelligence, but also facilitates effective storage and transmission of the vehicle's operating status and fault to the data center for real-time monitoring. As such, the maintenance needs can be accurately predicted, which changes the traditional way of preventive maintenance into predictive maintenance for reducing wastes. Data may be further transferred to manufacturers for prediction of demand for vehicle parts and design improvement. With the help of real-time ordering, inventory can be reduced, resulting in lower total cost of ownership. While the vehicle's electronic device sends maintenance notice to the owner, the vehicle workshop has already prepared all the supporting facilities and spare parts, so the amount of waiting time and downtime of the vehicle can be greatly reduced, as well as the number of parking spaces needed in the workshop can be reduced.

SWOT analysis of the automotive industry

3. To understand the industry's views on the above possible changes and the opportunities and challenges they would bring about, we have prepared a questionnaire for interview with the major stakeholders including automobile agents and maintenance providers' associations. Moreover, on 15 December 2017, a seminar was held at the Kwai Chung Pro-Act Training and Development Centre (Automotive) of the Vocational Training Council. The representatives of major automobile trade associations, institutes, and relevant government departments were invited to express their views and discuss with the attendees. After the meeting, the completed questionnaires were collected for statistical analysis. The following discussion is mainly based on industry's view.

Strengths

4. The younger generation in Hong Kong receives higher level of education and is more likely to accept new things, while the elder generation is very adaptable. Nowadays, many of the experienced maintenance mechanics are multi-skilled, such as many vehicle mechanics are capable of repairing general electrical appliances and assembling and disassembling car body parts. There is more benign cooperation than vicious competition among fellow practitioners in general. The concept of continuing education begins to be widely accepted. The apprenticeship scheme established by the Government and the vocational education provided by the Vocational Training Council starting from the 1970s assured a stable source of automotive practitioners and their quality. Recently, the Government and the industry have co-operated to implement the "Earn and Learn Scheme" to encourage young people to join the industry. This also indirectly increases the starting salary of practitioners to make the industry more appealing to them. The Electrical and Mechanical Services Department (EMSD) has implemented the Voluntary Registration Scheme for Vehicle Mechanics and the Voluntary Registration Scheme for Vehicle Maintenance Workshops to ensure the quality and standard of services provided by maintenance mechanics and vehicle maintenance workshops. The Automotive Industry Training Advisory Committee has also introduced Vocational Qualifications Pathway for the industry which provides clearer progression and learning pathways for the practitioners. Hong Kong as a whole has been gradually transforming into a knowledge-based society with relatively higher level of

English proficiency. Together with the well-developed internet and information system, and as affluent society, Hong Kong is capable of coping with challenges ahead.

5. The industry generally believes that Hong Kong's economy will continue to prosper, steady growth of the number of automobiles will continue, and the integration between China and Hong Kong is a positive factor for development. Expect motorcycles, relevant job positions of all types of vehicles sales and maintenance will benefit.

Weaknesses

6. Hong Kong is a small city with dense population. Many maintenance workshops inherited their predecessor's business which locate in downtown areas, residential buildings and even at brownfields. This is obviously not ideal from environmental protection and safety perspectives. In the event of building removal or relocation, or recovery of brownfields by the government, it would be difficult for the practitioners to continue their operation elsewhere which leads to the decreasing number of old-style maintenance workshops. In view of this dilemma, the Government has studied the construction of multi-storey industrial buildings in relatively remote areas for maintenance workshop relocation purpose. However, the progress of such project has been relatively slow. Many maintenance workshops have closed their business due to failure in finding suitable location for operation. Moreover, the industry faces external competition as many vehicles travelling between Mainland China and Hong Kong opt to carry out maintenance in Mainland in view of the lower maintenance cost. This indirectly reflects the lack of competitiveness in Hong Kong's rent and wage levels contributed to the higher maintenance cost. Although the total number of vehicles in Hong Kong has increased, the overall service hours for vehicle maintenance has been reduced due to improved reliability and durability of new cars. Moreover, the electric vehicles in general require less frequent maintenance services. Therefore, it is believed that the automotive business will only develop steadily in the future.

7. In recent years, the rapid development of automotive technology, tightening of emission standards and the electrification of automobiles have continuously brought challenges to the maintenance industry. Some practitioners face difficulties in obtaining the latest information for repair and maintenance, and for providing staff training. Given many regional training centres in Asia are set up in Mainland China and the medium of instruction of such training are Putonghua, practitioners may not be able to spare time for the training or adapt easily to the medium of instruction. Some employers even may not attach great importance for longer-term staff development which lead to the lack of sense of belonging among staff.

Opportunities

8. Hong Kong is a city which is extremely suitable and is in great need for electric vehicles. When time is ripe, such as the battery technology is advanced enough for development of electric commercial vehicles, and the power supply facilities have largely improved, the growth in number of electric vehicles will be explosive. By that time, there may be tremendous demand for electric vehicle maintenance and repair, monitoring, and diagnosis services. In order to take the lead, practitioners need to search for and undergo relevant training as soon as possible. Training institutions should also provide relevant training courses. At the beginning, these trainings may only involve basic concepts such as safety and requirements for environmental protection. However, such trainings shall evolve to that of various types and characteristics of the three electric systems (batteries, motors, electronic controls), various charging systems of different power ratings and conventions, and gradually to more in-depth knowledge of

remote real-time monitoring and diagnosis, predictive maintenance, seamless maintenance arrangements, and the just-in-time ordering and supply system of spare parts through internet.

9. As governments and vehicle manufacturers plan to reduce or discontinue petroleum-fueled vehicles in the next decades, so it is estimated that in the future ten or more years, improvement in efficiency and meeting higher emission standards are required for internal combustion engines. The technology of internal combustion engines will continue to evolve.

10. It is estimated that online inquiries regarding supply and sales of parts would increase, resulting in faster ordering and reduction in inventory level, which benefits the development of the industry, subject to that the practitioners have a better understanding on the use of information technology. The experience of some maintenance association shows that online platforms can help promote the sales of repairing coupons so as to increase business turnover.

11. Hong Kong's automobile agent generally welcome the trend of development of electric vehicles, as new products could attract customers to replace their cars. Although there are opinions that the overall online sales will surge, the major automobile importers is not in favor of online sales as they think that customers are more cautious in buying relatively expensive and long-life commodities. They would not easily purchase products for which they do not have in-depth understanding or have a test drive in person. Therefore, it is believed that there would not be much changes to the traditional automobile sales practices which rely on marketing and follow-up by individual salesman. Moreover, in the internet age, as the customers can acquire more in-depth understanding of cars, salesmen need to be better prepared for more demanding customers.

12. The above indicates that practitioners must achieve a certain proficiency in information technology. As the internet and information technology in Hong Kong's is well-developed, it lays a good foundation for the continuous development of the industry. The above changes shall also catalyst both production and non-production related practitioner to enhance their personal quality and ability to meet new demands. It is believed that the development would help to enhance the remuneration package and even the social status of the practitioners.

Challenges

13. The loss of vehicle practitioners especially the maintenance workers and unwillingness of young people to pursue their career in the industry are the biggest crisis faced by the industry. In fact, there has been a slight decline in manpower in the past decade, and the industry does not expect a major change of this trend in the short term. Given the working environment of the traditional automobile maintenance industry is worse when compared to other service industries, it is extremely difficult to attract young people to join the industry. Moreover, the long period for pre-employment training also becomes another barrier to recruit new talent. Therefore, it is of extremely important to improve the image and working environment of practitioners, uplift the social status and rewards of practitioners, and particularly improve the duration and content of training courses to meet social needs. If the industry can step up training for the practitioners, importing foreign workers and experts can be avoided.

14. At present, repairing and assembling work of vehicles in Hong Kong has been relocated to the Mainland. In view that the opening of the Hong Kong-Zhuhai-Macao Bridge accelerates integration between Guangdong and Hong Kong, and the rent hikes in Hong Kong, more related work process may continue to shift to Mainland China. However, some members of the industry still believe that if Hong Kong can sustain its competitive advantage in quality of work and service, the customers will not easily agree to transfer those work process to the Mainland. Traditionally, Hong Kong has been relied on and made reference to the experience of other regions to formulate its own direction for industry development. For example, on promotion and using of electric vehicles, Hong Kong has been lagged behind by one to two years when compared with other regions which leads to a delay in general knowledge, and even the education and training in repair and maintenance of electric vehicles. In some neighbouring areas, the improvement in production workflow and the application of online just-in-time systems (such as those applications in bus assembly technology) are ahead of Hong Kong. Hong Kong needs to catch up with the trend or the opportunities will be eroded.

Other suggestions

15. Although this document has already covered competency requirements for various personnel ranging from apprentice/assistant to the manager, some members of the industry proposed to cover the competency requirements for repair and maintenance of commercial vehicles and motor cycle and body construction for commercial vehicles to improve the coverage of current document.

16. Traditionally, employers assume employees have received basic training or possess basic skills including basic knowledge in information technology, logical thinking, interpersonal skills, continuous education, knowledge imparting, environmental protection, and occupational safety when they are employed. Proficiency in quality control, operational management, and customer service are also basic requirements for daily work for which the employees should be competent in. However, in view of the experience of other countries and the world's major trend to explicitly list out those generic requirements, this document also such competency requirements in order to be in line with the global trend.

17. The rapid development of the industry has also led to changes in job structure and duties. It is recommended to add the competency requirements of VQP qualification for vehicle damage assessor under the Vocational Qualifications Pathway in view of development of the industry.

Conclusion

18. In the recent years, electric vehicles have developed rapidly in countries around the world, in particular the development of electric vehicles in Mainland China has surpassed other countries. Therefore, the development of electric vehicles in Hong Kong is also an inevitable trend and shall make Hong Kong a role model of modern cities. However, in developing electric vehicles, it is necessary to ensure that the local automobile industry is at the forefront so that it will not be lagged behind the global trend. Some members of the industry believe that the government should have appropriate regulation and support coupled with appropriate policies to successfully bring the automotive industry to the new era of electric vehicles.

Specification of Competency Standards

19 In view of the industry's current situation and future development trend, it is imminent that the Specification of Competency Standards (SCS) be formulated to provide a solid framework for training to enhance the industry's technical capability, competitiveness and quality of service.

20 The SCS consists of competency standards of different levels. Competency standards are benchmarks for the industry-specific knowledge, professional skills and soft skills required for performing different job functions of the industry. The functional areas and competency standards under SCS will be practical and competence-based. The SCS not only sets out the professional knowledge and skills required for today, but also takes into account factors such as the development trend of both the industry and the society.

21 In the long run, the industry-recognised SCS will become the blueprint for training. It will not only ensure that training providers can meet the industry's present and future needs by offering training courses covering all the knowledge and skills required by the industry, but also provide employees with a clear set of learning pathways, so that they can draw up their own learning and career roadmaps. As such, the SCS will complement the full-scale implementation of the Qualifications Framework by the Government.

22 Since the SCS is established by the industry, it is indicated that the training programmes can meet the requirements of the industry. Upon completion of the SCS-based programmes, trainees will possess skills that can be objectively measured. Such information may facilitate employers to identify suitable talents thus, reducing possible losses incurred by unfit appointments, as well as shortening the new recruits' adaptation period and minimising related costs.

23 The Automotive Industry Training Advisory Committee (ITAC), comprising representatives of employers, employees, the Government and professional bodies of the industry, has prepared a preliminary version of "SCS for the Automotive Industry – Section A. Operation, Sales, Services and Parts Management Sector" with reference to its current status and development trend, as well as the standard and format adopted in the Mainland and overseas, with a view to providing practitioners with clear guidelines for devising their own learning and career roadmaps.

24 The SCS for the automotive industry is divided into two sectors, i.e. Part I-Operation, Sales, Services and Parts Management and Part II-Manufacturing of Vehicle Parts. In view of the extensive coverage of the automotive industry, this SCS version is focused on Part I while Part II will be developed in the next stage.

Chapter 2

Qualifications Framework

Hong Kong Qualifications Framework

25 The Automotive ITAC was set up by the Education Bureau to facilitate the implementation of the Hong Kong Qualifications Framework (QF) in the industry. The proposed QF is a voluntary system. It is a seven-level hierarchy that provides benchmarks for determining the level of complexity and difficulty of individual competencies. It is also used to order and support qualifications of different natures and titles. The QF has in place an independent quality assurance (QA) system that would enhance recognition and acceptance of the qualifications in the industry, irrespective of the mode and source of learning.

26 The Automotive ITAC is responsible for the development of its industry-specific, task-based SCS for the identified core functional areas. The SCS, in the form of Units of Competencies (UoCs), provides not only quantitative and qualitative specifications on the competencies required for specific tasks, but also the integrated outcome standards required as well as information on the QF level and credits.

27 The SCS may be used to aid vocational curriculum design by vocational education and training providers, or in-service employee development by HR personnel, or best practice recognition and qualifications by awarding bodies within the industry. SCS is the cornerstone to enhance workforce competitiveness and industry sustainability in the long run.

28 The QF aims to provide clear learning pathways for individuals to draw up their own roadmaps to obtain quality assured qualifications. Learners can either pursue a specific learning pathway to upgrade their skills in a particular area of specialization in a gradual and orderly manner (vertical development), or progress through traversing learning pathways to become multi-skilled (horizontal development). Through the full-scale implementation of the QF, we will foster a vocational environment and culture conducive to lifelong learning and continuing education in the industry. With the active participation of employers and employees as well as the wide acceptance of the industry, the QF will also encourage the development of quality training programmes by providers to meet the needs of the community and the industry.

Industry Training Advisory Committee (ITAC)

29 The future prospect of the automotive industry has much to do with the development of high-technology, environmental protection and safety awareness. As such, it is of paramount importance to train talents of versatility. In view of this, the Education Bureau set up the Automotive ITAC comprising leaders from the industry, representatives of the trade association, employers, employees and professional bodies to provide them with a platform for interaction and communication so that they can join their efforts to explore methods to enhance the development of the industry and formulate training needs for the industry.

30 Since its inception in 2005, the first task of the Automotive ITAC was to assist in the preparation of the SCS for the industry. With in-depth knowledge on the industry and thorough understanding of the competency requirements for different capacities, members of the ITAC have offered professional advice to the team responsible for compiling the SCS, enabling it to meet the needs of the industry. The SCS will become the blueprint for related human resources measures and training programmes upon completion.

31 Apart from facilitating the preparation of the SCS, the ITAC also plays an important role in motivating manpower development such as launching consultation and publicity exercises within the industry, giving advice on the design of training or articulation courses and facilitating policy-making for the Recognition of Prior Learning (RPL) mechanism, etc.

32 The ultimate objectives of the ITAC in assisting the preparation of the SCS and the implementation of the QF are to upgrade the quality standard of qualifications, extend education or promotion opportunities to more learners or employees and articulate various kinds of qualifications to enhance their recognition. All of the above are the important tasks of the QF and will also be the major tasks of the ITAC.

Qualifications Framework levels

33 The QF has seven levels, from level 1 to level 7, where level 1 is the lowest and level 7 the highest. The outcome characteristic of each level is depicted by a set of generic level descriptors (GLD) (Appendix 1). The GLD specifies for each QF level its generic complexity, demand and challenges in the four dimensions below:

- a. Knowledge and intellectual skills;
- b. Process;
- c. Autonomy and accountability; and
- d. Communication, ICT and numeracy.

34 The UoCs (See Chapter 4) are benchmarked to the QF levels in accordance with the GLD. It is worth to note that competency elements in a UoC may fall in some or all of the GLD dimensions as what it naturally should be. The QF level assignment is essentially a holistic judgement on the unit's integrated outcome requirement.

Chapter III

Competency Standards

Major Functional Areas of the Automotive Industry – Corporate Management, Sales and Marketing, Parts Management, Vehicle Servicing, and Common Competency Sectors

35 As proposed by the Automotive ITAC, the SCS of the Automotive Industry – Corporate Management, Sales and Marketing, Parts Management, Vehicle Servicing, and Common Competency Sectors, consists of the following core functional areas:

A. Corporate Management

(i) Operation Strategy

The core functional area of operation strategy is to formulate and monitor an overall operation strategy for the organisation. Practitioners should possess extensive commercial and legal knowledge and be conversant with the operation of the automotive industry. They should also be capable of drawing up policies that can meet organisational needs from higher perspectives such as organisational development, overall safety and risk management, etc. Apart from discharging daily monitoring duty, they should also conduct evaluation on a regular basis so as to enhance operational effectiveness of the organisation.

(ii) Financial Management

The core functional area of financial management involves the formulation and implementation of financial management plans. Practitioners should be conversant with the theories of double-entry bookkeeping, financial accounting and cost accounting so as to perform accounting duties and formulate financial management plans.

(iii) Human Resources Management

The core functional area of human resources management is to formulate various management procedures for the organisation so as to ensure sufficient and appropriate supply of human resources. Practitioners should establish, implement and evaluate different systems, including pay level, recruitment or promotion mechanism, staff training and appraisals, etc. on the understanding that human resources are the major dynamics of corporate development so as to enhance economic effectiveness and foster corporate development.

B. Sales and marketing

(i) Vehicle Sales

The functional area of vehicle sales mainly covers the sales of vehicle products and the knowledge on the history, characteristics, market positioning, new product concept and performance of the vehicle brands being sold. Practitioners should master the selling techniques of vehicle products and possess knowledge on the vehicle market situation, the strengths and weaknesses of other brands in the industry, consumers' consumption sentiments and behavior, the vehicle factory's market concept, marketing plans, promotion strategies and customer relationship management. They should also be responsible for marketing profits.

(ii) Vehicle Marketing

The functional areas of vehicle marketing mainly cover the marketing and promotion of vehicle products and the knowledge on the history, characteristics, market positioning, new product concept and performance of the vehicle brands under promotion. Practitioners should master the marketing and promotion techniques of vehicle products to draw up marketing and promotion strategies that are most conducive to the products in accordance with the vehicle factory's market concept by focusing on vehicle market situation, the strengths and weaknesses of other brands in the industry as well as consumers' consumption sentiments and behavior. Moreover, practitioners should possess certain knowledge on market research and customer relation management.

(iii) Sales process

The functional area of the sales process mainly covers the receipt, delivery and logistics of vehicles, and the preparation and implementation of vehicle import.

(iv) Showroom design

The functional area of the showroom design is the methods for displaying vehicles in the showroom.

C. Parts Management

(i) Parts and Accessories Sales

The functional area of parts and accessories sales mainly includes the sales and delivery of goods as well as the handling of transaction accounts, etc. Practitioners should possess knowledge on auto parts and accessories, master customer communication skills and know how to handle various kinds of payment methods as well as the retrieval, storage and return of purchase, etc. They should also be capable of adjusting the goods intake and sales strategy according to market demand.

- (ii) Inventory Control and Management
The functional area of inventory control and management mainly includes inventory control and protection of inventory goods. Practitioners should possess knowledge on vehicle parts and accessories and know how to apply inventory record and related software as well as protect various kinds of inventory goods. They should also be capable of setting the indicators for inventory level and the pattern of inventory replenishment according to the needs of the market.
- (iii) Purchasing Management
The functional area of purchasing management mainly covers the procurement of goods and monitoring of the quality of goods. Practitioners should be familiar with the characteristics of vehicles and related regulations, possess the capabilities of selecting suppliers of new or renovated parts and accessories, and judging the market value of used vehicles, etc. They should also be capable of formulating purchasing strategies for new, used and renovated goods according to market demand.
- (iv) Warehouse Management
The functional area of warehouse management mainly covers the assurance of the normal functioning of warehouse equipment and facilities as well as the safe storage of inventory goods. Practitioners should possess knowledge such as vehicles and their parts and accessories; regulations on warehouses, occupational safety and health as well as environmental protection; the application of related software and the protection of warehouse equipment and facilities, etc. They should also be capable of designing the storage areas for inventory goods and formulating strategy for the storage of goods according to their characteristics and circulation.

D. Vehicle Servicing

- (i) Vehicle Servicing and Testing
The functional areas of vehicle servicing and testing mainly include the understanding of the basic principles and structure of vehicles, various systems and spare parts; operation of appropriate instruments. He should be conversant with inspection, maintenance, fault diagnosis and servicing the various parts, systems, and accessories as well as vehicle body and painting, etc. Vehicle testing requires practitioners to have an understanding of various procedures and standards of vehicle tests, and the capabilities of conducting the tests and writing reports. Practitioners should also possess certain knowledge on relevant ordinances of occupational health and safety, environmental protection and vehicle safety.

(ii) Service Sales and Support

It mainly covers the sales and support of vehicle servicing. The functional areas include vehicle servicing, maintenance consultancy services, technical support, the handling and inspection of new vehicles, after-sales warranty and handling of claims for compensation, etc. Practitioners should possess knowledge of vehicle after-sales services on the market concept, marketing plans, business promotion, personal sales techniques, customer relation management as well as the terms and conditions of warranty and claims for compensation, etc. Practitioners engaged in technical support services should possess general vehicle servicing techniques and the capability of fixing more complicated servicing problems, whereas some individual functional areas may require skills such as communication with the experts of the vehicle manufacturer, planning and implementation of staff training.

(iii) Vehicle Damage Surveying

The functional area of vehicle damage surveying mainly requires practitioners to have certain knowledge on the structure of vehicles and spare parts; be conversant with the servicing procedure; know how to estimate the man-hours and spare parts required; and familiar with market price, etc. They should also be capable of making appropriate assessment on maintenance cost, writing relevant reports.

(iv) Body Design and Building (Commercial Vehicle)

Commercial vehicle body building means conducting processing work at the chassis and driving compartment of an uncompleted commercial vehicle equipped with engines, gearboxes and axles. The functional area mainly requires practitioners to design, construct and assemble servicing parts for the vehicle bodies and the loading compartments of trucks; installation of doors and windows, external decorations and vehicle lamps, etc. as well as assemble interior equipment (e.g. seats, floor, ceiling, accessories, lighting devices and meter wires, etc.). Practitioners should know respective provisions of the Road Traffic (Construction and Maintenance of Vehicles) Regulations and relevant legal requirements, and understand the structure of vehicle bodies, construction maps and installation manuals; and master the techniques of cutting, welding, drilling and articulation; the characteristics of materials being used inside or outside the vehicles. He should also grasp the know-how of application of treatment materials such as anti-rust, water-proofing, sound-proofing, heat-proofing and damping.

E. Common Competency

(i) Quality Management

The functional area of quality management covers the formulation and implementation of quality management schemes by employing the knowledge and techniques of quality management. Practitioners should know how to apply their knowledge of quality management to exercise effective control so as to achieve the cost effectiveness of low cost and high quality. They should also be able to analyse, handle and evaluate customer suggestions as well as to promote and implement quality management and staff training. Moreover, they should ensure that the quality of products or services can meet the requirements of customers, manufacturers and

government ordinances.

(ii) Operation Management

The functional area of operation management involves the provision of a safe and well-equipped workplace for the organisation that can meet its business operation and development, among which includes the formulation and implementation of various policies to ensure that the equipment, facilities and software within the workplace are normally functioning with adequate supply and safe and meet relevant legislative requirements. Practitioners should also take note of vehicle security, including vehicle storage and retrieval procedures. He shall formulate related policies on the basis of occupational safety, the health of staff and environmental protection.

(iii) Customer Service

The functional area of customer service mainly covers servicing the customers and communication skills. Practitioners should possess knowledge of customer service strategy, customer service quality management and customer relation management. They should also possess the techniques of providing quality and professional services, and handling customer suggestions. They should be conversant in communication with the customers in common Chinese and English.

(iv) Safety and Health

The functional area of safety and health mainly covers the identification of hazardous substances, pollutants and the implementation of occupational safety and environmental regulations.

(v) Interpersonal Relationship

The functional area of interpersonal relationship mainly includes maintaining good working relationship with colleagues

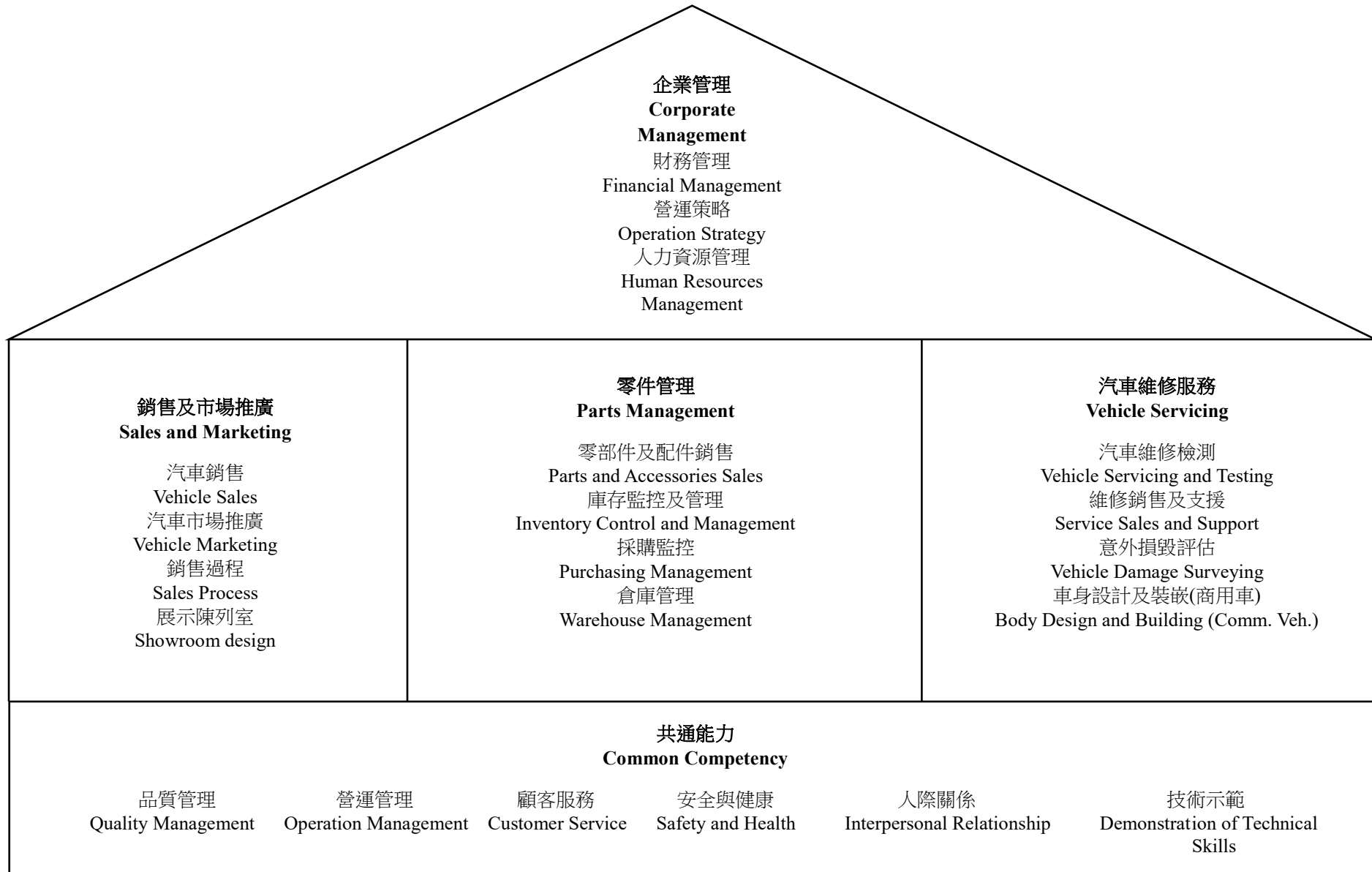
(vi) Demonstration of technical skills

The functional area of demonstration of technical skills mainly covers the ability to demonstrate technical skills to the learners.

36 Based on the generic level descriptors and the major functional areas, the Automotive ITAC has formulated a “List of Competencies” (Chapter 4) for the industry. The list provides details of the training requirements of the industry in regard to the different competency levels and functional areas. It is designed to provide clear and unified guidelines for drawing up individual learning roadmaps. Learners may either pursue a specific learning pathway to upgrade their skills in a particular area of specialisation in a gradual and orderly manner (vertical development), or progress along a number of learning pathways to become multi-skilled (horizontal development).

汽車業能力門類 / 職能範疇圖

Functional Map showing the Sectors / Functional Areas of the Automotive Industry



Competency Standards

37 Competency standards refer to the skills and knowledge required for a particular job function. They represent the industry benchmarks for the skills, knowledge and attributes required to perform competently in a particular job. Thus, they are the most important part of the SCS.

Units of Competencies

38 The Automotive ITAC has set out the competency standards for various job functions in the form of units of competencies, which describe the performance and standard required for each competency. Please refer to Chapter 4 for details. Every “unit of competency” comprises eight basic items:

1. Title
2. Code
3. Range
4. Level
5. Credits
6. Competency
7. Assessment Criteria
8. Remarks

Corporate Management

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Financial Management				
Apply double-entry bookkeeping	108555L2	2	3	3-1
Handle various kinds of payment methods	108556L2	2	3	3-2
Apply financial accounting techniques	108557L3	3	6	3-3
Adopt cost accounting techniques	108558L3	3	6	3-4
Develop procedures for various forms of payment	108559L4	4	6	3-5
Implement financial management	108560L4	4	6	3-6
Compile financial reports applicable to the automotive industry	108561L5	5	6	3-8
Formulate financial management plans	108562L5	5	6	3-9
Operation Strategy				
Assess the risks of accident at work within the workplace	108563L5	5	6	3-11
Formulate a comprehensive scheme for organisational operation management	108564L5	5	6	3-13
Formulate risk management plans	108565L6	6	6	3-14
Formulate corporate development strategy	108566L7	7	6	3-16
Human Resources Management				
Be familiar with relevant labour regulations	108567L1	1	1	3-17
Appraise staff performance and professional knowledge	108568L4	4	6	3-19
Draw up staff training programme	108569L4	4	6	3-20
Arrange filling of job vacancies	108570L4	4	6	3-22
Assess human resources market and establish remuneration system	108571L5	5	6	3-24

Sales and Marketing

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Vehicle Sales				
Introduce to customers the characteristics of different types of vehicles and their accessories	108572L1	1	3	3-26
Perform sales of vehicles	108573L2	2	6	3-27
Perform sales of vehicle parts and accessories	108574L2	2	6	3-29
Provide supporting services to vehicle sales	108575L2	2	3	3-30
Promote to potential/target customers to increase sales opportunities	108576L2	2	3	3-31
Deliver a product or service presentation	108577L2	2	3	3-32
Arrange vehicle test drive by customers	108578L3	3	3	3-33
Implement sales plan for vehicle products	108579L3	3	3	3-34
Arrange financial loan for vehicles	108580L3	3	3	3-35
Arrange for vehicle insurance	108581L3	3	3	3-37
Arrange receipt and delivery procedures of imported new vehicles	108582L3	3	3	3-38
Purchase used vehicles	108583L4	4	3	3-39
Purchase new vehicles	108584L4	4	3	3-41
Formulate sales estimates of vehicle products	108585L5	5	6	3-43
Formulate marketing plans for vehicle products	108586L5	5	6	3-45
Formulate vehicle products sales strategy	108587L6	6	6	3-47
Formulate management strategy for salespersons of vehicle products	108588L6	6	6	3-49
Formulate purchasing strategy for new vehicles	108589L6	6	6	3-51
Vehicle Marketing				
Implement market research plan	108590L3	3	3	3-53
Implement marketing plans	108591L3	3	3	3-54
Formulate marketing plans	108592L4	4	6	3-56
Formulate market research plans	108593L5	5	6	3-58
Write promotion script for the marketing of vehicle products	108594L5	5	6	3-59
Formulate marketing strategy	108595L6	6	6	3-60
Formulate brand strategy for vehicles	108596L6	6	6	3-61

Sales and Marketing

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Sales Process				
Arrange for delivery and transportation of vehicles	108597L2	2	3	3-63
Handle preparation work for vehicle importation	108598L2	2	3	3-64
Establish procedures for the receipt, dispatch and delivery of vehicles	108599L4	4	3	3-65
Showroom Design				
Exhibit / Display vehicles	108600L4	4	3	3-67

Parts Management

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Parts and Accessories Sales				
Deliver and transport parts and accessories	108601L2	2	3	3-68
Identify/confirm vehicle parts and accessories	108602L2	2	3	3-70
Implement vehicle parts stocktaking activities	108603L2	2	3	3-71
Sell vehicle parts online	108604L2	2	3	3-72
Implement inventory control of vehicle parts	108605L3	3	3	3-73
Return procedure of purchase	108606L3	3	3	3-74
Order parts and accessories	108607L3	3	3	3-76
Establish and manage the documentary system for the sale of auto parts and accessories	108608L4	4	3	3-78
Establish a procedure for the return of parts and accessories	108609L5	5	6	3-80
Formulate sales strategy for parts and accessories	108610L6	6	3	3-82
Inventory Control and Management				
Store auto parts and accessories	108611L3	3	3	3-83
Condemn the inventorial stock	108612L3	3	3	3-84
Establish the procedures for the receipt, dispatch and delivery of parts and accessories	108613L4	4	3	3-85
Monitor the delivery process of parts and accessories	108614L4	4	3	3-87
Manage the documentary system for auto parts and accessories inventory	108615L4	4	3	3-88
Establish the monitoring system for the delivery of parts and accessories	108616L5	5	3	3-90
Establish the procedure for stock condemnation	108617L5	5	6	3-91
Formulate inventory level policy	108618L5	5	6	3-92
Establish guidelines to protect the stock	108619L5	5	6	3-93
Purchasing Management				
Carry out purchasing procedures for auto parts and accessories (for designated motor agents)	108620L3	3	3	3-94
Carry out the purchasing procedure for auto parts and accessories (for non-designated vehicle agents)	108621L3	3	3	3-96
Select suppliers of parts and accessories	108622L4	4	3	3-98
Purchase renovated parts and accessories	108623L4	4	3	3-99

Parts Management

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Purchasing Management				
Establish methods to assess the applicability of non-OEM parts and accessories	108624L4	4	3	3-101
Conduct green procurement	108625L4	4	3	3-103
Formulate purchasing strategy of parts and accessories	108626L5	5	6	3-104
Warehouse Management				
Store and retrieve the parts and accessories	108627L2	2	3	3-106
Manage warehouse facilities	108628L3	3	3	3-107
Fulfil the requirements on environmental protection (parts management)	108629L3	3	3	3-108
Establish the procedure for the storage and retrieval of parts and accessories	108630L4	4	3	3-110
Design the storage zone for parts and accessories	108631L5	5	6	3-112
Formulate management strategy for auto parts and accessories warehouse	108632L6	6	6	3-114

Vehicle Servicing

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Vehicle Servicing and Testing				
Know about the structure and basic operation of vehicles and components	108633L1	1	1	3-116
Employ general vehicle servicing tools and equipment	108634L1	1	1	3-117
Dismantle, replace and re-assemble general vehicle system components	108635L1	1	6	3-118
Dismantle and replace various kinds of vehicle electric systems and accessories	108636L1	1	6	3-120
Replace metallic panels and accessories of vehicle body	108637L1	1	3	3-121
Handle chemicals	108638L1	1	1	3-122
Store paints	108639L1	1	1	3-123
Wax vehicle body	108640L1	1	1	3-124
Simple vehicle maintenance	108641L1	1	3	3-125
Know about the structure and basic operation of motorcycle and components	108642L1	1	1	3-127
Use general welding equipment	108643L2	2	3	3-128
Perform Vehicle body welding	108644L2	2	3	3-130
Use special tools and equipment for vehicle servicing	108645L2	2	3	3-131
Check, repair and replace tyres	108646L2	2	3	3-132
Check and repair engines	108647L2	2	6	3-134
Check and repair various types of fuel supply systems	108648L2	2	3	3-135
Check and repair various types of vehicle braking systems	108649L2	2	6	3-137
Check and repair vehicle chassis units and components	108650L2	2	6	3-139
Check and repair vehicle battery, charging and starting systems	108651L2	2	3	3-141
Check and repair vehicle lighting and signalling systems as well as the meters and indicating systems	108652L2	2	3	3-143
Check and repair vehicle wiper, electric door and power window systems	108653L2	2	3	3-145
Check and repair vehicle anti-theft, audio and video systems	108654L2	2	3	3-147
Check and repair vehicle electronic control systems and devices	108655L2	2	3	3-149

Vehicle Servicing

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Vehicle Servicing and Testing				
Check and repair vehicle air cooling and air-conditioning systems	108656L2	2	3	3-151
Dismantle and install the windows and doors as well as their components	108657L2	2	3	3-153
Check and repair front and rear windscreens	108658L2	2	3	3-154
Check and repair vehicle seats and interior fittings	108659L2	2	3	3-155
Check and mend the glass fibre panels of vehicle body	108660L2	2	3	3-156
Check and mend the metallic panels of vehicle body	108661L2	2	3	3-158
Measure vehicle body and chassis	108662L2	2	3	3-159
Use and maintain general painting equipment	108663L2	2	3	3-160
Remove paint and process surface treatment on metallic panel	108664L2	2	3	3-161
Carry out body filling and sanding	108665L2	2	3	3-162
Painting process	108666L2	2	3	3-163
Carry out body masking procedure	108667L2	2	3	3-164
Mix paints	108668L2	2	3	3-165
Car detailing work	108669L2	2	3	3-166
Use specialised instruments and equipment for vehicle inspection	108670L2	2	6	3-167
Inspect vehicles for regulations compliance	108671L2	2	6	3-169
Vehicle body parts fastening operation	108672L2	2	6	3-170
Spray paint on plastic components of vehicle body	108673L2	2	2	3-171
Routine Motorcycle Maintenance	108674L2	2	3	3-172
Motorcycle Pre-delivery Preparation and Inspection	108675L2	2	3	3-174
Remove and replace motorcycle engine power-train units and components	108676L2	2	3	3-175
Remove and replace motorcycle electrical units and components	108677L2	2	3	3-177
Remove and replace motorcycle chassis units and components	108678L2	2	3	3-179
Remove and replace motorcycle driveline units and components	108679L2	2	3	3-181
Remove and fit non-welded, non-structural motorcycle body panel	108680L2	2	3	3-183
Inspect, repair and replace motorcycle tyres	108681L2	2	3	3-185

Vehicle Servicing

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Vehicle Servicing and Testing				
Overhaul motorcycle mechanical units	108682L2	2	6	3-187
Carry out Routine Commercial Vehicle Maintenance	108683L2	2	3	3-189
Pre-delivery Preparation and Inspection of commercial vehicle	108684L2	2	3	3-191
Remove and replace commercial vehicle engine units and components	108685L2	2	3	3-193
Remove and replace commercial vehicle electrical units and components	108686L2	2	3	3-195
Remove and replace commercial vehicle chassis units and components	108687L2	2	3	3-197
Non-high energy electrical system related operation on electric and hybrid vehicles	108688L2	2	3	3-199
Check and repair mechanical break down and damage for electric and hybrid vehicles	108689L2	2	3	3-200
Isolate and reinstate electric system of electric and hybrid vehicle	108690L2	2	3	3-201
Service and repair non-live electric and hybrid vehicle systems	108691L2	2	3	3-203
Dismantle and repair electric and hybrid vehicle traction motors, electrical control and management systems	108692L2	2	6	3-205
Dismantle and repair electric and hybrid vehicle air-conditioning, cooling and power steering systems	108693L2	2	6	3-207
Dismantle and repair electric and hybrid vehicle WiFi, General Pocket Radio Service (GPRS) and various sensors for vehicle control	108694L2	2	6	3-209
Monitor and maintain instruments and equipment	108695L3	3	3	3-211
Conduct fault diagnosis on various vehicle fuel supply systems	108696L3	3	3	3-212
Conduct fault diagnosis on vehicle engine and component systems	108697L3	3	9	3-214
Conduct fault diagnosis on vehicle chassis units and components	108698L3	3	6	3-216
Conduct fault diagnosis on electric and hybrid vehicles	108699L3	3	3	3-218
Conduct fault diagnosis on vehicle transmission systems	108700L3	3	3	3-220

Vehicle Servicing

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Vehicle Servicing and Testing				
Test drive and report the condition of vehicles	108701L3	3	3	3-221
Maintain various vehicle servicing tools and equipment	108702L3	3	3	3-223
Conduct fault diagnosis on vehicle battery, charging and starting systems	108703L3	3	3	3-225
Conduct fault diagnosis on vehicle lighting systems, signalling systems, meter instruments and displaying systems	108704L3	3	3	3-227
Conduct fault diagnosis and analysis on vehicle wiper, electric door and window systems	108705L3	3	3	3-229
Conduct fault diagnosis and analysis on vehicle anti-theft, audio and video systems	108706L3	3	3	3-231
Conduct fault diagnosis and analysis on vehicle electronic data control systems	108707L3	3	3	3-233
Conduct fault diagnosis and analysis on vehicle air-conditioning and ventilation systems	108708L3	3	3	3-235
Measure vehicle body/chassis with specialised electronic instruments	108709L3	3	3	3-237
Rectify large-scale structural damages	108710L3	3	3	3-238
Check and repair aluminium alloy vehicle body	108711L3	3	3	3-239
Master the techniques of blending	108712L3	3	3	3-240
Remedy paint defects (spot painting)	108713L3	3	3	3-241
Examine vehicle of its roadworthiness	108714L3	3	3	3-242
Conduct maintenance for special equipment and instruments for vehicle inspection	108715L3	3	3	3-243
Arrange vehicle examination	108716L3	3	3	3-245
Defining defects of paint coating	108717L3	3	3	3-246
Diagnosis and rectify motorcycle engine and components faults	108718L3	3	3	3-248
Diagnose and rectify motorcycle chassis systems faults	108719L3	3	3	3-250
Diagnose and rectify motorcycle transmission and driveline system faults	108720L3	3	3	3-252
Diagnose and rectify motorcycle electrical system faults	108721L3	3	3	3-254
Diagnose and rectify commercial vehicle engine and components faults	108722L3	3	3	3-256
Diagnose and rectify commercial vehicle chassis systems faults	108723L3	3	6	3-258

Vehicle Servicing

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Vehicle Servicing and Testing				
Diagnose and rectify commercial vehicle transmission and driveline systems faults	108724L3	3	3	3-260
Diagnose, test and repair electric and hybrid vehicle high voltage batteries	108725L3	3	3	3-262
Provide technical support and advice to colleagues for vehicle repairing techniques	108726L3	3	3	3-264
Liaise with vehicle and product manufacturers on technical matters	108727L3	3	3	3-265
Conduct diagnostic consultations with customers	108728L3	3	3	3-267
Check and repair vehicle intelligent control systems and devices	108729L3	3	6	3-269
Formulate rules of safety operation for vehicle servicing work	108730L4	4	3	3-271
Conduct risk assessment on vehicle servicing work	108731L4	4	3	3-273
Monitor, arrange and coordinate the progress and workflow of the operation in the workshop	108732L4	4	3	3-274
Master complicated techniques of power systems	108733L4	4	9	3-276
Master the complicated techniques of transmission systems	108734L4	4	9	3-278
Master the complicated techniques of chassis stability control	108735L4	4	6	3-280
Master the complicated techniques of steering systems	108736L4	4	6	3-282
Master the complicated techniques of suspension systems	108737L4	4	6	3-284
Master the complicated techniques of electrical and electronic systems	108738L4	4	9	3-286
Master the complicated techniques of vehicle body and frame	108739L4	4	6	3-288
Conduct quality check on vehicle examination	108740L4	4	3	3-290
Master the complicated techniques of alternative power systems	108741L4	4	6	3-291
Master the complicated techniques of exhaust emission control	108742L4	4	6	3-293
Execute performance tests on vehicles	108743L4	4	6	3-295
Optimise the performance of vehicle systems	108744L5	5	6	3-296
Establish the testing procedure for vehicle performance	108745L6	6	6	3-298

Vehicle Servicing

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Vehicle Servicing and Testing				
Analyse the vehicle test result and evaluate the performance	108746L6	6	6	3-300
Service Sales and Support				
Offer servicing advice and consulting services	108747L3	3	3	3-301
Handle after-sales warranty claim	108748L3	3	3	3-302
Provide services on the repair quotation of insurance/claims for compensation	108749L3	3	3	3-303
Promote repair/maintenance services and consulting services	108750L3	3	3	3-305
Handle complicated technical servicing problems	108751L4	4	3	3-307
Contact vehicle manufacturers and overseas organisations for business and technical exchange	108752L5	5	3	3-308
Vehicle Damage Surveying				
Provide services on value assessment and trade-in of vehicles	108753L3	3	3	3-309
Verify cases of vehicle insurance claims	108754L4	4	3	3-310
Evaluate the repair cost for accidental damages of vehicles	108755L4	4	3	3-312
Coordinate insurance claims of vehicle damages	108756L4	4	3	3-314
Body Design and Building (Comm. Veh.)				
Use general materials and tools for vehicle body assembling	108757L1	1	3	3-316
Apply basic vehicle body building techniques	108758L2	2	3	3-317
Build the body frame	108759L2	2	3	3-318
Assemble the floor, windows, passageways, stairs and doors of vehicle	108760L2	2	3	3-319
Assemble seats and interior fittings	108761L2	2	3	3-320
Assemble air-conditioning systems	108762L2	2	3	3-321
Assemble lighting and indicating systems	108763L2	2	3	3-322
Produce vehicle body building fixtures	108764L2	2	3	3-323
Assemble vehicle body panels	108765L2	2	3	3-324

Vehicle Servicing

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Body Design and Building (Comm. Veh.)				
Provide quotation for vehicle body building work	108766L4	4	3	3-325
Design the loading compartments of trucks	108767L5	5	6	3-326
Design the carriages of passenger vehicles	108768L5	5	6	3-328

Common Competency

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Quality Management				
Judge the legitimacy of vehicle usage under laws and regulations (transport, environmental protection and road safety)	108769L3	3	3	3-330
Promote the culture of quality management in elementary level staffs	108770L4	4	3	3-331
Coordinate and implement quality management systems	108771L4	4	3	3-332
Monitor the quality of servicing work	108772L4	4	3	3-333
Conduct preliminary analysis on procedural deficiencies	108773L4	4	3	3-334
Compile report on quality issues	108774L5	5	6	3-335
Conduct quality audit	108775L5	5	6	3-336
Design quality management courses	108776L5	5	6	3-338
Implement the ISO quality management standard	108777L5	5	6	3-339
Implement the quality management standard specified by the vehicle manufacturer	108778L5	5	6	3-340
Implement quality management training courses	108779L5	5	6	3-341
Formulate plans to enhance staff awareness on quality management	108780L5	5	6	3-343
Formulate quality management policy	108781L6	6	9	3-344
Implement total quality management strategy	108782L6	6	9	3-346
Operation Management				
Draw up procedure of housekeeping in motor vehicle environments	108783L1	1	1	3-347
Carry out maintenance procedure in service workshops	108784L1	1	1	3-348
Transport vehicles	108785L1	1	1	3-349
Carry out maintenance work for the equipment inside the operating places	108786L2	2	3	3-350
Control vehicle servicing workflow	108787L3	3	3	3-351
Handle general accidents at work	108788L3	3	3	3-352
Establish procedures for parking, flow control and security of vehicles	108789L4	4	6	3-353
Investigate typical accidents at work	108790L4	4	3	3-354
Establish equipment management system	108791L5	5	6	3-355
Establish management system for servicing workshops	108792L5	5	6	3-357

Common Competency

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Customer Service				
Attend to Customers	108793L2	2	3	3-359
Manage customer relationship	108794L3	3	3	3-360
Manage customer services	108795L4	4	3	3-362
Handle customers' complaints	108796L4	4	3	3-363
Formulate customer services plan	108797L5	5	6	3-365
Formulate customer service management strategy	108798L6	6	9	3-367
Formulate customer relation management strategy	108799L6	6	9	3-369
Safety and Health				
Identify typical dangerous chemicals and understand their characteristics	108800L1	1	1	3-371
Apply the laws and regulations and management system of environmental protection	108801L1	1	1	3-372
Carry out the operation guidelines on occupational safety and health	108802L2	2	3	3-374
Handle typical dangerous chemicals, pollutants and waste	108803L3	3	3	3-376
Fulfil the requirements on environmental protection (electrical and mechanical servicing)	108804L3	3	3	3-378
Fulfil the requirements on environmental protection (vehicle body servicing)	108805L3	3	3	3-380
Monitor occupational safety and health systems	108806L4	4	3	3-382
Monitor and manage environmental protection operations	108807L4	4	3	3-384
Formulate management procedure for dangerous chemicals, pollutants and waste	108808L4	4	6	3-386
Establish occupational safety and health management system	108809L5	5	6	3-388
Establish environmental protection management system	108810L5	5	6	3-390
Formulate comprehensive occupational safety and health policy for the enterprise	108811L6	6	9	3-392
Formulate comprehensive environmental protection policy for the enterprise	108812L6	6	9	3-393

Common Competency

<u>Competency</u>	<u>UoC Code</u>	<u>Level</u>	<u>Credit</u>	<u>Page</u>
Interpersonal Relationship				
Maintain Working Relationships in the Motor Vehicle Environment	108813L2	2	1	3-395
Demonstration of Technical Skills				
Conduct demonstration of technical skills	108814L3	3	1	3-396

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Corporate Management

Title	Apply double-entry bookkeeping
Code	108555L2
Range	This unit of competency is applicable in workplaces relevant to the industry's operational management. Practitioners should be able to master the principles of double-entry bookkeeping and effectively applying this skill to accomplish the duty of accounting in accordance with the requirements.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The principles of double-entry bookkeeping)</p> <ul style="list-style-type: none"> • Understand the functions and procedure of bookkeeping. • Understand the principles of double-entry bookkeeping and the books of original entry. <p>2. Performance (Application of double-entry book keeping)</p> <ul style="list-style-type: none"> • Apply double-entry bookkeeping to record the assets, liabilities, transaction items of expenditure and revenue relevant to the automotive industry. • Compile the books of original entry for the automotive industry according to original vouchers, such as: <ul style="list-style-type: none"> ○ Sales journal ○ Purchase book ○ Returns inward journal ○ Returns outward journal ○ Cash book ○ Petty cash book
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the practitioners being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of understanding the principles of double-entry bookkeeping according to the requirements; and • Capable of effectively applying double-entry bookkeeping to accomplish the duty of account entering in accordance with the requirements.
Remark	

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Corporate Management

Title	Handle various kinds of payment methods
Code	108556L2
Range	This unit of competency is applicable in the sales department of vehicle parts and accessories. Practitioners should be able to complete payment process accurately according to various kinds of payment methods established by the organisation to safeguard the interest of both the organisation and the customers.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Payment methods and transaction documents)</p> <ul style="list-style-type: none"> • Understand different payment methods and the handling procedures, such as: <ul style="list-style-type: none"> ○ Payment by cash /electronic currency, credits card, cheque and transfer, etc. ○ Payment by charging to account, deposit and instalments, etc. • Identify the validity of financial documents and currency. • Know about the financial and transaction documents. <p>2. Performance (Handle various kinds of payment process)</p> <ul style="list-style-type: none"> • Handle payment procedure according to various kinds of payment methods established, such as payment by cash/electronic currency, credits card, cheque, charge to account and deposit. • Handle Documents Against Payment(D/P) and relevant documents. • Handle daily cash balance and relevant bills. • Carry out the organisation's established emergency and contingency procedure concerning the validity of currency or relevant documents, insufficient cash and amount discrepancy.
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 completing payment process effectively according to various kinds of payment methods established; and • Capable of carry out emergency and contingency procedure according to the established guidelines.
Remark	

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Corporate Management

Title	Apply financial accounting techniques
Code	108557L3
Range	This unit of competency is applicable in workplaces relevant to the operational management of the automotive industry. Practitioners should be able to employ financial accounting theory as well as performing such duty independently and effectively for the industry according to the requirements.
Level	3
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Financial accounting theory for the automotive industry)</p> <ul style="list-style-type: none"> • Good understanding of the functions of financial accounting theory. • Good understanding of the principles and procedure of financial accounting theory. • Good understanding of the life cycle of automotive products. • Good understanding of the inventory management of automotive products. • Good understanding of the effect of exchange rates on the finance of the automotive industry. • Good understanding of the relevant legal requirements of government policy on the automotive industry. <p>2. Performance (Adopt financial accounting techniques for the automotive industry)</p> <ul style="list-style-type: none"> • Adopt financial accounting principles to perform relevant duty for the automotive industry, including compilation of: <ul style="list-style-type: none"> ○ ledger by account ○ profit and loss statements ○ balance sheet ○ cash flow statements • Adopt accounting ratios. • Adopt accounting concepts. • Adopt the management functions of accounting systems. • Estimate the time value of currencies. • Estimate the change in exchange rates on the effect of finance account. • Estimate the inventory and value of stock.
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 employing financial accounting theory for the automotive industry; and • Capable of independently and effectively performing respective financial accounting duty according to legal and requirements.
Remark	

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Functional Area - Corporate Management

Title	Adopt cost accounting techniques
Code	108558L3
Range	This unit of competency is applicable in workplaces relevant to the operational management of the automotive industry. Practitioners should be able to employ cost accounting theory to perform such duty independently and effectively for the industry according to the requirements.
Level	3
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Cost accounting theory)</p> <ul style="list-style-type: none"> • Master basic cost accounting theory, including: <ul style="list-style-type: none"> ○ The significance and functions of cost accounting ○ The relationship between cost accounting, management accounting and financial accounting ○ The cost management system • Good understanding of the classification of costs, including: <ul style="list-style-type: none"> ○ The basic concept of costs ○ The classification of costs ○ The characteristics and differences of different industries ○ The compilation of profit and loss statements • Good understanding of the cost of quality, including: <ul style="list-style-type: none"> ○ The significance of quality ○ The importance of cost of quality • Good understanding of total cost method and variable cost method. <p>2. Performance (Adopt industry-related cost accounting techniques)</p> <ul style="list-style-type: none"> • Calculate cost, including: <ul style="list-style-type: none"> ○ Wages and cost of goods sold, etc. ○ Cost estimation ○ Regression analysis ○ Cost allocations • Analyse cost, quantity and profits, including: <ul style="list-style-type: none"> ○ Break-even analysis ○ Calculate break-even point ○ Analyse cost, quantity and profits • Calculate total cost and variable cost, including: <ul style="list-style-type: none"> ○ Formulate profit and loss statements by total cost method and variable cost method. ○ Assess the impact of changes in inventory level on profit and loss.
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 adopting basic cost accounting theory; and • Capable of performing cost accounting duty independently and effectively for the automotive industry according to the legal requirements.
Remark	

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Functional Area - Corporate Management

Title	Develop procedures for various forms of payment
Code	108559L4
Range	In the financial management department of the automotive industry, practitioners should be able to develop a set of handling procedures for various forms of payment to protect the interests of institutions and customers.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Different forms of payments and transaction documents)</p> <ul style="list-style-type: none"> • Good understanding of the different payment methods, such as: <ul style="list-style-type: none"> ○ cash, credit card, check, transfer, etc. ○ bookkeeping, deposit, instalments. • Master the technique of identifying counterfeit currency. • Be familiar with the financial document monitoring system. <p>2. Performance (Develop Procedures for various forms of payment)</p> <ul style="list-style-type: none"> • Develop Procedures for various forms of payment and handling procedures, such as: <ul style="list-style-type: none"> ○ Cash (currency exchange and identification, including counterfeit banknotes) ○ Electronic currency (validation of validity) ○ Credit card (validity, signature verification) ○ Cheque (accuracy of information) ○ bookkeeping (validity of account and its signature, maximum billing amount) ○ Deposit (minimum setting and expiration) • Develop the content of payment documents and issuing procedures. • Develop a financial document monitoring system. • Develop emergency contingency procedures, such as failing to identify the authenticity of the currency. • Review the handling procedures for various forms of payment and feedback from frontline staff. Revise the procedures to optimize processing efficiency and accuracy. • Join other forms of payment with the market to improve the cost-effectiveness.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency is that the practitioner being assessed shall prove that he/she is :</p> <ul style="list-style-type: none"> • Capable of formulating integrated procedures and contingency responses in accordance with various payment methods prevailing in the market to protect the interests of all parties; and • Capable of reviewing the handling procedures of various payment forms to match the changes in institutional policies and the market development needs to enhance the cost-effectiveness of the organization and the convenience of customers.
Remark	

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Functional Area - Corporate Management

Title	Implement financial management
Code	108560L4
Range	In operation management workplaces of the automotive industry, practitioners should be able to effectively implement financial management plans to control expenditure and prepare budget, report and evaluate information/data relating to cost, expenditure and profits, as to enhance cost effectiveness of the management of the outlet/organisation.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Financial Management)</p> <ul style="list-style-type: none"> • Good understanding of accounting knowledge for limited liability company. • Master the organisation's principle and procedure of internal audit. • Good understanding of the concept of financial management, including the knowledge of foreign currencies. • Good understanding of the concept of risk management. • Master the Government's tax policy on vehicles. • Good understanding of the application of information technology. <p>2. Performance (Implement industry-related financial management)</p> <ul style="list-style-type: none"> • Compile comprehensive financial statement, including: <ul style="list-style-type: none"> ○ Comprehensive balance sheets ○ Comprehensive profit and loss statements ○ Comprehensive cash flow statements • Control expenditure, such as: <ul style="list-style-type: none"> ○ Staff expenses ○ Wear and tear ○ Daily expenses of the outlet / organisation • Conduct internal audit for the organisation. • Estimate risks and returns, such as the risks and returns of foreign currencies. • Analyse financial data and set budget, such as: <ul style="list-style-type: none"> ○ Set budget for the outlet/organisation <ul style="list-style-type: none"> ▪ Set budget according to the business turnover and expenditure of the previous year ▪ Set annual business turnover and estimate expenditure ○ Compile business turnover reports: <ul style="list-style-type: none"> ▪ Weekly estimates on business turnover ▪ Submit weekly business turnover report ▪ Submit report on the accumulated business turnover for the current month ▪ Compare the business turnover with that of last month/last season/last year ▪ Compare the estimated business turnover • Apply information technology on financial management. • Effectively implement risk management.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall be:

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	<ul style="list-style-type: none">• Capable of grasping the account, financial budget and internal audit of the organisation; and• Capable of adopting information technology and risk management on financial management to effectively implement the financial management plan so as to enhance cost effectiveness of the management of the outlet/organisation
Remark	

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Functional Area - Corporate Management

Title	Compile financial reports applicable to the automotive industry
Code	108561L5
Range	This unit of competency is applicable to practitioners performing financial duties in the automotive industry. Practitioners should be able to use appropriate report format to complete various kinds of financial reports, including financial statements, internal audit reports, risk and return analysis reports and financial budget reports.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Format and key points of financial statement reports in the automotive industry)</p> <ul style="list-style-type: none"> • Master the key points and purposes of the industry's financial statement reports. • Master the format of the industry's financial statement reports, commonly used technical vocabularies and specific terms of vehicles. • Master financial management concept. <p>2. Performance (Compile financial reports)</p> <ul style="list-style-type: none"> • Use appropriate report format to compile various kinds of financial reports applicable to the automotive industry, such as: <ul style="list-style-type: none"> ○ Financial statements ○ Internal audit reports ○ Risk and return analysis reports ○ Financial budget reports • Use charts and graphs to enhance and enrich the content of various kinds of reports, including bar graph, histogram, pie chart/graph and flow chart.
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 mastering the industry's financial management concept as well as the format and key points of financial reports; and • Capable of compiling financial reports applicable to the automotive industry.
Remark	

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Functional Area - Corporate Management

Title	Formulate financial management plans
Code	108562L5
Range	This unit of competency is applicable in workplaces relevant to the operation management of the automotive industry. Practitioners should be able to analyze various kinds of financial management issues as well as formulating financial management plans with reference to the respective information/data such as cost, expenditure and profit, facilitating the organisation to achieve maximum financial return.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Financial management theory and strategy)</p> <ul style="list-style-type: none"> • Master financial management theory and strategy. <ul style="list-style-type: none"> ○ The objectives of financial management ○ The functions of the monetary market • Master the analysis of financial statements, including: <ul style="list-style-type: none"> ○ Balance sheet ○ Profit and loss statements ○ Cash flow statements ○ Forecast statements • Good understanding of the methods of financial planning and forecast. • Good understanding of capital budget, such as: <ul style="list-style-type: none"> ○ Principles of investment ○ Net present value method ○ Discounted payback period method ○ Internal rate of return method ○ Profitability index • Master the calculation of project cash flow, including: <ul style="list-style-type: none"> ○ Relevant cash flow ○ Additional cash flow ○ Working cash flow • Good understanding of the risk and return <ul style="list-style-type: none"> ○ System risk and non-system risk ○ The relation between risk and expected return ○ The risk in foreign exchange • Good understanding of government policy on vehicle tax. • Good understanding of risk management concept. • Good understanding of the application of information technology. <p>2. Performance (Formulate relevant financial management plans applicable to the automotive industry)</p> <ul style="list-style-type: none"> • Analyse financial statements. • Formulate capital budget strategy • Formulate cost control strategy. • Formulate risk and return management strategy. • Implement financial planning, such as: <ul style="list-style-type: none"> ○ Control the business cycle and cash flow ○ Understand cash budgeting • Formulate the management strategy of working capital, such as:

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	<ul style="list-style-type: none"> ○ Control cash income and expenses ○ Control inventory ○ Draw up credits policy and conduct analysis ● Draw up risk management plans. ● Formulate plans to apply information technology in financial management.
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 master financial management theory; and ● Capable of effectively formulating financial management plans by employing information technology and risk management strategy with respect to the actual operation.
Remark	

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Functional Area - Corporate Management

Title	Assess the risks of accident at work within the workplace
Code	108563L5
Range	This unit of competency is applicable to the management level of different servicing workshops and warehouses of the automotive industry. Practitioners should be able to assess the risks of accident at work during daily operation at the workplaces to safeguard the interest of the organisation.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The risks of the workplaces)</p> <ul style="list-style-type: none"> • Master the details of the daily operation in one's workplace and the risks involved. • Good understanding of standard risk analysis methods such as <ul style="list-style-type: none"> ○ HAZOP (Hazard of Operability), ○ QRA (Quality Risk Assessment), ○ FMEA (Failure Modes and Effects Analysis) ○ FTA (Fault Tree Analysis) • Good understanding of respective occupational safety and health, environmental protection as well as labour regulations; and understand the responsibilities of employers and employee. <p>2. Performance (Conduct risk assessment)</p> <ul style="list-style-type: none"> • Analyse the details of the operation in the workplace and list out the potential hazard and risks such as traffic accident at the workshop, accidents involving the vehicle lifting equipment, leakage of dangerous chemicals, fire and certain working procedure e.g. welding, painting, etc.; assess the probability and consequences of individual potential danger as well as the loss and hazard it will cause. • Set the order of priority; list out the issues that need to be handled; make suggestions for improvement; and assist in establishing emergency and contingency measur.s • Analyse the operating details of the workplace, list out the potential failure modes such as vehicle damages, inventory loss, damages on essential equipment, computer failure, etc.; assess the probability and consequences of the risk and the loss involved; review existing management system and make suggestions for improvement when necessary. • Choose suitable risk assessment pattern to conduct data analysis according to all accidents and operation failure cases; find out the causes of frequent accidents and complete risk assessment report.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the practitioners being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of fully understanding the details of the operation in one's workplace; listing out potential hazard and failure operation modes; assessing the probability and consequences of the risks and the loss involved; • Capable of setting the order of priority; listing out the potential risks that need to be handled; making suggestions for improvement; and • Capable of analyzing all accidents and operation failure cases to find out the causes of frequent accidents and completing risk assessment report.
Remark	The relevant legislations involved in this unit of competency are as follows:

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	<ul style="list-style-type: none">• Occupational Safety and Health Ordinance• Factories and Industrial Undertakings Ordinance
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Functional Area - Corporate Management

Title	Formulate a comprehensive scheme for organisational operation management
Code	108564L5
Range	This unit of competency is applicable to the senior management of sizable enterprises in the automotive industry. Practitioners should be able to formulate a comprehensive scheme for operation management for workplaces under their supervision in a business environment that continually pursues operational efficiency.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The operation of the automotive industry)</p> <ul style="list-style-type: none"> • Master the overall operation of the automotive industry and be familiar with the relative competitiveness and market positioning of competitors in the industry. • Know about modern scientific management techniques such as Six- Sigma, 5-S practice, Total Quality Management or the management system specified by the vehicle manufacturer. • Be familiar with the extensive information of the organisation such as scope of business, tangible and intangible assets, internal structure, allocation of human resources, quality management, income and expenditure status, profit level, vehicle sales and details of operation. <p>2. Performance (Formulate operation scheme)</p> <ul style="list-style-type: none"> • Master the impact of external factors such as economic development, etc. on the entire automotive industry and analyse the relative competitiveness of the organisation in the automotive industry by comparing its internal operating income and expenditure. • Set benchmark for allocation of resources in accordance with business operation and development, such as the structure of human resources and the proportion of vehicle sales, after-sales services. • Mastering the details of organisational management system such as financial accounting, quality control systems, information management, sales, services, etc.; formulate plans for division of work so as to facilitate inter-departmental coordination. • Be familiar with internal information management systems and management styles; capable of defining the data collected from key monitoring points; organise resources and collect data to conduct analysis, draw up improvement plan and monitor the operation.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of mastering the overall market of the vehicle industry to understand the competitors and the general situation, and the relative strengths of the organisation; • Capable of familiarizing the management system to set benchmark for allocation of resources and drawing up plans for division of work that can facilitate inter-departmental coordination; and • Capable of adopting modern scientific management methods and information management system to establish key monitoring points; collect data, conduct analysis, draw up improvement proposals and monitor the operation.
Remark	

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Functional Area - Corporate Management

Title	Formulate risk management plans
Code	108565L6
Range	This unit of competency is applicable to the senior managerial staff of the automotive industry. Practitioners should be able to obtain a wide scope of information to formulate risk management plans for the enterprise in an ever-changing business environment.
Level	6
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The scope and sources of risks)</p> <ul style="list-style-type: none"> • Good understanding of the sources of risks such as natural disasters, fire, accidents, thefts, the quality of internal management. • Master the operating details and daily operation of the enterprise • Good understanding of the scope of risks faced by the enterprise, such as: <ul style="list-style-type: none"> ○ Injury and death ○ Direct property loss ○ Inventory loss e.g. vehicles, spare parts ○ Damages on equipment e.g. testing equipment ○ Loss of talents e.g. experienced technical staff and managerial staff ○ Business computer operation system failure ○ Loss of important record and information ○ Damage on the reputation of the enterprise <p>2. Performance (Formulate risk management plans)</p> <ul style="list-style-type: none"> • Be familiar with risk assessment reports to formulate risk management plans for the enterprise and make the most suitable preparation, such as: <ul style="list-style-type: none"> ○ Being capable of selecting the most appropriate insurance plans for losses due to unpredictable tangible risks, e.g. property loss, inventory loss, damages on equipment ○ Monitor and review organisational human resources policy for the risk of loss of talents e.g. training policy, promotion, remuneration conditions, etc. ○ Monitor and review the daily operation and equipment management policy for the risk of operating equipment failure, e.g. unstable performance of computer operation systems or equipment ○ Monitor and review the daily operation and monitoring systems for the risk of theft of inventory goods e.g. security systems, the reception and dispatch of inventory and relevant records ○ Consider the public relation strategy and quality management systems for the risk of corporate reputation • Establish structural management systems and relevant indicators, collect data, conduct analysis, make improvement, monitor and prepare suitable resources for implementing the risk management plans and emergency and contingency measures.
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 integrating various sorts of information to formulate different risk management plans or strategies for the enterprise to minimize or transfer possible risks; and

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	<ul style="list-style-type: none">• Capable of estimating and utilizing resources appropriately to implement the emergency and contingency measures as and when necessary.
Remark	

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Functional Area - Corporate Management

Title	Formulate corporate development strategy
Code	108566L7
Range	This unit of competency is applicable to the senior decision-making and managerial staff of sizable enterprises in the automotive industry. Practitioners should be able to master the overall development trend of the automotive industry in a business environment with continuous escalation in both the industrial technology and the customer requirements, and formulating development strategy for the enterprise.
Level	7
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The environment of the society and the industry as well as the strength of the enterprise)</p> <ul style="list-style-type: none"> • Fully master the development trends of society and the automotive industry, as well as the impact of respective international and local regulations affecting the industry. • Fully master the economic development of society. <p>2. Performance (Formulate corporate development strategy)</p> <ul style="list-style-type: none"> • Analyse the cultural behaviour and scope of services, etc. to which the enterprise belongs to, and those of the competitors. • Analyse various aspects of the organisation such as operation management, occupational safety and health, environmental protection management, quality management, human resources management, financial management, development of new services, risk management based on sufficient data and rationale. • Collect information on the development of the enterprise for analysis and reference purposes; benchmarking with that of the industry. • Formulate corporate development direction and strategy, such as: <ul style="list-style-type: none"> ○ Corporate development strategy ○ Business operation strategy ○ Human resources management strategy ○ Financial strategy ○ Services development strategy ○ Risk management strategy ○ Communication channels • Proactively assess future trends in the development of automotive technology and review existing operational management systems to match the overall corporate policies of the future.
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 thoroughly analyzing and integrating data from different areas to formulate development direction and strategy for enterprises; and • Capable of mastering a variety of management skills, so that the development strategy can be at par with the times and achieve internal harmony.
Remark	

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Functional Area - Corporate Management

Title	Be familiar with relevant labour regulations
Code	108567L1
Range	This unit of competency is applicable to all levels of employees in the automotive industry. Practitioners should be familiar with relevant regulations and understand the responsibility, wages, benefits and rights entitled to employees; and be able to meet the terms stipulated in the regulations when performing their duties.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The local employment ordinances)</p> <ul style="list-style-type: none"> • Understand the functions of the Labour Department and the significance of the labour regulations to employees and employers. • Understand the significance of the Apprenticeship Ordinance to employers and employees in automotive industry, such as: <ul style="list-style-type: none"> ○ Attendance order ○ Apprentice contract ○ Training institutions ○ Registered apprentices • Understand the common terms in the employment contracts, such as: <ul style="list-style-type: none"> ○ The effectiveness and termination of employment contract ○ The definition of continuous contract of employment ○ The definition of wages ○ Paid leave, sick leave, compensation leave due to injury at work and maternity leave ○ Severance payment and long service payment • Understand the spirit of Mandatory Provident Fund and the rights and obligations of each relevant party. • Understand the basic spirit of the Employment Ordinance, such as the control of employment agency and the prohibition on children and youth employment; and also understand the prohibition of employment of illegal immigrants stipulated in the Immigration Ordinance. • Understand that in a modern and equal society, there are regulations protecting sexual discrimination, racial discrimination, age discrimination, disability discrimination and family status discrimination. • Understand the rights and benefits entitled to employees under the following ordinances <ul style="list-style-type: none"> ○ Employees' Compensation Assistance Ordinance ○ Employees' Compensation Insurance Levies Ordinance ○ Protection of Wages on Insolvency Ordinance ○ Employees' Compensation Ordinance ○ Occupational Deafness (Compensation) Ordinance. • Understand the salient points when employed outside Hong Kong. <p>2. Performance (Application of local employment ordinances)</p> <ul style="list-style-type: none"> • Be familiar with the legal binding between an employer and employee relationship, as well as the responsibility, wages, benefits and rights involved. • Protect the right of oneself by compliance with the labour regulations when working in the automotive industry.

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Assessment Criteria	The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is: <ul style="list-style-type: none">• Capable of understanding the responsibilities, wages, benefits and rights entitled to employees under the labour ordinance applicable to the automotive industry and complying with those regulations.
Remark	

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Functional Area - Corporate Management

Title	Appraise staff performance and professional knowledge
Code	108568L4
Range	This unit of competency is applicable to workplaces of the automotive industry. Practitioners should be able to understand the scope of work and the required performance standard of their subordinates. They should also be capable of conducting appraisal on the performance of their subordinates and writing appraisal report objectively.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The criteria for performance appraisal)</p> <ul style="list-style-type: none"> • Good understanding of the functional areas of the department to which one belongs to and the staff appraisal system of the organisation. • Understand that staff performance is composed of working attitude, competency level, degree of diligence and records of achievement. • Master the scope of work and the expected performance standard of subordinates. • Good understanding of the criteria for staff's performance appraisal. <p>2. Performance (Appraise staff performance)</p> <ul style="list-style-type: none"> • Communicate with staffs about the objectives, plans and standard of the department so as to arrive at a mutually agreed staff performance standard. • Continually monitor staff performance during daily operation according to the objectives and standard of the department in the organisation. • Conduct specific competency assessments, such as good operation trade test, examination and internal assessment specified by vehicle manufacturer. • Appraise staff performance during specific periods according to the appraisal procedures of the organisation and job requirements; and referring to staff record of continuing study in industry-related subjects when writing appraisal reports and make suggestions for improvement when necessary.
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 understanding the composition of staff performance and appraisal criteria according to the appraisal procedure; and objectively conduct assessment on staff performance according to their performance during relevant periods; and • Capable of writing staff appraisal reports and providing suggestion for improvement when necessary.
Remark	

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Functional Area - Corporate Management

Title	Draw up staff training programme
Code	108569L4
Range	This unit of competency is applicable to the human resources department in the automotive industry. Practitioners should be able of draw up staff training programme that is suitable for the organisation so as to meet the needs of human resources in different departments in the foreseeable future.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The competency requirements of different departments in the organisation)</p> <ul style="list-style-type: none"> • Master the structure of the organisation and the functions of different departments. • Good understanding of the basic theory of human resources management. • Master the competency requirements of different posts. • Good understanding of about the professional qualifications approved by the government, such as Vehicle Mechanics Registration Scheme, trade test for the automotive industry and Registered Professional Engineers. • Good understanding of the details of the Apprenticeship Ordinance and the rights and obligations of all parties concerned; and understand the training schemes approved by the Government, such as courses for craftsmen and technicians as well as Skills Upgrading Scheme for automotive industry. • Good understanding of the Bachelor-Degree Course in Engineering and Engineering Graduate Training Scheme approved by the government. • Master the technical level and training requirements for technicians specified by vehicle manufacturers. <p>2. Performance (Draw up staff training programme)</p> <ul style="list-style-type: none"> • Assess the competency level of current staff according to existing human resources. • Assess the needs of human resources in the foreseeable future according to the development of the automotive industry. • Analyse competency requirements of departmental staff. • Analyse the discrepancy between the competency of current staffs and expected competency requirements to determine the training items, choice of staffs and priority setting. • Draw up training items according to the internal succession/promotion scheme of the organisation. • Select suitable training modes according to the specific requirements of the department, internal training competency, characteristics of expected competency requirements and the demand of the training market, such as internal training, part-time study and on-job training; or participate in Apprenticeship Scheme and Engineering Graduate Training Scheme. • Ensure adequate supply of training resources and the normal functioning of departments during the training period. • Assess training results and review the effectiveness. • Promote the training of environmental protection operation to the enterprise and the staffs.

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Functional Area - Corporate Management

Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioners being assessed shall be: <ul style="list-style-type: none">• Capable of assessing and analysing the discrepancy between the competency of current staffs and expected competency requirements to determine the training items and staff selection; and draw up staff training programme that is suitable for the organisation to meet the needs of different departments and the development of the automotive industry;• Capable of selecting suitable training modes, ensuring adequate supply of training resources, and maintaining normal operation of departments during the training period; and• Capable of assessing the training results and reviewing its effectiveness.
Remark	

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Functional Area - Corporate Management

Title	Arrange filling of job vacancies
Code	108570L4
Range	This unit of competency is applicable to the human resources department of the organisations in the automotive industry. Practitioners should be able to implement relevant procedures to arrange the most suitable persons filling the job vacancies according to job duties.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The concept of human resources)</p> <ul style="list-style-type: none"> • Master the structure of the organisation and the functions of different departments. • Good understanding of the basic theory of human resources management. • Good understanding of the recruitment procedures for human resources. • Good understanding of the screening procedure for candidates and the points to note. • Good understanding of the professional qualifications approved by the Government, such as Vehicle Mechanics Registration Scheme, trade test for the automotive industry and Registered Professional Engineers. • Good understanding of the details of the Apprenticeship Ordinance and the rights and obligations of all parties concerned; and understand the training schemes approved by the Government, such as courses for craftsmen and technicians as well as Skills Upgrading Scheme for automotive industry. • Good understanding of the Bachelor-Degree Course in Engineering and Engineering Graduate Training Scheme approved by the government. • Good understanding of the levels and training requirements of technical staff specified by vehicle manufacturers. <p>2. Performance (Implement the procedure for filling job vacancies)</p> <ul style="list-style-type: none"> • List out the competency requirements of the job vacancies according to post titles and job duties, such as physical requirement, working experience, education level and industry-related professional qualifications e.g. craftsmen, technicians and engineers. • Know the human resources market situation within the automotive industry and organisational internal conditions to facilitate selection between internal promotion and external recruitment. Determine the appropriate recruitment method. • Determine screening modes, arrange interviews, prepare examinations on vehicle knowledge, trade tests and compile related documents according to the established competency requirements of the posts. • Determine screening procedure and conduct preliminary screening whenever necessary. • Arrange examination and facilitate its smooth progress to establish the priority of selected candidates. • Verify the accuracy of qualifications of candidates. • Negotiate with candidates on the terms of employment or promotion; and implement related procedures. • Ensure that the special professional posts should be filled with candidates of relevant professional qualifications that meet statutory requirements. • Ensure that employment conditions fulfil the requirements of local labour ordinances.

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Unit of Competency

Functional Area - Corporate Management

Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioners being assessed shall prove that he/she is: <ul style="list-style-type: none">• Capable of choosing between internal promotion and external recruitment according to the job duties of the vacancies and the required competency;• Capable of establishing screening modes, determining screening procedure and arranging examinations;• Capable of verifying the qualifications of candidates and negotiating with candidates on the terms of employment and promotion; and• Capable of employing and promoting suitable employees with employment conditions meeting the requirements of local labour ordinances.
Remark	

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Unit of Competency

Functional Area - Corporate Management

Title	Assess human resources market and establish remuneration system
Code	108571L5
Range	This unit of competency is applicable to the human resources management of sizable organisations in the automotive industry. Practitioners should be able to master changes in the manpower market of the automotive industry and establishing the most appropriate remuneration system and levels with regard to the overall operation strategy of the organization, being competitive for retention of talents.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The concept of remuneration system)</p> <ul style="list-style-type: none"> • Master the extensive theory of human resources management. • Master organisational structure and departmental functions. • Master the current situation of the human resources market of local automotive industry. • Good understanding of the characteristics of different remuneration methods such as salaries, bonus, monetary reward, vacation, pension, medical benefits, promotion opportunity, job satisfaction. • Good understanding of local labour ordinance. <p>2. Performance (Establish remuneration system and implement the respective procedure)</p> <ul style="list-style-type: none"> • Determine the grade/level of each post according to the structure, size of the organisation and the requirements of different posts. • Set the standard for various kinds of professional qualifications including local, overseas and internal professional training. • Assess the current situation of the human resources market of the automotive industry and compare it with the organisation to which one belongs to. • Determine the package of remuneration system according to the actual situation of different ranks and positions such as salary, vacation, pension, medical benefits, bonus, other benefits. • Ensure that the remuneration level of all ranks is established with full consideration of various internal and external factors and is implemented consistently across the organisation. • Capable of conducting regular reviews to ensure that the pay scale is appealing and exercise with flexibility under special circumstances. • Draw up instructions detailing the pay review mechanism. • Draw up working instructions for respective departments and implement respective administrative procedure. • Capable of ensuring that the established remuneration system compile with the statutory requirements of labour regulations.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the practitioners being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of mastering the concept of human resources management and the situation of the human resources market of the automotive industry; • Capable of determining the most appropriate remuneration level and benefits for different ranks and positions according to overall operation strategy to ensure it has market competitiveness to retain talents;

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	<ul style="list-style-type: none">• Capable of establishing an appropriate remuneration system according to the size of the organization; and implementing it across the organisation; and• Capable of ensuring that the established remuneration system complies with the statutory requirements of labour ordinance.
Remark	

Specification of Competency Standards
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Unit of Competency

Functional Area - Sales and Marketing

Title	Introduce to customers the characteristics of different types of vehicles and their accessories
Code	108572L1
Range	This unit of competency is applicable in workplaces relevant to the selling and marketing of vehicles, parts management and customer services. Practitioners should be able to introduce clearly to the customers the characteristics of different types of vehicles and their accessories according to the instruction laid down in the vehicle manufacturer's product manual. They should also give appropriate response to the queries lodged by the customers, giving them satisfactory reply and thereby facilitating the transaction of vehicles.
Level	1
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The characteristics of various types of vehicles and their accessories)</p> <ul style="list-style-type: none"> • According to the information provided in the vehicle manufacturer's product manual and internal training, have good understanding of the specification, performance and product characteristics of various types of vehicles as well as the functions and operation of different accessories. <p>2. Performance (Introduce to customers the characteristics of different types of vehicles and their accessories)</p> <ul style="list-style-type: none"> • According to the information provided in the product manual of various kinds of brand vehicle manufacturers and internal training, introduce clearly to the customers the specification, performance and product characteristics of different types of vehicles, such as the characteristics of vehicle engine, steering system, suspension system, braking system and transmission system. • According to the information provided in the product manual of various kinds of brand vehicle manufacturers and internal training, introduce clearly to the customers the functions and operation of accessories for different types of vehicles such as sun roof, electric doors and windows, tyres, seats, air-conditioning, meter instrument, anti-theft device and audio equipment.
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 knowing the characteristics of different types of vehicles and their accessories according to the information provided in the product manual of various kinds of brand vehicle manufacturers and internal training; and • In job duties relevant to the selling and marketing of vehicles, parts management and customer services, capable of introducing clearly to the customers the characteristics of various kinds of vehicles and the functions and operation of the accessories, so that the customers can have thorough understanding of the products and satisfactory reply, thereby facilitating the transaction of vehicles
Remark	

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Unit of Competency

Functional Area - Sales and Marketing

Title	Perform sales of vehicles
Code	108573L2
Range	This unit of competency is applicable to vehicle showrooms and exhibition venues, etc. Practitioners should be able to understand thoroughly the vehicle products and supporting services according to the requirements. They should also be able to apply marketing and selling techniques on general vehicle products to facilitate transactions.
Level	2
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicle products)</p> <ul style="list-style-type: none"> • Have comprehensive understanding of vehicle products, supporting services and practice in the industry, including: <ul style="list-style-type: none"> ○ The information and characteristics of various kinds of vehicle product specifications. ○ Various kinds of supporting services such as after-sales service, warranty claims and vehicle recalls, ○ Understand the relationship of the Government's environmental protection policy and the organisation's products ○ Other complementary strategies such as payment methods, used car trade-in and insurance. <p>2. Performance (Perform sales techniques)</p> <ul style="list-style-type: none"> • Understand customers' psychology in the choice of vehicle products, including: <ul style="list-style-type: none"> ○ Types of customers ○ The buying psychology of customers with respect to their preference and inclination ○ Capable of hitting on what one likes and communicate with different types of customers • Use product marketing strategies, including: <ul style="list-style-type: none"> ○ Compile a list of target customers ○ Communicate with and feedback to supervisor and marketing department ○ Devise promotion methods for individual ○ Determine selling location and time within the prescribed scope • Understand clearly the market trend of vehicle products, including: <ul style="list-style-type: none"> ○ Understand the trend of vehicle products ○ Reflect market demand to supervisor to facilitate communication with manufacturers or agents ○ Collect the latest vehicle products and accessories ○ Tie in with the vehicle manufacturer's product policy to establish the selling points of one's own products ○ Analyse the pros and cons of the competitors' products, and devise corresponding strategies with supervisor and marketing department • Handle transactions, including: <ul style="list-style-type: none"> ○ Provide customers with value-added services (arrangements of payment, order of goods, finance, insurance and installation of vehicle body and equipment.) and further value-added services in the future (contact, alert renewal of insurance and sales promotion.)

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Functional Area - Sales and Marketing

Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is: <ul style="list-style-type: none">• Capable of understanding thoroughly vehicle products and supporting services; and• Capable of using the techniques of selling general vehicle products to promote products to customers.
Remark	

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Unit of Competency

Functional Area - Sales and Marketing

Title	Perform sales of vehicle parts and accessories
Code	108574L2
Range	This unit of competency is applicable in workplaces relevant to the sales department of vehicle parts and accessories, retail outlets and showrooms. Practitioners should be able to understand thoroughly the products of various kinds of vehicle parts and employ promotion and selling techniques of general retailing products according to the requirements to facilitate transactions.
Level	2
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of vehicle parts and accessories and selling)</p> <ul style="list-style-type: none"> • Understand the promotion and selling techniques of general retailing products. • Understand the information such as price, market demand and market share of different parts and accessories. • Good understand of the characteristics of different parts and accessories, such as their range and market positioning. • Understand the characteristics, applicability and operating method of different selling pattern.s • Understand the decision-making process of purchase. • Understand the laws and regulations governing product selling. • Understand the knowledge of general logistics operation, including the knowledge required for handling purchasing orders of parts: <ul style="list-style-type: none"> ○ General logistics such as the time required for sea transportation/air freight and customs clearance procedure, etc. ○ Laws and regulations governing the import of general parts, such as the storage of dangerous goods, etc. <p>2. Performance (Employ the selling techniques for completing transaction)</p> <ul style="list-style-type: none"> • Capable of employing marketing and selling techniques in general retailing products. • Familiar with customers' consuming behaviour. • Focus on buyers' behavioural characteristics to give appropriate suggestion to speed up their decision in buying vehicle accessories. • Handle and complete transactions, such as the arrangements of payment and product delivery. • Tie in with the strategies and promotional activities of the sales department.
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 understanding the characteristics of general vehicle parts; and • Capable of employing promotion and selling techniques of general vehicle parts to promote products to customers.
Remark	

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Functional Area - Sales and Marketing

Title	Provide supporting services to vehicle sales
Code	108575L2
Range	Practitioners should be capable of providing supporting services to sales of vehicle products as to facilitate completion of transaction.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Knowledge of operation in vehicle sales)</p> <ul style="list-style-type: none"> • Good understand of the general market situation of vehicle sales <ul style="list-style-type: none"> ○ Knowledge of the latest information on the market price and demand of different types of vehicles, including new and used vehicles ○ Understand vehicle-related tax and other charges levied by the Government • Understand vehicle selling system and its procedure. <p>2. Performance (Provide supporting services to vehicle sales)</p> <ul style="list-style-type: none"> • Prepare sales document. • Prepare payment voucher. • Contact for delivery of vehicles. • Process the tax for first registration of vehicle. • Process vehicle registration and licencing • Introduce credits funds for vehicles. • Introduce vehicle insurance.
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 preparing sales document and payment voucher according to the requirements; and • Capable of providing effective supporting services to vehicle selling as to complete transaction.
Remark	

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Unit of Competency

Functional Area - Sales and Marketing

Title	Promote to potential/target customers to increase sales opportunities
Code	108576L2
Range	This unit of competency is applicable in vehicle showroom and sales venues. Practitioners should be able to follow instructions of vehicle sellers to perform sales to potential/target customers in order to increase sales opportunities, as well as to collect and convey customer feedbacks.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Knowledge on performing sales to potential / target customer)</p> <ul style="list-style-type: none"> • Understand the knowledge in sales, include: <ul style="list-style-type: none"> ○ evolution of sales activity ○ criticism of sales practices ○ rules of sales ○ regulation of sales • Understand the method to identify potential / target customers <p>2. Performance (Perform sales duties)</p> <ul style="list-style-type: none"> • To sell according to instructions of seller. • Collect and convey customer feedbacks
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 following seller's instruction in selling; and • Capable of collecting and conveying customer feedbacks.
Remark	The credits value of this unit of competency is set on the presumption that the assessee concerned already has possessed basic vehicle product knowledge.

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Functional Area - Sales and Marketing

Title	Deliver a product or service presentation
Code	108577L2
Range	This unit of competency is applicable in vehicle showroom and exhibition venues. Practitioners should be able to deliver the message of vehicle product or service accurately; and present the product or service to customers in a positive manner.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Presentation on vehicle products and services to customers)</p> <p>2. Performance (Deliver vehicle product or service presentation)</p> <ul style="list-style-type: none"> • Understand the presentation skills in positive manner: <ul style="list-style-type: none"> ○ evolution of vehicle product or service ○ procedures for presentation of vehicle product or service ○ rules for presentation of vehicle product or service • Understand the goals of presentation: <ul style="list-style-type: none"> ○ educate on vehicle product or service, ○ encourage buying and ○ enlighten of vehicle product or service. • Understand the message of the product or service to be delivered. • Understand the characteristics of the audience. • Deliver presentation on vehicle products or services to customers according to the instruction of seller. • Collect and convey customer's feedbacks.
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 understanding the evolution, procedures and goals of vehicle product or service presentation; • Capable of employing the techniques of presentation; and • Capable of collecting and convey customer's feedbacks.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge on vehicle product and service.

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Unit of Competency

Functional Area - Sales and Marketing

Title	Arrange vehicle test drive by customers
Code	108578L3
Range	This unit of competency is applicable in vehicle sales and service centres. Practitioners should be able to provide and arrange vehicle test drive by customers according to the instruction. They should also be able to introduce to customers the characteristics of respective vehicles as well as the operation and application of various systems and equipment.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Basic knowledge on arranging vehicle test drive for customers)</p> <ul style="list-style-type: none"> • Good understand of vehicle inspection, receipt and despatch procedure as well as transportation requirements. • Good understand of respective local legislative provisions on the requirements of driving a vehicle which is without a normal licence and the rules of using temporary vehicle licence. • Good understand of the key points and rules of using temporary vehicle licence and related insurance. • Good understand of the characteristics of respective vehicles and the functions of various systems and equipment. <p>2. Performance (Arrange vehicle test drive for customers)</p> <ul style="list-style-type: none"> • Prepare required documents for use of temporary vehicle licence to facilitate vehicle test drive by customers. • Introduce to customers the characteristics of respective vehicles as well as the operation and application of various systems and equipment. • Implement the procedure of vehicle test drive by customers. • Attend to traffic safety when customers are testing vehicles.
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 arranging vehicle test drive for customers and prepare the required documents; and • Capable of introducing to customers the characteristics of respective vehicles as well as the operation and application of various systems and equipment.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the capability to drive vehicles and receive customers.

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Functional Area - Sales and Marketing

Title	Implement sales plan for vehicle products
Code	108579L3
Range	This unit of competency is applicable in vehicle sales or related workplaces. The sales person should be able to employ sales techniques to implement sales plan effectively to accomplish the sales targets.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Sales of vehicle products)</p> <ul style="list-style-type: none"> • Good understand of the sales outlets and procedure for vehicle products. • Good understand of the vehicle market and customers' preferences. • Good understand of the strengths and weaknesses of the product. • Good understand of the market positioning of the brand/product. • Good understand of other competitors in the same business and their sales methods. • Understand the concept of foreign exchange risk. • Know the Government's environmental laws and regulations on vehicle. products, such as concessionary tax policy on environment-friendly cars. • Know the market information system for vehicle products . <p>2. Performance (Implement sales plan for vehicle products)</p> <ul style="list-style-type: none"> • Arrange the sales area and sales teams for vehicle products according to the marketing plan. • Arrange sales activities jointly with marketing and promotion department. • Negotiate with service and parts departments to provide corresponding 3S (Sales, Service and Spare Parts) support. • Train front-line teams to apply vehicle product selling techniques, such as: negotiating skills, identify target customers and promotional techniques. • Employ information technology and internet for sales of vehicle products. • Assess the performance of the sales plan. • Review the implementation process of the sales plan. • Compile and submit sales reports to supervisor.
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 employing sales techniques; and • Capable of implementing sales plan effectively to accomplish the sales targets; and capable of communicating effectively with relevant departments.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle products and sales.

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Functional Area - Sales and Marketing

Title	Arrange financial loan for vehicles
Code	108580L3
Range	This unit of competency is applicable in vehicle showrooms or exhibition venues. Practitioners should be able to explain the general procedure for arranging financial loan to customers according to guidelines.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Financial loan)</p> <ul style="list-style-type: none"> • Good understand of the financial loan for general private vehicles and commercial vehicles, including: <ul style="list-style-type: none"> ○ Terms of loan, such as customers' responsibilities to the financial company, the amount of loan, years of payment, interests, insurance requirements, damages or loss of vehicles, advance redemption and discontinuance of payment, etc. ○ Relevant documents required, such as contract of loan, customers' identity cards, proof of address, vehicle registration documents, insurance policy and examine the authorisation document from positive credits data bank, etc. ○ The procedure of loan, such as transferring customer information including identity card, proof of address, vehicle registration documents to the financial company ○ The method of calculating interest rates of loan, such as payment by instalments, floating interests and fixed interests, etc. • Good understand of the Personal Data (Privacy) Ordinance to maintain the secrecy of customers' information. • Good understand of the regulations on the acceptance of commission. • Good understand of the relationship between the organization and the financial company in corporation as well as the restrictions on adopting third party financial company. <p>2. Performance (Arrange financial loan for vehicles)</p> <ul style="list-style-type: none"> • Be familiar with the financial arrangement and characteristics of general private vehicles and commercial vehicles; and offer suitable financial arrangement to customers according to their needs. • Offer financial loan options to customers for reference, including the calculation of interest rates, years of payment, the amount of first instalment and monthly payment. • Act as intermediary to arrange financial loan and assist customers to provide the documents required for approval, such as proof of address, vehicle registration documents and insurance policy, etc., so as to complete the loaning procedure and handle relevant financial loan documents. • Safeguard customers' privacy. • Comply with the regulations on acceptance of commission.
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 understanding the requirements of financial arrangement and characteristics of general private vehicles and commercial vehicles; respond to customers' loaning requests and offer financial suggestions on vehicles;

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	<ul style="list-style-type: none">• Capable of calculating years of payment, the amount of first instalment and monthly instalment; and• Capable of acting as intermediary to arrange financial loan and handle relevant documents to facilitate transactions.
Remark	

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Functional Area - Sales and Marketing

Title	Arrange for vehicle insurance
Code	108581L3
Range	This unit of competency is applicable in vehicle showrooms or exhibition venues. Practitioners should be able to explain the terms of insurance policy to customers appropriately and arrange for vehicle insurance according to the instruction.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicles Insurance)</p> <ul style="list-style-type: none"> • Good understand of general vehicle insurance, including: <ul style="list-style-type: none"> ○ The summary of vehicle insurance ordinances ○ The terms and conditions of vehicle insurance ○ The types of vehicle insurance, such as Third-Party Liability Insurance, Comprehensive Insurance and Policy Excess ○ The document and timeframe required for processing vehicle insurance ○ The procedure for handling traffic accidents, including: <ul style="list-style-type: none"> ▪ Accidents involving injury and death ▪ Accidents not involving injury and death ▪ Understand the scope of acceptance of commission ▪ The section concerning vehicle insurance under The Hong Kong Federation of Insurers (HKFI) <p>2. Performance (Arrange for vehicle insurance)</p> <ul style="list-style-type: none"> • Good understand of the relationship between the organisation and the cooperating insurance company as well as the restrictions on adopting third party insurance company. • Explain clearly to customers general insurance issues and capable of providing insurance suggestions. • Explain to customers the general procedure for handling the submission and claims of compensation for traffic accidents. • Act as intermediary to arrange for vehicle insurance and assist customers complete the formalities for insurance application.
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 understanding the types of vehicle insurance and the terms and conditions of the policy; and • Capable of explaining clearly to customers general insurance issues, arrange insurance application with insurance company for customers as well as submit and claim compensation when necessary.
Remark	Practitioners should obtain the Insurance Intermediary License issued by The Hong Kong Federation of Insurers.

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Functional Area - Sales and Marketing

Title	Arrange receipt and delivery procedures of imported new vehicles
Code	108582L3
Range	This unit of competency is applicable in vehicle sales/service centers. Practitioners should be able to arrange vehicles to be transported to Hong Kong from the places of origin after purchasing orders have been placed under different situations/circumstances according to the procedure. They should also arrange delivery and inspection of vehicles; vehicle registration and licensing; and installation of accessories and supplementary devices.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Procedure for handling new vehicles)</p> <ul style="list-style-type: none"> • Good understand of the delivery of vehicles, transportation requirements, the processing procedure required and the workflow upon arrival of vehicles in Hong Kong. • Good understand of relevant local statutory requirements and procedures of registration of imported vehicles and the procedure for application of licence. • Good understand of the accessories and supplementary devices required and get familiar with vehicles and other product/service suppliers for the provision of products/services required. <p>2. Performance (Implement procedure for receipt and delivery new vehicles)</p> <ul style="list-style-type: none"> • Arrange the procedure for delivery, transportation and storage, etc. upon arrival of vehicles in Hong Kong. • Arrange the transportation of vehicles, processing procedure and coordinate the workflow involving different parties. • Make suitable arrangement for registration of imported vehicles and application for licence according to the procedure stipulated in relevant local legislative provisions. • Arrange the procedure for vehicle inspection and prepare the legal documents required. • Maintain contact with the sales department to understand customers' needs and demands; and get to know the relevant arrangement and agreement established between customers and salespersons. • Arrange and prepare the accessories and supplementary devices required, or the contact list of vehicles or other product/service suppliers for the provision of products/services required.
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 arranging delivery, transportation and storage upon arrival of vehicles in Hong Kong under different situations/circumstances according to procedure; • Capable of arranging vehicle inspection and application for license according to the requirements of relevant local statutory requirement; and • Capable of arranging and coordinating the required processing procedure upon arrival of new vehicles in Hong Kong and arranging the installation of accessories and supplementary devices.
Remark	The credits value of this unit of competency is set on the presumption that the assessee concerned has already possessed basic knowledge of vehicle servicing.

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Functional Area - Sales and Marketing

Title	Purchase used vehicles
Code	108583L4
Range	This unit of competency is applicable to the merchandisers in the department/organisation engaging in trading of used vehicles. Practitioners should be able to make suggestions to seniors on the purchase of used vehicles with commercial value and complete respective purchasing procedure to match with the organisational operation strategy.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The characteristics of vehicles and the actual market situation of used vehicles)</p> <ul style="list-style-type: none"> • Master the latest information of different vehicle types, such as market price and demand (including new and used vehicles). • Understand the specifications of vehicles, and the regulations governing the sale of vehicles. • Master the supply sources of different types of used vehicles. • Master the handling methods of purchasing documents for used vehicles. • Understand the resources available and risks affordable by the organisation. <p>2. Performance (Purchase used vehicles)</p> <ul style="list-style-type: none"> • Based on actual market situation, and organisational resources situation as well as updated information with the sales department, present to seniors the purchasing suggestions of used vehicle types such as: <ul style="list-style-type: none"> ○ Market value ○ The image of the vehicle type and the brand ○ Feedback of after-sales services ○ Market demand ○ Target customers, etc. • Submit evaluation report to seniors on the marginal profits for transaction, so as to determine if organisational operation strategy can be matched. • Master the determinants for the purchase of target used vehicles, such as: <ul style="list-style-type: none"> ○ Year of manufacturing and colour of the vehicle body ○ Driving mileage ○ Conditions of the vehicle body and interior upholstery ○ Engine capacity ○ Conditions of engine and transmission system ○ Information of first registration, such as brand-new vehicle imported from manufacturer, new parallel imported vehicle or imported used car, etc. ○ Number of previous owners ○ Validity period of licence and insurance ○ Accident records ○ Specification of vehicle (not supplied by local market) ○ Verify registration information to avoid buying illegally modified vehicles ○ Check for unsettled penalty or valid restraining order • Inspect the vehicles to be purchased and verify the related documents, so as to ensure the quality of the vehicles and the authenticity of information provided, such as the vehicle identification number. • Complete the obligatory transaction document according to relevant regulations governing the sale of vehicles, and internal records of the organisation.

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Functional Area - Sales and Marketing

	<ul style="list-style-type: none"> • Transfer the purchased vehicles to maintenance department for inspection and repair, so as to ensure the best conditions for sale. • Implement contingency measures in the case of special incidents, such as wrong specification or information of vehicles. • Review procedural deficiency in the purchase of used vehicles and capable of making suggestions for adjustment or improvement.
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 making suggestions to seniors on the purchase of used vehicles with commercial value according to the real situation of the used-vehicle market to meet organisational operation strategy; • Capable of completing relevant record and transaction documents according to established requirements of the organisation and the vehicle trading regulations of relevant government departments; and • Capable of reviewing procedural deficiency in the purchase of used vehicles and making suggestions to optimise respective procedure.
Remark	<p>The credits value of this unit of competency is assumes that the practitioner concerned has already possessed the knowledge of vehicles, including relevant regulations and purchasing knowledge.</p>

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Functional Area - Sales and Marketing

Title	Purchase new vehicles
Code	108584L4
Range	This unit of competency is applicable to the merchandisers in the department of vehicle sale. Practitioners should be able to make purchase orders of new vehicles that can meet market demand according to organisational purchasing strategy, including the style and quantity of vehicles as well as qualified accessories to match with organisational operation and development.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The characteristics of vehicles and actual market situation)</p> <ul style="list-style-type: none"> • Master the latest information of different vehicle types, such as characteristics, market price and demand. • Good understand of needs and purchasing power of customers. • Good understand of the models of product to be provided by vehicle manufacturers. • Good understand of the specification of vehicles and the regulations governing the sale of vehicles. • Master the purchasing procedure for vehicles and the handling of respective documents. • Good understand of the market positioning of the organisation and its affordable resources and risks. • Good understand of the factors affecting the purchasing quantity, such as economic condition, the customers' acceptability of the vehicle brand, track record on sale, customer feedbacks on exhibitions or promotion activities, and the movements of same level competitors. • Master local requirements on vehicle specification and regulations on sale. <p>2. Performance (Purchase new vehicles)</p> <ul style="list-style-type: none"> • Liaise with vehicle manufacturer to provide information actively on the regulations and environmental requirements of Hong Kong. • Close contact with the vehicle manufacturer to acquire the marketing strategy of the vehicle brand and the positioning of the product; and request developing suitable vehicle model for Hong Kong market. • Negotiate for best terms and conditions of product supply to fit organisational interests with the manufacturer, such as price, product supply period and the least supplying quantity. • According to established purchasing strategy, make purchase order of new vehicle in terms of style and quantity that meet market demand, such as the category and performance of vehicle, body colour, engine capacity and category, transmission system, vehicle upholstery and accessories. • Apply from senior management for the capital required, and fix the exchange rate beforehand accordingly. • Purchase approved accessories or value-added facilities that meet the specifications of the manufacturer from local factory. • Complete import and transaction documents as well as internal documentary records according to relevant regulations governing the sale of vehicles. • Provide relevant information to the sales and marketing department for the planning of promotion activities.

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	<ul style="list-style-type: none"> • Apply the established contingency procedures to cope with special incidents, such as shortage of supply or sudden change of exchange rate. • Notify the sales department, maintenance department and parts department, etc. for the advance respective preparation and corresponding measures. • Review the effectiveness of the purchasing procedure, and be capable of making suggestions for adjustment and improvement.
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 making purchase order of new vehicles that can meet market demand according to established purchasing strategy, including the style and quantity of vehicles, to meet organisational operation and development; • Capable of making purchase order of qualified products from local market according to the items of accessories approved by the manufacturer; • Capable of coping with special incidents according to established organisational contingency procedures; and • Capable of making suggestions to optimise the respective procedures according to the effectiveness in the purchase of vehicles.
Remark	<p>The credits value of this unit of competency assumes that the practitioner concerned has already possessed the knowledge of purchasing, vehicles and relevant regulations.</p>

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Functional Area - Sales and Marketing

Title	Formulate sales estimates of vehicle products
Code	108585L5
Range	This unit of competency is applicable to the managerial staff responsible for the marketing of vehicle products (e.g. vehicles, spare parts or repairing services). Practitioners should be able to anticipate the achievable sales targets within a specified period by analysing and assessing the various factors affecting sales performance to formulate sales estimates.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicle products and sales estimates)</p> <ul style="list-style-type: none"> • Master the factors to be taken into consideration when assessing the sales of vehicle products, including: <ul style="list-style-type: none"> ○ Sales growth rate <ul style="list-style-type: none"> ▪ The sales data of previous year ▪ Past sales data ▪ The business turnover of competitors ○ Organisational factors <ul style="list-style-type: none"> ▪ Sales strategy ▪ Market research ▪ Market share ▪ Number of showrooms, servicing centres and retailing outlets ○ Environmental factors <ul style="list-style-type: none"> ▪ The location and areas of the showrooms, servicing centres and retailing outlets ▪ The maturity period of the outlets ▪ The business days ○ Affecting factors <ul style="list-style-type: none"> ▪ Economic situation (e.g. the rise and fall of commodity prices, consuming inclination and inflation/deflation) ▪ Product variations (e.g. the launch of new models or model stop production, variation of models in the industry) ▪ Special factors (e.g. tax rate and oil price) • Master the concept of sales estimates of vehicle products, such as measure, control and anticipate sales condition. <p>2. Performance (Formulate sales estimates of vehicle products)</p> <ul style="list-style-type: none"> • Discuss with the sales and marketing departments to assess the anticipated achievable sales performance of vehicle products. • Formulate sales estimates of vehicle products, including: <ul style="list-style-type: none"> ○ Check past business performance of the organisation ○ Understand the expectation of the vehicle manufacturer on future achievements ○ Estimate the vehicle supply condition of the vehicle manufacturer ○ Consider the competitiveness of the products in future market ○ Formulate strategies that can support overall objectives and business in collaboration with other departments of the organisation ○ Assess the costs and prices to calculate anticipated profits ○ Compile aggregated sales financial budget of the organisation for submission to the seniors

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Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is: <ul style="list-style-type: none">• Capable of effectively assessing the sales performance of vehicle products by analysing and assessing the various factors affecting the sales of vehicle products; and• Capable of employing the concept of sales estimates to formulate reasonable sales estimates of vehicle products.
Remark	

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Functional Area - Sales and Marketing

Title	Formulate marketing plans for vehicle products
Code	108586L5
Range	This unit of competency is applicable to the managerial staff responsible for the marketing of vehicle products (e.g. vehicles, spare parts or repairing services). Practitioners should be able to formulate effective marketing plans in accordance with organisational resources and objectives by analysing the competitive environment of the vehicle products market and by employing practical marketing experience to accomplish sales targets.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Market environment and sales of vehicle products)</p> <ul style="list-style-type: none"> • Good understand of the competitive environment of the vehicle products market. • Good understand of the products that can be provided by the vehicle manufacturer and other spare parts suppliers in the planned year. • Good understand of the sales outlets and sales procedures of vehicle products. • Good understand of consumer psychology. • Master the concept of the risk of foreign exchange. • Know the Government's environmental protection regulations on vehicle products, such as the preferential tax policy for environment-friendly vehicles. • Master the organisational structure of salespersons in departments. • Good understand of the information system of the vehicle products market. <p>2. Performance (Formulate marketing plans)</p> <ul style="list-style-type: none"> • Formulate effective marketing plans in accordance with the resources and objectives of the vehicle manufacturer, spare parts suppliers and the organisation itself, including: <ul style="list-style-type: none"> ○ Assess the competitiveness of the products in the market ○ Set the market positioning of the products ○ Identify target customers ○ Set target price ○ Identify sales targets ○ Determine advertising methods in collaboration with the marketing department as well as anticipate and assess the achievable market attentiveness ○ Select appropriate sales channels ○ Select sales regions and the size of the sales teams ○ Establish commission and reward systems ○ Determine the manpower required for logistic support ○ Determine the resources required for the entire plan ○ Coordinate with the service and spare parts departments ○ Establish the implementation procedure for the marketing plans ○ Assess the effectiveness of the marketing plans • Establish plans for vehicle sales with the utilisation of information technology and internet. • Formulate the management and monitoring methods of marketing plans. • Formulate financial budget and seek for approval. • Recommend the plans to the vehicle manufacturer and the senior level of the organisation to obtain support. • Review the effectiveness of the plans upon completion and submit reports to the vehicle manufacturer and the organisation afterwards.

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Functional Area - Sales and Marketing

Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is: <ul style="list-style-type: none">• Capable of formulating marketing plans in accordance with organisational resources and objectives and seek support in resources allocation; and• Capable of formulating management and monitoring methods of marketing plans and submitting appropriate reports afterwards.
Remark	

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Functional Area - Sales and Marketing

Title	Formulate vehicle products sales strategy
Code	108587L6
Range	This unit of competency is applicable in workplaces relevant to vehicle products sales management. Practitioners should be able to analyse and assessing the competitive market environment of vehicle products in accordance with the overall objectives and operation strategy of the organisation and lead the subordinate staff to formulate effective and practicable sales strategies.
Level	6
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Market environment of vehicle products and sales strategies)</p> <ul style="list-style-type: none"> • Good understand of the significance of vehicle products sales to the entire organisation. • Master the competitive market environment of vehicle products. • Good understand of the sales outlets and sales procedure of vehicle products. • Good understand of consumer psychology. • Master the concept of foreign exchange risk. • Master the structure and composition of salespersons in the organisation. • Good understand of the overall objectives and operation strategies of the organisation. • Good understand of the government’s environmental protection legislations on vehicle products. <p>2. Performance (Formulate sales strategies for the organization)</p> <ul style="list-style-type: none"> • Master the significance of vehicle products sales to the entire organisation such as its influence on the organisation’s achievements, profits and the development of service and spare parts business and even the image of the organisation. • Analyse and assess the competitive market environment of vehicle products as well as the opportunities and risks involved so as to lead the subordinate staff to formulate effective sales strategies. • Analyse different aspects of the vehicle products market so as to formulate effective sales strategies for the organisation, such as: <ul style="list-style-type: none"> ○ Identify target customers, expand the market and attract new customers ○ Maintain existing customers and understand the advantage of it ○ adopt Relationship Marketing ○ Set communication objectives ○ Determine sales methods ○ Cooperate with respective departments ○ Request for resources • Allocate resource support to respective departments in accordance with organisational resources. • Formulation of assessment strategy for sales performance. • Peruse regular reports to assess the performance of sales strategies and seek for improvement and optimisation.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of understanding the responsibility of his rank, analysing and assessing the different aspects of the vehicle products market and the competitive environment, and leading the subordinate staff; and• Capable of formulating effective and practicable sales strategies in accordance with the overall objectives and operation strategies of the organisation to safeguard its achievements and profits of to facilitate its long-term development.
Remark	

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Functional Area - Sales and Marketing

Title	Formulate management strategy for salespersons of vehicle products
Code	108588L6
Range	This unit of competency is applicable to the managerial staff of vehicle products sales. Practitioners should be able to master the knowledge of salespersons management, analysing and assessing the performance of salespersons and organisational demand for salespersons to formulate salespersons management strategy.
Level	6
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Recruitment, training and assessment of salespersons)</p> <ul style="list-style-type: none"> • Master the structure and composition of salespersons, including: <ul style="list-style-type: none"> ○ Sales regions ○ Sales teams • Understand the resources planning of salespersons, including: <ul style="list-style-type: none"> ○ Recruitment interviews ○ Selection of salespersons • Master the management of salary policy for salespersons, including: <ul style="list-style-type: none"> ○ Salary and commission policy ○ Performance evaluation methods ○ Relevant labour ordinances • Understand performance evaluation and staff training, including <ul style="list-style-type: none"> ○ Formal and informal evaluation methods ○ Formal and informal training methods • Master staff relation, including: <ul style="list-style-type: none"> ○ Mechanism for settling internal conflicts ○ Procedure of complaints and disciplinary action ○ Staff motivation of and team building <p>2. Performance (Formulate management strategy for salespersons)</p> <ul style="list-style-type: none"> • Formulate organisation strategy for salespersons, such as: <ul style="list-style-type: none"> ○ Sales regions and the composition and structure of sales teams • Analyse the market supply of salespersons for respective departments, including: <ul style="list-style-type: none"> ○ Statistical information of respective salespersons ○ Market demand for the salespersons required ○ The cost for retaining talents, etc. • Formulate management strategy for salespersons in accordance with organisational operation management strategy and human resources strategy, including: <ul style="list-style-type: none"> ○ The strategy to recruit talents ○ The strategy to retain talents ○ Internal training mechanism and strategy ○ The rank of salesperson, promotion ladder, terms of reference of jobs, salary/commission, benefits and reward system, etc. ○ Estimate the salary/commission, benefits and rewards so as to seek relevant resources ○ Establish job employment mechanism ○ Build team spirit ○ Handle disputes ○ Establish performance evaluation scheme

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	<ul style="list-style-type: none"> ○ Submit regular reports to the organisation
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 applying the knowledge on vehicle products salespersons management to formulate recruitment, training, monitoring and assessment strategies for those salespersons; and • Capable of analysing and assessing organisational demand for vehicle products salespersons in accordance with the objectives of the organisation.
Remark	

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Functional Area - Sales and Marketing

Title	Formulate purchasing strategy for new vehicles
Code	108589L6
Range	This unit of competency is applicable to the decision-makers of the vehicle sales department for the formulation of forward-looking vehicle purchasing strategy matching with the operation and development of organisation.
Level	6
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of vehicles, and the actual market situation)</p> <ul style="list-style-type: none"> • Master the characteristics and prices of different models of vehicles in the market. • Good understand of the relationship between the economy of Hong Kong and the demand for vehicles; the cyclic changes of vehicle sales volume, customer needs and purchasing power. • Master the latest information on the traffic and transportation policy in Hong Kong. • Good understand of the specifications of vehicles and the regulations governing vehicle sales. • Good understand of the market position of the organisation as well as the resources available and risks affordable of the organisation. <p>2. Performance (Formulate purchasing strategy)</p> <ul style="list-style-type: none"> • Formulate the new vehicle purchasing strategy with the anticipation of various factors in market, such as the model, specification and disposition of equipment: <ul style="list-style-type: none"> ○ The impact of traffic and transportation policy of Hong Kong the development of local and cross border road networks public transportation networks migrating population and the development of new towns ○ Customer requirements on new vehicles and purchasing power: <ul style="list-style-type: none"> ▪ preferences of target customers, such as high carrying capacity, high power or low fuel consumption and low emission, etc. ▪ the trend in the economy change of Hong Kong ▪ the rising and declining stages of popular styles or specifications ▪ the extent of impact of overseas trend on local market ▪ customer expectation on value-added products ○ Market demand: <ul style="list-style-type: none"> ▪ tendencies of competitors ▪ images of the models and the brands ▪ feedbacks on after-sales services ▪ customer satisfaction on the products ▪ second-hand market value ○ Comply with local laws and regulations on vehicle specifications and sales ○ The social responsibility of the organisation ○ Bargaining power with the manufacturers • Determine the purchase volume according to market demand, customer acceptance of the brands and resources available from organisation. • Formulate contingency measures to cope with special incidents, such as dull sale, late supply, change of exchange rate. • Review the effectiveness of purchasing strategy and capable of making timely adjustment. • Effectively draw up the proposal presenting to the organisation for approval.

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Functional Area - Sales and Marketing

	<ul style="list-style-type: none">• Apply for organisational support in resource.
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 anticipating market demand for the formulation of forward-looking purchasing strategy including the styles and quantity of vehicles, matching the operation and development of the organisation; and• Capable of making timely adjustment to optimise the strategy in accordance with the effectiveness of vehicle purchase.
Remark	<p>The credits value of this unit of competency assumes that the practitioner concerned has already possessed knowledge of vehicles, related regulations and procurement.</p>

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Functional Area - Sales and Marketing

Title	Implement market research plan
Code	108590L3
Range	This unit of competency is applicable in workplaces relevant to the market research of vehicle products (such as auto parts and repairing services). Practitioners should be able to collect market research information on vehicle products. They should also be able to employ market research techniques effectively to implement market research plan according to the requirements to accomplish its market research targets.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Market research techniques for vehicle products)</p> <ul style="list-style-type: none"> • Good understand of the objectives of market research for vehicle products, such as: <ul style="list-style-type: none"> ○ Understand the pros and cons of current brands or products ○ Recognise the position of one's own brands or products graded by customers • Good understand of the marketing methods that can tie in with the sales of vehicle products. • Good understand of the market research methods for vehicle products. • Good understand of the market information system for vehicle products. <p>2. Performance (Implement market research plan)</p> <ul style="list-style-type: none"> • Effectively implement market research plan according to organisational targets, including: <ul style="list-style-type: none"> ○ Identify the targets for market research ○ Understand the market positioning of brands • Carry out market research duty as well as communicate and coordinate with other departments. • Apply market research methods, such as: <ul style="list-style-type: none"> ○ Questionnaire ○ Interview • Make use of information technology and the internet to collect market research information on vehicle products.
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 collecting market research information on vehicle products from the public and internal staff according to requirements; and • Capable of employing market research techniques effectively to implement market research plan for vehicle products to accomplish the company's market research targets and report to supervisor.
Remark	

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Functional Area - Sales and Marketing

Title	Implement marketing plans
Code	108591L3
Range	This unit of competency is applicable in workplaces relevant to the marketing of vehicle products (e.g. auto parts or servicing services). Practitioners should be able to understand the market trend of vehicle products so as to effectively implement marketing plans.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The market trend and market theory of vehicle products)</p> <ul style="list-style-type: none"> • Good understand of the market of vehicle products: <ul style="list-style-type: none"> ○ The opportunities and threats brought to the organisation by macroscopic marketing and microscopic environment ○ The concept of market segmentation <ul style="list-style-type: none"> ▪ Understand the purpose of market segmentation and “position” the products ▪ Understand the basic variables of the market ▪ Understand market segmentation procedure and its basic strategies. ○ Understand customers’ buying pattern, types of customers and how they make decisions ○ Master the techniques of handling product in-take • Good understand of the trend of vehicle products and services as well as information on technical development: <ul style="list-style-type: none"> ○ Analyse vehicle products and services, such as: core products/services, basic products/services, extra products/services, etc. ○ The development trend of vehicle products and services ○ The development trend of vehicle servicing techniques • Good understand of the impact of government policies and local economics on the vehicle market. • Good understand of market orientation theory, including: <ul style="list-style-type: none"> ○ The operation of marketing portfolio ○ Consumer goods and industrial and commercial markets ○ Customer-led and vehicle product-led organisations • Good understand of marketing environment and market segmentation, including: <ul style="list-style-type: none"> ○ The distribution channels of vehicle products, including promotion methods ○ Sales and pricing strategies and methods <p>2. Performance (Implement marketing plans for vehicles)</p> <ul style="list-style-type: none"> • Employ marketing knowledge to perform the duties of promoting vehicle products and services to accomplish organisational targets. • Analyse the market and the characteristics of target customers. • Coordinate practical marketing work according to the established marketing plans of the organisation, including identify promotion and publicity objectives and design relevant promotion proposals.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioners being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of possessing marketing knowledge on general vehicle products and services and capable of understanding the marketing environment of vehicles and market segmentation; and• Capable of performing marketing duties of vehicle products and servicing services to accomplish the promotion objectives; and coordinate practical promotion work according to the established marketing plans, including identify promotion and publicity objectives and draw up relevant promotion proposals.
Remark	The credits value of this unit of competency is set on the presumption that the assessee concerned has already possessed marketing and promotion techniques of vehicle products.

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Functional Area - Sales and Marketing

Title	Formulate marketing plans
Code	108592L4
Range	In the automotive market-related workplaces, practitioners are able to analyze the automotive market, develop a systematic marketing plan, increase the visibility of the organization, promote their automotive products and services, and develop performance indicators.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The operation of marketing and the sales systems for vehicles)</p> <ul style="list-style-type: none"> • Good understand of the operation concept of marketing and the sales systems for vehicles and make basic analysis on different markets to determine the marketing and sales methods to be adopted. • Good understand of the brand trend of the vehicle manufacturer, product positioning and the guidelines on promotion methods. • Good understand of the market direction requirements of the organisation. • Good understand of the characteristics and costs of various marketing media (such as car magazines, TV commercials, car fairse.) <p>2. Performance (Formulate marketing plans and performance indicators)</p> <ul style="list-style-type: none"> • Communicate with vehicle manufacturing factory to get an understanding of the trend of the vehicle brand, product positioning and instructions on marketing methods. • Communicate with the sales department and maintenance department to get an understanding of local market demand and the support affordable by the organisation. • Discuss and formulate sales strategy and price. • Formulate effective and comprehensive marketing plans: <ul style="list-style-type: none"> ○ Capable of extending the market and absorb new customers apart from identifying old customers as target customers ○ Formulate marketing portfolio according to the organisation's financial situation and prepared budget and set priorities ○ Choose suitable media to launch marketing strategy ○ Assess marketing results <ul style="list-style-type: none"> ▪ Be aware of the effectiveness of marketing plans and respective information so to analyse and formulate future marketing plans • Develop and manage the coordination of the entire promotion plan, make assessments and distribute them to various departments. • Develop marketing strategies for different targets, plans and performance indicators according to the objectives of the organization • Develop marketing performance indicators • Assess marketing effectiveness
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of communicating with the vehicle manufacturer and various departments of the organisation to formulate vehicle promotion plans to meet the market development plans, financial budget and strategies of the organization, enhancing the visibility of the organization, enlarging the market share, analysing respective marketing plans and, reporting to seniors.

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Remark	The credits value of this unit of competency assumes that the practitioner concerned are familiar with the market trend of vehicle products/ service and are equipped with promotion techniques.
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Functional Area - Sales and Marketing

Title	Formulate market research plans
Code	108593L5
Range	This unit of competency is applicable to the market surveyors of vehicle products (including vehicles, spare parts or vehicle after-sales services). Practitioners should be able to formulate effective market research plans according to organisational needs by employing their practical experience and techniques of collecting and analysing the information obtained from the survey of the vehicle product market to achieve respective organisational objectives.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Techniques for conducting market research on vehicle products)</p> <ul style="list-style-type: none"> • Good understand of the purposes of market research on vehicle products, such as <ul style="list-style-type: none"> ○ Introduce and promote new products ○ Explore the market situation of the brands or products ○ Sales and marketing • Master market research methods for vehicle products. • Good understand of the information system for vehicle product market. <p>2. Performance (Formulate market research plans)</p> <ul style="list-style-type: none"> • Formulate effective market research plans according to organisational needs, including: <ul style="list-style-type: none"> ○ Determine the objectives of market research ○ Choose market research methods ○ Establish the implementation procedure for the market research plans ○ Assess the effectiveness of the market research plans • Establish market research management plan. • Establish market research monitoring plan. • Formulate plans for collecting and analysing information obtained from the survey of vehicle product market making use of information technology and internet. • Make use of the information obtained from the survey to organise and analyse reports. • Report respective information to the organisation and/or the vehicle manufacturer and make suggestions on marketing issues.
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 formulating effective market research plans according to organisational needs by employing practical experience and techniques of collecting and analysing the information obtained from the survey of the vehicle product market; and • Capable of formulating management and monitoring plans for market research, organising relevant information, submitting report and suggestions to achieve organisational objectives of market research.
Remark	

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Functional Area - Sales and Marketing

Title	Write promotion script for the marketing of vehicle products
Code	108594L5
Range	This unit of competency is applicable in workplaces relevant to the sales and marketing of vehicle products. Practitioners should be able to understand thoroughly the contextual functions in marketing creativity and can use appropriate language to write promotion script relating to the sales and marketing of vehicle products.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The format and key points of automotive product sales and marketing documents)</p> <ul style="list-style-type: none"> • Master thoroughly the contextual functions in marketing creativity. • Good understand of common terminology and specific terms of the automotive industry. • Master about the format and key points of the promotion script for the sales and marketing of vehicle products. • Good understand of thoroughly the established format and presentation methods employed by the organisation or the brand. <p>2. Performance (Write promotion script for the sales and marketing of vehicle products)</p> <ul style="list-style-type: none"> • Communicate with advertising agencies or other professional copywriters. • Maintain good relationship with the media of the automotive industry. • Employ appropriate language, charts/graphs to write related script according to the operation of the sales and marketing of vehicle products, such as: <ul style="list-style-type: none"> ○ Feature articles for publicity purposes ○ Media plans ○ Sales reports ○ Marketing reports ○ Sales letters and promotion leaflets • Assess the proposals submitted by advertising agencies or other professional copywriters on the content of the script and make amendments.
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 understanding the format and key points of the promotion script for the sales and marketing of vehicle products; and • Capable of mastering thoroughly the contextual functions in marketing creativity and using appropriate language to write promotion script relating to the sales and marketing of vehicle products or assigning the job to professional people.
Remark	

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Functional Area - Sales and Marketing

Title	Formulate marketing strategy
Code	108595L6
Range	This unit of competency is applicable to staff responsible for the marketing of vehicle products (e.g. vehicles, spare parts or repairing services). Practitioners should be able to apply marketing theory to explore local market orientation and making appropriate analysis and assessment on the latest market information to effectively formulate marketing plans and to enhance the popularity of the organisation and the vehicle products in the market, thereby fostering the vehicle products and services of the organisation.
Level	6
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Operation of the marketing and sales systems)</p> <ul style="list-style-type: none"> • Good understand of the significance of marketing work to the entire organisation such as the impact on the achievements, profits and the development of the maintenance and spare parts business and even the image of the organization. • Good understand of the marketing environment and market segmentation: <ul style="list-style-type: none"> ○ The distribution channels of vehicle products/services ○ Pricing strategies and methods • Master the consumer pattern on vehicle products/services. <p>2. Performance (Formulate marketing strategy)</p> <ul style="list-style-type: none"> • Analyse the operation concept of organisational sales systems. • Analyse the characteristics of local market and target customer groups. • Formulate marketing strategy for local market: <ul style="list-style-type: none"> ○ Determine the focus and themes of sales products ○ Determine the proportion in the use of different marketing media and formulate financial budget ○ Understand the methods to retain existing customers and source new customers ○ Formulate marketing portfolio to attract new customers ○ Coordinate different departments for cooperation ○ Estimate the resources required and seek support from the organisation • Assess the compatibility of the whole set of marketing strategy for the local market. • Submit reports, conduct analysis and make suggestions on a regular basis.
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of formulating marketing strategy to meet the business development of the organisation in accordance with market environment and organisational operation plans.
Remark	The credits value of this unit of competency assumes that the practitioner concerned has possessed thorough understanding of the vehicle products market and marketing knowledge.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Sales and Marketing

Title	Formulate brand strategy for vehicles
Code	108596L6
Range	This unit of competency is applicable to the senior staff or marketing staff in the organisation. Practitioners should be able to integrate marketing theory and the professional knowledge of brand strategy and applying brand management policy to effectively lead their team to establish and promote vehicle brands.
Level	6
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Buyers and brands)</p> <ul style="list-style-type: none"> • Good understand of the significance of vehicle brands establishment to the entire organisation such as the impact on the achievements, profits and the development of the vehicle servicing and spare parts business and even the image of the organization. • Master vehicle brands. • Good understand of consumer orientation, including: <ul style="list-style-type: none"> ○ The impact of pop culture on consumer behaviour ○ The change of consumer pattern and the causes of the changes • Good understand of the value and the undertone of the brands. • Understand thoroughly the history of vehicle brands. <p>2. Performance (Draw up concrete proposals to establish vehicle brands)</p> <ul style="list-style-type: none"> • Communicate with vehicle manufacturers, including: <ul style="list-style-type: none"> ○ Understand and formulate marketing strategies for vehicle brands ○ Formulate the sales plans for vehicle brands • Instruct subordinate staff to formulate vehicle brand strategies, including: <ul style="list-style-type: none"> ○ Determine brand positioning and formulate related strategies ○ Establish the image and value of the brands ○ Set the quality of the products/services ○ Integrate with marketing, distribution and products strategies • Instruct subordinate staff to help them understand brand management and marketing strategies, including: <ul style="list-style-type: none"> ○ Master brand management methods ○ Determine the sales channels for the brands • Be familiar with the brands and the respective regulations of intellectual property rights, including: <ul style="list-style-type: none"> ○ Understand the significance of intellectual property rights to the brands ○ Understand the legal protection of brands • Brand management strategy: <ul style="list-style-type: none"> ○ Ascertain that brand establishment is the long-term objective of organisational development ○ Allocate organisational resources according to the budget plan ○ Understand the core value of the brands ○ Consistently maintain the image of the brands and product quality ○ Monitor the suitability of the plans during implementation ○ Rectify the policy problems during implementation ○ Convey the messages relating to brand strategy to relevant departments and demand for full cooperation and regular submission of reports

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Sales and Marketing

Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is: <ul style="list-style-type: none">• Capable of integrating marketing theory and the professional knowledge of brand strategy to effectively formulate concrete proposals to establish vehicle brands; and• Capable of understanding brand management and marketing strategies to enhance the image and value of the brands.
Remark	

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Sales and Marketing

Title	Arrange for delivery and transportation of vehicles
Code	108597L2
Range	This unit of competency is applicable in the sales department of vehicles. Practitioners should be able to arrange for delivery and transportation of vehicles, thus enabling accurate and speedy arrival of vehicles to the destination.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Transportation requirements and logistics procedure for vehicles)</p> <ul style="list-style-type: none"> • Know the characteristics of vehicles and transportation requirements. • Understand the methods to control transportation of vehicles. • Understand the organisation's vehicle labelling system and its characteristics. • Know the characteristics of different transportation devices. • Know various kinds of communication facilities employed by the organisation • Understand the established acceptance, delivery and transportation procedure for vehicles. • Understand the organisation's filing system with respect to the acceptance, delivery and transportation of vehicles. <p>2. Performance (Perform deliver and transportation of vehicles)</p> <ul style="list-style-type: none"> • Deliver and transport vehicles according to the instructions. Such as: <ul style="list-style-type: none"> ○ Carry out the verification procedure for acceptance, delivery and transportation of vehicles ○ Arrange drivers to transport vehicles and confirm the validity period of driving license, T-plate and insurance policy ○ Safeguard the vehicle transportation process, such as securing the vehicle on the transportation device ○ Be familiar with vehicle transportation process and transportation route (including contingency route) ○ Be familiar with the temporary arrangement for allocation of resources ○ Confirm the document pertaining to the delivery of vehicles ○ Report damages on vehicles • Arrange the order of transportation according to the department's instructions, such as the characteristics of vehicles and degrees of urgency. • In accordance with the established performance indicators governing the delivery and transportation of vehicles and the effectiveness, review the efficiency of the operation and report any procedural deficiency to the supervisor in note form.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of enabling accurate and speedy arrival of the parts and accessories to the destination safely in accordance with the established guidelines on the delivery and transportation process of vehicles; and • Capable of reporting any procedural deficiency to the supervisor with regard to the efficiency of delivery and transportation of vehicles.
Remark	

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Sales and Marketing

Title	Handle preparation work for vehicle importation
Code	108598L2
Range	This unit of competency is applicable in industry-related workplaces. Practitioners should be able to maintain contact with vehicle manufacturers according to the organisation's established procedure to obtain documents certifying that the types of vehicle to be imported can meet the requirements of relevant legislations and arrange submission of type-approval application to respective departments.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The legislation relating to vehicle licencing)</p> <ul style="list-style-type: none"> • Know the Hong Kong's legislative provisions in relation to the requirements and restrictions of vehicle importation. • Know the Hong Kong's legislative provisions on issues relating to vehicle tax. • Know the Hong Kong's statutory requirements and application procedure for vehicle import registration and licencing. • Know the type-approval procedure for imported vehicles. <p>2. Performance (Handle preparatory work for import of vehicles)</p> <ul style="list-style-type: none"> • Confirm with related department the type of vehicle for import. • Liaise with the manufacturer to collect the document for type-approval • Arrange submission of type-approval application to respective departments • Arrange submission of imported vehicle type to respective departments for inspection • Submit application on the selling price of the imported vehicle type • Process the first registration of vehicles • Calculate the first registration tax of vehicles according to approved selling price and additional accessories • Contact finance and insurance companies to arrange relevant issues • Arrange for the provision of necessary accessories and additional equipment for respective vehicles by other product /service providers to cater for the needs of customers and relevant departments; and calculate the increased expenses and tax • Capable of coordinating with the service department for arrangement of pre-delivery inspection and associate transportation of the new cars • Capable of coordinating with the sales department to hand over new cars
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the practitioners being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of contacting vehicle manufacturers in obtaining the required documents on the agreed import vehicle type to comply with the statutory requirement on vehicle importation; • Capable of arranging vehicle for examination and apply vehicle license in compliance with respective local legislative provisions; and • Capable of calculating the tax on the retailing price of vehicles and other accessories.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed knowledge on vehicle services/financial management.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Sales and Marketing

Title	Establish procedures for the receipt, dispatch and delivery of vehicles
Code	108599L4
Range	This unit of competency is applicable to the practitioners of vehicle purchasing and monitoring department for the establishment of effective procedures in the receipt, dispatch and delivery of vehicles, and effectiveness review, to enable the vehicles arrive the destinations accurately, safely and speedily.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of vehicles and their transportation devices)</p> <ul style="list-style-type: none"> • Good understand of the characteristics of different vehicles as well as the delivery and protection requirements. • Identify the applicability of transportation devices for vehicles. • Good understand of respective regulations and insurance arrangement on the delivery of vehicles. • Good understand of the receipt, dispatch and delivery methods for various kinds of vehicles. • Good understand of the procedure for handling the import and export of commodities <p>2. Performance (Establish procedures for the receipt, dispatch and delivery of vehicles)</p> <ul style="list-style-type: none"> • Formulate the documentary system for the receipt, dispatch and delivery of vehicles, including the legislated customs clearance and customs entry documents (e.g. Import Licence and Removal Permit.). • Devise vehicle labelling system. • Establish the verification procedure for the receipt and dispatch of vehicles at different sites, such as: <ul style="list-style-type: none"> ○ Container terminals ○ Warehouses ○ Vehicle Pre-delivery Inspection (PDI) workshops ○ Showrooms • Establish the insurance arrangement for vehicle delivery, including insurance for the vehicles, the deliverer, third party and property. • Choose different transportation methods according to the characteristics of different kinds of vehicles, such as driving, cart or tow. • Establish respective procedures according to the transportation methods of different kinds of vehicles, such as: <ul style="list-style-type: none"> ○ The requirements on the driver qualifications, and the check list prior to delivery operation. ○ Instructions on transportation device selection, and the methods of fixing the vehicles onto the transportation device. ○ Selection of devices for towing, and instructions on the delivery process • Select suitable route (including contingency route) according to the types of vehicles and the destinations • Establish the procedure for contingency measures, such as in the event of accident or vehicle damaged. • Establish the performance indicators for the delivery of vehicles.

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for the Automotive Industry
Unit of Competency

Functional Area - Sales and Marketing

	<ul style="list-style-type: none"> Review the effectiveness of the procedures for the receipt, dispatch and delivery of vehicles as well as feedback from front-line staff; revise respective procedures to optimise efficiency and accuracy.
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 establishing instructions on the procedures for effective receipt, dispatch and delivery of vehicles according to the characteristics of vehicles and delivery requirements, and handling of relevant documents; Capable of establishing the performance indicators for the receipt, dispatch and delivery of vehicles; and Capable of reviewing the effectiveness of the procedures for the receipt, dispatch and delivery of vehicles as well as collecting feedback from front-line staff to improve respective procedures.
Remark	The credits value of this unit of competency assumes that the practitioner has already possessed basic knowledge on logistics.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Sales and Marketing

Title	Exhibit / Display vehicles
Code	108600L4
Range	This unit of competency is applicable to practitioners performing marketing and related duties in the automotive industry. They should be able to employ the techniques of display art to effectively display vehicles at showrooms/ exhibition venues according to organisational requirements to achieve sales purpose.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Setting of the venues for display of vehicles)</p> <ul style="list-style-type: none"> • Good understand of the objectives of the setting of showrooms/exhibition venues, such as: <ul style="list-style-type: none"> ○ Arousing customers' interests ○ Stimulating customers' buying desires ○ Bringing visual enjoyment to customers ○ Establishing the image of the brand • Good understand of the restrictions of the showrooms/exhibition venues. <p>2. Performance (Display vehicles)</p> <ul style="list-style-type: none"> • Employ the techniques of displaying vehicles, such as: <ul style="list-style-type: none"> ○ Go with the theme of display according to the requirements of vehicle manufacturers on the brand/product services and the characteristics of the commodities ○ Colour matching ○ Lighting design ○ Decorations for the scene, etc • Understand the theme of the vehicle show <ul style="list-style-type: none"> ○ Commercialised ○ Livelihood (activities, trend, etc.) ○ Characterised • Communicate with the staff of the vehicle showrooms/exhibition venues/advertising companies and the managerial staff of the organisation; and give appropriate working instructions to subordinates after analysis and judgement to facilitate drafting a proposals of vehicle show. • Participate in the entire preparation process of the show and to follow up actions: <ul style="list-style-type: none"> ○ Contact advertising companies and follow up on production issues ○ Formulate proposals on vehicle shows ○ Source materials/props etc. for vehicle shows • Effectively display vehicles so as to achieve sales purpose.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of mastering the techniques of vehicle exhibition and display; and • Capable of understanding the image of the organisation and the orientation of consumers to facilitate effective exhibition and display vehicles so as to achieve sales purpose.
Remark	

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Deliver and transport parts and accessories
Code	108601L2
Range	This unit of competency is applicable in the sales department of vehicle parts and accessories, inventory control and management departments as well as procurement control department. Practitioners should be able to deliver and transport the parts and accessories in an effective manner, enabling accurate and speedy arrival of the parts and accessories to the destination.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The transportation requirements of parts and accessories and the logistics procedure)</p> <ul style="list-style-type: none"> • Know the characteristics of parts and accessories as well as transportation requirements. • Know the organisation's labelling system of parts and accessories and its characteristics. • Know the characteristics of different transportation devices. • Know various kinds of communication facilities employed by the organisation. • Know the established procedure for the acceptance, delivery and transportation of parts and accessories • Know the organisation's filing system with respect to the acceptance, delivery and transportation of parts and accessories. <p>2. Performance (Deliver and transport parts and accessories)</p> <ul style="list-style-type: none"> • Deliver and transport the parts and accessories according to established procedure: <ul style="list-style-type: none"> ○ Implement with the verification procedure for the delivery and transportation of parts and accessories (including the quantity) ○ Safeguard the parts and accessories during the transportation process, such as ways to secure them on the transportation device ○ The transportation method, procedure and transportation route of parts and accessories (including contingency route) ○ The temporary arrangement for allocation of resources ○ The documents pertaining to the delivery of parts and accessories ○ Report damages on the parts and accessories • Arrange the transportation order of parts and accessories according to the total transportation quantity, their characteristics and degrees of urgency. • In accordance with the established performance indicators governing the delivery and transportation of parts and accessories, review the efficiency of the whole process and report any procedural deficiency to the supervisor in note form
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of enabling accurate and speedy arrival of the parts and accessories to the destination safely in accordance with the established guidelines on the delivery and transportation procedure of parts and accessories; and • Capable of reporting any procedural deficiency to the supervisor with regard to the efficiency of delivery and transportation of parts and accessories.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Remark	The credits value of this unit of competency is set on the presumption that the assessee has already possessed basic knowledge of occupational safety and health. They also possess the capability to identify general vehicle parts and accessories.
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Identify/confirm vehicle parts and accessories
Code	108602L2
Range	This unit of competency is applicable in the sales department of vehicle parts and accessories. Practitioners should be able to identify the products required by customers (including the staff of the organisation's maintenance department) accurately and speedily according to the organisation's established identification method and procedure. They should also provide relevant information to customers.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The use of vehicle parts and accessories and their coding method)</p> <ul style="list-style-type: none"> • Understand the use, location and names of vehicle parts and accessories. • Understand the coding method of vehicle parts and accessories with information provided by vehicle manufacturers and parts suppliers. <p>2. Performance (Identify/confirm vehicle parts and accessories)</p> <ul style="list-style-type: none"> • According to the information provided by customers, accurately and speedily confirm the codes, names, functions, appearances, physical objects, vehicle types and manufacturing year of the parts and accessories required by customers. • With reference to confirmed information, accurately and speedily identify the products required by customers according to the catalogue (soft copy or hard copy) provided by vehicle manufacturers or parts suppliers. • Confirm the inventory level, location and price of the parts and accessories required by customers from inventory record (soft copy or hard copy). • Let customers confirm their required products and provide relevant information such as price.
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 confirming the parts and accessories required by customers accurately and speedily according to the information provided by them; and • Capable of identifying the products and relevant information required by customers accurately and speedily according to the catalogue and inventory record provided by vehicle manufacturers or parts suppliers.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner has already possessed the capability to identify vehicle parts and accessories.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Implement vehicle parts stocktaking activities
Code	108603L2
Range	This unit of competency is applicable in vehicle parts store. Practitioners should be able to conduct stocktaking of vehicle parts according to the manufacturer's instructions, keeping those stock record, maintaining stock level and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Stocktaking in vehicle parts operation)</p> <ul style="list-style-type: none"> • Understand the stock records to identify parts. • Understand to monitor and check on the progress of a major stocktake. • Understand the frequency for stocktaking. • Understand to report on the results of stocktaking and the type of reports used. <p>2. Performance (Carry out stocktaking in vehicle parts operation)</p> <ul style="list-style-type: none"> • Use the correct format to report the stock records. • Chose suitable time according to the stock record for stocktaking. • Provide written report after stocktaking.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of following manufacturer's instruction to take the stocking procedure; and • Capable of providing written report after the stocking procedure.
Remark	

Specification of Competency Standards
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Unit of Competency

Functional Area - Parts Management

Title	Sell vehicle parts online
Code	108604L2
Range	This unit of competency is applicable in vehicle parts store. Practitioners should be able to conduct web-based activities of vehicle parts sales which include checking stock availability, placing orders and processing payments using online facilities.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Sell vehicle parts online)</p> <ul style="list-style-type: none"> • Understand of web-based selling facilities available. • Understand the online communication method with the customers. • Understand the payments and refund procedure using online facilities. • Understand the web-based activities available in-store to promote and achieve sales. <p>2. Performance (Carry out sell vehicle parts online)</p> <ul style="list-style-type: none"> • Using web-based selling facilities. • Communicate with the customers online. • Process payments and refund using online facilities. • Showing promotion activities on line.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the practitioners shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of following instruction to sell vehicle parts online; and • Capable of processing payment, refund and promote activities online.
Remark	

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Implement inventory control of vehicle parts
Code	108605L3
Range	This unit of competency is applicable in vehicle parts store. Practitioners should be able to control of stock of vehicle parts including analysing stock records to identify parts to be purchased, buying at the most advantageous terms, following up orders, monitoring the performance of suppliers and maintaining accurate purchasing records, as well as identifying when to carry out stock cleansing procedures.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Stock control with in vehicle parts operation)</p> <ul style="list-style-type: none"> • Good understand of the stock records to identify parts. • Good understand of the business terms for the maximum advantage for purchasing. • Good understand of the system to follow for placing and follow up orders. • Good understand of the procedure to complete the purchasing records. • Good understand of the stock cleansing procedures. <p>2. Performance (Analyzing stock records, monitoring purchasing records and identifying stock cleaning procedure)</p> <ul style="list-style-type: none"> • Fill in parts stock records. • Analysis of parts stock records. • Monitoring the performance of suppliers and maintaining accurate purchasing records. • Carry out stock cleaning procedures.
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 analysing stock records to identify parts to be Purchased; • Capable of monitoring supplier's performance and maintaining accurate purchasing records; and • Capable of identifying stock cleaning procedures.
Remark	

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Return procedure of purchase
Code	108606L3
Range	This unit of competency is applicable to the practitioners of vehicle sales, parts and accessories, inventory control and management departments for effective handling the demands for goods return based on the established procedure of organisation, so as to safeguard the interests of the organisation and customers.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The principles of the return of vehicle parts and accessories)</p> <ul style="list-style-type: none"> • Good understand of the use and characteristics of vehicle parts and accessories. • Master organisational principles on the return of purchase. • Good understand of organisational procedure for receipt, dispatch and handling of returned purchase. • Good understand of organisational monitoring on returned purchase and respective documentary system. <p>2. Performance (Handle the return of purchase)</p> <ul style="list-style-type: none"> • Handle the return of purchase according to the organisation's established rules, such as: <ul style="list-style-type: none"> ○ Product specification <ul style="list-style-type: none"> ○ The standards of handling and using of the products set by the manufacturer or supplier e.g. approved installation procedure, warranty or storage period ○ Be familiar with the validity of transaction documents ○ Identify the products • Execute protective measures on the returned purchase according to established handling procedure, such as packaging, arrangement for delivery and storage. • Keep monitoring record on returned purchase. • Execute the procedure for refunding or new product replacement to customers and handling of relevant documents. • Compile report on preliminary inspection of returned purchase and the frequency record of similar defects for facilitating follow up action taken by parts management departments. • Carry out the contingency measures established by the organisation, for special cases such as handling of customers' dissatisfaction, occasional bulk return of purchase and insufficient inventory level. • Reflect procedural deficiency to the supervisor or respective counterpart in note form.
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 ascertaining the validity of the demands for return of purchase according to the organisation's established principles; • Capable of carrying out contingency procedure according to the guidelines established by the organisation; • Capable of reporting on preliminary inspection of returned purchase and on the frequency record of similar defects for facilitating follow up action taken by parts management departments; and

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for the Automotive Industry
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Functional Area - Parts Management

	<ul style="list-style-type: none">• Capable of handling the returned purchase according to established procedure and reflect procedural deficiency.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner has already possessed the capability to identify auto parts and accessories.

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Functional Area - Parts Management

Title	Order parts and accessories
Code	108607L3
Range	This unit of competency is applicable to the practitioners of parts and accessories sales department for customer order according to procedure established by the organisation, so as to enhance its selling efficiency.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The function of auto parts and accessories, its coding method and sales)</p> <ul style="list-style-type: none"> • Master the latest information on the prices of different parts and accessories. • Good understand of the standard and selling regulations of respective products. • Know the types, functions, locations and names of vehicle parts and accessories. • Good understand of the coding method used by vehicle manufacturer or parts supplier for vehicle parts and accessories. • Good understand of the selling (including ordering) methods and procedure employed by the organisation, such as order form, invoice, deposit treatment and transportation time. • Be familiar with the use of documentary system for sales (including ordering) employed by the organisation (including the Enterprise Resource Planning (ERP) or related software). <p>2. Performance (Implement the order procedure for parts and accessories)</p> <ul style="list-style-type: none"> • According to the information of customer demand, ensure that if there is sufficient inventory, or a requirement for placing order. • Confirm the ordered goods and record customer information, such as the code, quantity, price and deposit of parts and accessories, as well as modes of transportation and ways to contact customers. • Complete relevant ordering documents, such as ordering record, order form, invoice and receipt of deposit. • Confirm the supply with vehicle manufacturer or parts supplier according to the information of goods ordered, and complete the ordering procedure. • Select modes of transportation according to the degrees of urgency of the orders and the guidelines established by the organisation. • Regularly record the delivery progress of ordered goods to facilitate follow-up actions. • Carry out the contingency measures established by the organisation, for special cases such as out of stock, delay in delivery and cancellation of orders.
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 confirming the parts and accessories ordered by customers accurately and speedily according to the provided information; • Capable of ordering parts and accessories and complete the ordering document according to organisational procedure; and capable of following the progress of delivery; • Capable of carrying out contingency procedure according to the guidelines established by the organisation; and

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for the Automotive Industry
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Functional Area - Parts Management

	<ul style="list-style-type: none">• Capable of reviewing the effectiveness of the ordering procedure for parts and accessories, and reflecting any deficiency to supervisor or respective counterpart, so as to improve the efficiency of parts and accessories ordering.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner has already possessed the capability to identify / confirm auto parts and accessories.

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Functional Area - Parts Management

Title	Establish and manage the documentary system for the sale of auto parts and accessories
Code	108608L4
Range	This unit of competency is applicable to the practitioners in the auto parts and accessories sales department for the effective establishment and management of sales documentary system and related inventorial documents or software, to optimise the use of organisational resources and monitor operation efficiency.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Sales of parts and accessories, use of computer for word processing)</p> <ul style="list-style-type: none"> • Good understanding of the types and names of auto parts and accessories. • Master the sales pattern and procedure of organisation. • Good understanding of general knowledge of sales management and operation. • Be familiar with the documentary systems used by various departments in the organisation. • Master the ERP or relevant software employed by the organisation. • Be familiar with the general word processing techniques. <p>2. Performance (Establish and manage the sales documentary system)</p> <ul style="list-style-type: none"> • Apply the Enterprise Resource Planning (ERP) or relevant software designated by the organisation to establish the recording and monitoring documents required for sales operation, such as: <ul style="list-style-type: none"> ○ The transaction records for various sales items, including invoices ○ The records of accounts and cash balance of the sales department ○ The records of orders of purchase and respective implementation procedure ○ The records of return of purchase and respective implementation procedure ○ Receipt and dispatch records of parts and accessories ○ The inventory record of the sales department ○ Monitor and control of various operations such as sales and transactions. • Monitor the use of software to ensure normal operation, and submit report regularly. • Establish measures to backup information, and design temporary trading vouchers or bills in case of emergency. • Establish the contingency measures to cope with situations such as loss of information or malfunction etc. due to computer or software failure. • Review the effectiveness of the sales documentary system and feedback from front-line colleagues, revise respective procedures to optimise operation efficiency.
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 developing records and monitoring documents required for auto parts sales based on the file system selected by the organization to improve operational efficiency; • Capable of effectively managing the operation of the documents and software relating to inventory in accordance with the file system designated by the organisation to ensure normal operation; and • Capable of reviewing the effectiveness of the parts sales documentation system, feedback from frontline colleagues, and revising the procedures to optimize operational efficiency.

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Functional Area - Parts Management

Remark	The credits value of this unit of competency assumes that the practitioner has already possessed general knowledge of auto parts and accessories as well as the knowledge of sales management.
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Establish a procedure for the return of parts and accessories
Code	108609L5
Range	This unit of competency is applicable in the vehicle parts and accessories sales department, inventory control department and management department. Practitioners should be able to establish procedures for the return of purchase to safeguard the interests of both the organisation and the customers.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Receipt and delivery procedures for auto parts and accessories)</p> <ul style="list-style-type: none"> • Good understanding of the functions and characteristics of vehicle parts and accessories, such as specification (including international standard and the standard required by the manufacturer), the standard of packaging, delivery, assembling, use, warranty or storage period of goods required by the manufacturer or supplier • Master organisational procedure for handling the receipt and delivery of good <p>2. Performance (Establish procedures for the return of purchase)</p> <ul style="list-style-type: none"> • Establish the criteria and handling procedure for return of purchase according to the following circumstances: <ul style="list-style-type: none"> ○ Specification of goods ○ The standard of handling and use of goods required by the manufacturer or supplier, such as approved assembling procedure, warranty or storage period. ○ The validity of transaction documents ○ Confirmation of goods • Determine the rank of the persons approving the return of purchase. • Formulate measures to secure the purchase to be returned, such as packaging, delivery and storage. • Prepare documents for monitoring and recording the return of purchase. • Formulate sustainable monitoring measures on the quality of goods. • Establish contingency measures for special cases such as huge bulk of returns. • Review the procedure for return of purchase: <ul style="list-style-type: none"> ○ Review the criteria for the return of goods and respective handling procedure and capable of making revision to meet the revised standard required by the manufacturer or supplier on the handling and use of goods ○ Establish feedback mechanism to provide information relating to records of return of purchase, etc. to the purchasing and warehouse management departments for follow-up action to be taken
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 establishing the criteria for return of purchase and respective handling procedures according to the specification of goods, standard required by the manufacturer or supplier on the handling and use of goods and notifying respective departments for follow-up action to be taken; and • Capable of adjusting the criteria and handling procedure for the return of goods according to changes in organisational policy and the standard required by the manufacturer of supplier on the handling and use of goods.

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Functional Area - Parts Management

Remark	The credits value of this unit of competency assumes that the practitioner concerned already has possessed the knowledge of vehicle parts and accessories.
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Unit of Competency

Functional Area - Parts Management

Title	Formulate sales strategy for parts and accessories
Code	108610L6
Range	This unit of competency is applicable to the practitioners of the auto parts and accessories purchasing and sales departments for the formulation of sales strategy according to the characteristics of different parts and accessories and the market situation to achieve the maximum operational benefit for the organisation.
Level	6
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of auto parts and accessories as well as the marketing and sales theory)</p> <ul style="list-style-type: none"> • Master the latest information on the prices, market demand and market shares of different parts and accessories. • Good understanding of the characteristics of different parts and accessories, such as scope of applicability and market position. • Master the consuming behaviour of customers. • Good understanding of the characteristics and applicability of different marketing methods. • Know the characteristics, applicability and operation methods of different sales patterns. • Good understanding of the resources availability and risks affordability of the organisation. • Good understanding of the regulations governing the marketing and sales of goods. <p>2. Performance (Sales strategy of auto parts and accessories)</p> <ul style="list-style-type: none"> • Formulate the sales strategy, such as partnership scheme, pricing and marketing, according to the characteristics of different parts and accessories, market situation, consuming pattern of customers and employable resources of the organisation. • Formulate contingency measures in case of dull sales. • Establish performance indicators for the sales strategy, such as sales volume. • Review the sales strategy, and make corresponding adjustments.
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 formulating effective sales strategy according to the characteristics of auto parts and accessories, actual market situation and the capability of the organisation; and • Capable of adjusting or improving the sales strategy with reference to its performance indicators.
Remark	The credits value of this unit of competency assumes that the practitioner concerned has already possessed the knowledge of auto parts and accessories as well as the marketing and sales of commodities.

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Unit of Competency

Functional Area - Parts Management

Title	Store auto parts and accessories
Code	108611L3
Range	This unit of competency is applicable to the practitioners of the warehouse of auto parts and accessories, inventory control and management department as well as the sales department for effective protection and storage of goods according to the established guidelines of the organisation.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Auto parts and accessories, and the characteristic of transportation devices)</p> <ul style="list-style-type: none"> • Good understand of the characteristics of auto parts and accessories. • Master the methods to store and protect auto parts and accessories • Identify the applicability of different transportation devices. • Identify the applicability of different protective materials. • Good understand of the organisation's labelling system for auto parts and accessories. • Good understand of the basic knowledge in occupational safety, health, environmental protection and handling of dangerous goods/chemicals. <p>2. Performance (Store auto parts and accessories)</p> <ul style="list-style-type: none"> • Categorize, protect and store the goods effectively according to the organisation's guidelines on storage of goods, such as: <ul style="list-style-type: none"> ○ Verify the categories of goods (general or dangerous goods) ○ Carry out the protection of goods and packaging specification (e.g. protective materials and the environmental requirements for storage of goods) ○ Fulfil the security and environmental requirements for the storage of precious properties (e.g. auto and electronic parts) ○ Verify the quantity of goods and storage areas (including differentiate them from existing inventory) ○ Report on damages of stored goods • Execute the labelling procedure for the location of stored vehicles, auto parts and accessories. • Carry out the contingency measures established by the organisation, for special cases (e.g. incorrect bar code or quantity of goods; insufficient storage areas) • Reflect procedural deficiency to the supervisor or respective counterpart in note form.
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 enabling effective protection and appropriate storage location for auto parts and accessories according to the guidelines on storage of goods established by the organisation; • Capable of carrying out contingency procedure according to the established guidelines of the organisation; and • Capable of reflecting procedural deficiency regarding the storage of auto parts and accessories to the supervisor or the respective counterpart, so as to enhance the efficiency of protection and storage of goods.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner has already possessed the capability to identify auto parts and accessories.

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Functional Area - Parts Management

Title	Condemn the inventorial stock
Code	108612L3
Range	This unit of competency is applicable to the practitioners of inventory control and management department for the condemnation of inventorial stock according to the established procedure of organisation, so as to enhance its effectiveness in the utilisation of resources.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The condemnation procedure for inventorial stock)</p> <ul style="list-style-type: none"> • Good understand of the characteristics of inventory stock, such as sales record and the time limit for storage. • Good understand of the validity of inventory stock, such as damages. • Master the decay time line of different types of vehicles. • Good understand of the terms offered by different waste recovery traders • Master the established inventorial stock condemnation procedure of the organisation. <p>2. Performance (Handle the condemnation of inventorial stock)</p> <ul style="list-style-type: none"> • Handle the condemnation of inventorial stock according to the procedure established by the organisation: <ul style="list-style-type: none"> ○ Confirm the items and quantities of the inventorial stock to be condemned according to their characteristics, validity, selling opportunities and salvage value ○ Make suggestions to staff in designated ranks on the condemnation of inventorial stock ○ Arrange and monitor the destruction process upon approval of condemnation suggestions ○ Complete relevant record documents • Select and monitor the waste recovery trader according to the procedure established by the organisation, such as: <ul style="list-style-type: none"> ○ Selling price ○ The recovery cycle of waste and the minimum quantity required ○ Carry out contingency measures for special cases such as accumulation of condemned stock and unreasonable condemnation • Review and report on the effectiveness of the procedure for condemnation of inventorial stock, and execute improvement measures approved by seniors.
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 making accurate condemnation suggestions according to the principle on the condemnation of inventorial stock established by the organisation; • Capable of effectively handling the condemnation of inventorial stock and completing relevant document according to established procedure; and • Capable of confirming and monitoring the waste recovery trader according to the established procedure of the organisation.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner has already possessed the capability to identify auto parts and accessories.

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Functional Area - Parts Management

Title	Establish the procedures for the receipt, dispatch and delivery of parts and accessories
Code	108613L4
Range	This unit of competency is applicable to the practitioners of the departments of auto parts and accessories sale, inventory control and management, purchase monitoring and warehouse management for establishment of effective procedures in the receipt, dispatch and delivery of goods, and the review of their effectiveness, to facilitate the arrival of goods to the destination accurately, safely and speedily.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of auto parts and accessories as well as related transportation devices)</p> <ul style="list-style-type: none"> • Good understanding of the characteristics of auto parts and accessories as well as the requirements on protection measures. • Identify the applicability of different transportation devices. • Good understanding of the methods of receipt and dispatch for various kinds of goods. • Good understanding of the procedure for handling of import and export commodities. <p>2. Performance (Establish the procedures for the receipt, dispatch and delivery of parts and accessories)</p> <ul style="list-style-type: none"> • Establish the labelling system for auto parts and accessories. • Establish the documentary system for the receipt and dispatch of parts and accessories, including the customs clearance and entry documents required by legislation. • Establish the verification procedure for the receipt and dispatch of auto parts and accessories at different locations, such as: <ul style="list-style-type: none"> ○ airports, container terminals, etc. ○ warehouses ○ servicing workshops ○ retailing points • Formulate the protection specification, modes and procedure of delivery according to the characteristics of various auto parts and accessories. • Select the suitable transportation routes (including contingency routes) according to the categories and characteristics of auto parts and accessories, and the delivery area. • Establish contingency measures for accidents, damages. • Establish the performance indicator of the receipt, dispatch and delivery of auto parts and accessories. • Review the effectiveness of the receipt, dispatch and delivery of auto parts and accessories with consideration of feedback from front-line staff; revise relevant procedures to optimise the efficiencies of receipt, dispatch and delivery.
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 establishing the documentary system for the receipt, dispatch and delivery as well as the import and export of auto parts and accessories according to relevant requirements of the organisation and related government departments;

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	<ul style="list-style-type: none">• Capable of formulating effective protection measures, transportation route and procedure for the receipt, dispatch and delivery of auto parts and accessories, according to their characteristics and transportation requirements; and• Capable of improving the receipt, dispatch and delivery methods of auto parts and accessories according to relevant performance indicators and feedback from front-line staff.
Remark	The credits value of this unit of competency assumes that the practitioner concerned already has possessed basic knowledge of auto parts and accessories as well as logistics.

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Functional Area - Parts Management

Title	Monitor the delivery process of parts and accessories
Code	108614L4
Range	This unit of competency is applicable to the practitioners of the departments of auto parts and accessories sale, inventory control and management, and purchase monitoring for effective surveillance of parts and accessories logistics to accomplish the delivery process accurately and speedily.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of parts and accessories as well as the logistic monitoring systems)</p> <ul style="list-style-type: none"> • Good understanding of the characteristics of parts and accessories as well as the delivery requirements. • Good understanding of the labelling system of organisation for parts and accessories, and its characteristics. • Be familiar with the characteristics of different transportation devices. • Be familiar with the operating method of various kinds of logistic monitoring systems, such as the use of monitoring devices, e.g. satellite positioning, internet, telephone, log book. • Good understanding of the established monitoring procedure for goods delivery. <p>2. Performance (Monitor the delivery of parts and accessories)</p> <ul style="list-style-type: none"> • Use suitable implementation method according to the instructions of the monitoring system for goods delivery: <ul style="list-style-type: none"> ○ Monitor and record the logistic process ○ Communicate internally, and release messages externally (for clients) ○ Contingency measures for cases such as monitoring system failure, communication hurdle, change of delivery plan or fall short of progress, etc. • Review the efficiency of work and make suggestions to improve the logistic monitoring system according to the performance indicator of the monitoring system for the delivery of goods. • Compile report to reflect procedural deficiency to seniors or respective counterparts according to the effectiveness of logistic operations and make suggestions to improve the delivery process.
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 taking effective measures to monitor the delivery process of parts and accessories according to the established instructions of the monitoring system for goods delivery to accomplish the work process accurately and speedily; • Capable of reporting to seniors or respective staff immediately on the contingency measures taken, such as parts and accessories delivery falls short of progress; and • Capable of making suggestions to improve the methods of logistic monitoring according to the results of parts and accessories monitoring and reflecting procedural deficiency of logistic operations to seniors or respective counterparts.
Remark	The credits value of this unit of competency assumes that the practitioner has already possessed basic knowledge on logistics.

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Functional Area - Parts Management

Title	Manage the documentary system for auto parts and accessories inventory
Code	108615L4
Range	This unit of competency is applicable to the practitioners of inventory control and management department for effectively managing the inventorial documents and software to ensure normal supply of parts and accessories.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Auto parts and accessories inventory, use of computer and word processing)</p> <ul style="list-style-type: none"> • Good understanding of the types and names of auto parts and accessories. • Good understanding of the method to handle inventory items in the organisation. • Good understanding of the general knowledge of inventory management and warehouse operation. • Be familiar with the filing systems used by various departments in the organisation. • Master the use of Enterprise Resources Planning (ERP) software or relevant software employed by the organisation. • Be familiar with general word processing techniques. <p>2. Performance (Manage the documentary system for inventory)</p> <ul style="list-style-type: none"> • Apply ERP or relevant software designated by the organisation to record and monitor related tasks, such as: <ul style="list-style-type: none"> ○ The records of the inventory level of various kinds of parts and accessories and their changes ○ The records of condemned items and respective implementation procedure ○ The records of return of purchase and respective implementation procedure ○ The records of storage and retrieval of parts and accessories ○ The records of receipt, dispatch and delivery of parts and accessories, and relevant monitoring record ○ The purchasing price of various parts and accessories ○ The reports of various transactions or related actions ○ The monitoring and control of various operations, such as inventory and transaction. • Monitor the use of software to ensure normal operation and submit report regularly. • Establish measures to backup information and design temporary trading vouchers or bills in case of emergency. • Devise sample documents regarding the receipt and dispatch, condemnation, inventory level, return of purchase, etc. of various kinds of parts and accessories; and formulate perfect instructions on the document protection, storage and retrieval methods and procedure (applicable to organisations not using software) • Establish the contingency measures to cope with situations such as loss of information or malfunction, etc. due to computer or software failure. • Review the effectiveness of the inventorial document system and the feedback from front-line colleagues, revise respective procedures to optimise operation efficiency.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of effectively managing the inventorial documents and software (including backup) for parts and accessories according to the documentary system designated by the organisation, so as to ensure smooth operation;• Capable of establishing contingency measures to cope with special incidents, such as computer failure or loss of information, to ensure effective inventory management; and• Capable of reviewing the effectiveness of the inventorial document system for parts and accessories and making suggestions for improvement; reviewing feedback from front-line colleagues to revise respective procedures to optimise operation efficiency.
Remark	The credits value of this unit of competency assumes that the practitioner has already possessed general knowledge of auto parts and accessories as well as the knowledge of inventory management.

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Functional Area - Parts Management

Title	Establish the monitoring system for the delivery of parts and accessories
Code	108616L5
Range	This unit of competency is applicable in the vehicle parts and accessories sales department, inventory control department and management department. Practitioners should be able to establish effective methods to monitor the delivery of goods within the territories or across the border so that the delivery process can be completed accurately and speedily.
Level	5
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of auto parts and accessories and the logistics monitoring methods)</p> <ul style="list-style-type: none"> • Master the characteristics of vehicle parts and accessories and the delivery requirements. • Master the labelling system of vehicle parts and accessories employed by the organisation and its characteristics. • Identify the characteristics of different transportation devices. • Identify various logistics monitoring systems and their applicability such as the use of monitoring tools like satellite positioning, internet, telephone, log book. <p>2. Performance (Monitoring the delivery of vehicle parts and accessories)</p> <ul style="list-style-type: none"> • Establish suitable monitoring procedure and standard according to the nature of goods, transportation methods as well as the region and routes of delivery. • Establish the procedure for communication of internal information. • Establish the procedure for the disclosure of information to the outsiders (e.g. customers). • Establish contingency procedure to cope with special incidents such as losing contact. • Establish the performance indicators for delivery of goods such as zero overdue. • Review the effectiveness of the monitoring system of logistics operation and obtain feedbacks from front-line staff to improve the monitoring methods.
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 establishing effective monitoring systems according to the characteristics of auto parts and accessories and the delivery requirements; • Capable of improving the monitoring methods for the delivery of goods according to the effectiveness of the monitoring of logistics operation.
Remark	The credits value of this unit of competency assumes that the practitioner already has possessed the knowledge of logistics.

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Functional Area - Parts Management

Title	Establish the procedure for stock condemnation
Code	108617L5
Range	This unit of competency is applicable to the practitioners in the inventory monitoring and management department for establishment of effective condemnation procedure according to the conditions and salvage value of different parts and accessories.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Conditions and demand of stock)</p> <ul style="list-style-type: none"> • Good understanding of the characteristics of stock, such as sales record and the time limit for storage. • Identify the validity of stock, such as damages. • Master with the decay time line of different types of vehicles. • Good understanding of the management methods for different stock. • Master the resources available and risks affordable by the organisation. <p>2. Performance (Establish the procedure for stock condemnation)</p> <ul style="list-style-type: none"> • Establish the conditions for condemnation according to the characteristics and salvage value of the stock, such as: <ul style="list-style-type: none"> ○ The sales data, life cycles and decay time line of different types of obsolete vehicles and related parts and accessories ○ The sales opportunity of stock ○ Damaged or malfunction stock ○ Balance sales return and storage cost, such as deposition and interests. • Establish the approval procedure for condemnation of stock, such as: <ul style="list-style-type: none"> ○ The rank of the responsible staff ○ Records of items and quantity etc. ○ Cycle of handling the condemned stock • Establish the handling methods for condemned stock, such as destroy, disintegrate or designated criteria of the waste recovery traders. • Review the effectiveness of the procedure for condemnation of stock, such as the monitoring of condemned items and review regularly stock level of the stored or damaged items to adjust respective strategy and report to the inventory level monitoring department. • Establish contingency procedure for cases such as accumulation of condemned items and unreasonable condemnation.
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 establishing the conditions, procedures and destroying methods for condemned stock according to the states and salvage values of different stock items to minimize organisational loss and normalize the utilisation of resources; and • Capable of reviewing the effectiveness of the procedure for condemned stock, adjusting the condemnation strategy and optimizing the handling procedure.
Remark	

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Functional Area - Parts Management

Title	Formulate inventory level policy
Code	108618L5
Range	This unit of competency is applicable to the practitioners in the inventory control and management department for the formulation of effective inventory level policy of stock to optimise the utilisation of organisational resources and facilitate sufficient and speedy supply of parts and accessories.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics, demand and of stock and its control)</p> <ul style="list-style-type: none"> • Good understanding of the characteristics of parts and accessories, such as sales record and storage period of individual stock items. • Master the sales records and life cycles of various types of vehicles. • Good understanding of the management methods for different inventory level. • Good understanding of the ordering strategy for different goods. • Master the resources available and risks affordable by the organisation. <p>2. Performance (Formulate inventory level policy)</p> <ul style="list-style-type: none"> • Formulate effective inventory level policy according to the characteristics, management and ordering strategies of different stock, such as: <ul style="list-style-type: none"> ○ The sales records and life cycles of different types of vehicles ○ Evaluation of sales volume, storage period and life cycles of various related parts and accessories ○ Management factors such as volume, value, functions and transportation of stock ○ Apply just-in-time buffer stock method ○ Strive for high frequency and low quantity goods supply condition ○ Keep a balance between total investment on stock and inventory level • Establish contingency procedure for cases such as shortage of goods and overstocking. • Review the effectiveness of the formulated inventory level policy, such as survey the inventory level regularly, circulation and damage reports, etc., to adjust respective strategy.
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 formulating the inventory level policy of different goods according to the characteristics, circulation, inventory level and value, etc. of stock facilitating the organisation to provide the parts and accessories to sales department and servicing workshops with sufficient and speedy supply of parts and accessories by utilising minimum organisational resources; and • Capable of reviewing and optimising inventory level policy according to the inventory level, circulation and damages reports of stock.
Remark	

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Functional Area - Parts Management

Title	Establish guidelines to protect the stock
Code	108619L5
Range	This unit of competency is applicable to the practitioners in auto parts and accessories warehouses for the establishment of guidelines according to the characteristics of different goods to protect the goods effectively.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics and protection requirements of vehicles, parts and accessories)</p> <ul style="list-style-type: none"> • Good understanding of the characteristics of vehicles, parts and accessories. • Master the storage and protection methods for vehicles, parts and accessories. • Good understanding of the characteristics and limitations of different storage premises or regions. • Master the applicability of different protective materials. • Good understanding of the knowledge of occupational safety, health and environmental protection, dangerous goods management and warehouse management. <p>2. Performance (Protection of stock)</p> <ul style="list-style-type: none"> • Capable of establishing effective protection guidelines according to the characteristics of different stock, such as: <ul style="list-style-type: none"> ○ Identification of the stock categories (general or dangerous goods) ○ Protection and packaging requirements of the stock (e.g. requirements of protective materials) ○ Special security requirements of valuable stock (e.g. anti-theft and fire prevention) ○ Special requirements on the storage environment of stock (e.g. temperature, humidity and shockproof) ○ The storage methods of stock (e.g. stack-up, up-right and suspension) ○ Regular inspection system for the stock • Establish the procedure for reporting damages of stock. • Establish performance indicators for the protection of stock, such as damage data. • Establish contingency procedure for cases such as sudden change of storage environment. • Review the effectiveness of the stock protection, and feed respective departments with information for strategies adjustment (e.g. inventory level and purchase).
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 establishing effective guidelines on the storage of stock according to the characteristics of different goods to protect the auto parts and accessories effectively, and storing in suitable premises; • Capable of establishing the procedure for assessing the effectiveness of the guidelines according to the characteristics of different stock items; and • Capable of optimising the storage methods according to the effectiveness of goods protection method and making suggestions across different departments.
Remark	

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Functional Area - Parts Management

Title	Carry out purchasing procedures for auto parts and accessories (for designated motor agents)
Code	108620L3
Range	This unit of competency is applicable to the practitioners of parts and accessories purchasing department of designated motor agents for the purchasing of suitable goods in appropriate quantity according to the purchasing procedure formulated by the organisation, so as to tie in with its operational strategy of organisation.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of auto parts and accessories, and the market situation)</p> <ul style="list-style-type: none"> • Master the latest information on the price and market demand of different parts and accessories. • Good understand of the standard of goods, and the laws and regulations on the selling of goods. • Master the specifications and required inventory levels for different parts and accessories. • Master the handling of purchasing document of the organisation. • Master the new trend and specifications of relevant environmental-friendly products, and offer choices to customers. • Master the concept and application of green purchase. <p>2. Performance (Purchase auto parts and accessories)</p> <ul style="list-style-type: none"> • Purchase auto parts and accessories from designated supplier according to the purchasing strategy formulated by the organisation, including identify the purchasing quantity and cycle of different parts and accessories. • Complete documents in relation to transaction record, customs clearance. • In accordance with organisational guidelines, the consuming pattern of local market and the trends of different places, execute the purchasing of OEM accessories or related products (e.g. souvenir). • Carry out the established contingency measures for special cases (e.g. fluctuating exchange rate and delay in delivery). • Review the quality of auto parts and accessories and reflect procedural deficiency in purchasing to seniors or respective counterparts in note form.
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 determining the purchasing quantity and cycle of auto parts and accessories according to the purchasing procedure formulated by the organisation, and effectively carry out the purchasing procedure; • Capable of purchasing OEM accessories and related products according to the consuming pattern of local market and the trends of different places; • Capable of carrying out the contingency measures according to the established guidelines of organisation; and • Capable of reflecting the quality of auto parts and accessories to respective counterparts.

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Functional Area - Parts Management

Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of auto parts and accessories and merchandizing.
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Functional Area - Parts Management

Title	Carry out the purchasing procedure for auto parts and accessories (for non-designated vehicle agents)
Code	108621L3
Range	This unit of competency is applicable to the practitioners of parts and accessories purchasing department of non-designated vehicle agents for the purchasing of suitable goods in appropriate quantity from selected supplier according to the purchasing procedure formulated by the organisation, so as to tie in with operational needs.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of auto parts and accessories, and the market situation)</p> <ul style="list-style-type: none"> • Master the latest information on the price, market demand and market share of different parts and accessories. • Good understand of the standard of goods, the laws and regulations on the selling of goods • Master the specifications and required inventory levels for different parts and accessories. • Master the handling of purchasing document of the organisation. • Good understand of the procedure for selecting suppliers of parts and accessories. • Good understand of the methods to assess the applicability of non-OEM parts and accessories. • Master the new trend and specification of relevant environmental-friendly products and offer choices to customers. • Master the concept and application of green purchase. <p>2. Performance (Purchase auto parts and accessories)</p> <ul style="list-style-type: none"> • Determine the purchase of parts and accessories required according to the established methods of the organisation in the assessment of the applicability of non-OEM parts and accessories. • Identify the grading of the suppliers for the required parts and accessories according to the established procedure of organisation in supplier selection. • Purchase from selected suppliers according to organisational strategy, including identify the specification of different parts and accessories; the quantity, price and cycle of purchase; and the requirements of suppliers. • Complete documents in relation to transaction record, customs clearance. • In accordance with organisational guidelines, the consuming pattern of local market and the trends of different places, execute the purchasing of OEM or non-OEM accessories or related products (e.g. souvenir). • Carry out contingency measures for special cases (e.g. non-conformity quality and fluctuating exchange rate). • Reflect procedural deficiency in purchasing to seniors or respective counterparts in note form.
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 determining the grading of suitable parts and accessories suppliers according to the organisation's procedure of selecting suppliers;

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Unit of Competency

Functional Area - Parts Management

	<ul style="list-style-type: none">• Capable of purchasing auto parts and accessories from suitable suppliers effectively according to the purchasing procedure formulated by the organisation;• Capable of carrying out contingency measures according to the established guidelines of organisation; and• Capable of reviewing the purchasing procedure for auto parts and accessories and reflecting deficiency to respective counterparts.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned already possess the knowledge of auto parts and accessories and merchandizing.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Select suppliers of parts and accessories
Code	108622L4
Range	This unit of competency is applicable to the practitioners of the parts and accessories purchasing department of non-designated motor agents for the effective ascertainment of the grading and the supplying ability of various suppliers.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Regulations related to auto parts and accessories, and the actual situation of market supply)</p> <ul style="list-style-type: none"> • Good understanding of the functions and characteristics of auto parts and accessories. • Master information of different suppliers of non-OEM parts and accessories. (including original and non-original) • Good understanding of market feedbacks on parts and accessories. • Good understanding of the suggestions and restrictions established by auto manufacturers on the specifications and restrictions of different parts and accessories. • Good understanding of the vehicle related laws and regulations, such as traffic, environmental protection and road safety. <p>2. Performance (Select suppliers of parts and accessories)</p> <ul style="list-style-type: none"> • Evaluate the grading of the auto parts and accessories suppliers (including original and non-original) according to the following factors: <ul style="list-style-type: none"> ○ The track records of suppliers ○ The quality, specification or standard of goods. ○ The stability of the quality and quantity of goods ○ The minimum order and flexibility of goods supplied ○ Price of goods, methods of return of purchase and payment ○ Suggestions and restrictions established by the manufacturer ○ Recognition by insurer • Identify the grading of various suppliers and their possessive supply ratio according to assessment results. • Keep sourcing for new suppliers in the market that are suitable for the organisation. • Monitor the performance of suppliers and update the list and the grading of suppliers regularly. • Review the selection criteria for auto parts and accessories suppliers and make suggestions for improvement to ensure the quality of parts and accessories.
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 identifying the grading of suppliers and their goods supply ratio according to the quality, price, supplying ability and conditions offered by different suppliers of auto parts and accessories, and • Capable of adjusting the grading of suppliers and updating the list according to their performance.
Remark	The credits value of this unit of competency assumes that the practitioner concerned has already possessed knowledge on auto parts and accessories as well as general commercial knowledge.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Purchase renovated parts and accessories
Code	108623L4
Range	This unit of competency is applicable to the practitioners of auto parts and accessories purchase department for the quality and high commercial-value renovated parts and accessories purchasing in accordance with the market demand to match the operation strategy of organisation.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics, specifications and market situation of auto parts and accessories)</p> <ul style="list-style-type: none"> • Master information on market price and demand of different auto parts and accessories (including new and renovated parts and accessories). • Good understanding of the specifications, standard and relevant regulations on parts and accessories. • Master the required inventory level of different reconditioned parts and accessories. • Good understanding of the procedure for selecting suppliers. • Master the quality of goods, supplying ability, preferential terms and conditions offered by different suppliers of renovated parts and accessories. • Good understanding of the methods to assess the performance of renovated parts and accessories. • Master the handling of purchasing documents of the organisation. • Good understanding of the resources available and risks affordable of the organisation. <p>2. Performance (Purchase reconditioned parts and accessories)</p> <ul style="list-style-type: none"> • Determine the types and quantity of renovated parts and accessories to be purchased according to market demand and matching with the required inventory level and resources of the organisation. • Discharge purchasing duty according to the determinants for purchasing suitable renovated parts and accessories, such as: <ul style="list-style-type: none"> ○ Discounts and allowances ○ Quality and performance of goods as well as the warranty period ○ Specification and standard (not supplied by local market) ○ Recognition by insurers ○ Regulations related to vehicles • Confirm the suppliers according to the formulated selection instructions of the organisation, such as: <ul style="list-style-type: none"> ○ The quality, specification or standard ○ The stability of the quality and quantity ○ Price, methods of return of purchase and payment • Ensure that the marginal profits of transactions can meet organisational operation requirements. • Ensure the renovated parts and accessories to be purchased are of good quality by visual inspection or simple functional tests. • Verify the documents relating to the goods to be purchased to ensure the authenticity of the information provided, such as the engine number. • Complete transaction documents and internal records and documents according to related regulations governing the sale of goods.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

	<ul style="list-style-type: none"> • Carry out contingency measures for special incidents (e.g. discrepancy in quality and quantity). • Review the effectiveness of the purchasing strategy, and capable of making suggestions for adjustment or improvement.
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 purchasing renovated parts and accessories of suitable types, quantity, quality with commercial value according to the needs of the market and the organisation to match the operation strategy of organisation; • Capable of completing relevant records and transaction documents according to the established requirements of the organisation; and • Capable of making suggestions to optimise the procedure of renovated parts and accessories procurement according to its effectiveness.
Remark	<p>The credits value of this unit of competency assumes that the practitioner concerned has already possessed knowledge on purchasing, auto parts and accessories as well as relevant regulations.</p>

Specification of Competency Standards
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Unit of Competency

Functional Area - Parts Management

Title	Establish methods to assess the applicability of non-OEM parts and accessories
Code	108624L4
Range	This unit of competency is applicable to the practitioners of the parts and accessories purchasing department of non-designated vehicle agents for accurate ascertainment of the applicability of non-OEM parts and accessories accurately to enhance the flexibility of sales and purchasing operations.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (OEM and non-OEM parts and accessories, relevant regulations and the market situation)</p> <ul style="list-style-type: none"> • Good understanding of the functions, locations and characteristics of auto parts and accessories. • Master information on the specification (e.g. international standard), price and market demand of different OEM and non-OEM parts and accessories. • Good understanding of the suggestions and restrictions established by the auto manufacturers on the specifications of different parts and accessories. • Good understanding of the recognition of different non-OEM parts and accessories by auto insurers. • Know the vehicle related ordinances and regulations (e.g. traffic, environmental protection and road safety). • Know the trend of environmental-friendly products. <p>2. Performance (Assess the applicability of non-OEM parts and accessories)</p> <ul style="list-style-type: none"> • Assess the feasibility of replacing OEM parts and accessories by non-OEM parts and accessories according to their characteristics: <ul style="list-style-type: none"> ○ Specifications and application characteristics ○ Price and market demand ○ Suggestions and restrictions established by the manufacturer ○ Recognition by insurers ○ Relevant regulations of vehicles • Formulate sustainable measures to monitor the quality of non-OEM parts and accessories. • Formulate internal instructions on the applicability of non-OEM parts and accessories facilitating the sales department for provision of professional advice to customers. • Review the assessment criteria of non-OEM parts and accessories, and make suggestions to cope with changes in the specifications of goods and relevant regulations.
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 formulating instructions on the assessment of applicability of non-OEM parts and accessories in accordance with the characteristics and specifications of OEM parts and accessories as well as relevant regulations, and • Capable of revising the standard for assessing non-OEM parts and accessories in accordance with changes in the quality of goods and relevant regulations.

Specification of Competency Standards
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Functional Area - Parts Management

Remark	The credits value of this unit of competency assumes that the practitioner concerned has already possessed knowledge of auto parts and accessories as well as relevant regulations on vehicles.
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Conduct green procurement
Code	108625L4
Range	This unit of competency is applicable to the merchandisers in various workplaces of the automotive industry. Practitioners should be able to take full consideration of environmental-friendly elements when discharging purchasing duty (including commodities and services) in familiar workplaces to meet the comprehensive environmental protection policy of the organisation and the needs of the market.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (About green materials)</p> <ul style="list-style-type: none"> • Good understanding of the characteristics, labelling system and classification of reusable materials, such as paper products, plastic products, organic chemicals. • Understand the contamination of typical chemicals in automotive industries, such as toxicity, carcinogenicity, volatility, ozone layer depletion. • Good understanding of environmental management standard such as International Standard Organisation (ISO) • Good understanding of the trend of the market supply of relevant green material <p>2. Performance (Select green materials and suppliers)</p> <ul style="list-style-type: none"> • Purchase goods: Capable of taking full consideration of the green characteristics of products when purchasing consumables to be used by the servicing workplaces under the organisation or the commodities sold at retail shops such as paints, organic solvent, cleansers, hydraulic oil, lubricants, engine oil, consumable parts, batteries, tyres, brake linings, filters. • Select suppliers/contractors: capable of taking full consideration of the environmental protection management standard of suppliers to see if they can meet the environmental protection policy of the organisation when selecting products or service suppliers, including suppliers of consumables, commodities, waste chemicals recycling contractors, waste treatment contractors. • Differentiate service contractors with recognised qualifications such as waste chemicals recycling companies.
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 taking into full consideration of the environmental protection elements in the products, including the intrinsic environmental-friendly characteristics of the products and the environmental protection management standard of the suppliers when discharging environmental-friendly purchase in familiar workplaces; • Capable of selecting suppliers or contractors that can meet the environmental protection management standard of the comprehensive environmental protection policy adopted by the organization; and • Capable of selecting specific service contractors with recognised qualifications.
Remark	

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Formulate purchasing strategy of parts and accessories
Code	108626L5
Range	This unit of competency is applicable to the practitioners in the auto parts and accessories purchasing department for the formulation of effective purchasing strategy and revision of its effectiveness to optimise the utilisation of resources and enhance cost effectiveness for the organisation.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of auto parts and accessories as well as the actual market situation)</p> <ul style="list-style-type: none"> • Master the latest information such as the prices of different auto parts and accessories, market demands and market shares. • Good understanding of the standard of goods and respective regulations governing sale • Master the states of sales, return and exchange of different goods. • Good understanding of the specifications and characteristics of different parts and accessories, such as applicable range, utilisation rate and storage period. • Master the specifications of different parts and accessories as well as inventory level requirements. • Good understanding of the quality, availability and stability of goods supply of different parts and accessories suppliers as well as the discounts and terms of conditions offered by them (applicable to the parts and accessories sales agents not affiliated with vehicle agents). • Familiar the resources available and risks affordable by the organisation. <p>2. Performance (Purchasing strategy of auto parts and accessories)</p> <ul style="list-style-type: none"> • According to the characteristics of different parts and accessories, market situation, sales records and the employable resources of the organisation, formulate the purchasing strategy of auto parts and accessories applicable to the suppliers of non-designated vehicle agents such as specifications, categories, prices, quantity and the cycles of goods supply, the requirements on the suppliers, including the instructions on the assessment of the applicability of non-original parts and accessories. • According to the sales records of different types of vehicles supplied exclusively by the organisation and the suggestions of the manufacturers, evaluate the demand for different parts and accessories and the employable resources of the organisation, to formulate the purchasing strategy applicable to the supplier of designated vehicle agents, such as prices, quantity and cycles of goods supply. • Establish contingency measures to cope with special incidents such as late supply and variation in quality. • Introduce innovated auto accessories according to the consuming pattern of local market and world-wide trend. • Establish the performance indicators for the purchasing strategy, such as the storage period of goods and costs. • Review the effectiveness of purchase and revise the strategy.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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Functional Area - Parts Management

	<ul style="list-style-type: none">• Capable of formulating effective purchasing strategy according to the characteristics of auto parts and accessories, market situation, the conditions of the suppliers and the resources of the organisation; and• Capable of reviewing and adjusting the strategy according to the performance indicators of the purchasing strategy.
Remark	

Specification of Competency Standards
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Unit of Competency

Functional Area - Parts Management

Title	Store and retrieve the parts and accessories
Code	108627L2
Range	This unit of competency is applicable in the sales department of vehicle parts and accessories, inventory control and management as well as warehouse management departments. Practitioners should be able to effectively carry out the storage and retrieval procedure for non-dangerous goods, enabling the goods to be stored and retrieved accurately, safely and speedily.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The characteristics of vehicle parts and accessories and the related storage and retrieval procedure)</p> <ul style="list-style-type: none"> • Understand the characteristics of vehicle parts and accessories; and the requirements of storage, transportation and protection. • Understand the operating method of different transportation devices. • Understand the storage and retrieval method of various kinds of goods and the relevant monitoring document. • Understand the labelling system of vehicle parts and accessories employed by the organisation and its characteristics. • Understand the organisation's established storage and retrieval procedure for vehicle parts and accessories. <p>2. Performance (Store and retrieve vehicle parts and accessories)</p> <ul style="list-style-type: none"> • According to the organisation's established storage and retrieval procedure for vehicle parts and accessories, perform the following duties: <ul style="list-style-type: none"> ○ The procedure for storing, retrieving and verifying various kinds of goods in different places (e.g. warehouses, servicing workshops and retailing places) ○ The file record of storage and retrieval of goods ○ The protection and packaging specifications for different kinds of goods ○ The safety and transportation requirements for different kinds of goods • Carry out the organisation's established contingency procedure to cope with non-routine problems such as loss or damage of goods. • Reflect procedural deficiency to supervisor or respective counterpart in note form.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of storing and retrieving the goods accurately, safely and speedily according to the organisation's established procedure for storage and retrieval of vehicle parts and accessories (including completing the relevant monitoring document); • Capable of carrying out contingency procedure according to the organisation's established guidelines, and • Capable of reflecting procedural deficiency to supervisor or respective counterpart in note form with regard to the efficiency of the relevant procedure.
Remark	The credits value of this unit of competency is set on the presumption that the assessee already has possessed basic knowledge of occupational safety and health, and the capability to identify vehicle parts and accessories.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Title	Manage warehouse facilities
Code	108628L3
Range	This unit of competency is applicable to the practitioners in the vehicle, parts and accessories warehouses for effective management of their facilities, so as keeping them in good condition according to the established warehouse management policy of organisation.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Various kinds of warehouse facilities)</p> <ul style="list-style-type: none"> • Good understand of the various kinds of warehouse facilities in their structures, methods of use and protection, and potential dangers. • Master the basic knowledge of relevant laws and regulations, such as occupational safety and health, environmental protection, building structure and facilities. <p>2. Performance (Manage warehouse facilities)</p> <ul style="list-style-type: none"> • Effectively monitor and manage the operation of various kinds of facilities according to the established warehouse management policy of the organisation, including: <ul style="list-style-type: none"> ○ The load capacity of the facilities ○ The control of temperature, humidity, ventilation and illumination, etc. ○ Security systems ○ Fire prevention systems ○ Electric supply systems ○ Water supply and sewage systems ○ The storage of dangerous goods/chemicals ○ Building structure • Conduct regular inspection to the aforesaid facilities and perform maintenance procedures. • Record and assess the maintenance condition of various facilities and submit reports periodically. • Carry out contingency measures for special cases (e.g. power failure and water leakage.) • According to the condition of various facilities, suggest maintenance plan to seniors in note form.
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 effectively managing and protecting warehouse facilities according to the established warehouse management policy of the organisation; • Capable of finishing the records of maintenance and condition assessment of warehouse facilities accurately and completely, and proposing the maintenance plan for facilities concerned; and • Capable of carrying out appropriate contingency measures according to the designated instructions.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of building services maintenance.

Specification of Competency Standards
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Unit of Competency

Functional Area - Parts Management

Title	Fulfil the requirements on environmental protection (parts management)
Code	108629L3
Range	This unit of competency is applicable to workshops, warehouses and retail shops of new and used parts in the automotive industry. Practitioners should be able to understand environmental protection concept and comply with relevant requirements in a familiar workplace.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Environmental protection concept)</p> <ul style="list-style-type: none"> • Good understand of the statutory requirements of environmental protection ordinances applicable to the department which one belongs to. • Good understand of organisational instructions on the requirements of environmental protection. <p>2. Performance (Comply with requirements on environmental protection)</p> <ul style="list-style-type: none"> • In accordance with the organisational guideline, carefully carry out the procedures that bear a risk of polluting the environment in a familiar working environment such as: <ul style="list-style-type: none"> ○ Prevent leakage of engine oil, fuel, gearbox oil, organic dissolvent, paint, engine coolant and various kinds of hydraulic oil into the land and prevent discharge of these pollutants into sewers, rivers, streams or sea. Relevant works should be carried out on the floor coated with leak-proofing material or covered with leak-proofing canvas. All procedures should be handled according to the Code of Practice for Chemical Waste Producers ○ Prevent disposing empty utensils containing organic substances (e.g. abandoned oil container, abandoned oil filter and washing cloth, etc.) together with general waste ○ Collect all refrigerants by approved refrigerant recycling equipment before opening up of the refrigerant lines ○ Works that produces noise, such as metal cutting or the use of pneumatic tools, should be carried out in indoor workshops within specified timeframe to avoid noise nuisances ○ Capable of sorting different waste materials, such as tyres, batteries, various kinds of metal and plastics, etc.; and able to refer to relevant international standard and instructions ○ Minimize the waste production in parts packaging by reduction in utilisation of excessive packaging materials ○ Works involving dangerous chemicals and pollutants should be carried out according to procedures ○ Dispose waste of non-vehicle parts in accordance with established procedures • Be familiar with the organisation's contingency measures on pollutant leakage; capable of handling the situation safely and efficiently so as to minimize danger and pollution. • Confirm the compliance with the statutory requirements on handling chemical wastes and utilisation of refrigerants.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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Functional Area - Parts Management

	<ul style="list-style-type: none">• Capable of fully understanding environmental protection ordinances and organisational requirements on environmental protection; and carrying out the work carefully to protect environment; and• Capable of carrying out the works involving dangerous chemicals, pollutants, recyclable parts and wastes according to established procedures in a familiar workplace; familiarizing with the emergency and contingency measures and implementing them safely and efficiently so as to minimize danger and pollution.
Remark	

Specification of Competency Standards
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Unit of Competency

Functional Area - Parts Management

Title	Establish the procedure for the storage and retrieval of parts and accessories
Code	108630L4
Range	This unit of competency is applicable to the practitioners of the departments for auto parts and accessories sale, inventory control and management, and warehouse management for establishment of effective procedures in the storage and retrieval of auto parts and accessories, and effectiveness review to facilitate accurate, safe and speedy storage and retrieval of auto parts and accessories.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of auto parts and accessories as well as the related hauling devices)</p> <ul style="list-style-type: none"> • Good understanding of the characteristics of auto parts and accessories as well as storage, haulage and protection requirements. • Identify the applicability of different hauling devices. • Good understanding of the storage and retrieval methods for different kinds of goods and the related monitoring documents. • Good understanding of the labelling system of organisation for auto parts and accessories, and its characteristics. <p>2. Performance (Procedure for the storage and retrieval of auto parts and accessories)</p> <ul style="list-style-type: none"> • Establish the documentary system for the storage and retrieval of auto parts and accessories. • Formulate the protection and packaging specifications for different goods according to the characteristics of various kinds of auto parts and accessories. • Determine disposal methods according to the characteristics of different protection and packaging materials. • Establish the procedure for the storage, retrieval and verification of different goods, including at different places, such as: <ul style="list-style-type: none"> ○ warehouses ○ servicing workshops ○ retailing points • Establish contingency measures for cases such as wrong retrieval or verification of goods. • Establish the performance indicator for the storage and retrieval of goods. • Review the effectiveness of the storage and retrieval of goods and the feedback from front-line staff for respective procedure revision to optimise the efficiency of the storage and retrieval process.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of establishing effective procedure for the storage and retrieval of goods including protection of goods and related documents according to the characteristics of auto parts and accessories as well as haulage and protection requirements; and • Capable of improving the storage and retrieval methods according to the performance indicator for the storage and retrieval of auto parts and accessories as well as the feedback from front-line staff.

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Functional Area - Parts Management

Remark	The credits value of this unit of competency assumes that the assessee concerned has already possessed basic knowledge on auto parts and accessories as well as logistics.
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Specification of Competency Standards
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Functional Area - Parts Management

Title	Design the storage zone for parts and accessories
Code	108631L5
Range	This unit of competency is applicable to the practitioners in the warehouse management department. They should be capable of designing highly effective and flexible storage zones in accordance with the requirements of the storage zone and the characteristics of stock.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of auto parts and accessories, and the storage methods)</p> <ul style="list-style-type: none"> • Master the characteristics of auto parts and accessories and the requirements of storage and delivery, such as temperature and humidity control. • Good understanding of the characteristics and functions of different kinds of storage devices, such as open type, closed type and loading. • Master the requirements of the overall layout of the warehouse (e.g. the storage and retrieval locations). • Good understanding of the characteristics of the tools for storage and retrieval of goods. • Master the requirements on circulation of goods and inventory level. <p>2. Performance (Design the storage zone for parts and accessories)</p> <ul style="list-style-type: none"> • Devise the storage zones for the parts and accessories (including dangerous goods) according to the warehouse management strategy, overall layout of warehouse, characteristics of goods as well as the requirements on circulation and inventory level, such as: <ul style="list-style-type: none"> ○ The types (open or closed) and dimensions of the storage bins or racks for parts and accessories ○ Quantity of different types of storage bins and racks, and the arrangement of locations ○ Gangways for the effective goods storage, retrieval and delivery processes, such as: <ul style="list-style-type: none"> ▪ quick circulation items should be placed close to the storage and retrieval points ▪ the size and circulation frequency of goods should be considered, apart from sorting by categories ▪ effective space utilisation ▪ convenient for stock taking ▪ flexibility for change of design • Draw up contingency measures to cope with temporary changes in the requirements on the storage of parts and accessories. • Establish performance indicators for the storage and logistics of goods, such as the time taken for goods storage and retrieval, storage capacity. • Review the effectiveness of the storage and logistics operation and improve the design.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the practitioner shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of designing highly effective and flexible storage zones in accordance with the warehouse management strategy and the characteristics of the inventory goods; and • Capable of improving the design of the storage zone in accordance with the performance indicators of the storage and logistics operation.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Parts Management

Remark	
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Specification of Competency Standards
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Functional Area - Parts Management

Title	Formulate management strategy for auto parts and accessories warehouse
Code	108632L6
Range	This unit of competency is applicable to the practitioners of warehouse management department for the formulation of warehouse management strategy according to the characteristics of different auto parts and accessories, and the nature of the warehouses, etc., to optimise the operational efficiency of the organisation.
Level	6
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of auto parts and accessories as well as the receipt, dispatch and storage methods of goods)</p> <ul style="list-style-type: none"> • Good understanding of the characteristics of auto parts and accessories as well as the requirements on the methods of storage, receipt and dispatch, such as controlling of temperature and humidity. • Good understanding of respective regulations governing the operation of warehouses, such as the handling of dangerous goods, occupational safety, health and environmental protection. • Good understanding of the characteristics of warehouses, such as independent warehouses, warehouses attached to the servicing workshops or retailing points, the areas, floor loading and external infrastructure. • Master the requirements on inventory circulation, inventory level and categories. <p>2. Performance (Formulate warehouse management strategy)</p> <ul style="list-style-type: none"> • Formulate warehouse management strategy according to the characteristics of the warehouse, inventory requirements and related regulations, such as: <ul style="list-style-type: none"> ○ The locations for the receipt and dispatch of goods, storage area (including dangerous goods zone) and document management centre ○ The retrieval methods of different inventory items, such as first-in-first-out, last-in-first-out or lowest quantity ○ The labelling system identifying the location of inventory items ○ The standards of goods storage, retrieval and transportation ○ The standard of storage environment and monitoring instructions ○ Management of the fire prevention and security system of the warehouse, and respective implementation instructions ○ Insurance arrangement for the warehouse and inventory items, and respective implementation instructions ○ Requirements on staff performance • Draw up instructions for stock taking. • Establish different contingency plans to cope with different kinds of special incidents such as theft or fire. • Establish the performance indicators for warehouse management, such as the protection, retrieval and storage of inventory items. • Review the effectiveness of warehouse management, and make suggestions for improvement.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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Functional Area - Parts Management

	<ul style="list-style-type: none">• Capable of formulating a complete warehouse management strategy according to the characteristics of the warehouse, inventory requirements and related regulations; and• Capable of reviewing and improving the management strategy with reference to the performance indicators of warehouse management.
Remark	The credits value of this unit of competency assumes that the practitioner concerned already has possessed the knowledge of auto parts and accessories as well as logistics.

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Functional Area - Vehicle Servicing

Title	Know about the structure and basic operation of vehicles and components
Code	108633L1
Range	This unit of competency is applicable in workplaces relevant to vehicle parts management and servicing. Practitioners should be able to know about the structure and basic operation of vehicles and components.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The structure and functions of vehicles and components)</p> <ul style="list-style-type: none"> • Know about the formation of vehicles and the location of components. • Know about the functions of vehicles and components. <p>2. Performance (Know the basic operation of vehicles and components)</p> <ul style="list-style-type: none"> • Know about the basic operation of various vehicle systems and components such as: <ul style="list-style-type: none"> ○ Engine and mechanical components ○ Various types of fuel supply systems ○ Various types of engine management systems ○ Various types of vehicle braking systems ○ Vehicle steering systems ○ Vehicle suspension systems ○ Vehicle transmission systems ○ General electrical systems ○ Various types of advanced electronic control systems ○ Vehicle body and chassis components ○ Other related systems
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of knowing about the formation, location, functions and basic operation of various vehicle systems and components.
Remark	

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Functional Area - Vehicle Servicing

Title	Employ general vehicle servicing tools and equipment
Code	108634L1
Range	This unit of competency is applicable in general vehicle servicing workshop. Practitioners should be able to employ general vehicle servicing tools and equipment correctly.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The functions of general vehicle servicing tools and equipment)</p> <ul style="list-style-type: none"> • Understand the types of general vehicle servicing tools and equipment, as well as their purposes and functions. <p>2. Performance (Employ general vehicle servicing tools and equipment)</p> <ul style="list-style-type: none"> • Select and employ general tools and equipment correctly according to their purposes, such as: <ul style="list-style-type: none"> ○ Hand tools ○ Pneumatic tools ○ Electrically-operated tools ○ Measuring tools ○ Vehicle lifting equipment ○ Other related tools and equipment • Employ general tools and equipment in accordance with safety rules and relevant legislations • Employ relevant tools and equipment according to environmental protection laws and regulations as well as the organization's environmental protection operation 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 understanding the purposes and functions of general vehicle servicing tools and equipment; and • Capable of selecting general vehicle servicing tools and equipment correctly and using them according to safety rules.
Remark	<p>The major relevant legislation/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Boilers and Pressure Vessels Ordinance • Factories and Industrial Undertakings (Lifting Appliances and Lifting gear) Regulations • Factories and Industrial Undertakings (Protection of Eyes) Regulations

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Dismantle, replace and re-assemble general vehicle system components
Code	108635L1
Range	This unit of competency is applicable in vehicle servicing worksites. Practitioners should be able to dismantle, replace and re-assemble general vehicle system components correctly according to the vehicle manufacturer's manual and guidelines under instruction and supervision and providing written report
Level	1
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The general vehicle system components)</p> <ul style="list-style-type: none"> • Understand the names and location of general vehicle system components. • Understand the formation and functions of general vehicles and components. • Understand the procedure of dismantling, replacing and re-assembling general vehicle system components. • Understand the relevant requirements on road and vehicle safety and health regulations. <p>2. Performance (Dismantle, replace and re-assemble general vehicle system components)</p> <ul style="list-style-type: none"> • Dismantle, replace and re-assemble general vehicle system components correctly according to the vehicle manufacturer's manual and guidelines under supervision, such as: <ul style="list-style-type: none"> ○ Engine and mechanical components ○ Various types of fuel supply systems ○ Various types of engine management systems ○ Various types of vehicle braking systems ○ Vehicle steering systems ○ Vehicle suspension systems ○ Vehicle transmission systems ○ General electrical systems ○ Various types of advanced electronic control systems ○ Other related systems • Observe the environmental protection laws and regulations and the environmental protection operation guidelines formulated by the organization when carrying out related procedure. • On completion of work, provide written report.
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 describing the names, formation, location and functions of various vehicle systems and components correctly; and • Capable of dismantling, replacing and re-assembling general vehicle system components correctly according to the vehicle manufacturer's manual and guidelines under supervision and providing written report after the work
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the capability to use general vehicle servicing tools.</p> <p>The major relevant legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Waste Disposal (Chemical Waste) (General) Regulation

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Factories and Industrial Undertakings (Lifting Appliances and Lifting gear) Regulations
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Dismantle and replace various kinds of vehicle electric systems and accessories
Code	108636L1
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to dismantle, replace and re-assemble the components of vehicle electric systems under instruction in routine working environment and conduct tests on basic components upon completion of work and providing written report.
Level	1
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The components of general vehicle electric systems)</p> <ul style="list-style-type: none"> • Understand the names, formation and functions of general vehicle systems and their components. • Understand the names, location and functions of the components of general vehicle electric systems. • Understand basic electrical and electronic theory, and capable of checking the circuit systems/components by general electrical tools or equipment. • Understand the procedure of dismantling, replacing and re-assembling components of general vehicle electric systems. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Dismantle, replace and re-assemble the components of general vehicle electric systems)</p> <ul style="list-style-type: none"> • In accordance with instructions, capable of dismantling, replace and re-assemble the components of general vehicle electric systems and their accessories under supervision in a familiar working environment, such as: <ul style="list-style-type: none"> ○ Battery, starter and charging systems ○ Lighting, signals and meter instrument systems ○ Wiper, electric window and central lock systems ○ Anti-theft, audio and visual system ○ Air-conditioning and ventilation systems ○ Electronic control systems ○ Other related systems • Conduct performance and safety inspection after the work and provide written report.
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 describing the names, formation, location and functions of various kinds of vehicle electric systems and components correctly; and • Capable of dismantling, replacing and re-assembling the components of general vehicle electric systems correctly in routine working environment and under supervision and providing written report after the work
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the skills of using general vehicle servicing tools and the maintenance of electric appliances.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Replace metallic panels and accessories of vehicle body
Code	108637L1
Range	This unit of competency is applicable in vehicle body servicing workshops. Practitioners should be able to safely replace metallic panels and accessories of various kinds of vehicle bodies in accordance with working instructions or the instructions stated in the vehicle manufacturer's servicing manual and providing written report.
Level	1
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The structure of metallic panels and accessories of vehicle body)</p> <ul style="list-style-type: none"> • Understand the material and structure of the metallic panels of vehicle body. • Understand the material and structure of the accessories of vehicle body. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Replace metallic panels and accessories of vehicle body)</p> <ul style="list-style-type: none"> • In accordance with working instruction or the guidelines set out in the vehicle manufacturer's installation and servicing manuals, as well as the supplier's specifications, safely replace the metallic panels of vehicle body (such as: bonnet, lid, fender, door panel and bumper, not include rear fender) process include: <ul style="list-style-type: none"> ○ Visual inspection ○ Functional test ○ Troubleshoot • Conduct performance and safety inspection after the work and provide written report.
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 replacing the metallic panels and accessories of vehicle body in accordance with working instructions or the instructions stated in the vehicle manufacturer's servicing manual. • Capable of conducting visual inspection, dimensional check upon completion of work and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge in vehicle body servicing.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Handle chemicals
Code	108638L1
Range	This unit of competency is applicable in vehicle painting workshops. Practitioners should be able to handle typical chemicals.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Classification and characteristics of chemicals)</p> <ul style="list-style-type: none"> • Understand the labelling of various kinds of chemicals and the different degrees of danger. • Understand the characteristics of various kinds of typical chemicals in the vehicle painting workshops and the safety protection methods. • Understand the content of the Safety Data Sheet (SDS) with respect to chemicals. • Understand the relevant legal requirements on environment protection and dangerous goods. <p>2. Performance (Handle various kinds of commonly used chemicals)</p> <ul style="list-style-type: none"> • Capable of identifying typical dangerous goods. • Capable of ascertaining the use of chemicals in a safe environment. • Capable of wearing suitable personal protection equipment when using chemicals. • Safely take out and put back the chemicals before/after work. • Store the chemicals according to stipulated rules. • Handle chemical waste according to stipulated rules.
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of identifying dangerous goods, using, store and dispose typical chemicals in a safe manner in accordance with stipulated rules.
Remark	<p>The major relevant legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Waste Disposal (Chemical Waste) (General) Regulation • Dangerous Goods Ordinance

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Store paints
Code	108639L1
Range	This unit of competency is applicable in vehicle painting workshops. Practitioners should be able to store paints in a safe manner in accordance with the requirements of the legislation in a familiar working environment and under instruction.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Types of paints and their characteristics)</p> <ul style="list-style-type: none"> • Understand the labelling of various kinds of paints and their dangerous nature. • Understand the characteristics of paints. • Understand the classification of dangerous goods and the relevant laws and regulations. • Understand the content of the Safety Data Sheet (SDS) with respect to paints. <p>2. Performance (Store various kinds of typical paints)</p> <ul style="list-style-type: none"> • Execute the established working guidelines on the storage and transportation of paints. • Use the dangerous goods store properly to store and place the paints in accordance with the Factories and Industrial Undertakings (Dangerous Substances) Regulations and Dangerous Goods Ordinance, including: <ul style="list-style-type: none"> ○ Classification of dangerous goods ○ Quantity restriction ○ Clear access • Be aware the proper places for the storage of paints should be: <ul style="list-style-type: none"> ○ Cool places with good ventilation ○ Far from places that will produce sparks and of high temperature ○ With obstruction-free passageway
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 recognizing suitable places for the storage of paints in accordance with the Factories and Industrial Undertakings (Dangerous Substances) Regulations/the organisation's safety or working guidelines; and • Capable of transporting and placing the paints in a safe manner in a familiar working environment.
Remark	<p>The major relevant legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Dangerous Goods Ordinance

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Wax vehicle body
Code	108640L1
Range	This unit of competency is applicable in vehicle painting workshops. Practitioners should be able to perform the job duty of vehicle body waxing.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Waxing materials and waxing equipment)</p> <ul style="list-style-type: none"> • Understand the user information relating to general car wax and cleanser. • Understand the functions and operating guides of general waxing equipment. • Understand the content of general cleanser and that of Safety Data Sheet (SDS). <p>2. Performance (Carry out the procedure of vehicle body waxing)</p> <ul style="list-style-type: none"> • In accordance with working instruction or the guidelines set out in the vehicle manufacturer's manuals, as well as the supplier's specifications, safely waxing vehicle body. • Use suitable tools and equipment. • Complete the following working procedure according to instructions, including: <ul style="list-style-type: none"> ○ Clean and wipe the vehicle body ○ Remove the markings for the waxing area ○ Use suitable cleanser and car wax ○ Use manual and power waxing machine to carry out waxing procedure. • Process final checking.
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 carrying out the waxing procedure effectively in accordance with instructions; and • Capable of ensuring that no flaws are left on the surface upon completion of the waxing procedure.
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 handling related chemicals.</p> <p>The major relevant legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Waste Disposal (Chemical Waste) (General) Regulation • Dangerous Goods Ordinance

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Simple vehicle maintenance
Code	108641L1
Range	This unit of competency is applicable in vehicle servicing worksites and places that provide simple vehicle maintenance service. Practitioners should be able to check, rectifying and topping up consumable materials as well as replacing simple parts for various vehicle systems correctly according to the vehicle manufacturer's manual, guidelines and providing written report.
Level	1
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Operation of simple vehicle maintenance)</p> <ul style="list-style-type: none"> • Understand the importance of vehicle maintenance. • Understand the operation of simple vehicle maintenance and carry out simple vehicle maintenance procedure, as well as check, rectify and top up consumable materials and replace simple parts. • Understand the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Carry out simple vehicle maintenance work)</p> <ul style="list-style-type: none"> • Check, rectify and top up consumable materials for various vehicle systems correctly according to the vehicle manufacturer's manual and guidelines, such as: <ul style="list-style-type: none"> ○ Engine lubricants ○ Transmission fluid for the manual and automatic transmissions ○ Differential lubricants ○ Coolant for the cooling system ○ Brake fluid for the braking and clutch systems ○ Fluid for hydraulic assisted steering system ○ Grease for the steering ball-joints, suspension joints, king pin and spring eye and shackle pins, etc. ○ Battery electrolyte ○ Cleaning fluid for the windshield. • Include: <ul style="list-style-type: none"> ○ Identify general problems by Visual inspection. ○ Assessment of components by functional test. ○ Troubleshoot of common faults. ○ After work completion, provide written report.
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 understanding the importance of maintenance to vehicles; • Capable of checking, rectifying and topping up consumable materials for various vehicle systems correctly; • Capable of reporting accurately on the systems with abnormal consumption and excessive loss of oil; • Capable of reporting accurately the oil/liquid leakage and oil stain condition; • Capable of replacing simple parts correctly; and • Capable of providing written report on work completion.

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 already has known the structure of vehicles and components and their basic application.</p> <p>The relevant legislation involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Waste Disposal Ordinance - Waste Disposal (Chemical waste) (General) Regulation
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Know about the structure and basic operation of motorcycle and components
Code	108642L1
Range	This unit of competency is applicable in workplaces relevant to motor cycle servicing. Practitioners should be able to know about the structure and basic operation of motorcycle and components.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and functions of motorcycle and components)</p> <ul style="list-style-type: none"> • Know about the formation of motorcycle and the location of components. • Know about the functions of motorcycle and components. <p>2. Performance (Know the relevant legal requirements and the basic operation of motorcycle and components)</p> <ul style="list-style-type: none"> • Know about the basic operation of various motorcycle systems and components such as: <ul style="list-style-type: none"> ○ Engine and mechanical components ○ Various types of fuel supply systems ○ Various types of engine management systems ○ Various types of braking systems ○ Steering systems ○ Suspension systems ○ Transmission systems ○ General electrical systems ○ Advanced electronic control systems ○ Body and chassis components ○ Other related systems
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of identifying clearly the formation, location, functions and basic operation of various Motorcycle systems and components.
Remark	

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Use general welding equipment
Code	108643L2
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) 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	<p>Performance Requirements</p> <p>1. Knowledge (Equipment and safety rules of Oxyacetylene Welding, MIG and SPOT)</p> <ul style="list-style-type: none"> • Know the hazards caused by the process of Oxyacetylene Welding/ cutting, MIG and SPOT, such as: <ul style="list-style-type: none"> ○ 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 and SPOT. • Know the welding parameters affecting weld seams, such as: <ul style="list-style-type: none"> ○ Gas flow ○ Welding current ○ Welding speed ○ Welding voltage ○ The angle of welding gun. • Understanding of the relevant requirements on safety and health regulations. <p>2. Performance (Use welding equipment to conduct welding)</p> <ul style="list-style-type: none"> • 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 and SPOT, as well as relevant working, safety and health guidelines.
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 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.

Specification of Competency Standards
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Unit of Competency

Functional Area - Vehicle Servicing

Remark	The relevant ordinances/rules involved in this unit of competency are as follows: <ul style="list-style-type: none">• 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
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Perform Vehicle body welding
Code	108644L2
Range	This unit of competency is applicable in vehicle body repair workshops and body assembly workshops. Practitioners should be able to employ welding techniques (including Oxyacetylene Welding/ cutting and MIG) to perform general vehicle body welding process and providing written report after the work
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicle body welding process)</p> <ul style="list-style-type: none"> • Understand the standard requirement of the work-piece set by the vehicle manufacturer. • Understand welding process <ul style="list-style-type: none"> ○ Oxyacetylene Welding ○ Arc Welding ○ MIG. • Know about flaws commonly found in welding seams, such as: <ul style="list-style-type: none"> ○ Burning through ○ Slag inclusion ○ Air hole. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Vehicle body welding)</p> <ul style="list-style-type: none"> • Select suitable welding equipment according to the requirement of work-piece; establish welding procedure and safety measures. • Prepare work-piece, such as align mating parts and protect other portions of the vehicle being affected by welding. • Carry out welding process and provide written report after the work.
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 knowing about the hazards caused by the welding process and relevant rules of safety; • Capable of selecting suitable welding equipment to carry out welding process; and • Capable of checking welding seams and rectify the flaws 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 skills of using general welding equipment and the basic knowledge of vehicle body structure.</p> <p>The relevant ordinances/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Factories and Industrial Undertakings (Gas Welding and Flame Cutting) Regulations • 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

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Use special tools and equipment for vehicle servicing
Code	108645L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to use special tools and equipment for vehicle servicing correctly to examine and repair various vehicle systems and components according to the instructions in the vehicle manufacturer's servicing manual or the user guide provided by the producer of special tools and equipment for vehicle servicing.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Special tools and equipment for vehicle servicing)</p> <ul style="list-style-type: none"> • Understand the structure, use and basic operating principles of the special tools and equipment for vehicle servicing. • Know about the instructions in the vehicle manufacturer's servicing manual as well as the special tools and equipment for vehicle servicing producer's user guide. <p>2. Performance (Use special tools and equipment for vehicle servicing)</p> <ul style="list-style-type: none"> • Use special tools and equipment for vehicle servicing to examine and repair various vehicle systems and components according to the instructions in the vehicle manufacturer's servicing manual or the special tools and equipment for vehicle servicing producer's user guide, such as: <ul style="list-style-type: none"> ○ Precision measuring equipment e.g. micrometre, dial snap gauge and cylinder bore gauge. ○ Various kinds of engine management system analysers and hand-held testers ○ Exhaust gas analysers ○ Opacimeters ○ Chassis power testers ○ Drum brake testers ○ Various kinds of wheel position indicators ○ Various kinds of vehicle system hydraulic testing instruments ○ Various kinds of universal meter instruments specially used for vehicles ○ Hand held testers for various types of advanced electronic control vehicle systems ○ Special checking and repairing instruments and equipment provided by vehicle manufacturers ○ Checking and repairing instruments and equipment for other related systems
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 selecting special tools and equipment for vehicle servicing correctly according to the instructions in the vehicle manufacturer's servicing manual or the user guide provided by the producer of special tools and equipment for vehicle servicing; and • Capable of examining and repair various vehicle systems and components according to the instructions on how to use the special tools and equipment for vehicle servicing correctly.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle mechanical servicing.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Check, repair and replace tyres
Code	108646L2
Range	This unit of competency is applicable in vehicle servicing workshops or workplaces that provide tyre services. Practitioners should be able of check, mend, repair and replace vehicle tyres or rims safely according to the instructions in the vehicle/tyre/rim manufacturer's manual. They should also be capable of conducting basic tests on components upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of the tyres and rims of vehicles)</p> <ul style="list-style-type: none"> • Understand the structure, codes and basic operating principles of the tyres and rims of vehicles. • Understand the general tools used in checking and servicing for the tyres and rims of vehicles with the instructions given by the vehicle or tyre or rim manufacturer. • Understand the general checking and servicing procedure for the tyres and rims of vehicles with the instructions given by the vehicle or tyre or rim manufacturer. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check, repair, replace and handle the tyres and rims of vehicles)</p> <ul style="list-style-type: none"> • According to the instructions in the vehicle or tyre manufacturer's manual, the requirements of relevant road traffic ordinances, safety and health as well as environmental protection, safely check, mend, repair and replace the tyres or rims of vehicles, including: <ul style="list-style-type: none"> ○ Inflate the tyres pressure correctly according to the information and instructions provided by vehicle manufacturers ○ Accurately measure the wear of tyres to make correct assessment of tyre condition ○ Accurately detect and assess tyre leakage condition for mending work to be done ○ Accurately check and test damages of rims and measure the out-of-roundness to make correct assessment of rim condition ○ Use tyre changer to remove, replace and install tyres and rims correctly ○ Use wheel balancer to rectify wheel balance • Install the tyres correctly according to tyre manufacturer's guide and the requirements of the Road Traffic Ordinances of Hong Kong. • Collect, recover, re-tread, re-grove, handle and dispose used tyres according to the code of practice for environmental protection and Dangerous Goods Ordinance. • Measure and assess tyres wear according to relevant provisions of the Road Traffic Ordinance of Hong Kong. • Identify whether the combinations of tyres on vehicle meeting the requirement prescribed. • Check the relevant vehicle components are normal by visual inspection when installing or removing the tyres. • Conduct performance and safety inspection after the work and provide written report focusing on: <ul style="list-style-type: none"> ○ Abnormalities

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

	<ul style="list-style-type: none"> ○ 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 checking and repair general vehicle tyres and rims safely according to the instructions in the manufacturer’s servicing manual and providing written report; • Capable of checking, measure and assess the condition of vehicle tyres and check for the combinations of tyres on vehicle to meet the requirement prescribed according to relevant provisions of the Road Traffic Ordinance; and • Capable of disposing used tyres according to environmental protection legislations and the organisational requirement on environmental protection.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge on vehicle. They should also possess the capability to operate floor jacks or lifting equipment to lift the vehicles as well as remove and install the road wheels.</p> <p>The major legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Road Traffic (Construction and Maintenance of vehicles) Regulations - Tyres • Waste Disposal Ordinance • Dangerous Goods Ordinance

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Check and repair engines
Code	108647L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check and repair vehicle engines safely according to the instructions in the vehicle manufacturer's servicing manual. 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 (Structure and basic operating principles of vehicle engines)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of vehicle engines. • Understand the working procedure for checking and repairing of engines. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair vehicle engines)</p> <ul style="list-style-type: none"> • Check and repair vehicle engines safely according to the instructions in the vehicle manufacturer's servicing manual and the requirements of occupational safety and health as well as environmental protection, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems of the engines by visual inspection ○ Measure the engine components accurately according to the instructions in the vehicle manufacturer's servicing manual and report the wear and tear condition of engine components ○ Check and repair vehicle engines, including dismantle, replace and re-assemble the engines ○ Eliminate typical system failure • 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 checking and repair vehicle engines safely according to the instructions in the vehicle manufacturer's servicing manual; and providing written report; • Capable of measuring the engine components accurately and assessing the wear and tear condition.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle mechanical servicing and the capability to use precision measuring tools for vehicle servicing.

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Check and repair various types of fuel supply systems
Code	108648L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check and repair various types of fuel supply systems according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on occupational safety and health, environment and gas safety. They should also be able to conduct basic tests on components upon completion of work.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of various types of fuel supply systems)</p> <ul style="list-style-type: none"> • Understand the characteristics of various types of fuel, such as: <ul style="list-style-type: none"> ○ Petrol ○ Liquefied Gas ○ Diesel • Understand the structure and basic operating principles of various types of fuel supply systems. • Understand the working procedure of checking and repairing various types of fuel supply systems. • Understand the impact of fuel supply systems on exhaust emission. • Understanding of the relevant legal requirements on road and vehicle safety, gas safety and environment protection. <p>2. Performance (Check and repair various types of fuel supply systems)</p> <ul style="list-style-type: none"> • According to the instructions in the vehicle manufacturer's servicing manual, the Road Traffic Ordinances of Hong Kong and the relevant requirements on occupational safety and health, gas safety as well as environmental protection, safely check, repair and replace various types of fuel supply systems, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems of various types of fuel supply systems by visual inspection. ○ Operate special testing devices to test various types of fuel supply systems ○ Check and repair various types of fuel supply systems, including dismantle, replace and re-assemble vehicle system components ○ Eliminate typical system failure • 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 requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of checking and repair various types of fuel supply systems for general vehicles and operating special testing devices to conduct tests on basic components and systems, according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on occupational safety and health, environment and gas safety. • Capable of performing safety inspection and providing written report

Specification of Competency Standards
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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 of vehicle mechanical servicing and know how to handle various types of fuel.</p> <p>The major legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none">• Waste Disposal Ordinance• Dangerous Goods Ordinance
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Check and repair various types of vehicle braking systems
Code	108649L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check and repair the mechanical parts of various types of vehicle braking systems safely according to the instructions in the vehicle manufacturer's servicing manual. They should also be able to conduct basic tests on components upon completion of work and providing written report as well as calculate and assess the performance of various types of vehicle braking systems according to the relative provisions under the Road Traffic Ordinance of Hong Kong.
Level	2
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of various types of braking systems)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of various types of braking systems, such as: <ul style="list-style-type: none"> ○ Hydraulic Braking System ○ Compressed Air Braking System • Understand the general checking and repairing procedure for various types of vehicle braking systems according to the instructions in the vehicle manufacturer's servicing manual and the requirements of Road Traffic Ordinance of Hong Kong. • Understand the characteristics of brake oil. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair various types of vehicle braking systems)</p> <ul style="list-style-type: none"> • According to the instructions in the vehicle manufacturer's servicing manual and the requirements of occupational safety and health, safely check and repair various types of vehicle braking systems, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in various types of vehicle braking systems by visual inspection ○ Maintain various types of vehicle braking systems, including cleaning the brake pad dust, adjusting drum brake pad and hand brake lever stroke etc. ○ Measure the wear and tear of brake pad, brake disc and brake drum; and assess component condition correctly according to the data contained in vehicle manufacturer's servicing manual ○ Check and repair various types of vehicle braking systems components, including dismantle, replace and re-assemble vehicle system components ○ Use pedals, negative pressure or pressurization methods to release the air stored in the hydraulic pipes in the course of repairing ○ Accurately check and rectify the air leakage in the compressed air systems ○ Eliminate typical system failure • Capable of calculating and assess if the testing data of vehicle hydraulic braking systems can meet the prescribed requirement according to the relevant provisions of the Road Traffic Ordinance. • 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

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

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 checking and repairing the various types of vehicle braking systems of general vehicles safely according to the instructions in the vehicle manufacturer's servicing manual; • Capable of conducting basic tests on components upon completion of work and providing written report; • Capable of calculating and assessing the performance of various types of vehicle braking systems according to the relevant provisions of the Road Traffic Ordinance.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle mechanical servicing and know how to handle hydraulic oil.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Road Traffic (Construction and Maintenance of vehicles) Regulations

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Check and repair vehicle chassis units and components
Code	108650L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check and repair the mechanical parts of vehicle chassis units safely according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, safety and health regulations. They should also be capable of conducting 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 (Structure and basic operating principles of vehicle chassis units.)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of vehicle chassis units such as: <ul style="list-style-type: none"> ○ Steering Systems ○ Suspension Systems ○ Transmission Systems (Including automatic and manual gearboxes as well as differential mechanisms) • With reference to the instructions in the vehicle manufacturer's servicing manual and the requirements of relevant provisions under the Road Traffic Ordinance of Hong Kong, understand the requirements and procedure for general checking and repairing of vehicle chassis units. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair vehicle chassis units)</p> <ul style="list-style-type: none"> • According to the instructions in the vehicle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely check and repair vehicle chassis units, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in vehicle chassis units by visual inspection ○ Check and repair vehicle chassis unit components, including dismantle, replace and re-assemble components ○ Eliminate typical unit failures ○ Conduct inspection and assessment prior to measurement of tyre positioning ○ According to the measuring guide provided by manufacturer, use tyre positioning instruments to measure tyre positioning angle and relevant numerical value accurately ○ Capable of adjusting the substandard numerical value of tyre positioning to meet the manufacturer's index ○ Accurately test and assess the performance of vibration dampers ○ Safely dismantle and install the springs after accurate assessment of the pressure storage condition ○ Conduct speed loss test for automatic transmission system and assess the result ○ According to the instructions in the vehicle manufacturer's servicing manual, report the items of substandard tyre positioning and propose suggestions for advanced checking and repairing • Conduct performance and safety inspection after the work and provide written report focusing on:

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Functional Area - Vehicle Servicing

	<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 checking and repairing general vehicle chassis units and components safely according to the instructions in the vehicle manufacturer's servicing manual and the requirements on environment, safety and health regulations; and • Capable of measuring tyre positioning, vibration dampers and the speed loss test for automatic transmission system according to the instructions in the vehicle manufacturer's servicing manual and the requirements on environment, safety and health regulations. • Capable of conducting performance and safety inspection after the work and providing written report
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle servicing and know how to handle power system hydraulic oil.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Road Traffic (Construction and Maintenance of vehicles) Regulations

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Functional Area - Vehicle Servicing

Title	Check and repair vehicle battery, charging and starting systems
Code	108651L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check the condition of vehicle battery; testing and repairing vehicle charging and starting systems safely according to the instructions in the vehicle manufacturer's servicing manual. They should also be able to conduct basic tests on components upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of battery, charging, electric supply and starting systems)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of battery, charging, electric supply and starting systems. • Understand the specification, maintenance and safety rules of battery and the methods of handling battery. • Understand basic electric power transfer and the principle of power generation. • Know about general electric tools and instruments. • According to the instructions in the vehicle manufacturer's servicing manual, understand the general checking and repairing procedure for battery, charging, electric supply and starting systems. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair vehicle battery, charging, electric supply and starting systems)</p> <ul style="list-style-type: none"> • According to the instructions in the vehicle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely inspect and repair vehicle battery, charging, electric supply and starting systems, including: <ul style="list-style-type: none"> ○ Capable of identifying the common faults in vehicle battery, charging, electric supply and starting systems by visual inspection ○ Use specified tools or instruments to inspect and measure the value of specific gravity of lead acid battery and the effectiveness of electric discharge; and carry out appropriate maintenance work ○ Replace battery ○ Handle and dispose battery in accordance with environmental protection ordinances • Check and repair the parts/components of vehicle charging, electric supply and starting systems as well as circuit control components, including dismantle, replace and re-assemble relevant system components. • 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

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Unit of Competency

Functional Area - Vehicle Servicing

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 checking and repair general vehicle battery, charging and starting systems safely according to the instructions in the vehicle manufacturer's servicing manual;• Capable of conducting basic tests on components upon completion of work and providing written report;• Capable of charging and handling (including disposing of) battery in accordance with the requirements of the Occupational Safety and Health Ordinance and environmental protection ordinances.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle electrical systems servicing.</p>

Specification of Competency Standards
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Unit of Competency

Functional Area - Vehicle Servicing

Title	Check and repair vehicle lighting and signalling systems as well as the meters and indicating systems
Code	108652L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check, repair and adjust the lighting and signaling systems as well as the meters and indicating systems safely according to the instructions in the vehicle manufacturer's servicing manual. They should also be capable of conducting basic adjustments and tests on components upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of lighting and signaling systems as well as the meters and indicating systems)</p> <ul style="list-style-type: none"> • Understand the requirements of local legislative provisions in relation to vehicle lighting, signalling and indicating systems. • Understand the structure and basic operating principles of vehicle lighting and signalling systems as well as the meters and indicating systems. • Understand basic electric and electronic principles. • Know about general electronic/electric tools or instruments; test electronic/circuit systems/components. • According to the instructions in the vehicle manufacturer's servicing manual, understand the general checking and repairing procedure for the lighting and signalling systems as well as the meters and indicating systems. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair lighting and signaling systems as well as the meters and indicating systems)</p> <ul style="list-style-type: none"> • According to the instructions in the vehicle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely check, repair and adjust vehicle lighting and signaling systems as well as the meters and indicating systems, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in the components of lighting and signaling systems as well the meters and indicating systems by visual inspection ○ Use specified tools and instruments to inspect the lighting and signaling systems as well as the meters and indicating systems ○ According to instructions, check and repair the parts of lighting and signalling systems, meters and indicating systems as well as circuit systems, including dismantle, replace, re-assemble and adjust relevant system components and accessories ○ Use specified tools or instruments to accurately measure and adjust the lighting and signalling systems as well as the meters and indicating systems • 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

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none"> • Capable of testing/checking vehicle lighting and signalling systems in accordance with relevant local legislative provisions if they can comply to relevant regulations and ordinances.
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 checking and repairing general vehicle lighting and signaling systems as well as the meters and indicating systems safely according to the instructions in the vehicle manufacturer's servicing manual; • Capable of conducting basic adjustments and tests on components upon completion of work, including test of headlamps and providing written report; • Capable of safely testing the relevant systems to check if they meet the requirements as specified under relevant legislative provisions of Hong Kong and the vehicle manufacturer's servicing manual.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle electronic and electrical system servicing.</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

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Functional Area - Vehicle Servicing

Title	Check and repair vehicle wiper, electric door and power window systems
Code	108653L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check, repairing and adjusting vehicle wiper, electric door and window systems safely according to the instructions in the vehicle manufacturer's servicing manual. They should also be able to conduct basic adjustments and tests on components upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of vehicle wiper, electric door and power window systems)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of vehicle wiper, electric door and power window systems. • Understand the circuit of relevant systems. • With reference to the instructions in the vehicle manufacturer's servicing manual, understand the general checking and repairing procedure for wiper, electric door and power window systems. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair vehicle wiper, electric door and power window systems)</p> <ul style="list-style-type: none"> • According to the instructions in the vehicle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely check, repair and adjust the vehicle wiper, electric door and power window systems, including: <ul style="list-style-type: none"> ○ Capable of identifying the common faults in the components of wiper, electric door and power window systems by visual inspection ○ Use general tools and instruments to check and measure the wiper, electric door and power window systems ○ Check and repair the parts of wiper, electric door and power window systems as well as circuit systems, including dismantle, replace, re-assemble and adjust relevant system components and accessories ○ Rectify typical system faults ○ Measure and adjust the operation and effectiveness of wiper and electric door and power window systems • 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 checking, repairing and adjusting general vehicle wiper and electric door and power window systems safely according to the instructions in the vehicle manufacturer's servicing manual; and

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Capable of conducting basic adjustments and tests on components upon completion of work and providing written report
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle electronic and electrical system servicing.

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Functional Area - Vehicle Servicing

Title	Check and repair vehicle anti-theft, audio and video systems
Code	108654L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check, repair and replace vehicle anti-theft, audio and video systems safely according to the instructions in the servicing manual provided by vehicle manufacturer or parts supplier. They should also be able to conduct basic adjustments and tests on components upon completion of work.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of vehicle anti-theft, audio and video systems)</p> <ul style="list-style-type: none"> • Understand the requirements of local legislative provisions in relation to vehicle anti-theft, audio and video systems. • Understand the circuit and basic operating principles of vehicle anti-theft, audio and video systems. • Understand basic radio, video and electrical theories. • With reference to the instructions in the servicing manual provided by vehicle manufacturer or parts supplier, know about the general checking and repairing procedure for vehicle anti-theft, audio and video systems. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair vehicle anti-theft, audio and video systems)</p> <ul style="list-style-type: none"> • According to the instructions in the servicing manual provided by vehicle manufacturer or parts supplier and the requirements of occupational safety and health as well as that of environmental protection, safely check, repair, adjust and replace vehicle anti-theft, audio and video systems etc., including: <ul style="list-style-type: none"> ○ Capable of identifying the common faults in the components of vehicle anti-theft, audio and video systems by visual inspection ○ Use general tools and instruments to check and measure vehicle anti-theft, audio and video systems as well as rectify typical system faults ○ According to inspection result, handle the parts of vehicle anti-theft, audio and video systems as well as circuit systems, including dismantle, replace, re-assemble and adjust relevant system components and accessories ○ According to instructions, adjust and test the operation and effectiveness of vehicle anti-theft, audio and video systems • 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 • Capable of testing the vehicle anti-theft, audio and video systems in accordance with relevant local legislative provisions to check if they can meet the requirements. • Handle anti-theft systems according to security rules and regulations.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Capable of checking and repairing general vehicle anti-theft, audio and video systems safely according to the instructions in the servicing manual provided by vehicle manufacturer or parts supplier;• Capable of conducting basic adjustments and tests on components upon completion of work and providing written report;• Capable of assessing if the vehicle anti-theft, audio and video systems meet the requirements as specified under relevant regulations/ordinances of Hong Kong and the vehicle manufacturer's servicing manual.
Remark	The credits value of this unit of competency is set on the presumption that the assessee concerned has already possessed basic knowledge of vehicle electronic and electrical system servicing.

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Functional Area - Vehicle Servicing

Title	Check and repair vehicle electronic control systems and devices
Code	108655L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check, repair and adjust various kinds of vehicle electronic/data control systems and devices safely according to the instructions in the vehicle manufacturer's servicing manual. They should also be able to conduct basic adjustments and tests on components upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of various types of vehicle electronic control systems and devices)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of various types of vehicle electronic control systems and devices. • Understand vehicle electronic/data control principles. • With reference to the requirements in the servicing manual provided by the vehicle manufacturer or parts supplier, understand the general checking and repairing procedure for various types of vehicle electronic/data control systems and devices. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair various types of vehicle electronic control systems and devices)</p> <ul style="list-style-type: none"> • According to the instructions in the servicing manual provided by vehicle manufacturer or parts supplier and the requirements of occupational safety and health as well as that of environmental protection, safely check, repair and adjust various types of vehicle electronic control systems and devices, including: <ul style="list-style-type: none"> ○ Capable of identifying the common faults in various types of vehicle electronic control systems and devices by visual inspection ○ Use general tools and instruments to check and measure various types of vehicle electronic control systems and devices as well as rectify typical system fault ○ According to inspection result, repair the parts of various types of vehicle electronic control systems and devices as well as circuit/data systems, including dismantle, replace, re-assemble and adjust relevant system components and accessories ○ According to instructions, measure and adjust the operation and effectiveness of various types of vehicle electronic/data control systems • 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	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of checking, repairing and adjusting general vehicle electronic/data control systems and devices safely according to the instructions in the servicing manual provided by vehicle manufacturer or parts supplier; and• Capable of conducting basic adjustments and tests on components upon completion of work and providing written report
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle electronic and electrical system servicing.

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Functional Area - Vehicle Servicing

Title	Check and repair vehicle air cooling and air-conditioning systems
Code	108656L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check and repair vehicle air cooling and air-conditioning systems safely according to relevant legislative provisions of Hong Kong and the instructions in the vehicle manufacturer's servicing manual. They should also be capable of conducting basic tests on components upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of vehicle air cooling and air-conditioning systems)</p> <ul style="list-style-type: none"> • Understand the characteristics of vehicle refrigerants and the relevant handling procedure as well as safety rules and regulations. • Understand the structure and basic operating principles of vehicle air cooling and air-conditioning systems. • Understand the circuit of vehicle air cooling and air-conditioning systems. • With reference to relevant legislative provisions of Hong Kong and the instructions in the vehicle manufacturer's servicing manual, know about the general checking and repairing procedure for vehicle air cooling and air-conditioning systems. • Understand the legal requirements of concerning the refrigerants recovery. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair vehicle air cooling and air-conditioning systems)</p> <ul style="list-style-type: none"> • According to relevant legislative provisions of Hong Kong, the instructions in the vehicle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely check, repair and test the air cooling and air-conditioning systems, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in the components of vehicle air cooling and air-conditioning systems by visual inspection ○ Use general tools and instruments to check and measure vehicle air cooling and air-conditioning systems ○ Check and repair the parts of vehicle air cooling and air-conditioning systems as well as electric/electronic devices, including dismantle, replace, re-assemble, adjust and test relevant system components and accessories ○ Rectify typical system fault ○ Use prescribed tools or instruments to accurately test refrigerant leakage in the systems ○ Use the refrigerant recovery machine approved by the Environmental Protection Department to collect/ recycle refrigerants ○ Use prescribed tools or instruments to accurately measure and test the operation and effectiveness of vehicle air cooling and air-conditioning systems • 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

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Functional Area - Vehicle Servicing

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 checking, repairing and adjusting general vehicle air cooling and air-conditioning systems safely according to the instructions in the vehicle manufacturer's servicing manual and conducting basic tests on components upon completion of work and providing written report.• Capable of collecting and handling the refrigerants of vehicle cooling and air-conditioning systems according to relevant legislative provisions of Hong Kong and the instructions in the vehicle manufacturer's servicing manual; and• Capable of checking any refrigerant leakage in vehicle air cooling and air-conditioning systems.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle electronic and electric system servicing.</p>

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Functional Area - Vehicle Servicing

Title	Dismantle and install the windows and doors as well as their components
Code	108657L2
Range	This unit of competency is applicable in vehicle body servicing workshops. Practitioners should be able to dismantle and install the windows and doors as well as their components correctly according to the instructions in the vehicle manufacturer's servicing manual. Conduct performance and safety inspection after the work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and operating principles of windows and doors as well as their components)</p> <ul style="list-style-type: none"> • Understand the structure of windows and doors as well as their components. • Understand the operating principles of windows and doors as well as their components. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Dismantle and install the windows and doors as well as their components)</p> <ul style="list-style-type: none"> • According to working instructions, the instructions in the vehicle manufacturer's installation and servicing manual as well as the supplier's specification, safely dismantle the windows and doors as well as mechanical components under instructions and supervision; and minimize material consumption. • Carry out the working procedure of dismantling and installation of windows and doors in accordance with the respective rules of the workshops and environmental protection requirements; and ensure that no damage is done to the formation parts or systems during the procedure. • Remove and connect relevant wires according to instructions. • Adjust the vehicle doors and locks, etc. e and test the operation of other components after installation. • 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 mastering the structure and operating principles of the windows and doors as well as the mechanical components; and • Capable of dismantling and installing the windows and doors as well as their components safely according to working instructions or the instructions in the vehicle manufacturer's servicing manual; and conducting adjustments tests and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle body servicing.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Check and repair front and rear windscreens
Code	108658L2
Range	This unit of competency is applicable in vehicle body servicing workshops. Practitioners should be able to dismantl and install front and rear windscreens correctly according to the instructions in the vehicle manufacturer's servicing manual and installation instructions, providing written report after the work.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and operating principles of vehicle windscreens)</p> <ul style="list-style-type: none"> • Understand the materials, structure, specification and legislative requirements of windscreens • Understand the installation and dismantling procedure of windscreens and their attachments, such as heat conducting wires and antennas. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Remove and replace windscreens)</p> <ul style="list-style-type: none"> • Capable of using special tools for removal and replacement of windscreens. • Remove and reinstall windscreens and attachments safely according to the instructions in the vehicle. manufacturer's installation and servicing manual as well as the supplier's specification. • According to instructions, remove and connect relevant wires correctly. • Conduct water tests and test the operation of attachments upon completion of work and provide written report.
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 dismantling and installing vehicle windscreens and attachments safely according to the instructions in the vehicle manufacturer's servicing manual; and • Capable of conducting water tests according to the manufacturer's specification upon completion of work and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle body servicing.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Check and repair vehicle seats and interior fittings
Code	108659L2
Range	This unit of competency is applicable in vehicle body servicing workshops. Practitioners should be able to check and repair vehicle seats and interior fittings correctly according to the instructions provided by vehicle manufacturer/material supplier, providing written report after the work
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating of vehicle seats and interior fittings)</p> <ul style="list-style-type: none"> • Understand the structure of vehicle seats and interior fittings. • Understand basic operating principles of vehicle seats and interior fittings. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair the seats and interior fittings of vehicles)</p> <ul style="list-style-type: none"> • According to the instructions in the vehicle manufacturer's installation and servicing manual, the requirements of occupational safety and health as well as that of environmental protection, check and repair vehicle seats and interior fittings. • According to instructions, remove and connect relevant wires correctly. • Check and test vehicle seats and interior fittings according to the manufacturer's specification to ensure they can meet the factory's requirements. • 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 checking and repairing vehicle seats and interior fittings safely according to the instructions in the vehicle manufacturer's servicing manual; and • Capable of conducting basic inspection and tests on components according to the manufacturer's specification upon completion of work and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle body servicing.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Check and mend the glass fibre panels of vehicle body
Code	108660L2
Range	This unit of competency is applicable in vehicle body servicing workshops. Practitioners should be able to check and mend the glass fibre panels of vehicle body safely according to the instructions in the vehicle manufacturer's servicing manual. They should also be able to conduct basic tests on components upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Safety rules and regulations in mending the fibre-glass panels of vehicle body)</p> <ul style="list-style-type: none"> • Know about the devices and accessories for mending the glass fibre panels of vehicle body. • Understand the risks and preventive methods in using relevant dangerous materials and during the procedure. • Understand the importance of ventilation in worksites. • Know about the content of Material Safety Data Sheet (MSDS) with respect to chemicals. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Mend and check the glass fibre panels of vehicle body)</p> <ul style="list-style-type: none"> • Identify various kinds of typical defects on the surface of glass fibre panels (e.g. peeling off, cracks and air holes). • Use appropriate methods and procedure to mend the glass fibre board. • Ensure that work is carried out under suitable environment and appropriate protective measure is adopted. • According to the instructions in the vehicle manufacturer's servicing manual and environmental protection requirements of occupational safety and health, check and mend the glass fibre panels of vehicle body. • Use correct tools to polish. • According to the manufacturer's specification, conduct visual inspection and dimensional check on and surface of the glass fibre panels of vehicle body. • 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 checking and mending the glass fibre panels of vehicle body according to the instructions in the vehicle manufacturer's servicing manual and the environmental protection and occupational safety and health requirements; and • Capable of conducting visual inspection and dimensional check on and surface of the glass fibre panels of vehicle body according to the manufacturer's specification. • Capable of conducting performance and safety inspection after the work and providing written report

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle structure and know how to handle dangerous goods.
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Check and mend the metallic panels of vehicle body
Code	108661L2
Range	This unit of competency is applicable in vehicle body servicing workshops. Practitioners should be able to check and mend the metallic panels of vehicle body safely according to the instructions in the vehicle manufacturer's servicing manual. They should also be able to conduct basic tests on components upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Properties of metallic panels and tools)</p> <ul style="list-style-type: none"> • Understand the properties of metallic panels, including the changes under high temperature. • Understand the tools for repairing metallic panels and the operating method • Understand the water-proofing devices, heat insulation devices, sound reduction devices, vibration dampers and anti-rust devices used in vehicle body. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Mend and check the metallic panels of vehicle body)</p> <ul style="list-style-type: none"> • Dismantle and install the metallic panels of vehicle body or other simple components according to needs to facilitate the repairing of damaged metallic panels. • Select appropriate tools to mend the concave surface of metallic panels. • Use appropriate welding method and procedure to repair metallic panels and ensure that work is carried out in suitable environment and appropriate protective measure is adopted. • Select appropriate metallic sheet to mend the vehicle body. • Use the tools correctly for grinding. • Adopt appropriate working procedure to maintain the functions of the vehicle, such as water-proofing, heat insulation, sound reduction, vibration dampening and anti-rust. • Conduct inspection and dimensional check of the metallic panels of vehicle body and basic tests on relevant components according to the manufacturer's specification upon completion of work and provide written report.
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 selecting appropriate tools and working procedure to check and mending the metallic panels of vehicle body according to the instructions in the vehicle manufacturer's servicing manual; and • Capable of conducting inspection and dimensional check of the metallic panels of vehicle body and basic tests on relevant components according to manufacturer's specification and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of Oxyacetylene Welding and MIG as well as basic vehicle body structure.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Measure vehicle body and chassis
Code	108662L2
Range	This unit of competency is applicable in vehicle body servicing workshops. Practitioners should be able to correctly measure the body alignment and comparing that with the manufacturer's specification in the service manual and providing written report after the work.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicle body measurement)</p> <ul style="list-style-type: none"> • Know about the methods to diagnose damage and deformation of vehicle body. • Know about various kinds of measuring tools/instruments and the measuring methods for vehicle body. • Understand the vehicle manufacturer's vehicle body measurement map. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Carry out the process of vehicle body measurement and chassis deformation inspection)</p> <ul style="list-style-type: none"> • Conduct preparatory work prior to the measurement of vehicle body, including the vehicle and tools/equipment. • Carry out the process of vehicle body measurement and record relevant data according to the instructions provided by the tools/equipment manufacturer. • Compare the measurement data with the specification to identify the deformation of vehicle. • 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 accurately conducting vehicle body measurement according to the instructions in the vehicle/equipment manufacturer's servicing manual; and • Capable of identifying the deformation condition of the vehicle and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle body servicing.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Use and maintain general painting equipment
Code	108663L2
Range	This unit of competency is applicable in vehicle painting workshops. Practitioners should be able to use and maintain general painting equipment for vehicles according to the instructions provided by equipment manufacturer.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Use and operating principles of the equipment in vehicle painting workshops)</p> <ul style="list-style-type: none"> • Understand the use of equipment in vehicle painting workshops. • Understand the content of the user manual provided by vehicle painting workshop equipment manufacturer. • Understand the operating principle of the equipment in vehicle painting workshops. • Know the safety rules and personal protective equipment required for the use and maintenance of equipment in vehicle painting workshops. • Understand the ordinances and regulations in relation to the equipment in vehicle painting workshops. <p>2. Performance (Use and maintain general equipment in vehicle painting workshops)</p> <ul style="list-style-type: none"> • Use the equipment in vehicle painting workshops according to the equipment manufacturer's user manual. • Clean the respective tools/devices and dispose chemical waste, etc. upon completion of work. • Implement or arrange maintenance plan for the equipment in vehicle painting workshops according to the instructions in the equipment manufacturer's user manual, such as regular inspection of painting booth, replacement of filter element and calibration of electronic scale. • Conduct initial fault diagnosis for the equipment in vehicle painting workshops and issue suspension notice; and carry out or arrange for repair work.
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 selecting appropriate equipment in vehicle spraying workshops according to the required use; • Capable of carrying out or arranging maintenance work for the painting equipment according to the user manual provided by vehicle painting equipment manufacturer; and • Capable of conducting initial fault diagnosis for the painting equipment and arranging / carrying out repair work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle painting and know-how to handle chemicals.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Remove paint and process surface treatment on metallic panel
Code	108664L2
Range	This unit of competency is applicable in vehicle body painting workshops. Practitioners should be able to carry out the procedure for removing paint and processing surface treatment on metallic panel according to working instructions or the guidelines in the vehicle manufacturer's servicing manual, providing written report after the work.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Paint remover and cleanser)</p> <ul style="list-style-type: none"> • Know the impact of paint remover and cleanser on skin and on the materials of vehicle body. • Know the content of Safety Data Sheet (SDS) with respect to paint remover and cleanser, including protective measures. • Understanding of the relevant legal requirements on environment protection. <p>2. Performance (Carry out the procedure for paint removal and surface treatment on metallic panel)</p> <ul style="list-style-type: none"> • Carry out the established working instructions on dangerous goods, pollutants and chemical waste. • Observe the condition of the workplace and carry out the procedure for paint removal and surface treatment, including the use of air pollution control device. • Select and use suitable tools and instruments. • Complete the work according to working instructions, the guidelines in the vehicle manufacturer manual and the code of practice for occupational safety and health as well as environmental protection. • Handle chemical waste upon completion of work and provide written report.
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 understanding the characteristics of paint remover and cleanser; and • Capable of completing the working procedure of paint removal and surface treatment on metallic panel according to working instructions, the guidelines in the vehicle manufacturer manual and the code of practice for occupational safety and health as well as environmental protection requirements and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of handling chemicals.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Carry out body filling and sanding
Code	108665L2
Range	This unit of competency is applicable in vehicle body vehicle painting workshops. Practitioners should be able to carry out body filling and sanding according to working instructions or the guidelines in the vehicle manufacturer's servicing manual and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Body fillers and sanding equipment)</p> <ul style="list-style-type: none"> • Know about the composition and characteristics of body fillers. • Know about the functions and respective operating rules for sanding equipment. • Know about the characteristics as well as the pros and cons of dry sanding and wet sanding. • Know about the content of Safety Data Sheet (SDS) with respect to cleanser and chemicals including protective measures. • Understanding of the relevant legal requirements on environment protection. <p>2. Performance (Carry out body filling and sanding)</p> <ul style="list-style-type: none"> • Carry out various working procedures according to environmental protection ordinances and requirements. • Carry out the established operating guidelines on dangerous goods, pollutants and chemical waste; handle and dispose chemical waste according to the Code of Practice for Chemical Waste Producer. • Observe the working environment when carrying out body filling, dry sanding or wet sanding procedure; and capable of minimizing material consumption. • Follow procedures regarding drainage of water during the work progress as to comply with the standard of sewage disposal licence under the Water Pollution Control Ordinance; and should control the use of cleanser, fresh water and chemical substances. • Complete the working procedure according to working instructions, product manufacturer's guidelines and the requirements of Occupational Safety and Health Ordinance as well as environmental protection ordinances. • Conduct inspection upon completion of body filling and sanding procedures to ensure that the requirements for carrying out painting procedure are met and provide written report.
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 carrying out body filling and sanding procedures effectively according to working instructions, the guidelines in vehicle manufacturer manual, the occupational safety and health / environmental protection ordinances; and • Capable of conducting inspection upon completion of body filling and sanding procedures to ensure that the requirements for carrying out painting procedure are met and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of how to handle chemicals and operate general sanding tools and instruments.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Painting process
Code	108666L2
Range	This unit of competency is applicable in vehicle painting workshops. Practitioners should be able to carry out vehicle body painting work according to working instructions or the guidelines in the vehicle manufacturer's servicing manual and providing written report,
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Painting materials and spray guns)</p> <ul style="list-style-type: none"> • Know the composition and characteristics of primer paint and finish paint, including waterborne paint. • Know the characteristics and operating principles of various kinds of spray guns, including high volume low pressure (HVLV) spray guns. • Know the content of Safety Data Sheet (SDS) with respect to paints, catalysts and dissolvent, including protective measures. • Understand the characteristics of the materials of different work-piece and painting methods. • Understand the painting process and the reasons for paint defects. • Understanding of the relevant legal requirements on environment protection. <p>2. Performance (Carry out painting process)</p> <ul style="list-style-type: none"> • Observe the condition of the workplace and should carry out painting process in the spray booth equipped with anti-pollution control device; and capable of minimizing material consumption. • Select and use suitable tools and instruments; and apply relevant painting techniques correctly with regard to the characteristics of different spray guns. • Operate spray booth ; infra-red car paint curer, also control the temperature and time accurately. • Complete the painting process according to the guidelines in the vehicle manufacturer manual, the occupational safety and health as well as environmental protection ordinances and Factories and Industrial Undertakings (Spraying of Flammable liquids) Regulations. • Conduct inspection upon completion of painting process to ensure that no paint defects and provide written report.
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 selecting and adjusting spray guns and other devices according to working instructions or the guidelines in the vehicle manufacturer's servicing manual to carry out painting process; and • Capable of conducting inspection upon completion of painting process to ensure that no paint defects and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of how to handle chemicals and operate commonly used spraying tools and instruments.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Carry out body masking procedure
Code	108667L2
Range	This unit of competency is applicable in vehicle body vehicle painting workshops. Practitioners should be able to use suitable masking paper and tape to cover the areas that need to be protected according to the instructions in the vehicle manufacturer's servicing manual before carrying out painting process. They should also remove masking paper and tape upon completion of work and provide written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Masking materials and equipment)</p> <ul style="list-style-type: none"> • Know the use and characteristics of cleanser. • Know the characteristics of typical masking paper and masking tape as well as associated equipment. • Understand the process of body masking and the techniques of removing masking tape. • Understanding of the relevant legal requirements on environment protection. <p>2. Performance (Carry out body masking procedure)</p> <ul style="list-style-type: none"> • Select and use appropriate personal protective equipment correctly. • Identify the regions that need to be covered during the painting process. • Apply suitable cleanser on the required areas. • Select and use appropriate masking paper and tape to cover the areas that need to be protected. • Check if the surface of the areas that need to be protected are fully covered • Conduct inspection after the work and provide written report.
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 carrying out body masking procedure safely according to the manufacturer servicing manual or working instructions; and • Capable of accurately checking if the surface of the areas that need to be protected are fully covered and providing written report of any abnormalities.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the basic knowledge of vehicle body and know how to paint the vehicle body and handle chemicals.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Mix paints
Code	108668L2
Range	This unit of competency is applicable in vehicle body vehicle painting workshops. Practitioners should be able to mix paints according to painting formulas, carrying out processes such as spray test, colour checking, tinting adjustment and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Mix and blend the paints)</p> <ul style="list-style-type: none"> • Know about basic colour theory • Understand the basic principles of colour mixing, including: <ul style="list-style-type: none"> ○ Colour wheel ○ Complementary colour ○ Colour effect • Understand the colour codes used by vehicle manufacturer and paint manufacture. • Know about the methods of finding out the original colour of the vehicle body according to information such as vehicle brand, vehicle type, year of production and code. • Understand the tools and instruments for mixing and blending of paints. • Understanding of the relevant legal requirements on environment protection. <p>2. Performance (Mix and blend the paints)</p> <ul style="list-style-type: none"> • Select and use appropriate personal protective equipment, tools and instruments correctly. • Comply with working instructions on established dangerous goods, pollutants and chemical waste; and handle and dispose chemical waste according to the Code of Practice for Chemical Waste Producer. • According to the instructions of vehicle manufacturer and paint manufacture as well as the ordinances of occupational health and safety and environmental protection, carry out the procedure correctly and provide written report.
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 finding out the original colour formula of the vehicle according to the code provided by vehicle manufacturer or the information of the vehicle; and • Capable of mixing and blending the colour by measuring correctly according to the specified formula, and carrying out work such as spray testing, colour checking, tinting adjustment and colour matching and final inspection after the work and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of paints and know how to handle chemicals.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Car detailing work
Code	108669L2
Range	This unit of competency is applicable in vehicle workshops or car detailing shops. Practitioners should be able to carry out cleaning and other cosmetic maintenance work for vehicle body and interior finishing according to working instructions and procedure and providing written report after the work. (The use of automatic car washing device is not included in this unit of competency)
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicle detailing on vehicle body and compartment)</p> <ul style="list-style-type: none"> • Understand the vehicle detailing work procedure for general vehicle body and compartment. • Understand the functions and operating procedure of general equipment (e.g. wax machine, vacuum cleaner and steamer.) for vehicle detailing. • Know the application of typical types of cleanser for vehicles. • Know the cleanser/caring products applicable for different materials. • Understand general cleanser and the content of the Safety Data Sheet (SDS) with respect to chemicals, including protective measures. • Understand the procedure of handling customers' property in vehicles and must not take or use those property. • Understand the relevant legal requirements on environment protection. <p>2. Performance (Carry out the vehicle detailing procedure for the vehicle body and compartment)</p> <ul style="list-style-type: none"> • Comply with the established working instructions on chemicals and sewage. • Perform vehicle detailing job according to working instructions and procedure or the guidelines in the vehicle manufacturer manual, including: <ul style="list-style-type: none"> ○ Wash the vehicle body and clean the compartment ○ Use prescribed cleanser, vehicle caring products and caring equipment to carry out caring duties for the vehicle body and the compartment by hand ○ Use prescribed vehicle caring products to mend and take care of the damages on the vehicle body and on the compartment • Provide written report after the work.
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 washing the vehicle body and the compartment according to working instructions; and • Capable of using prescribed products/equipment to perform vehicle detailing job on the vehicle body and the compartment and providing written report after the work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the basic knowledge of vehicle parts and know how to handle chemicals for washing purposes and operate general cleaning/vehicle detailing equipment.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Use specialised instruments and equipment for vehicle inspection
Code	108670L2
Range	This unit of competency is applicable in vehicle servicing workshops or vehicle inspection places. Practitioners should be able to use special instruments and equipment for vehicle inspection to check and repair various vehicle systems and components according to the relevant legislative provisions under the Road Traffic Ordinance of Hong Kong, the instructions in vehicle manufacturer's servicing manual or the user guide provided by the manufacturer of special instruments and equipment for vehicle inspection.
Level	2
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Special instruments and equipment for vehicle inspection)</p> <ul style="list-style-type: none"> • Understand the structure, use and basic operating principles of specialised instruments and equipment for vehicle inspection. • Understand the legislative provisions under the Road Traffic Ordinance of Hong Kong in relation to vehicle inspection. • Understand the instructions in vehicle manufacturer's servicing manual or the user guide provided by the manufacturer of specialised instruments and equipment for vehicle inspection. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Use specialized instruments and equipment for vehicle inspection)</p> <ul style="list-style-type: none"> • According to the instructions in vehicle manufacturer's servicing manual or the user guide provided by the manufacturer of specialised instruments and equipment for vehicle inspection, the requirements of occupational safety and health as well as that of environmental protection, safely use specialised instruments and equipment for vehicle inspection to check various vehicle systems and components, such as: <ul style="list-style-type: none"> ○ Specialised instruments and equipment for various types of engine and mechanical components ○ Specialised instruments and equipment for various types of fuel supply systems ○ Specialised instruments and equipment for various types of engine management systems ○ Specialised instruments and equipment for various types of vehicle braking systems ○ Specialised instruments and equipment for vehicle steering systems ○ Specialised instruments and equipment for vehicle suspension systems ○ Specialised instruments and equipment for vehicle transmission systems ○ Specialised instruments and equipment for electric systems ○ Specialised instruments and equipment for other related systems
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of using testing instruments /equipment for vehicle inspection correctly to check various vehicle systems and components according to the instructions in vehicle manufacturer's servicing manual or the user guide provided by the manufacturer of special instruments /equipment for vehicle inspection.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the basic knowledge of vehicle mechanic servicing.
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Inspect vehicles for regulations compliance
Code	108671L2
Range	This unit of competency is applicable in vehicle servicing workshops or vehicle inspection places. Practitioners should be able to inspect vehicles and find out defects which do not comply with regulations according to the relevant legislative provisions under the Road Traffic Ordinance of Hong Kong or the instructions in the vehicle manufacturer's servicing manual, providing written report after the work.
Level	2
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Defects on vehicle that do not comply with regulations)</p> <ul style="list-style-type: none"> • Understand the legislative provisions under the Road Traffic Ordinance of Hong Kong in relation to vehicle inspection. • Understand the legislative provisions under the Road Traffic Ordinance in relation to the procedure of vehicle inspection. • Understand the instructions in the vehicle manufacturer's servicing manual in relation to vehicle inspection. • Understand the instructions in the vehicle manufacturer's servicing manual in relation to the procedure of vehicle inspection. <p>2. Performance (Inspect vehicle for regulations compliance)</p> <ul style="list-style-type: none"> • According to the legislative provisions under the Road Traffic Ordinance in relation to vehicle inspection, the instructions in the vehicle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely inspect the vehicle and find out defects that do not comply with regulations, such as defects in: <ul style="list-style-type: none"> ○ Engine and mechanical components ○ Various types of fuel supply systems ○ Various types of engine management systems ○ Various types of vehicle braking systems ○ Vehicle steering systems ○ Vehicle suspension systems ○ Vehicle transmission systems ○ Electric systems ○ Other related systems • Provide written report after the work.
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 inspecting vehicles and finding out defects which do not comply with regulations by visual inspection, equipment and instruments; and • Capable of providing a written vehicle examination report according to the legislative provisions under the Road Traffic Ordinance or the instructions in the vehicle manufacturer's servicing manual.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the basic knowledge of vehicle servicing.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Vehicle body parts fastening operation
Code	108672L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to fasten vehicle body parts safely according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, safety and health regulations. They should also be able to conduct basic tests on components upon completion of work and providing written report after the work.
Level	2
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Operation, tools or equipment use for body stabling operation)</p> <ul style="list-style-type: none"> • Know the types of body stabling operation, such as: <ul style="list-style-type: none"> ○ Riveting (single sided, double sided, self-piercing) ○ clinching ○ bolts and fasteners ○ screwing (self-threading, self -piercing) ○ adhesive bonding (rubber base, acrylic base and silicone base) ○ hybrid joining (combinations of techniques listed) • Know the tools, equipment used for body stabling. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Carry out vehicle body stabling operation)</p> <ul style="list-style-type: none"> • According to the instructions in the vehicle manufacturer's servicing manual, occupational safety and health as well as that of environmental protection, safely check, carry out vehicle body stabling operation. • Conduct safety inspection after the work and provide written report focusing on: <ul style="list-style-type: none"> ○ Abnormalities ○ Major decisions
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of carrying out vehicle body part fastening operation, according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, safety and health regulations with the tools and equipment, and conducting safety inspection and reporting work records.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle body structure.

Specification of Competency Standards
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Unit of Competency

Functional Area - Vehicle Servicing

Title	Spray paint on plastic components of vehicle body
Code	108673L2
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to spray paint on plastic components of vehicle body plastic components safely according to the instructions in the vehicle paint manufacturer's hand book and the relevant requirements on environment, safety and health regulations. They should also be able to conduct inspection of fault upon completion of work and completing simple report.
Level	2
Credit	2 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Materials, processes, tools or equipment use for painting with plastic components in vehicle body)</p> <ul style="list-style-type: none"> • Know the preparation processes when painting with plastic components in vehicle body, such as: <ul style="list-style-type: none"> ○ Suitable materials for the type of surface ○ Approved method and technique • Know the materials, tools and equipment used for painting with plastic components in vehicle body. <p>2. Performance (Carry out painting with plastic components in vehicle body)</p> <ul style="list-style-type: none"> • According to the instructions in the vehicle paint manufacturer's hand book, occupational safety and health as well as that of environmental protection, safely check, carry out painting with plastic components in vehicle body. • Report any faults and complete work records.
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of carrying out paint spraying on plastic components of vehicle body according to the instructions in the vehicle paint manufacturer's hand book and the relevant requirements on environment, safety and health regulations, including selection of correct materials, operating the tools and equipment and conducting inspection on faults and reporting.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle body structure and material used.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Routine Motorcycle Maintenance
Code	108674L2
Range	This unit of competency is applicable in motor cycle servicing workshops. Practitioners should be able to carry out routine motor cycle maintenance work safely according to the instructions in the motorcycle manufacturer's servicing manual and the relevant requirements on environment, safety and health regulations. They should also be cable to conduct safety tests on systems upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Procedure to carry out routine motorcycle maintenance work)</p> <ul style="list-style-type: none"> • According to the instructions in the motor cycle manufacturer's servicing manual, understand the procedure to carry out routine motorcycle maintenance work. Such as: <ul style="list-style-type: none"> ○ Quick service ○ Standard service • Understand the tools and equipment to carry out routine motorcycle maintenance work. • Understand the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Carry out routine motorcycle maintenance work)</p> <ul style="list-style-type: none"> • According to the instructions in the motorcycle manufacturer's servicing manual, occupational safety and health as well as that of environmental protection, to carry out the routine maintenance work, included: <ul style="list-style-type: none"> ○ Engine unit ○ Fuel supply system ○ Engine management system ○ Brake system ○ Steering system ○ Suspension system ○ Transmission system ○ Electrical system ○ Body and Frame unit • 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 carrying out routine motor cycle maintenance work safely according to the instructions in the motorcycle manufacturer's servicing manual and the relevant requirements on environment, safety and health regulations; • Capable of conducting safety inspection upon completion of work; and providing written report; • Capable of testing the performance of various types of systems according to the relevant provisions of the Road Traffic Ordinance.

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 of the functions of the motorcycle systems.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Motorcycle Pre-delivery Preparation and Inspection
Code	108675L2
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to carry out motorcycle pre-delivery preparation and inspection safely according to the instructions in the motorcycle manufacturer's manual and the relevant requirements on environment, occupational safety and health regulations. They should also be cable to conduct safety tests on systems upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Requirements to carry out motorcycle pre-delivery preparation)</p> <ul style="list-style-type: none"> • According to the instructions in the motorcycle manufacturer's manual, understand the requirements to carry out motor cycle pre-delivery preparation work. • Understand the documents needed for motorcycle pre-delivery. <p>2. Performance (Carry out motorcycle pre-delivery preparation and inspection work)</p> <ul style="list-style-type: none"> • According to the instructions in the motorcycle manufacturer's manual, occupational safety and health as well as that of environmental protection, to carry out the motorcycle pre-delivery preparation and inspection work, included: <ul style="list-style-type: none"> ○ Engine unit ○ Fuel supply system ○ Engine management system ○ Brake system ○ Steering system ○ Suspension system ○ Transmission system ○ Electrical system ○ Body and Frame unit • Inspection of the documents needed for motorcycle pre-delivery. • Provide written report after the work
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 carrying out motorcycle pre-delivery preparation and inspection work safely according to the instructions in the motor cycle manufacturer's manual and the relevant requirements on environment, occupational safety and health regulations; • Capable of knowing the documents needed for motorcycle delivery; and • Capable of testing the performance of various types of systems according to the relevant provisions of the Road Traffic Ordinance.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of the functions of the motorcycle systems.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Road Traffic (Construction and Maintenance of vehicles) Regulations

Specification of Competency Standards
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Unit of Competency

Functional Area - Vehicle Servicing

Title	Remove and replace motorcycle engine power-train units and components
Code	108676L2
Range	This unit of competency is applicable in motor cycle servicing workshops. Practitioners should be able to remove and replace motorcycle engine power-train units and components safely according to the instructions in the motorcycle manufacturer's servicing 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	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of motorcycle engine power-train units and components)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of motorcycle engine power-train units and components such as: <ul style="list-style-type: none"> ○ Engine mechanical systems ○ Cooling systems ○ Intake and exhaust systems ○ Fuel and ignition systems ○ Lubrication systems ○ Clutch ○ Transmission and Final drive ○ Starting and Charging • With reference to the instructions in the motorcycle manufacturer's servicing manual and the requirements of relevant provisions under the Road Traffic Ordinance of Hong Kong, understand the general checking and repairing procedure for the components. • Understand the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Remove and replace motorcycle engine power-train units and components)</p> <ul style="list-style-type: none"> • According to the instructions in the motorcycle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely remove and replace motorcycle engine power-train units and components, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in motorcycle engine power-train units and components by visual inspection ○ Functional test of each engine power-train units and components ○ Eliminate typical system failure • 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 removing and replacing motorcycle engine power-train units and components safely according to the instructions in the motorcycle manufacturer's

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Functional Area - Vehicle Servicing

	<p>servicing manual and the relevant requirements on environment, occupational safety and health regulations; and</p> <ul style="list-style-type: none"> • Capable of conducting basic tests on components upon completion of work and providing written report.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of motorcycle mechanical servicing.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Road Traffic (Construction and Maintenance of vehicles) Regulations

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Remove and replace motorcycle electrical units and components
Code	108677L2
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to remove and replace motorcycle electrical units and components safely according to the instructions in the motorcycle manufacturer's servicing 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	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of motorcycle electrical units and components)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of motorcycle electrical units and components such as: <ul style="list-style-type: none"> ○ Lighting systems ○ Security and alarm systems ○ Comfort and convenience systems ○ Electrical rider safety systems ○ Monitoring and instrumentation systems • With reference to the instructions in the motorcycle manufacturer's servicing manual understand the general remove and replace procedure for the components. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Remove and replace motorcycle electrical units and components)</p> <ul style="list-style-type: none"> • According to the instructions in the motorcycle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely remove and replace motorcycle electrical units and components, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in motorcycle electrical units and components by visual inspection ○ Functional test of each electrical units and components ○ Eliminate typical system failure • 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 removing and replacing motorcycle electrical units and components safely according to the instructions in the motorcycle 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 written report.

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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 of motorcycle electrical and mechanical servicing.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Remove and replace motorcycle chassis units and components
Code	108678L2
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to remove and replace motorcycle chassis units and components safely according to the instructions in the motorcycle manufacturer's servicing 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	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of motorcycle chassis units and components)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of motorcycle chassis units and components such as: <ul style="list-style-type: none"> ○ Steering systems ○ Suspension systems ○ Braking systems • With reference to the instructions in the motorcycle manufacturer's servicing manual and the requirements of relevant provisions under the Road Traffic Ordinance, understand the general remove and replace procedure for the components. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Remove and replace motorcycle chassis units and components)</p> <ul style="list-style-type: none"> • According to the instructions in the motorcycle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely remove and replace motorcycle chassis units and components, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in motorcycle chassis units and components by visual inspection ○ Functional test of each chassis units and components ○ Remove and replace motorcycle chassis units and components with safety procedure ○ Eliminate typical system failure • 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 removing and replacing motorcycle chassis units and components safely according to the instructions in the motorcycle 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 written report.

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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 of motorcycle mechanical servicing.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations
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Specification of Competency Standards
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Unit of Competency

Functional Area - Vehicle Servicing

Title	Remove and replace motorcycle driveline units and components
Code	108679L2
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to remove and replace motorcycle driveline units and components safely according to the instructions in the motorcycle manufacturer's servicing 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	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of motorcycle driveline units and components)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of motorcycle driveline units and components such as: <ul style="list-style-type: none"> ○ Chain and sprockets ○ Wheel bearings and seals ○ Drive shaft ○ Gear drive ○ Belts and pulleys • With reference to the instructions in the motorcycle manufacturer's servicing manual, understand the general removal and replacement procedure for the components. • Understand the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Remove and replace motorcycle driveline units and components)</p> <ul style="list-style-type: none"> • According to the instructions in the motorcycle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely remove and replace motorcycle driveline units and components, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in motorcycle driveline units and components by visual inspection ○ Functional test of each driveline units and components ○ Remove and replace motorcycle driveline units and components with safety procedure ○ Eliminate 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 removing and replacing motorcycle driveline units and components safely according to the instructions in the motorcycle 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 with written report.

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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 of motorcycle mechanical servicing.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Remove and fit non-welded, non-structural motorcycle body panel
Code	108680L2
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to remove and fit non-welded, non-structural motorcycle body panel safely according to the instructions in the motorcycle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct inspection of panels upon completion of work and providing written report
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure of non-welded, non-structural motorcycle body panel)</p> <ul style="list-style-type: none"> • Understand the structure of non-welded, non-structural motorcycle body panel, such as: <ul style="list-style-type: none"> ○ Front fairings ○ Seat cowlings ○ Mudguards ○ Screen ○ Mirror ○ Luggage and fittings • With reference to the instructions in the motorcycle manufacturer's servicing manual, understand the removal and fitting non-welded, non-structural motorcycle body panel procedures. • Understand the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Remove and fit non-welded, non-structural motorcycle body panel)</p> <ul style="list-style-type: none"> • According to the instructions in the motorcycle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely remove and fit non-welded, non-structural motorcycle body panel, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in non-welded, non-structural motorcycle body panel by visual inspection ○ Functional inspection of each panels and components ○ Eliminate typical safety 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 removing and fitting non-welded, non-structural motorcycle body panel safely according to the instructions in the motorcycle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations; and • Capable of conducting inspection of components upon completion of work and providing written report.

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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 knowledge of motorcycle body structure.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations
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Specification of Competency Standards
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Unit of Competency

Functional Area - Vehicle Servicing

Title	Inspect, repair and replace motorcycle tyres
Code	108681L2
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to inspect, repair and replace motorcycle tyres safely according to the instructions in the motorcycle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct safety inspection upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure of motorcycle tyres and the tools and equipment for the repair and replace)</p> <ul style="list-style-type: none"> • Understand the structure of motorcycle tyres, such as: <ul style="list-style-type: none"> ○ Tube tyre ○ Tubeless tyre • Know the tools and equipment for the repair and replace of motorcycle tyres, such as: <ul style="list-style-type: none"> ○ Lifting and supporting equipment ○ Tyre removal and refitting tools and equipment ○ Tread depth measuring equipment ○ Inflation equipment ○ Balancing equipment ○ Tyre repair tools • With reference to the instructions in the motorcycle manufacturer's servicing manual, understand the inspection, repair and replace motorcycle tyres procedures and regulations. • Understand the relevant legal requirements on road and vehicle safety and environment protection. • Understand the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Inspect, repair and replace motorcycle tyres)</p> <ul style="list-style-type: none"> • According to the instructions in the motorcycle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely repair and replace motorcycle tyres, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in motorcycle tyres, such as: wheel rim, tyre valve and inner tube by visual inspection ○ Accurate measurement of tread depth ○ Inspection of tyre pressures ○ Use of removal and refitting, balancing equipment and repairing tools to repair and replace of motorcycle tyres in safety procedure ○ Eliminate typical safety 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

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

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 inspecting, repairing and replacing motorcycle tyres safely according to the instructions in the motorcycle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations; and• Capable of conducting safety inspection of tyres upon completion of work and providing written report.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed knowledge of motorcycle tyre technology.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations• Dangerous Goods Ordinance

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for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Overhaul motorcycle mechanical units
Code	108682L2
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to overhaul motorcycle mechanical units safely according to the instructions in the motorcycle manufacturer's service manual. They should also be capable of conducting safety inspection upon completion of work and providing written report.
Level	2
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure of motorcycle mechanical units and the overhaul work)</p> <ul style="list-style-type: none"> • Understand the structure of motorcycle mechanical units, such as: <ul style="list-style-type: none"> ○ Engine ○ Transmission and drive systems ○ Steering systems ○ Suspension systems ○ Chassis assemblies. • Know the overhaul work including: <ul style="list-style-type: none"> ○ Dismantling ○ Assessment ○ Repair ○ Replacement ○ Adjustment of internal components ○ Re-assembly ○ Functional testing. • Understand the overhaul procedures and specification of motorcycle mechanical units with reference to the instructions in the motorcycle manufacturer's service manual. • Understand the relevant legal requirements on road & vehicle safety and environment protection. <p>2. Performance (Overhaul motorcycle mechanical units)</p> <ul style="list-style-type: none"> • According to the instructions in the motorcycle manufacturer's service manual and the requirements of occupational safety and health as well as that of environmental protection, safely overhaul motorcycle mechanical units, including: <ul style="list-style-type: none"> ○ identifying the general problems in motorcycle mechanical units by visual inspection ○ Functional test and assessment of the effectiveness of all components ○ Elimination of typical faults and safety failures. • Conduct performance test and safety inspection after the work and provide written report, emphasizing on: <ul style="list-style-type: none"> ○ Abnormalities ○ Measuring data ○ Major decision
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 overhauling motorcycle mechanical units safely according to the instructions in the motorcycle manufacturer's service manual and relevant legal requirements; and

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for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Capable of conducting safety inspection of all components upon completion of work and providing written report.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed knowledge of motorcycle mechanical units.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations

Specification of Competency Standards
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Unit of Competency

Functional Area - Vehicle Servicing

Title	Carry out Routine Commercial Vehicle Maintenance
Code	108683L2
Range	This unit of competency is applicable in commercial vehicle servicing workshops. Practitioners should be able to carry out routine commercial vehicle maintenance work safely according to the instructions in the commercial vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct performance and safety tests on systems upon completion of work according to the manufacturer's specification and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Procedure to carry out routine commercial vehicle maintenance work)</p> <ul style="list-style-type: none"> • In accordance with the commercial vehicle manufacturer's service manual, understand the procedures to carry out routine commercial vehicle maintenance work. Such as: <ul style="list-style-type: none"> ○ Quick service ○ Standard service • Understand the tools and equipment to carry out routine commercial vehicle maintenance work. • Understand the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Carry out routine commercial vehicle maintenance work)</p> <ul style="list-style-type: none"> • In accordance with the commercial vehicle manufacturer's servicing manual, Hong Kong Road Traffic Ordinance, requirements of occupational safety & health, and environmental protection, carry out the routine maintenance work, including: <ul style="list-style-type: none"> ○ Engine unit ○ Fuel supply & emission systems ○ Engine management system ○ Brake system ○ Steering system ○ Suspension system ○ Transmission system ○ Electrical system ○ Body and Frame unit • 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 carrying out routine commercial vehicle maintenance work safely according to the instructions in the commercial vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations; • Capable of conducting safety inspection upon completion of work and providing written report; and

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Capable of assessing the performance of various systems according to the manufacturer's specification and relevant ledge requirements.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of the functions of the commercial vehicle systems.</p> <p>The major legislation/code involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Pre-delivery Preparation and Inspection of commercial vehicle
Code	108684L2
Range	This unit of competency is applicable in commercial vehicle servicing workshops. Practitioners should be able to carry out commercial vehicle pre-delivery preparation and inspection safely according to the instructions in the commercial vehicle manufacturer's manual and the relevant requirements on environment, occupational safety and health regulations. Upon completion of work and provide written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Requirements to carry out commercial vehicle pre-delivery preparation)</p> <ul style="list-style-type: none"> • According to the instructions in the commercial vehicle manufacturer's manual, understand the requirements to carry out commercial vehicle pre-delivery preparation work. • Know the documents needed for commercial vehicle pre-delivery. • Understand the relevant legal requirements on road & vehicle safety and environment protection. <p>2. Performance (Carry out commercial vehicle pre-delivery preparation and inspection work)</p> <ul style="list-style-type: none"> • In accordance with (i) the commercial vehicle manufacturer's servicing manual, (ii) legal requirements of occupational safety and health & environmental protection, to carry out the commercial vehicle pre-delivery preparation and inspection work, included: <ul style="list-style-type: none"> ○ Engine unit ○ Fuel supply & emission systems ○ Engine management system ○ Brake system ○ Steering system ○ Suspension system ○ Transmission system ○ Electrical system ○ Body, Frame and mounted equipment. • Inspection of the documents needed for commercial vehicle pre-delivery. • Conduct safety inspection after the work and provide written report, focusing on: <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 carrying out commercial vehicle pre-delivery preparation and inspection work safely according to the instructions in the commercial vehicle manufacturer's manual, relevant legal requirements and the relevant requirements on environment, occupational safety and health regulations; and • Capable of identifying the documents needed for commercial vehicle pre-delivery; and • Capable of conducting basic tests on components upon completion of work and provide working report.

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Functional Area - Vehicle Servicing

Remark	<p>The credits value of this unit of competency is set on the presumption that practitioner concerned has already possessed basic knowledge of the functions of the commercial vehicle systems.</p> <p>The major legislation/code involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations
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Functional Area - Vehicle Servicing

Title	Remove and replace commercial vehicle engine units and components
Code	108685L2
Range	This unit of competency is applicable in commercial vehicle servicing workshops. Practitioners should be able to remove and replace commercial vehicle engine units and components safely according to the instructions in the commercial 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 provide written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of commercial vehicle engine units and components)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of commercial vehicle engine units and components including: <ul style="list-style-type: none"> ○ Engine mechanical systems ○ Cooling systems ○ Intake and exhaust systems ○ Fuel systems ○ Lubrication systems ○ Electrical systems • Understand the general checking and repairing procedures for the components with reference to the instructions in the commercial vehicle manufacturer's service manual. • Understand the relevant legal requirements on road & vehicle safety and environment protection. <p>2. Performance (Remove and replace commercial vehicle engine power-train units and components)</p> <ul style="list-style-type: none"> • According to the manufacturer's service manual and relevant legal requirements concerning occupational safety & health and environmental protection, safely remove, replace commercial vehicle engine, power-train units and components, including: <ul style="list-style-type: none"> ○ Being capable of identifying general problems in commercial vehicle engine, power-train units and components by visual inspection ○ Functional test and assessment of the effectiveness of all components ○ Elimination of typical system failures • Conduct performance and safety inspection after the work and provide written report, focusing on: <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 removing and replacing commercial vehicle engine, power-train units and components safely in accordance with manufacturer service manual, relevant legal requirements and the relevant requirements on environment, occupational safety and health regulations; and

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Capable of conducting basic tests on components upon completion of work with written report.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of commercial vehicle mechanical servicing.</p> <p>The major legislation / code involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations• Factories and Industrial Undertakings (Lifting Appliances and Lifting gear) Regulations

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Remove and replace commercial vehicle electrical units and components
Code	108686L2
Range	This unit of competency is applicable in commercial vehicle servicing workshops. Practitioners should be able to remove and replace commercial vehicle electrical units and components safely according to the instructions in the commercial 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	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of commercial vehicle electrical units and components)</p> <ul style="list-style-type: none"> • Understanding of the structure and basic operating principles of commercial vehicle electrical units and components, including: <ul style="list-style-type: none"> ○ Lighting systems ○ Wiper systems ○ Security and alarm systems ○ Comfort and convenience systems ○ Audio systems ○ Communication systems ○ Electric window systems ○ Monitoring and instrumentation systems • Understanding of the general removal and replacement procedures for the components according to the instructions in the commercial vehicle manufacturer's service manual • Understanding of the relevant legal requirements on road & vehicle safety, and environment protection. <p>2. Performance (Remove and replace commercial vehicle electrical units and components)</p> <ul style="list-style-type: none"> • According to the instructions in the commercial vehicle manufacturer's service manual and the legal requirements of occupational safety and health as well as those of environmental protection, safely remove and replace commercial vehicle electrical units and components, including: <ul style="list-style-type: none"> ○ Being capable of identifying general problems in commercial vehicle electrical units and components by visual inspection ○ Functional test of each electrical units and components ○ Elimination of typical system failures • 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 removing and replacing commercial vehicle electrical units and components safely in accordance with manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations; and

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Capable of conducting basic tests on components upon completion of work with written report.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of commercial vehicle electrical and mechanical servicing.</p> <p>The major legislation/code involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations

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Functional Area - Vehicle Servicing

Title	Remove and replace commercial vehicle chassis units and components
Code	108687L2
Range	This unit of competency is applicable in commercial Vehicle servicing workshops. Practitioners should be able to remove and replace commercial Vehicle chassis units and components safely according to the instructions in the commercial 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	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of commercial Vehicle chassis units and components)</p> <ul style="list-style-type: none"> • Understand the structure and basic operating principles of commercial Vehicle chassis units and components such as (mechanical, electrical, hydraulic and fluid, pneumatic powered): <ul style="list-style-type: none"> ○ Steering systems ○ Suspension systems ○ Braking systems • Understand the general remove and replace procedure for the components according to the instructions in the commercial Vehicle manufacturer's service manual • Understanding of the relevant legal requirements on road & vehicle safety, and environment protection. <p>2. Performance (Remove and replace commercial Vehicle chassis units and components)</p> <ul style="list-style-type: none"> • According to the instructions in the commercial Vehicle manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, safely remove and replace commercial Vehicle chassis units and components, including: <ul style="list-style-type: none"> ○ Capable of identifying the general problems in commercial Vehicle chassis units and components by visual inspection ○ Functional test of each chassis units and components ○ Eliminate typical system failure • 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 removing and replacing commercial vehicle chassis units and components safely according to the instructions in the commercial 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 with written report.

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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 of commercial Vehicle mechanical servicing.</p> <p>The major legislation/code involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of vehicles) Regulations
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Specification of Competency Standards
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Unit of Competency

Functional Area - Vehicle Servicing

Title	Non-high energy electrical system related operation on electric and hybrid vehicles
Code	108688L2
Range	This unit of competency is applicable in electrical vehicle servicing workshops. Practitioners should be able to carry out non-high energy electrical system work on or near electric and hybrid vehicles safely according to the instructions in the electrical 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	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Hazard associated with electric and hybrid vehicles)</p> <ul style="list-style-type: none"> • According to the instructions in the electrical vehicle manufacturer's service manual, understand the hazards associated with electric and hybrid vehicles such as: <ul style="list-style-type: none"> ○ Potential hazards of the following components: <ul style="list-style-type: none"> ▪ High power component ▪ Charging systems ▪ High voltage battery ○ Preventive measures relating to work • Understand how to provide written report after the work. • Understanding of the relevant legal requirements on road & vehicle safety, and environment protection. <p>2. Performance (Process the work in hazards associated with electric and hybrid vehicles)</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, safely process the work in hazards associated with electric and hybrid vehicles, including: <ul style="list-style-type: none"> ○ Collect information about potential hazards ○ Work with the basis of preventive measures • 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 assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of carrying on non-high energy electrical system work of electric and hybrid vehicle safely according to the instructions in the electric and hybrid vehicle manufacturer's servicing manual the relevant requirements on environment, occupational safety and health regulations; and • Capable of conducting basic tests on components upon completion of work and provide working report.
Remark	The credits value of this unit of competency is set on the presumption that the assessee concerned has already possessed basic knowledge in operation of electric and hybrid vehicle.

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Functional Area - Vehicle Servicing

Title	Check and repair mechanical break down and damage for electric and hybrid vehicles
Code	108689L2
Range	This unit of competency is applicable in electric and hybrid vehicle servicing workshops. Practitioners should be able to carry out mechanical breakdown and damaged work on electric and hybrid vehicles safely according to the instructions in the electric and hybrid vehicle manufacturer's service manual and the relevant requirements on road and vehicle safety, environment, occupational safety and health regulations. They should also be able to handle potential hazards and conducting basic tests on components upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Hazards with mechanical break down and damage for electric and hybrid vehicles and work base on preventive measures)</p> <ul style="list-style-type: none"> • According to the instructions in the electric and hybrid vehicle manufacturer's service manual, understand the potential hazards associated with mechanical breakdown and damage for electric and hybrid vehicle, such as: <ul style="list-style-type: none"> ○ Potential hazards on break down and damage vehicle ○ The risk assessment ○ Work base on preventive measures • Understanding of the relevant legal requirements on road and vehicle safety, and environment protection. <p>2. Performance (Work with mechanical break down and damage for electric and hybrid vehicle)</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, safely process the work with mechanical break down and damage for electric and hybrid vehicle, including: <ul style="list-style-type: none"> ○ Collect information about potential hazards ○ Conduct risk assessment ○ Repair work with the basis of preventive measures • 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 working on repair of mechanical breakdown and damaged on electric and hybrid vehicle safely according to the instructions in the electric and hybrid vehicle manufacturer's servicing manual and the relevant requirements on road and vehicle safety, environment, occupational safety and health regulations; and • Capable of conducting basic tests on components upon completion of work and providing working report.
Remark	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.

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Functional Area - Vehicle Servicing

Title	Isolate and reinstate electric system of electric and hybrid vehicle
Code	108690L2
Range	This unit of competency is applicable in electric and hybrid vehicle servicing workshops. Practitioners should be able to isolate and reinstating electric system of electric and hybrid vehicle 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 handle potential hazards and conducting basic tests on components upon completion of work and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Isolate and reinstate electric system of electric and hybrid vehicle)</p> <ul style="list-style-type: none"> • Understand the high voltage systems and components in electric and hybrid vehicle, such as: <ul style="list-style-type: none"> ○ Component with high voltage: <ul style="list-style-type: none"> ▪ Battery ▪ Modules Component ▪ Electric Motor ▪ Hardware ○ Location of the high voltage components • Isolate and reinstate an electric and hybrid vehicle according to the instructions in the manufacturer's service manual. • Know the testing equipment for high voltage component. • Understanding of the relevant legal requirements on road & vehicle safety, and environment protection. <p>2. Performance (Perform isolate and reinstate electric system of electric and hybrid vehicle)</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, safely process isolate and reinstate an electric and hybrid vehicle, 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. ○ Process isolate and reinstate ○ 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 isolating and reinstating electric system of electric and hybrid vehicle 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

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Capable of conducting basic tests on components upon completion of work and providing working report.
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

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Service and repair non-live electric and hybrid vehicle systems
Code	108691L2
Range	This unit of competency is applicable in electric and hybrid vehicle servicing workshops. Practitioners should be able to service and repairing non-live electric and hybrid vehicle 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	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The non-live electric and hybrid vehicle systems)</p> <ul style="list-style-type: none"> • Understand the non-live systems and components of an electric and hybrid vehicle, such as: <ul style="list-style-type: none"> ○ Battery system and components ○ Electric Motor ○ Converter ○ Control and meter console ○ Drive units ○ Power source ○ Other auxiliary systems • Service and repair procedure according to the instructions in the electric and hybrid vehicle manufacturer's service manual. • Understanding of the relevant legal requirements on road & vehicle safety, and environment protection. <p>2. Performance (Service and repair on the non-live electric and hybrid vehicle 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, safely process service and repair on the non-live electric and hybrid vehicle systems, 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. ○ Remove, change and reinstall the components ○ 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 service and repair on non-live electric and hybrid vehicle 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

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Capable of conducting basic tests on components upon completion of work and provide working report.
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

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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 safety, 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
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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
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Dismantle and repair electric and hybrid vehicle air-conditioning, cooling and power steering systems
Code	108693L2
Range	This unit of competency is applicable in electric and hybrid vehicle servicing workshops. Practitioners should be able to dismantle and repairing electric and hybrid vehicle air-conditioning, cooling and power steering 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 air-conditioning, cooling and power steering systems)</p> <ul style="list-style-type: none"> • Understand the structure and operation of the electric and hybrid vehicle air-conditioning, cooling and power steering systems. • 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 air-con. cooling and power steering systems. • Understanding of the relevant legal requirements on road & vehicle safety, and environment protection. <p>2. Performance (Dismantle and repair electric and hybrid vehicle air-conditioning, cooling and power steering 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 air-conditioning, cooling and power steering systems of an electric and hybrid vehicle safety, 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 air-conditioning, cooling and power steering 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
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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
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Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Dismantle and repair electric and hybrid vehicle WiFi, General Pocket Radio Service (GPRS) and various sensors for vehicle control
Code	108694L2
Range	This unit of competency is applicable in electric and hybrid vehicle servicing workshops. Practitioners should be able to dismantle and repairing electric and hybrid vehicle WiFi, GPRS and various sensors for vehicle control 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 WiFi, GPRS and various sensors for vehicle control)</p> <ul style="list-style-type: none"> • Understand the structure and operation of the electric and hybrid vehicle WIFI, GPRS and various sensors for vehicle control. • 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 WIFI, GPRS and various sensors for vehicle control • Understanding of the relevant legal requirements on road & vehicle safety, and environment protection. <p>2. Performance (Dismantle and repair electric and hybrid vehicle WIFI, GPRS and various sensors for vehicle control)</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 WIFI, GPRS and various sensors for vehicle control of an electric and hybrid vehicle safety, 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 dismantling and repairing electric and hybrid vehicle WiFi, GPRS and various sensors for vehicle control 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.

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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
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Unit of Competency

Functional Area - Vehicle Servicing

Title	Monitor and maintain instruments and equipment
Code	108695L3
Range	This unit of competency is applicable in vehicle body assembling and servicing workshops. Practitioners should be able to monitor and maintaining instruments and equipment according to the maintenance and user guide provided by equipment manufacturer.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Operating principles and maintenance procedure for vehicle body servicing instruments and equipment)</p> <ul style="list-style-type: none"> • Good understanding of the use of vehicle body servicing instruments and equipment. • Good understanding of the user guide of vehicle body servicing instruments and equipment. • Good understanding of the operating principles of vehicle body servicing instruments and equipment. • Understand the laws and regulations in relation to vehicle body servicing instruments and equipment. <p>2. Performance (Monitor and maintain instruments and equipment)</p> <ul style="list-style-type: none"> • Implement or arrange maintenance plan for instruments and equipment according to the user and maintenance guide provided by vehicle body servicing instruments and equipment manufacturer: Such as: <ul style="list-style-type: none"> ○ Body Jack ○ Body Stand ○ Body Repair Chain ○ Welding tools and equipment. • Conduct initial fault diagnosis for faulty instruments and equipment; and issue suspension notice. • Conduct regular inspection and fine-tuning on instruments and equipment.
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 implementing or arranging maintenance plan for instruments and equipment according to the user and maintenance guide provided by instruments and equipment manufacturer; and • Capable of conducting inspection and fine-tuning on instruments and equipment.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of operating vehicle instruments and equipment.

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Conduct fault diagnosis on various vehicle fuel supply systems
Code	108696L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able masterly to conduct complicated fault diagnosis on various vehicle fuel supply systems and conduct or arrange rectification according to the instructions in the vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct system tests and complete simple fault 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 various vehicle fuel systems)</p> <ul style="list-style-type: none"> • Good understanding of the structure and operating principles of various vehicle fuel systems (e.g. petrol, diesel and liquefied gas). • With reference to the vehicle manufacturer's servicing instructions, understand the fault diagnosis process for various vehicle fuel systems, such as using exhaust gases analysers to conduct system fault diagnosis. • Master fuel system diagnosis and the operation of testing equipment and instrument, such as various types of on-board diagnostic systems. • Good understanding of relevant laws and regulations governing vehicle exhaust emissions. • Good understanding of relevant laws and regulations governing the handling of vehicle liquefied gas. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Conduct fault diagnosis on various vehicle fuel supply systems)</p> <ul style="list-style-type: none"> • Accurately conduct complicated fault diagnosis on various vehicle fuel supply systems according to the instructions in the vehicle manufacturer's service manual and the requirements of occupational health and safety and that of environmental protection, including the use of special equipment and instruments to assist the diagnostic process. • Conduct or arrange rectification to eliminate the fault according to diagnostic results. • Accurately test the fuel systems, including using relevant equipment and instrument to conduct the tests. • 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. • Assess from the measurement if the vehicle emissions can meet the local statutory requirements. • Handle liquefied gas system components according to relevant local statutory requirement.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none"> • Capable of accurately conducting complicated fault diagnosis on various vehicle fuel supply systems according to the instructions in the vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations; • Capable of conducting or arranging rectification according to diagnostic results; • Capable of conducting fuel system tests and completing written report upon completion of work; • Capable of assessing vehicle emissions or smoke correctly according to relevant laws and regulations on vehicle emissions; • Capable of handling liquefied gas system components correctly according to relevant laws and regulations governing the handling of liquefied gas.
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 inspecting and repairing various types of fuel systems.</p> <p>The major legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Road Traffic (Construction and Maintenance of Vehicles) Regulations – Smoke, etc. and Exhaust Emission • Air Pollution Control Ordinance • Gas Safety Ordinance

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Functional Area - Vehicle Servicing

Title	Conduct fault diagnosis on vehicle engine and component systems
Code	108697L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able masterly to conduct complicated fault diagnosis on various vehicle engine and component systems and conduct or arrange rectification according to the instructions in the vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct system tests and complete simple fault report upon completion of work.
Level	3
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and operating principles of vehicle engine and component systems)</p> <ul style="list-style-type: none"> • Master the structure and operating principles of vehicle engine and component systems, such as: <ul style="list-style-type: none"> ○ vehicle engine ○ vehicle cooling systems ○ vehicle ignition systems ○ vehicle emission control systems ○ various types of engine management systems. • With reference to the vehicle manufacturer's servicing instructions, understand the fault diagnosis process for vehicle engine and component systems. • Master vehicle engine and component systems diagnosis and the operation of testing equipment and instrument, such as various types of on-board diagnostic systems. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Conduct fault diagnosis on vehicle engine and component systems)</p> <ul style="list-style-type: none"> • Master conduct complicated fault diagnosis on various vehicle engine and component systems according to the instructions in the vehicle manufacturer's service manual and the requirements of occupational health and safety and that of environmental protection, including the use of special equipment and instruments to assist the diagnostic process. • Conduct or arrange rectification to eliminate the fault according to diagnostic results. • Accurately test the vehicle engine and component systems, including using relevant equipment and instrument to conduct the tests. • Conduct performance and safety inspection after the work and provide written report focusing on: <ul style="list-style-type: none"> ○ Abnormalities ○ Measured data ○ Major decision
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 masterly conducting complicated fault diagnosis on various vehicle engine and component systems according to the instructions in the vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations; • Capable of making rectification for vehicle engine and component systems according to diagnostic results; and

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	<ul style="list-style-type: none">• Capable of conducting vehicle engine and component systems tests and completing written report upon completion of work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of inspecting and repairing vehicle engine and component systems.

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Conduct fault diagnosis on vehicle chassis units and components
Code	108698L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able masterly to conduct complicated fault diagnosis on vehicle chassis systems and components and conduct or arrange rectification according to the instructions in the vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct system tests and providing written report upon completion of work.
Level	3
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and operating principles of vehicle chassis systems and components)</p> <ul style="list-style-type: none"> • Be familiar with the structure and operating principles of vehicle chassis systems and components, such as: <ul style="list-style-type: none"> ○ Braking systems ○ Steering systems ○ Suspension systems • With reference to the vehicle manufacturer's servicing instructions and the requirements of relevant local road traffic ordinances, understand the fault diagnosis process for vehicle chassis systems and components. • Be familiar with vehicle chassis systems and components diagnosis and the operation of testing equipment and instruments. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Conduct fault diagnosis on vehicle chassis systems and components)</p> <ul style="list-style-type: none"> • Conduct complicated fault diagnosis on vehicle chassis systems and components according to the instructions in the vehicle manufacturer's service manual and the requirements of occupational health and safety and that of environmental protection, including the use of special equipment and instruments to assist the diagnostic process. • Conduct or arrange rectification to eliminate the fault according to diagnostic results. • Accurately conduct test of vehicle chassis systems and components, including the use of relevant equipment and instrument to conduct test. • 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 masterly conducting complicated fault diagnosis on vehicle chassis systems and components according to the instructions in the vehicle manufacturer's service manual and Be familiar with; • Capable of conducting or arranging rectification for vehicle chassis systems and components according to diagnostic results; and • Capable of conducting tests on vehicle chassis systems and components and providing written report upon completion of work.

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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 inspecting and repairing vehicle chassis systems and components.</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
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Unit of Competency

Functional Area - Vehicle Servicing

Title	Conduct fault diagnosis on electric and hybrid vehicles
Code	108699L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be masterly able to conduct fault diagnosis on electric vehicles and conduct or arrange rectification according to the instructions in the vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct system 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 electric and hybrid vehicles)</p> <ul style="list-style-type: none"> • Good understanding of the structure and operating principles of various types of electric and hybrid vehicles. • Understand the fault diagnosis procedure for electric and hybrid vehicles with reference to instructions in the vehicle manufacturer's service manual. • Good understanding of the hazards and safety rules of the electric-driven system of electric and hybrid vehicles. • Master the operation of various types of diagnostic and testing instruments and equipment, such as on-board diagnostic systems. • Good understanding of the disposal and recovery procedure for batteries according to the requirements of environmental protection regulations. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Conduct fault diagnosis on electric and hybrid vehicles)</p> <ul style="list-style-type: none"> • Conduct fault diagnosis on electric and hybrid vehicles according to the instructions in the vehicle manufacturer's service manual and safety rules as well as the requirements of occupational safety and health and environmental protection, including the use of special equipment and instruments, such as using hand held testers and chassis dynamometers to assist the diagnosis of system components, included: <ul style="list-style-type: none"> ○ Electric systems, ○ Charging systems, ○ Control systems and ○ Mechanical structure • Conduct or arrange rectification of defects found according to diagnostic results. • Test various types of electric and hybrid vehicles accurately and confirm that rectification is done, such as conduct tests by using instruments and equipment. • 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 • Correctly handle the disposal and recovery of battery according to the requirements of environmental protection regulations.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of accurately conducting fault diagnosis on electric and hybrid vehicles according to the instructions in the vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations;• Capable of conducting or arranging rectification of defects according to diagnostic results;• Capable of testing various types of electric vehicles accurately and providing written report; and• Capable of handling the disposal and recovery of various types of batteries correctly with compliance to the requirements of environmental protection regulations.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of repairing various types of vehicle mechanical and electric systems.

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Functional Area - Vehicle Servicing

Title	Conduct fault diagnosis on vehicle transmission systems
Code	108700L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able masterly to conducting complicated fault diagnosis on vehicle transmission systems and conduct or arrange rectification according to the instructions in the vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct system 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 various types of vehicle transmission systems)</p> <ul style="list-style-type: none"> • Good understanding of the structure and operating principles of various types of vehicle transmission systems (e.g. electronic control automatic transmission, continuously variable transmission, limited slip differential). • With reference to the vehicle manufacturer's servicing instructions, understand the fault diagnosis process for various types of vehicle transmission systems, such as inspection of automatic transmission hydraulic system and electronic transmission system. • Master the vehicle transmission system diagnosis and the operation of testing equipment and instruments. <p>2. Performance (Conduct fault diagnosis on vehicle transmission systems)</p> <ul style="list-style-type: none"> • Accurately conduct complicated fault diagnosis on various types of vehicle transmission systems according to the instructions in the vehicle manufacturer's service manual and the requirements of occupational health and safety and that of environmental protection, including the use of special equipment and instruments to assist the diagnostic process • Conduct or arrange rectification to eliminate the fault according to diagnostic results. • Accurately conduct test of transmission systems, including using relevant equipment and instruments to conduct the tests. • Provide written report after confirming that rectification is done.
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 accurately conducting complicated fault diagnosis on various types of vehicle transmission systems according to the instructions in the vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations; • Capable of conducting or arranging rectification for various types of vehicle transmission systems according to diagnostic results; and • Capable of conducting tests on vehicle transmission systems and providing written report upon completion of work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of inspecting and repairing various types of vehicle transmission systems.

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Functional Area - Vehicle Servicing

Title	Test drive and report the condition of vehicles
Code	108701L3
Range	This unit of competency is applicable in vehicle servicing. Practitioners should be able to test drive the vehicles on chassis dynamometer or on road according to organisational policy, the instructions in the vehicle manufacturer's manual and relevant road traffic regulations masterly, so as to check the vehicle, conduct fault diagnosis or confirm completion of rectification work. Providing written report after the work.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Procedural guidelines and relevant regulations on vehicle testing)</p> <ul style="list-style-type: none"> • Good understanding of the organisational policy on vehicle testing. • Good understanding of vehicle manufacturer's guidelines on vehicle testing procedure. • Good understanding of relevant equipment and instruments for vehicle testing. • Good understanding of the road traffic regulations, including road test and the use of T-plate. <p>2. Performance (Process vehicle testing)</p> <ul style="list-style-type: none"> • With reference to organisational policy on vehicle testing and vehicle manufacturer's guidelines on vehicle testing procedure, test various vehicle systems by visual inspection and instruments, including: <ul style="list-style-type: none"> ○ Conduct the test by the use of equipment and instruments – use chassis dynamometer to simulate different road conditions ○ Conduct road test in compliance with road traffic safety instructions • Detect potential deficiency in vehicles. • Conduct fault diagnosis on vehicles. • Provide suggestions on repair items. • Confirm rectification after repair job is done. • Check vehicle component defect by visual inspection. • Issue document to confirm rectification of fault. • Complete report on outstanding defect of the vehicle with repairing suggestions included. • Complete the vehicle condition report and provide written report after the work. • Determine that the vehicle systems and components as well as the vehicle tests can meet the requirements of relevant road traffic regulations. • Be familiar with relevant procedure and regulations on the use of T-plate.
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 accurately vehicle testing and check, fault diagnosis and confirming completion of rectification work according to the instructions in the vehicle manufacturer's manual and relevant road traffic regulations; • Capable of providing accurate and suitable suggestions on repair items and providing written report; and • Capable of ascertaining that the vehicle systems and components can meet the requirements of relevant road traffic ordinance/ regulations.

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Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the capability to conduct fault diagnosis on various vehicle systems and possess driving licence for the vehicle types involved.</p> <p>The major legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none">• Road Traffic (Registration and Licensing of Vehicles) Regulations- Limitations of use of trade licence, display of trade plates and licence, Register of journeys under trade licence and Trade licence not transferable• Road Traffic (Construction and Maintenance of Vehicles) Regulations
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Specification of Competency Standards
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Unit of Competency

Functional Area - Vehicle Servicing

Title	Maintain various vehicle servicing tools and equipment
Code	108702L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to maintain vehicle servicing tools and equipment to keep them in good condition according to the instructions of various vehicle servicing tools and equipment manufacturers masterly. They should also arrange regular inspection and rectification required for the tools and equipment that are governed by regulations.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Purposes and operating principles of vehicle servicing tools and equipment)</p> <ul style="list-style-type: none"> • Good understanding of the purposes of vehicle servicing tools and equipment. • Good understanding of the vehicle servicing tools and equipment manufacturer's user guide. • Understand the operating principles of special vehicle servicing tools and equipment. • Understand special vehicle servicing tools and equipment, such as relevant regulations governing lifting appliances. <p>2. Performance (Maintain various categories of tools and equipment)</p> <ul style="list-style-type: none"> • Implement or arrange for maintenance plan for special vehicle servicing tools and equipment according to the vehicle servicing tools and equipment manufacturer's user guide. • Arrange tests/calibration for the tools and equipment that have to undergo regular inspection, such as roller brake testers, chassis dynamometer, exhaust gases analysers, torque wrenches and vehicle lifting equipment. • Conduct initial diagnosis and issue suspension notice for the malfunction tools and equipment. • Arrange for repairing of vehicle servicing tools and equipment. • Record, keep and update the record on the maintenance and repairing of vehicle servicing tools and equipment. • Keep and or display the documents concerning the regular tests/calibration of vehicle servicing tools and equipment.
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 implementing or arranging for maintenance of vehicle servicing tools and equipment according to the instructions of various vehicle servicing tools and equipment manufacturers; • Capable of conducting initial diagnosis of faults from vehicle servicing tools and equipment; • Capable of arranging regular tests and calibration required for vehicle servicing tools and equipment that are governed by regulations, and keeping/displaying documents concerned; and • Capable of accurately recording, keeping and updating the maintenance and repairing record of vehicle servicing tools and equipment.
Remark	The major legislation/rule involved in this unit of competency is as follows:

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	<ul style="list-style-type: none">• Factories and Industrial Undertakings (Lifting appliances and Lifting gear) Regulations
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Specification of Competency Standards
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Functional Area - Vehicle Servicing

Title	Conduct fault diagnosis on vehicle battery, charging and starting systems
Code	108703L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check the condition of vehicle battery, conduct diagnosis on vehicle charging and starting systems and also repair them according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations masterly. They should also be able to conduct system tests 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 battery, charging, electric supply and starting systems)</p> <ul style="list-style-type: none"> • Good understanding of the structure and operating principles of vehicle battery, charging, electric supply and starting systems. • Good understanding of electric and electronic theories and also the principles of electric power transfer and electric power generation. • Good understanding of about general. electric/electronic tools or equipment. • Good understanding of the handling procedure for vehicle lead acid battery and its possible impact and danger on occupational safety and health as well as environmental protection. • Master the inspection and maintenance procedure for vehicle battery, charging, electric supply and starting systems according to the requirements stated in the vehicle manufacturer's servicing manual. <p>2. Performance (Conduct fault diagnosis on vehicle battery, charging, electric supply and starting systems)</p> <ul style="list-style-type: none"> • Independently check and repair the faults found in vehicle battery, charging, electric supply and starting systems according the information in the vehicle manufacturer's servicing manual and the requirements of occupational safety and health as well as environmental protection. • Select appropriate tools and instruments to accurately inspect and measure vehicle charging/electric supply and starting systems; and analyse and evaluate the faults found in the systems according to different data. • Subject to different faults, conduct checking and repairing work including dismantle, replace, re-assemble and fine-tune relevant system components and accessories. • Handle and dispose vehicle battery according to environmental protection regulations. • Accurately assess the efficiency of relevant systems upon completion of the checking and repairing work; and conduct appropriate evaluation and follow-up action. • Rectify system faults based on analysis of data obtained by inspection and measurement; and evaluate if the efficiency of the vehicle battery, charging systems, electric supply systems and starting systems can meet the requirements stated in the vehicle manufacturer's servicing manual • Provide written report after confirming that rectification is done. • Handle and dispose vehicle battery systems according to relevant local statutory requirement, the instructions of parts supplier and battery collection merchants.

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Functional Area - Vehicle Servicing

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 masterly conducting fault diagnosis on vehicle battery, charging and starting systems according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations;• Capable of implementing or arranging rectification work for relevant systems according to diagnostic results; and conduct test of components upon completion of work; and• Capable of conducting system tests 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 electric system servicing.</p>

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Functional Area - Vehicle Servicing

Title	Conduct fault diagnosis on vehicle lighting systems, signalling systems, meter instruments and displaying systems
Code	108704L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to independently check and repairing as well as conduct diagnosis and analysis on vehicle lighting systems, signalling systems, meter instruments and displaying systems according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations masterly. They should also be capable of conducting system tests 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 lighting systems, signaling systems, meter instruments and displaying systems)</p> <ul style="list-style-type: none"> • Good understanding of relevant local statutory requirements of vehicle lighting, signaling and displaying systems. • Good understanding of the structure and operating principles of vehicle lighting systems, signaling systems, meter instruments and displaying systems. • Good understanding of the principles of lighting, electricity and electronics. • Know about general electric/electronic tools or instruments. • Understand the general inspection and maintenance procedure for vehicle lighting systems, signaling systems, meter instruments and displaying systems according to the requirements stated in the vehicle manufacturer's servicing manual. <p>2. Performance (Conduct fault diagnosis on vehicle lighting systems, signaling systems, meter instruments and displaying systems)</p> <ul style="list-style-type: none"> • Safely conduct fault diagnosis on vehicle lighting systems, signalling systems, meter instruments and displaying systems and repair them according to the information in the vehicle manufacturer's servicing manual 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 lighting systems, signalling systems, meter instruments and displaying systems by visual inspection ○ Select suitable tools or instruments to inspect and measure the systems and capable of analysing and evaluate system faults according to different circumstances • Check and repair faulty systems and circuits; work may include dismantle, replace, re-assemble and fine-tune relevant system components and accessories. • With the use of suitable tools or instruments, accurately evaluate if the relevant systems can meet the requirements upon completion of work. • Provide written report after confirming that rectification is done. • Capable of assessing if the vehicle lighting systems and signalling systems can meet the local statutory requirement.
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 accurately conducting complicated fault diagnosis on vehicle lighting systems, signalling systems, meter instruments and displaying systems according to the

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	<p>instructions in the vehicle manufacturer's 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 relevant system tests and evaluation and providing written report upon completion of work.
Remark	<p>The major ordinance involved in this unit of competency is as follow relevant ordinances, such as:</p> <ul style="list-style-type: none">• Road Traffic Ordinance• Road Traffic (Construction and Maintenance of vehicles) Regulations

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Functional Area - Vehicle Servicing

Title	Conduct fault diagnosis and analysis on vehicle wiper, electric door and window systems
Code	108705L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to independently check and repairing as well as conduct diagnosis and analysis on vehicle wiper, electric door and window systems according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations masterly. They should also be able to conduct system tests 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 wiper, electric door and window systems)</p> <ul style="list-style-type: none"> • Good understanding of the structure and operating principles of vehicle wiper and electric door and window systems. • Good understanding of the inspection and maintenance procedure for wiper, electric door and window systems according to the instructions in the vehicle manufacturer's servicing manual. • Understand the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Conduct fault diagnosis and analysis on vehicle wiper, electric door and window systems)</p> <ul style="list-style-type: none"> • Safely conduct fault diagnosis on vehicle wiper, electric door and window systems and repair them according to the information in the vehicle manufacturer's servicing manual 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 wiper, electric door and window systems by visual inspection ○ Select suitable tools or instruments to inspect and measure relevant systems ○ Determine, 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 evaluate if the relevant systems can meet the requirements and are up to standard upon completion of work ○ Provide written report after confirming that rectification is done.
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 wiper, electric door and window systems according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations; • Capable of implementing or arranging rectification work for relevant systems according to diagnostic results; and

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	<ul style="list-style-type: none">• Capable of conducting tests and evaluation on vehicle wiper, electric door and window systems and providing written report upon completion of work.
Remark	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.

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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>

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Title	Conduct fault diagnosis and analysis on vehicle electronic data control systems
Code	108707L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to independently check, repairing, analysing and evaluating various types of vehicle electronic/data control systems and equipment according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations. They should also be capable of conducting fine-tuning, test and evaluation of system components 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 various types of vehicle electronic control systems and equipment)</p> <ul style="list-style-type: none"> • Good understanding of the structure and operating principles of various types of vehicle electronic control systems and equipment. • Good understanding of the principles of electricity, electronics and data control. • Good understanding of the inspection, service and analysis procedure for various types of vehicle electronic/data control systems and equipment according to servicing instructions 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 and analysis on various types of vehicle electronic control systems and equipment)</p> <ul style="list-style-type: none"> • Safely conduct fault diagnosis on various types of vehicle electronic control systems and equipment 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 electronic control systems and equipment by visual inspection ○ Select suitable tools and instruments to inspect and measure various types of vehicle electronic control systems and equipment and conduct fault diagnosis, calculation and analysis of the problems in the systems according to different data and circumstances ○ Conduct appropriate rectification work according to the faults found; work may include dismantle, replace, re-assemble and fine-tune relevant system components and accessories ○ Measure, test and evaluate the operation and efficiency of various types of vehicle electronic/data control systems and equipment ○ Provide written report after confirming that rectification is done
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 electronic/data control systems and equipment according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations;

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	<ul style="list-style-type: none">• Capable of implementing or arranging rectification work for relevant systems according to diagnostic results; and• Capable of conducting relevant system tests and evaluation and providing written report upon completion of work.
Remark	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.

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Functional Area - Vehicle Servicing

Title	Conduct fault diagnosis and analysis on vehicle air-conditioning and ventilation systems
Code	108708L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to independently check, repairing, conducting diagnosis and analysis on vehicle air-conditioning and ventilation systems according to statutory requirement and the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations. They should also be capable of conducting system test 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 air-conditioning and ventilation systems)</p> <ul style="list-style-type: none"> • Master the types of vehicle refrigerants, their characteristics and relevant handling procedure and the possible impact on environmental protection as well as relevant statutory requirements. • Good understanding of the structure and operating principles of vehicle air-conditioning and ventilation systems. • Good understanding of the principles of refrigeration and electricity. • Good understanding of the inspection and service procedure for vehicle air-conditioning and ventilation systems according to relevant local statutory requirement and the servicing instructions provided by the vehicle manufacturer. • Understand the environmental protection regulations and requirements on the recovery of refrigerants. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Conduct fault diagnosis on vehicle air-conditioning and ventilation systems)</p> <ul style="list-style-type: none"> • Safely conduct fault diagnosis on vehicle air-conditioning and ventilation systems and also repair them according to relevant local statutory requirement, the information in the vehicle manufacturer's servicing manual 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 air-conditioning and ventilation system components by visual inspection ○ Select suitable tools or instruments to inspect and analyse vehicle air-conditioning and ventilation systems faults ○ Check and repair the parts and electric/electronic equipment of vehicle air-conditioning and ventilation systems according to data obtained by measurement; work may include dismantle, replace, re-assemble, fine-tune and test relevant system components and accessories ○ Select suitable tools or instruments to accurately check refrigerant leakage in the systems ○ With the use of suitable tools or instruments and application of the theories of refrigeration and electricity, calculate, analyse and assess the faults and efficiency of vehicle air-conditioning and ventilation systems ○ Maintain record on the consumption of refrigerants according to environmental protection regulations ○ Provide written report after confirming that rectification is done.

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Functional Area - Vehicle Servicing

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 air-conditioning and ventilation systems according to the instructions in the vehicle manufacturer's servicing manual;• Capable of safely collecting and handling the refrigerants for vehicle air-conditioning and ventilation systems according to relevant legislative provisions and the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations;• Capable of conducting leakage test on refrigerants for vehicle air-conditioning and ventilation systems; and• Capable of implementing or arranging rectification work for relevant systems according to diagnostic results; and conducting system test and evaluation upon completion of work; and providing written report.
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 and know how to handle refrigerants.</p>

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Functional Area - Vehicle Servicing

Title	Measure vehicle body/chassis with specialised electronic instruments
Code	108709L3
Range	This unit of competency is applicable in vehicle body servicing workshops. Practitioners should be able to measure vehicle body/chassis and conduct diagnosis on the deformation condition according to the vehicle body servicing manual, equipment user guide and the relevant requirements on environment, occupational safety and health regulations. Providing written report after the work.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure of various types of vehicle body and the operating principles of electronic measuring instruments)</p> <ul style="list-style-type: none"> • Good understanding of various types of chassis and the structure of unitary chassis. • Good understanding of the operating principle of vehicle body electronic instruments <ul style="list-style-type: none"> ○ Data Liner ○ Car-O Liner. • Understand the impact of crushing on the structure of vehicle body. <p>2. Performance (Measure vehicle body/chassis with electronic instruments)</p> <ul style="list-style-type: none"> • Calibrate instruments. • Measure vehicle body with specialised instruments according to the vehicle body servicing manual, equipment user guide and the relevant requirements on environment, occupational safety and health regulations. • Record measurement data and conduct diagnosis on deformation condition. • Provide written report after completion of work.
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 masterly measuring and conducting diagnosis on the deformation of vehicle body structure according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations; and • Capable of recording measurement data and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle body servicing and measurement.

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Functional Area - Vehicle Servicing

Title	Rectify large-scale structural damages
Code	108710L3
Range	This unit of competency is applicable in vehicle body servicing workshops. Practitioners should be able of correctly diagnose and rectifying large-scale structural damages according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations. Providing written report after the work.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structural damages of vehicle body and rectification systems)</p> <ul style="list-style-type: none"> • Be familiar with the impact of crushing to the structure of vehicle body. • Be familiar with the structure of rectification systems, names of accessories and the operating method. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Conduct diagnosis and rectification on structural damages of vehicle body)</p> <ul style="list-style-type: none"> • Conduct diagnosis on the structure of vehicle body by visual inspection and the measurement data of vehicle body. • Replace the structural parts according to the instructions in the vehicle. manufacturer's servicing manual • Rectify damaged structural parts by conducting cutting and welding procedure according to the instructions in the vehicle manufacturer's servicing manual and the working instructions of vehicle body rectification systems. • Conduct rectification procedure by using vehicle body rectification systems according to the vehicle manufacturer's servicing manual and provide written report after the work.
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 masterly conducting diagnosis on the damages of vehicle body structure according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations; and • Capable of masterly conducting vehicle body rectification procedure according to the instructions in the vehicle manufacturer's user guide/servicing manual. • Capable of providing written report after the work
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle body servicing, welding and know how to use vehicle body rectification instruments.

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Functional Area - Vehicle Servicing

Title	Check and repair aluminium alloy vehicle body
Code	108711L3
Range	This unit of competency is applicable in vehicle body servicing workshops. Practitioners should be able to safely check and repair aluminium alloy vehicle body according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct basic test of components upon completion of work. Providing written report after the work.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Repairing of aluminium alloy vehicle body)</p> <ul style="list-style-type: none"> • Master the characteristics of aluminium alloy suitable to be used as the material for vehicle body, including its comparison with steel and the damages of iron elements to aluminium alloy. • Master various kinds of methods to join aluminium alloy panels and the materials and tools required. • Good understanding of the categories, specification and standard of aluminium alloy welding rods and wires commonly used in MIG/TIG welding. • Good understanding of the working procedure for aluminium alloy. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair aluminium alloy vehicle body)</p> <ul style="list-style-type: none"> • Repair aluminium alloy vehicle body according to the instructions in the vehicle manufacturer's servicing manual, the requirements of occupational safety and health and environmental protection as well as the Code of Practice for Safety and Health at Work for Manual Electric Arc Welding, including: <ul style="list-style-type: none"> ○ Use adhesives ○ Use rivets ○ Welding ○ Use correct tools to cut and grind. • Conduct visual inspection and dimensional check on vehicle body and the surface of welding seams according to the specification provided by vehicle manufacturer and provide written report.
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 safely checking and repairing aluminium alloy vehicle body panels according to the instructions in the vehicle manufacturer's servicing manual, the relevant requirements on environment, occupational safety and health regulations and the Code of Practice for Safety and Health at Work for Manual Electric Arc Welding; and selecting the materials and tools required for repair work; and • Capable of conducting visual inspection and dimensional check on vehicle body panels and the surface of welding seams according to the specification provided by vehicle manufacturer and providing written report after the work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of MIG/TIG and vehicle body structure.

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Functional Area - Vehicle Servicing

Title	Master the techniques of blending
Code	108712L3
Range	This unit of competency is applicable in vehicle body painting workshops. Practitioners should be masterly able of conduct colour mixing, matching and blending according to working instructions and the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations. Providing written report after the work.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Colour mixing, painting materials and spraying guns)</p> <ul style="list-style-type: none"> • Good understanding of basic colour theory and the principle of colour mixing. • Good understanding of the user instructions / data sheet of painting materials. • Master the characteristics and operating principles of various kinds of spraying guns. • Master the difference between the techniques of blending paint and ordinary spray painting. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Carry out the work of colour mixing, colour matching and blending paint)</p> <ul style="list-style-type: none"> • Carry out the work of colour mixing and colour matching according to the instructions in the vehicle manufacturer's manual and the relevant requirements on environment, occupational safety and health regulations, such as: <ul style="list-style-type: none"> ○ Paint mixing ○ Spray testing and colour checking ○ Tinting adjustment ○ Colour matching ○ Spray gun adjustment ○ Adjust air pressure to control the colour • Apply blending paint technique to the work piece. • Check the working procedure to ensure that the requirements of the factory are met. • Provide written report after the work.
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 accurately conducting the procedure for paint mixing according to the painting formula provided by the vehicle manufacturer and the colour of the vehicle; • Capable of correctly adjusting the spraying gun to conduct blending paint according to working instructions or the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations; and • Capable of conducting inspection to ensure that the requirements of the factory are met according to working instructions or the instructions in the vehicle manufacturer's servicing manual and providing written report after the work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the capability to handle the painting process and safely operate general painting tools and instruments.

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Functional Area - Vehicle Servicing

Title	Remedy paint defects (spot painting)
Code	108713L3
Range	This unit of competency is applicable in vehicle body painting workshop. Practitioners should be able of remedy paint defects applicable to spot painting independently and the relevant requirements on environment, occupational safety and health regulations. Providing written report after the work.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Painting defects)</p> <ul style="list-style-type: none"> • Master the causes, preventive measures and solutions for painting defects. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Apply spot painting technique for remedial work)</p> <ul style="list-style-type: none"> • With compliance to the relevant requirements on environment, occupational safety and health regulations carry out procedures to remedy painting defects including the following: <ul style="list-style-type: none"> ○ Handle old top coating ○ Select suitable painting materials ○ Mix and blend the paint and conduct colour matching ○ Carry out spot painting process. • Inspect the working procedure to ensure that the requirements of the factory are met. • Provide written report after the work.
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 correctly identifying painting defects; • Capable of successfully solving the painting defects in compliance with the relevant requirements on environment, occupational safety and health regulations; and • Capable of conducting inspection to ensure that no painting defect is found on the work piece upon completion of work and providing written report after the work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the capability to perform spray painting and paint mixing.

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Functional Area - Vehicle Servicing

Title	Examine vehicle of its roadworthiness
Code	108714L3
Range	This unit of competency is applicable in designated vehicle examination workplaces under legislative provision. Practitioners should be able to inspect vehicles according to the stipulated instructions as to satisfy the relevant regulations on roadworthiness of vehicles. Providing written report after the work.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Standard of vehicle examination)</p> <ul style="list-style-type: none"> • Master relevant regulations on vehicle examination so as to determine if the structure and components can meet statutory requirements during vehicle examination. • Master the procedure for issuing documents in relation to vehicle examination and the responsibilities involved. • Master with the operation of testing instruments and equipment. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Carry out vehicle examination and related duties)</p> <ul style="list-style-type: none"> • Perform the duty of vehicle examination according to relevant regulations/instructions on vehicle inspection, such as: <ul style="list-style-type: none"> ○ Vehicle examination e.g. visual inspection, test vehicle with tools and instruments if vehicle components can meet statutory requirements and roadworthiness ○ Issue and record documents in relation to vehicle inspection, such as certificate of roadworthiness ○ Report cases of severe deficiency and vehicles that cannot meet the specification. • Conduct simple maintenance for testing instruments and equipment. • Report faulty testing instruments and equipment and improper conditions. • Update vehicle examination standard/specification according to the latest regulations/instructions. • Provide written report after the work.
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 vehicle examination according to the instructions and standard stipulated in relevant regulations; and • Capable of issuing documents in relation to vehicle examination according to relevant regulations and providing written report after the work.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed extensive knowledge of vehicle servicing.</p> <p>The major legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Road Traffic Ordinance • Road Traffic (Construction and Maintenance of Vehicles) Regulations

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Title	Conduct maintenance for special equipment and instruments for vehicle inspection
Code	108715L3
Range	This unit of competency is applicable in vehicle servicing workplaces. Practitioners should be able to conduct maintenance for special equipment and instruments for vehicle inspection according to vehicle manufacturer's manual.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Maintenance for special equipment and instruments for vehicle inspection)</p> <ul style="list-style-type: none"> • Master the maintenance manual on special equipment and instruments for vehicle inspection. • Master the operating method for testing instruments and equipment. <p>2. Performance (Conduct maintenance for special equipment and instruments for vehicle inspection)</p> <ul style="list-style-type: none"> • Conduct maintenance for special equipment and instruments for vehicle inspection regularly according to the instructions in the vehicle manufacturer's manual, including: <ul style="list-style-type: none"> ○ Check and clean ○ Fine tune and calibrate ○ Top up materials and replace consumable materials ○ Keep documents in relation to instruments and equipment, such as operating manual ○ Keep, update, reset and upgrade computer software relevant to equipment ○ Update and maintain the maintenance and repair records/information of those instruments and equipment. • Conduct maintenance for special equipment and instruments for vehicle inspection, such as: <ul style="list-style-type: none"> ○ Exhaust gases analysers for petrol engines ○ Diesel engine smoke meters ○ Chassis dynamometers ○ Engine dynamometers ○ Engine analysers ○ Hand held testers ○ Brake testers ○ Wheel aligners ○ Wheel balancers ○ Headlamp aligners ○ Refrigerant recovery and reclaim station ○ Liquefied gas testing equipment ○ Other special equipment and instruments for vehicle inspection.
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 masterly conducting maintenance on special equipment and instruments for vehicle inspection according to vehicle manufacturer's manual; and • Capable of updating and maintaining the documents concerning the special equipment and instruments for vehicle inspection.

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Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already understood the basic operation of special equipment and instruments for vehicle inspection and general computer operation.
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Functional Area - Vehicle Servicing

Title	Arrange vehicle examination
Code	108716L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to check and repair vehicles on customers' demand and ensure that condition of vehicles can meet the statutory requirements of relevant road traffic regulations. They should also be able of deliver respective vehicles to vehicle examination department for examination upon completion of work to obtain documents such as the certificate of roadworthiness.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Arrangement of vehicle examination)</p> <ul style="list-style-type: none"> • Understand relevant local regulations on road traffic and vehicle inspection. • Understand the procedure for arrangement of vehicles examination. <p>2. Performance (Arrange vehicle examination)</p> <ul style="list-style-type: none"> • Inspect the vehicle defects according to relevant local regulations and customer requirement on road traffic and vehicle examination. • Estimate the cost entailed for the repair items according to inspection results. • Carry out or arrange repairing procedure. • Test various vehicle systems upon completion of rectification work, including using instruments and equipment to test vehicles so as to determine if they can meet the statutory requirements of relevant road traffic regulations. • Bring and prepare vehicle documents for car owners and make appointment and arrangement for inspection according to vehicle types. • Conduct further rectification for the parts that failed to pass the examination and arrange for second examination. • Obtain documents such as the certificate of roadworthiness, etc. after passing vehicle inspection and deliver them to car owners.
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 identifying vehicle defects according to relevant local regulations and customer requirement on road traffic and vehicle examination; • Capable of carrying out or arranging rectification work according to inspection results; • Capable of accurately inspecting various vehicle systems to ascertain that they can meet the statutory requirements of relevant road traffic regulations; and • Capable of preparing vehicle documents for car owners and making appointment and arrangement for examination according to vehicle types.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle systems servicing.

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Functional Area - Vehicle Servicing

Title	Defining defects of paint coating
Code	108717L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to conduct complicated defects on vehicle body paint work and conduct or arrange rectification according to the instructions in the vehicle paint manufacturer's hand book and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct inspection and providing written report upon completion of work.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Defects on vehicle body paint work and their causes)</p> <ul style="list-style-type: none"> • According to the vehicle paint manufacturer's hand book, Have good understanding of the defects on vehicle body paint work, such as: <ul style="list-style-type: none"> ○ Adhesion loss and chipping ○ Blushing ○ Cracking ○ Fish eyes ○ Mottling ○ Pinhole ○ Sand scratch swelling ○ Solvent popping ○ Blistering ○ Cracking ○ Featheredge cracking ○ Orange peel ○ Sag or Run ○ Shrinking of putty ○ Discoloration • Br familiar with the causes of the paint defects, such as: <ul style="list-style-type: none"> ○ Surface preparation ○ Choice of refinishing material ○ Reading paint manufacture's instruction ○ Operation condition and technique ○ Thinning ○ Drying time <p>2. Performance (Rectification the defects on vehicle body paint work.)</p> <ul style="list-style-type: none"> • According to the vehicle paint manufacturer's hand book and the requirements of occupational health and safety and that of environmental protection, the curing methods of the paint defects as the followings: <ul style="list-style-type: none"> ○ Polishing with wax ○ Polishing with fine sanding paper ○ Flating and respray ○ Respray from the prime layer ○ Respray from the bare layer
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of accurately identifying defects on vehicle body paint work according to the vehicle paint manufacturer's hand book and the relevant requirements on environment, occupational safety and health regulations;• Capable of conducting or arranging rectification of the defects on vehicle body paint work; and• Capable of conducting inspection of vehicle body paint work and completing simple defects report upon completion of work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of vehicle paint materials.

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Diagnosis and rectify motorcycle engine and components faults
Code	108718L3
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to conduct complicated fault diagnosis on motorcycle engine and components and conduct or arrange 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 functional tests and complete simple fault report upon completion of work and providing written report.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and operating principles of motorcycle engine and components)</p> <ul style="list-style-type: none"> • Master the structure and operating principles of motorcycle engine and components. • Master the fault diagnosis process for motorcycle engine and components with reference to the instructions in the motorcycle manufacturer's service manual: <ul style="list-style-type: none"> ○ Faults occur within: <ul style="list-style-type: none"> ▪ Engine mechanical systems ▪ Engine electrical and electronic systems ▪ Engine hydraulic and fluid systems ○ Equipment used: <ul style="list-style-type: none"> ▪ Diagnostic and rectification equipment for various systems ▪ Special repair tools • Understand relevant legal requirements on road & safety and environment protection. <p>2. Performance (Conduct diagnosis and rectify motorcycle engine and components faults)</p> <ul style="list-style-type: none"> • Accurately conduct complicated fault diagnosis on motorcycle engine and components according to the instructions in the manufacturer's service manual, including the use of special equipment and instruments to assist the diagnostic process, meeting requirements of occupational health and safety and that of environmental protection. • Accordingly process the rectification work. • Conduct functional tests. • Conduct performance and safety inspection after the work and provide written report, focusing on: <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 complicated fault diagnosis on motorcycle engine and components 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 tests and completing working report upon completion of work. • Capable of conducting emission test within the limit of the emission regulations.

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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 engine and components.</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.
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Functional Area - Vehicle Servicing

Title	Diagnose and rectify motorcycle chassis systems faults
Code	108719L3
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to conduct complicated fault diagnosis on motorcycle chassis 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 of conduct functional 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 chassis systems)</p> <ul style="list-style-type: none"> • Have good understanding of the structure and operating principles of motorcycle chassis systems, including: <ul style="list-style-type: none"> ○ Steering systems ○ Suspension systems ○ Brake systems • Master the fault diagnosis process for motorcycle chassis systems with reference to the instructions in the motorcycle manufacturer's service manual: <ul style="list-style-type: none"> ○ Faults occur within: <ul style="list-style-type: none"> ▪ Mechanical systems ▪ Electrical and electronic systems ▪ Hydraulic systems ○ Equipment used: <ul style="list-style-type: none"> ▪ Diagnostic and rectification equipment for various systems ▪ Special repair tools • Understand relevant legal requirements on road & safety and environment protection. <p>2. Performance (Conduct diagnosis and rectify motorcycle chassis systems faults)</p> <ul style="list-style-type: none"> • Accurately conduct fault diagnosis on motorcycle chassis systems according to the instructions in the manufacturer's service manual including using special equipment and instruments to assist the diagnosis, meeting the requirements concerning occupational health and safety and that of environmental protection. • According to the diagnostic result to implement the rectification work. • Conduct functional tests. • Conduct performance and safety inspection 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 complicated fault diagnosis on motorcycle chassis systems according to the instructions in the manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations; • Capable of implementing or arranging rectification according to diagnostic results; and

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	<ul style="list-style-type: none">• Capable of conducting performance tests and providing working 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 operation of motorcycle chassis 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.

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Functional Area - Vehicle Servicing

Title	Diagnose and rectify motorcycle transmission and driveline system faults
Code	108720L3
Range	This unit of competency is applicable in motorcycle servicing workshops. Practitioners should be able to conduct fault diagnose on motorcycle transmission and driveline 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 of conduct functional 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 transmission and driveline systems)</p> <ul style="list-style-type: none"> • Master the structure and operating principles of motorcycle transmission and driveline systems, including: <ul style="list-style-type: none"> ○ Transmission ○ Hubs and bearings ○ Drive ○ Clutch • Master the fault diagnosis process for motorcycle transmission and driveline systems with reference to the instructions in the motorcycle manufacturer's service manual: <ul style="list-style-type: none"> ○ For faults occur within: <ul style="list-style-type: none"> ▪ Mechanical systems ▪ Electrical and electronic systems ▪ Hydraulic systems ○ Equipment used: <ul style="list-style-type: none"> ▪ Diagnostic and rectification equipment for various systems ▪ Special repair tools • Understand relevant legal requirements on road & safety and environment protection. <p>2. Performance (Conduct diagnosis and rectify motorcycle transmission and driveline systems faults)</p> <ul style="list-style-type: none"> • Accurately conduct fault diagnosis on motorcycle transmission and driveline 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. • Implement the rectification work. • Conduct performance and safety inspection after the work and provide written report, focusing on: <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 transmission and driveline systems according to the instructions in the manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations;

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Capable of conducting or arranging rectification according to diagnostic results; and• Capable of conducting performance tests and completing working 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 operation of motorcycle transmission and driveline 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.

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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.

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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.
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Functional Area - Vehicle Servicing

Title	Diagnose and rectify commercial vehicle engine and components faults
Code	108722L3
Range	This unit of competency is applicable in commercial Vehicle servicing workshops. Practitioners should be able masterly to conduct complicated fault diagnosis on commercial Vehicle engine and components and conduct or arrange rectification according to the instructions in the commercial Vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct functional tests and complete simple fault report upon completion of work and providing written report.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and operating principles of commercial Vehicle engine and components)</p> <ul style="list-style-type: none"> • Master the structure and operating principles of commercial Vehicle engine and components. • Master the fault diagnosis process for commercial Vehicle engine and components with reference to the instructions in the commercial Vehicle manufacturer's service manual: <ul style="list-style-type: none"> ○ Faults occur within: <ul style="list-style-type: none"> ▪ Engine mechanical systems ▪ Engine electrical and electronic systems ▪ Engine hydraulic and fluid systems ○ Equipment used: <ul style="list-style-type: none"> ▪ Diagnostic and rectification equipment for various systems ▪ Special repair tools • Understand relevant legal requirements on road & safety and environment protection. <p>2. Performance (Conduct diagnosis and rectify commercial Vehicle engine and components faults)</p> <ul style="list-style-type: none"> • Accurately conduct complicated fault diagnosis on commercial Vehicle engine and components according to the instructions in the manufacturer's service manual and the requirements concerning occupational health and safety and that of environmental protection, including the use of special equipment and instruments to assist the diagnostic process. • According to the diagnostic result to process the rectification work. • Conduct functional tests. • Conduct performance and safety inspection 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 complicated fault diagnosis on commercial vehicle engine and components 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;

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	<ul style="list-style-type: none">• Capable of conducting functional tests and completing simple fault report upon completion of work and providing working report.• Capable of assessing the emission or smoke according to the relevant legislation on emission control.
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 commercial Vehicle engine and components.</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.

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Functional Area - Vehicle Servicing

Title	Diagnose and rectify commercial vehicle chassis systems faults
Code	108723L3
Range	This unit of competency is applicable in commercial vehicle servicing workshops. Practitioners should be able to conduct complicated fault diagnosis on commercial vehicle chassis systems and conduct or arrange rectification according to the instructions in the commercial vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct functional tests and complete simple fault report upon completion of work and providing written report.
Level	3
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and operating principles of commercial vehicle chassis systems)</p> <ul style="list-style-type: none"> • Master the structure and operating principles of commercial vehicle chassis systems, including (mechanical, electrical, hydraulic and fluid, pneumatic powered): <ul style="list-style-type: none"> ○ Steering systems ○ Suspension systems ○ Brake systems • Master the fault diagnosis process for commercial vehicle chassis systems with reference to the instructions in the commercial vehicle manufacturer's service manual: <ul style="list-style-type: none"> ○ Faults occur within: <ul style="list-style-type: none"> ▪ Mechanical systems ▪ Electrical and electronic systems ▪ Hydraulic systems ○ Equipment used: <ul style="list-style-type: none"> ▪ Diagnostic and rectification equipment for various systems ▪ Special repair tools • Understand relevant legal requirements on road & safety and environment protection. <p>2. Performance (Conduct diagnosis and rectify commercial vehicle chassis systems faults)</p> <ul style="list-style-type: none"> • Accurately conduct complicated fault diagnosis on commercial vehicle chassis systems according to the instructions in the manufacturer's service manual and the requirements concerning occupational health and safety and that of environmental protection, including the use of special equipment and instruments to assist the diagnostic process. • According to the diagnostic result to process the rectification work. • Conduct functional tests. • Conduct performance and safety inspection 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 complicated fault diagnosis on commercial vehicle chassis systems according to the instructions in the manufacturer's service manual and relevant legal requirements; and • Capable of conducting or arranging rectification according to diagnostic results;

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	<ul style="list-style-type: none">• Capable of conducting functional tests and completing simple fault report upon completion of work and providing working report.
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 commercial vehicle chassis 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.

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Functional Area - Vehicle Servicing

Title	Diagnose and rectify commercial vehicle transmission and driveline systems faults
Code	108724L3
Range	This unit of competency is applicable in commercial vehicle servicing workshops. Practitioners should be able to conduct complicated fault diagnosis on commercial vehicle transmission and driveline systems and conduct or arrange rectification according to the instructions in the commercial vehicle manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct functional tests and complete simple fault report upon completion of work and providing written report.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and operating principles of commercial vehicle transmission and driveline systems)</p> <ul style="list-style-type: none"> • Master the structure and operating principles of commercial vehicle transmission and driveline systems, including (mechanical, electrical, hydraulic and pneumatic powered): <ul style="list-style-type: none"> ○ Transmission (including manual and automatic) ○ Hubs and bearings ○ Drive ○ Clutch • Master the fault diagnosis process for commercial vehicle transmission and driveline systems with reference to the instructions in the commercial vehicle manufacturer's service manual: <ul style="list-style-type: none"> ○ Faults occur within: <ul style="list-style-type: none"> ▪ Mechanical systems ▪ Electrical and electronic systems ▪ Hydraulic systems ○ Equipment used: <ul style="list-style-type: none"> ▪ Diagnostic and rectification equipment for various systems ▪ Special repair tools • Understand relevant legal requirements on road & safety and environment protection. <p>2. Performance (Conduct diagnosis and rectify commercial vehicle transmission and driveline systems faults)</p> <ul style="list-style-type: none"> • Accurately conduct complicated fault diagnosis on commercial vehicle transmission and driveline systems according to the instructions in the manufacturer's service manual and the requirements concerning occupational health and safety and that of environmental protection, including the use of special equipment and instruments to assist the diagnostic process. • According to the diagnostic result to process the rectification work. • Conduct functional tests. • Conduct performance and safety inspection after the work and provide written report, focusing: <ul style="list-style-type: none"> ○ Abnormalities ○ Measuring data ○ Major decisions

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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 complicated fault diagnosis on commercial vehicle transmission and driveline 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 functional tests and completing simple fault report upon completion of work and providing working report.
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 commercial vehicle transmission and driveline 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.

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Functional Area - Vehicle Servicing

Title	Diagnose, test and repair electric and hybrid vehicle high voltage batteries
Code	108725L3
Range	This unit of competency is applicable in electric vehicle servicing workshops. Practitioners should be able to work on functional or potentially functional battery system and the related high-voltage components in electric and hybrid vehicles, including plug-in hybrid electric vehicles; diagnose, repair and overhaul high-voltage batteries safely according to the instructions in the vehicle manufacturer's service manual, occupational and health and environmental protection legislation. They should also be able to conduct performance tests to the high voltage batteries upon completion of works and providing written report.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Common faults of the high voltage batteries of electric and hybrid vehicle and diagnosis procedures)</p> <ul style="list-style-type: none"> • Master the common faults of the high voltage batteries of electric and hybrid vehicle on: <ul style="list-style-type: none"> ○ Over heat ○ Crash ○ Leak ○ Smoke ○ Soak • Master the fault diagnosis process for high voltage batteries of electric and hybrid vehicle with reference to the instructions in the manufacturer's service manual. Such as: <ul style="list-style-type: none"> ○ Pressure Test (IP test) ○ Isolation / non-conductive test ○ Symmetric / balances test • Understand relevant legal requirements on road & safety and environment protection. <p>2. Performance (Conduct diagnosis and rectify the faults of the high voltage batteries of electric and hybrid vehicle)</p> <ul style="list-style-type: none"> • Accurately conduct complicated fault diagnosis on the high voltage batteries of electric and hybrid vehicle according to the instructions in the manufacturer's service manual and the requirements concerning occupational health and safety and that of environmental protection, including the use of special equipment and instruments to assist the diagnostic process. • According to the diagnostic result to process the rectification work. • Conduct functional tests. • Conduct performance and safety inspection 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 complicated fault diagnosis on the high voltage batteries of electric and hybrid vehicle according to the instructions in the manufacturer's service manual and the relevant requirements on environment, occupational safety and health regulations; and

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	<ul style="list-style-type: none">• Capable of conducting or arranging rectification according to diagnostic results;• Capable of conducting functional tests and completing simple fault report upon completion of work and providing working report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of the high voltage batteries of electric and hybrid vehicle.

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Functional Area - Vehicle Servicing

Title	Provide technical support and advice to colleagues for vehicle repairing techniques
Code	108726L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to provide effective technical support and advice to colleagues safely according to the vehicle manufacturer's instructions service manual or other appropriate information. They should also be able to coach fully colleagues in implementing the advice, assessing its safety and effectiveness upon completion of work, providing written technical report and initiating improvement actions.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Contents of technical support and advice to colleagues for vehicle servicing)</p> <ul style="list-style-type: none"> • Master communication skills with colleagues and the vehicle manufacturer. • Master technical report writing skill. • Have good understanding of the vehicle manufacturer's instruction (service manual and supplementary information), and temporary local measures agreed by the management. <p>2. Performance (Provide technical support and advice to colleagues for vehicle servicing)</p> <ul style="list-style-type: none"> • Provide effective technical support and advice to colleagues based on the vehicle manufacturer's information (service manual and supplementary information), and temporary local measures agreed by the management, including: <ul style="list-style-type: none"> ○ Finding out the cause of the problem via road test or with the aid of diagnostic equipment, and the solution ○ Coaching the colleagues in accurately implementing the solution ○ When the service database fails to provide effective solution, reporting to the manufacturer precisely and promptly for assistance ○ If necessary, recommending the manufacturer and the management on temporary local relief measures ○ Following through on the effectiveness of the solution adopted and submitting technical report ○ Initiating improvement actions for precaution and training purposes
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 providing effective technical support and advice to colleagues in vehicle environments safely according to the vehicle manufacturer's service manual or other appropriate information meeting relevant legal requirements; and • Capable of conducting assessment of safety and effectiveness of adopted technical advice upon completion of work, providing written report and initiating improvement actions.
Remark	<p>The credits value of this unit of competency assumes that the assessed has already possessed basic knowledge and skills of vehicle diagnosis as required of a vehicle technician.</p> <p>The major legislation/code involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Road Traffic Ordinance • Air Pollution Control Ordinance • Occupational Safety and Health Ordinance

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Functional Area - Vehicle Servicing

Title	Liaise with vehicle and product manufacturers on technical matters
Code	108727L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to identify and documenting various technical problems clearly, reporting to the vehicle and product manufacturers precisely and promptly such that support for diagnosis, repairs, claims, and product development could be obtained. He/she may need proposing temporary local fixes and seek for other administrative support, following through the problem, and initiate improvement actions.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Identify and record various technical issues, contact the manufacturer for solutions)</p> <ul style="list-style-type: none"> • Master and identify various technical issues. Such as: <ul style="list-style-type: none"> ○ Diagnosis ○ Maintenance ○ Warranty Claim ○ Product Development Support • Have good understanding of the method to record technical issues. • Have good understanding of the established communication channels with the manufacturers for submitting technical reports properly. • Master how to liaise with the manufacturer to get the solutions for the technical problems. <p>2. Performance (Master the nature of various technical issues, obtain manufacturer solutions, seek support and initiate improvement actions)</p> <ul style="list-style-type: none"> • According to manufacturer's instruction master the technical issues in respects of: <ul style="list-style-type: none"> ○ nature ○ frequency ○ implications • Formulate action plan, such as: <ul style="list-style-type: none"> ○ Coordinate with the manufacturer and request for solution ○ Seek support ○ Suggest temporary fix • Formulate and initiate improvement actions.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the practitioner shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of identifying various technical problems and formulating the course of action required • Capable of liaising with vehicle/ product manufacturers on technical matters • Capable of obtaining and implementing solutions from manufacturers and suggesting temporary local fixes whenever necessary; and • Capable of consolidating the problem and initiating preventive measures
Remark	The credits value of this unit of competency assumes that the assessee has already possessed basic knowledge and skills of vehicle diagnosis as required of a vehicle technician.

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Functional Area - Vehicle Servicing

	<p>The major legislation/code involved in this unit of competency are as follows:</p> <ul style="list-style-type: none">• Road Traffic Ordinance• Air Pollution Control Ordinance• Occupational Safety and Health Ordinance
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Functional Area - Vehicle Servicing

Title	Conduct diagnostic consultations with customers
Code	108728L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able to attend to the customer's concerns and needs politely and tactfully, including carrying out vehicle diagnosis with the customers. He/she should need explaining clearly the findings and recommendation on the course of action, ensuring that they are well understood, considered and accepted by the customer. On the basis of need and organizational policy, he/she may need proposing temporary local fixes and seek for other relief measures, following through the problem, and initiating organization improvement actions.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Prerequisites of conducting diagnostic consultations with customers in vehicle environments)</p> <ul style="list-style-type: none"> • Have good understanding of the organization chart, procedures and limits of authority of colleagues. • Master the policies of manufacturers and own organisation on vehicle/ product problems and related claims. • Have good understanding of the designated communication channels with colleagues for technical and administrative support. • Master the communication and handling skills with customers. • Understand the manufacturer's instruction (service manual or supplementary information), or temporary local measures agreed by the management for diagnosis and solving problems. • Good understanding of the functions, application and limitations of diagnostic equipment. • Good understanding of the report writing skill. • Understand the relevant legal requirements on road and vehicle safety, environment protection and OSH. <p>2. Performance (Conduct diagnostic consultations with customers in vehicle environments)</p> <ul style="list-style-type: none"> • Identify problems with the car/product as directed by the manufacturer and considering the nature, frequency, meaning, diagnostic results, statistics, and feedback from colleagues and guests. • Perform diagnostic activities and attend road tests with customers if required in a professional manner. • Respond to customer reactions and complaints politely and tactfully. • Explain clearly technical problems, diagnostic results, and recommendations in a way such that layman can understand. • Formulate the course of actions required, such as: <ul style="list-style-type: none"> ○ Normal service, rework, or manufacturer / internal claims ○ Devising temporary local fixes on the basis of need and organizational policy ○ Referring to colleagues for further relief measures (e.g. obtaining rare parts or substitute vehicles) on basis of need and organizational policy • Submit well-defined quotations for consideration, acceptance and signature by the customer. • Initiate workshop repair order and follow through until full rectification, and keep customers informed of progress.

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none"> • Consolidate the events and raise internal technical bulletin for precaution and training purpose if deemed necessary.
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 mastering and identifying technical problems and construct required action plans • Capable of communicating effectively with customers instilling confidence • Capable of obtaining administrative and technical support from colleagues in resolving customer concerns and, providing temporary local relief measures whenever necessary and possible. • Capable of following through customer concerns until full rectification; and • Capable of consolidating the problem and initiating preventive measures
Remark	<p>The credit value of this unit of competency assumes that the practitioner has already possessed basic knowledge and skills of vehicle diagnosis as required of a vehicle technician.</p> <p>The major legislation/code involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Road Traffic Ordinance • Air Pollution Control Ordinance • Occupational Safety and Health Ordinance

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Functional Area - Vehicle Servicing

Title	Check and repair vehicle intelligent control systems and devices
Code	108729L3
Range	This unit of competency is applicable in vehicle servicing workshops. Practitioners should be able of check, repair and adjust various kinds of vehicle intelligent control systems and devices safely according to the instructions in the vehicle manufacturer's servicing manual and the relevant requirements on environment, occupational safety and health regulations. They should also be able to conduct basic adjustments and tests on components upon completion of work. Provide written report after the work.
Level	3
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of various types of vehicle electronic control systems and devices)</p> <ul style="list-style-type: none"> • Master the structure and basic operating principles of various types of vehicle intelligent control systems and devices, such as: <ul style="list-style-type: none"> ○ Surround Sensor (Laser System) ○ Intelligent Body Stability System ○ Pre-collision Warning System ○ Pre-collision Brake System ○ Smart Parking Assist System ○ Active Lane Keeping System ○ Intelligent Lighting System • With reference to the requirements in the servicing manual provided by the vehicle manufacturer or parts supplier, master the general checking and repairing procedure for various types of vehicle electronic/data control systems and devices. • Understand the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Check and repair various types of vehicle electronic control systems and devices)</p> <ul style="list-style-type: none"> • According to the instructions in the servicing manual provided by vehicle manufacturer or parts supplier and the requirements of occupational safety and health as well as that of environmental protection, safely check, repair and adjust various types of vehicle intelligent control systems and devices, including: <ul style="list-style-type: none"> ○ Capable of identifying the common faults in various types of vehicle intelligent control systems and devices by visual inspection ○ Use general tools and instruments to check and measure various types of vehicle intelligent control systems and devices as well as rectify typical system fault ○ According to inspection result, repair the parts of various types of vehicle intelligent control systems and devices as well as circuit/data systems, including dismantle, replace, re-assemble and adjust relevant system components and accessories ○ According to instructions, measure and adjust the operation and effectiveness of various types of vehicle intelligent control systems. • After the repair work, provide written report focusing on: <ul style="list-style-type: none"> ○ Abnormalities ○ Measured data

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	<ul style="list-style-type: none"> ○ 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 checking, repairing and adjusting general vehicle intelligent control systems and devices safely 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; and • Capable of conducting basic adjustments and tests on components upon completion of work and providing written report.
Remark	<p>The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle electronic and electrical system servicing.</p>

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Functional Area - Vehicle Servicing

Title	Formulate rules of safety operation for vehicle servicing work
Code	108730L4
Range	This unit of competency is applicable in vehicle servicing workplaces. Practitioners should be able to formulate rules of safety operation for vehicle servicing work according to relevant regulations on occupational safety and health, instructions of respective organisational policies as well as risk assessment reports and suggestions on control measures. They should also be able to establish related filing system.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Rules of safety operation for vehicle servicing work)</p> <ul style="list-style-type: none"> • Good understanding of relevant regulations on occupational safety and health. • Master organisational policy on occupational safety and health. • Master the procedure for vehicle servicing and related work. • Good understanding of risk assessment and control measures. • Good understanding of formulation of rules of safety operation and monitor its implementation. <p>2. Performance (Formulate rules of safety operation for vehicle servicing work)</p> <ul style="list-style-type: none"> • Formulate rules of safety operation for vehicle servicing work according to the instructions of relevant regulations on occupational safety and health, organisational operation policies as well as risk assessment reports and suggestions on control measures, such as: <ul style="list-style-type: none"> ○ Formulate rules of safety operation in collaboration with relevant persons ○ Rehearse, examine and revise the rules of safety operation for vehicle servicing work ○ Establish and maintain related filing system in collaboration with relevant persons ○ Formulate monitoring system to monitor the implementation of the rules of safety operation in collaboration with the management staff at the workplaces ○ Review the rules of safety operation periodically in collaboration with relevant persons ○ Analyse, revise or delete relevant items and content of the rules of safety operation in collaboration with relevant people according to the investigation report on hazardous incidents and updated risk assessment documents • Determine the rules of safety operation for vehicle servicing works can comply with related regulations on occupational safety and health.
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 formulating effective rules of safety operation for vehicle servicing work and assisting the monitoring of implementation according to the instructions of relevant regulations on occupational safety and health as well as organisational operation policies; • Capable of establishing and maintaining related filing system, analyzing and reviewing the effectiveness of the rules of safety operation periodically; and • Capable of determining correctly that the rules of safety operation for vehicle servicing works shall comply with related regulations on occupational safety and health.

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Remark	<p>The credits value of this unit of competency assumes that the practitioner concerned has already possessed extensive knowledge on vehicle servicing.</p> <p>The major legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none">• Factories and Industrial Undertakings Ordinance• Occupational Safety and Health Ordinance
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Functional Area - Vehicle Servicing

Title	Conduct risk assessment on vehicle servicing work
Code	108731L4
Range	This unit of competency is applicable in vehicle servicing workplaces. Practitioners should be able to conduct risk assessment on vehicle servicing work and providing suggestions for improvement according to the regulations related to occupational safety and health. They should also be able to update the risk assessment report and related documents.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Risk assessment on vehicle servicing work)</p> <ul style="list-style-type: none"> • Good understanding of relevant regulations for conducting risk assessment on occupational safety and health. • Master the organisational policy on occupational safety and health. • Be familiar with vehicle servicing work • Good understanding of the methodology for risk assessment. <p>2. Performance (Assess the risk of vehicle servicing work)</p> <ul style="list-style-type: none"> • Conduct risk assessment on vehicle servicing and related working procedure in accordance with the instructions of regulations related to occupational safety and health as well as organisational operation policy <ul style="list-style-type: none"> ○ Collect information related to all operation activities in the workplaces ○ Analyse the potential hazards caused by vehicle servicing and related working procedure ○ Analyse various parameter variation and estimate the respective impact so as to determine the risk level, including the severity and the frequency of hazards, etc. ○ Make suggestions for improvement according to risk assessment results ○ Compile risk assessment report ○ Update the risk assessment report and related documents • Reflect to seniors for comments on the risk assessment system and make suggestions for improvement. • Ascertain that the risk assessment on vehicle servicing work can meet relevant regulations of occupational safety and health.
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 assessing the risk of vehicle servicing and related working procedure in accordance with the instructions of regulations related to occupational safety and health as well as organisational operation policy; • Capable of compiling risk assessment report and updating related documents; and • Capable of reflecting his opinions to seniors on the risk assessment system and making suggestions for improvement.
Remark	<p>The credits value of this unit of competency assumes that the practitioner has already possessed extensive knowledge on vehicle servicing.</p> <p>The major legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Factories and Industrial Undertakings Ordinance • Occupational Safety and Health Ordinance

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Functional Area - Vehicle Servicing

Title	Monitor, arrange and coordinate the progress and workflow of the operation in the workshop
Code	108732L4
Range	This unit of competency is applicable in vehicle servicing workplaces. Practitioners should be able to monitor, arrange and coordinate the progress and workflow of the daily operation of workshops according to organisational operation strategy.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Operation management of vehicle servicing workshops)</p> <ul style="list-style-type: none"> • Master organisational operation strategy. • Good understanding of respective operational regulations. • Good understanding of the concept of customer services. • Good understanding of the concept of human resources management. • Master workshop management. • Good understanding of crisis management. <p>2. Performance (Monitor, arrange and coordinate the progress and workflow of the operation of the workshops)</p> <ul style="list-style-type: none"> • Capable of monitor, arrange and coordinate the workflow of vehicle servicing according to organisational operation strategy and instructions of respective operational regulations such as labour, employment, factory undertakings, occupational safety and health as well as environmental protection: <ul style="list-style-type: none"> ○ Collect information on human resources, assess production capability as well as to set up and review production indicators ○ Establish, revise and implement daily operation workflow systems such as: <ul style="list-style-type: none"> ▪ production workflow ▪ quality control ▪ customer services ▪ interdepartmental communication mechanisms ▪ staff appointment ▪ occupational safety and health as well as environmental protection management ▪ replenish spare parts ▪ purchase equipment, goods and materials ▪ maintenance of workshop equipment ▪ waste disposal ▪ other related issues ○ Establish, revise and implement crisis management mechanism such as in the event of fire and typhoon. ○ Establish, revise and implement customer services complaint ○ Coordinate and settle interdepartmental disputes. ○ Monitor daily operation systems ○ Monitor daily production progress • Ascertain that the operation management of the workshop can meet relevant the requirements of the regulations of employment, occupational safety and health as well as environmental protection.

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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 effectively monitoring, analysing, arranging and coordinating the workflow of vehicle servicing according to organisational operation strategy to achieve target performance indicators; and• Capable of ascertaining that the operation management of the workshop shall meet the requirements of relevant regulations of labour, employment, occupational safety and health as well as environmental protection.
Remark	<p>The credits value of this unit of competency assumes that the practitioner has already possessed extensive knowledge on vehicle servicing and understand respective working procedure.</p>

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Functional Area - Vehicle Servicing

Title	Master complicated techniques of power systems
Code	108733L4
Range	This unit of competency is applicable to the technicians working at vehicle servicing and inspection departments. Practitioners should be able to obtain thorough understanding of the operating principles of various types of power systems and their impact on power output and fuel consumption to inspect and diagnose complicated system faults with enhanced efficiency and accuracy.
Level	4
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Power generation of internal combustion engines)</p> <ul style="list-style-type: none"> • Fuel: <ul style="list-style-type: none"> ○ Good understanding of the characteristics of different fuels (e.g. petrol, diesel, liquefied petroleum gas, natural gas and hydrogen.) including heating value, combustibility, anti-knock property, boiling point and combustion temperature. ○ Good understanding of related sciences of chemistry, fluid and heat, including basic knowledge in safety aspect ○ The principle of power generation ○ Master the requirements and processes of combustion for different fuels performing in the internal combustion engines; and understand the factors affecting combustion efficiency and heat releasing rate ○ Good understanding of the methods and process of power generation by internal combustion engines ○ Good understanding of the factors affecting engine power output ○ Master the relation between engine setting and relevant specification, such as capacity, compression ratio, intake efficiency, engine speed, quantity of mixture, mean effective pressure, power and revolving resistance, etc. ○ Good understanding of the methods to increase engine power output and their application limits, such as breathing efficiency, ignition and fuel injection timings • Engine design: <ul style="list-style-type: none"> ○ Master the structure, materials and functions of various components ○ Good understanding of the configuration of various movable components and the principle of dynamic balance ○ Good understanding of the principles of devices enhancing breathing efficiency, such as variable intake and exhaust tracts lengths, variable valve timing and lift, matching of pressure charging system with engine ○ Good understanding of the principles of engine working temperature control and reduction of movable components wear ○ Good understanding of the principle of fuel metering for various types of engines, so as to optimise power output and comply with the requirements of exhaust emission ○ Master the basic principles of controlling or treatment of engine pollutants, such as exhaust gas recirculation and catalytic devices, etc. • Power system <ul style="list-style-type: none"> ○ Good understanding of the structure, functions, controlling methods, operating principles and specifications of engine and various sub systems (including related components), such as closed-loop control, electronic fuel-injection and ignition as well as intake and exhaust

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	<ul style="list-style-type: none"> ○ Master the integrated electronic control principles and the operating characteristics of various sub systems <p>2. Performance (Inspection, fault diagnosis and analysis of the performance of power systems)</p> <ul style="list-style-type: none"> ● Conduct analysis procedures according to diagnostic results of the various engine sub systems and related components, such as: <ul style="list-style-type: none"> ○ Conductivity and insulation of control circuits ○ Electronic actuation and feedback signals ○ The operating condition of electronic control devices and actuators ○ The output signals of sensors ○ Pressure variations of cylinders, intake and exhaust systems ○ Operating pressure of fuels and lubricants. ● Conduct inspection, fault diagnosis and analysis procedures according to the fault symptoms (including recurrent or intermittent defects) of various types of engines, their sub systems and related components, such as: <ul style="list-style-type: none"> ○ Stall or fail to start ○ Insufficient power or weak acceleration ○ Abnormal pressure charging (only applicable to pressure charged engines) ○ Rough engine running or abnormal speed ○ Excessive fuel consumption ○ Abnormal engine operating temperature ○ Abnormal wear of engine components ○ Occurrence of unusual noise (including detonation) or vibration. ○ Excessive emission of pollutants ● Review the causes of defects and diagnostic methods; submit report to seniors covering preventive measures, instructions on inspection and maintenance as well as suggestions for improvement.
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 obtaining a thorough understanding of the structure, functions and operating principles of various types of power systems, including engines, their sub systems and related components, so as to enhance the efficiency and accuracy of inspection and diagnosis of complicated system faults; ● Familiar with the principles of power generation by internal combustion engines, and understand the impact of factors such as efficiencies of intake, exhaust and combustion, etc. on the performance of power output to solve the complicated technical problems, such as excessive fuel consumption and emission of pollutants, effectively and accurately; and ● Capable of compiling reports covering preventive measures, instructions on inspection and maintenance as well as providing suggestions for improvement, in accordance with the specific defects found in respective power systems.
Remark	<p>The credit for this competency unit assumes that the practitioner already has acquired extensive knowledge of automotive, vehicle repair and testing procedures.</p>

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Title	Master the complicated techniques of transmission systems
Code	108734L4
Range	This unit of competency is applicable to technicians working at vehicle servicing and inspection departments. Practitioners should be able to master the impact of transmission systems on driving performance and stability to enhance the efficiency and accuracy of inspection and complicated fault diagnosis.
Level	4
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Power transmission)</p> <ul style="list-style-type: none"> • Good understanding of the working efficiency and application limits of different power transmission methods (including friction, hydraulic, adhesion, gear and electromagnet) • Good understanding of the working efficiency and application limits of different power distribution methods (e.g. friction, hydraulic and gear) • Good understanding of the performance of transmission systems. • Good understanding of the relationship of engine power output, driving resistance, speed and accelerating performance. • Master the effects of gearbox, gear ratio setting on vehicle performance and fuel consumption. • Good understanding of the effects of transmission fluid quality and characteristics on transmission efficiency, shift control and protection of components. • Good understanding of the operation of transmission systems. • Master the structure, functions, operating principles and specification of various kinds of transmission components (including relevant electronic control systems and components). <p>2. Performance (Inspection, fault diagnosis and analysis on transmission systems)</p> <ul style="list-style-type: none"> • Conduct inspection, fault diagnosis and analysis procedures according to the fault symptoms (including recurrent or intermittent phenomena) of various types of transmission systems and related components. • Conduct inspection, fault diagnosis and analysis procedures in accordance with fault symptoms of driving performance and stability, such as: <ul style="list-style-type: none"> ○ Fail to attain the expected highest speed ○ Fail to reach expected maximum driving power ○ Abnormal side slide when cornering • Review the causes of defects and diagnostic methods; submit report to seniors covering preventive measures, instructions on inspection and maintenance as well as suggestions for improvement.
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 mastering the structure, functions, operating principles of various types of transmission systems including related components to enhance the efficiency and accuracy of inspection and complicated fault diagnosis; • Capable of mastering the principle of power transmission as well as the effects of engine power output, driving resistance and gear ratio setting on vehicle performance and fuel

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	<p>consumption to solve the complicated technical problems, such as insufficient power output and abnormal tyre wear, etc., effectively and accurately; and</p> <ul style="list-style-type: none">• Capable of compiling reports covering preventive measures, instructions on inspection and maintenance as well as providing suggestions for improvement, etc. according to the specific defects relating to respective transmission systems.
Remark	The credit for this competency unit assumes that the practitioner has already possessed extensive knowledge of automotive, vehicle repair and testing procedures.

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Title	Master the complicated techniques of chassis stability control
Code	108735L4
Range	This unit of competency is applicable to technicians working at vehicle servicing and inspection departments. Practitioners should be able to master various chassis control systems to enhance the efficiency of inspection and complicated fault diagnosis, and effectively solve the complicated technical problem of vehicle stability.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Relevant chassis control)</p> <ul style="list-style-type: none"> • Good understanding of the principles of speed and stability controls. • Good understanding of the effects of rolling condition of wheels on slip ratio, adhesion and overall performance of vehicle, such as tyre wear, speed control and vehicle stability. • Master the basic factors and possible methods of vehicle deceleration control, as well as their performance and applicability, such as the resistance from wheels or engine. • Master various control methods for vehicle stability and their applicability, such as wheel resistance or power distribution ratio. • Master chassis control systems. • Master the relationship, structure, functions, operating methods, control principles (including hydraulic, air pressure and electricity, etc.) and standard parameters of various systems (including related mechanical and electronically controlled components), such as: <ul style="list-style-type: none"> ○ Brake systems, including anti-lock devices ○ Traction control systems, including braking and engine power regulation devices ○ Yaw control systems, including power regulation devices <p>2. Performance (Inspection, fault diagnosis and analysis on the performance of vehicle control)</p> <ul style="list-style-type: none"> • Conduct inspection, fault diagnosis and analysis procedures according to the fault symptoms (including recurrent or intermittent phenomena) of brake systems (including retarder) and related components. • Conduct inspection, fault diagnosis and analysis procedures on traction control system and related components according to the instability symptoms (including recurrent or intermittent phenomena) during acceleration. • Conduct fault inspection or diagnosis procedures on yaw control system according to the instability symptoms (including recurrent or intermittent phenomena) when high speed turning. • Review the causes of defects and diagnostic methods; submit report to seniors covering preventive measures, instructions on inspection and maintenance as well as suggestions for improvement. • Capable of ascertain the performance of brake systems, such as efficiency and balance, etc. according to respective legislative requirements. • Capable of ascertain the right choice of tyres according to respective legislative requirements.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of mastering various types of chassis control systems, including the structure, functions, operating methods and control principles of related components to enhance the efficiency and accuracy of inspection and complicated fault diagnosis;• Capable of mastering the principles of speed and stability as well as the effects of slip ratio, adhesion, braking force, engine resistance and power distribution, etc. on the performance of stability control to solve the complicated technical problem of vehicle stability effectively and accurately; and• Capable of compiling reports covering preventive measures, instructions on inspection and maintenance as well as providing suggestions for improvement, etc. according to the specific defects found in respective chassis stability control systems.
Remark	The credit for this competency unit assumes that the practitioner already has possessed extensive knowledge of automotive, vehicle repair and testing procedures.

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Title	Master the complicated techniques of steering systems
Code	108736L4
Range	This unit of competency is applicable to technicians working at vehicle servicing and inspection departments. Practitioners should be able to master the effects of steering system, suspension system and wheel alignment on the performance of steering stability, to enhance the efficiency and accuracy of inspection and complicated fault diagnosis.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Relevant steering systems)</p> <ul style="list-style-type: none"> • Master the importance of Ackermann Principle of steering. • Master the structure, functions, operating principles and specification of various types of power-assisted steering systems (including related components). • Understand the structure, functions and operating principles of the steering systems for dual-front axle vehicles, such as the relation between the steered angle of wheels and steering linkages. • Good understanding of the structure, functions and meanings of markings of different types of tyres and rims. • Good understanding of the importance of wheel balance, and the method to balance wheels. • Master the function, importance, special characteristic and application of tread patterns. • Good understanding of the important and related factors affecting the steering stability of vehicle, including the steered angles of wheels. • Master the definition, functions, related factors, operating principle and specification of wheel off-sets. • Good understanding of the apply forces exerted on steered wheels and the impact on steering stability, including neutral steer, oversteer, understeer and side slide of vehicle. • Good understanding of the impacts of suspension systems on steering stability. • Good understanding of the relation between the steered angle of wheels and side slide. <p>2. Performance (Inspection, fault diagnosis and analysis on steering system and driving control)</p> <ul style="list-style-type: none"> • Conduct inspection, fault diagnosis and analysis procedures according to the fault symptoms (including recurrent or intermittent defects) of steering systems and related components. • Conduct inspection, fault diagnosis and analysis procedures according to the respective fault symptoms of wheel alignment. • Conduct inspection or fault diagnosis procedures according to symptoms of instability (including recurrent or intermittent phenomena) when high speed cornering. • Review the causes of defects and diagnostic methods; submit report to seniors covering preventive measures, instructions on inspection and maintenance as well as suggestions for improvement. • Ascertain the applicability of tread pattern and depth according to respective legislative requirements.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of mastering the structure, functions and operating principles of various types of steering systems (including related components) to enhance the efficiency and accuracy of inspection and complicated fault diagnosis;• Capable of mastering the principle of vehicle steering as well as the impact of suspension systems, tyres and wheel alignment on steering stability to solve the complicated technical problems of abnormal wear of tread pattern and vehicle side slide, etc., effectively and accurately; and• Capable of compiling reports covering preventive measures, instructions on inspection and maintenance as well as providing suggestions for improvement, etc. according to the defects relating to steering stability.
Remark	The credit for this competency unit assumes that the practitioner already has possessed extensive knowledge of automotive, vehicle repair and testing procedures.

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Title	Master the complicated techniques of suspension systems
Code	108737L4
Range	This unit of competency is applicable to technicians working at vehicle servicing and inspection departments. Practitioners should be able to master the effect of suspension system on vehicle vibration and stability to enhance the efficiency and accuracy of inspection and complicated fault diagnosis.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Relevant suspension systems and driving stability)</p> <ul style="list-style-type: none"> • Good understanding of the affecting factors overcoming the driving vibration, such as tyres, seats, suspension methods, spring stiffness and damping coefficient. • Good understanding of the effects of centre of gravity of vehicle and suspension systems design affecting driving stability, such as the change of wheel alignment and wheel span, pitching during speed change, instantaneous rolling axis and roll axis, roll steer. • Master the structure, functions controlling methods, operating principles and standard parameters of various systems (including related components, e.g. electronic or pressure actuators and sensors), such as: <ul style="list-style-type: none"> ○ rigid axle suspension and independent suspension, ○ stiffness control of metal and air springs, ○ damping coefficient control of shock absorber ○ anti-roll devices. <p>2. Performance (Inspection, fault diagnosis and analysis of suspension system performance)</p> <ul style="list-style-type: none"> • Conduct inspection, fault diagnosis and analysis procedures according to the fault symptoms (including recurrent or intermittent defects) of suspension systems and related components, such as: <ul style="list-style-type: none"> ○ Decreasing comfort, including toss or shock of vehicle body ○ Damaged anchoring points for the linkages of suspension system (vehicle body or frame) ○ Abnormal noise or vibration ○ Tilted vehicle body or incorrect height ○ Abnormal tyre wear • Conduct inspection, fault diagnosis and analysis procedures on suspension systems, damping control and electric control etc. according to symptoms of instability (including recurrent or intermittent defects) when the vehicle is in driving, speed changing or high-speed cornering, such as: <ul style="list-style-type: none"> ○ Pulling aside when driving straight ahead ○ Pitching seriously when changing speed ○ Excessive body rolling when cornering ○ Abnormal side slip ○ Abnormal steering performance • Review the causes of defects and diagnostic methods; submit report to seniors covering preventive measures, instructions on inspection and maintenance as well as suggestions for improvement. • Ascertain that springs and shock absorbers etc. can meet safety standard according to respective legislative requirements, such as the free-plays of suspension linkages.

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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 mastering the structure, functions and operating methods of various types of suspension systems (including related components) to enhance the efficiency and accuracy of inspection and complicated fault diagnosis;• Capable of understanding the principles of vehicle vibration and stability as well as the affecting factors of vehicle stability, such as wheel alignment, suspension methods, spring stiffness, damping coefficient, instantaneous rolling axis and roll steer to solve the complicated technical problems, such as abnormal noises and driving instability, etc., effectively and accurately; and• Capable of compiling reports covering preventive measures, instructions on inspection and maintenance as well as providing suggestions for improvement, etc. according to the specific defects relating to respective suspension systems.
Remark	<p>The credit for this competency unit assumes that the practitioner already has possessed extensive knowledge of automotive, vehicle repair and testing procedures.</p>

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Title	Master the complicated techniques of electrical and electronic systems
Code	108738L4
Range	This unit of competency is applicable to technicians working at vehicle servicing and inspection departments. Practitioners should be able to master the working principles of electrical and electronic systems as well as multiplexing, and their effects on vehicle performance to enhance the efficiency and accuracy of inspection and diagnosis of vehicle systems.
Level	4
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Relevant electrical and electronic systems)</p> <ul style="list-style-type: none"> • Master the operating principles and output characteristics of different types of electric motors and electric generators, such as torque, speed and generation of electricity. • Good understanding of the controlling methods of starting and charging system • Master the operating principles of various types of electrical and electronic sub-systems (including related components and control systems) • Good understanding of the applications of analogy and digital devices, and their systems, such as integrated circuits, analogy/digital converters, amplifiers, comparators and microprocessors. • Master the structure, operating principles, output characteristics and applications of sensors and actuators applied on vehicles, such as temperature sensing, pressure responsive, photosensitive, air current, position and electromagnetic solenoids of various functions. • Master electronic control principle, such as closed-loop control • Good understanding of the principle and application of multiplexing, such as the controller-area network. • Good understanding of the operating principles and applications of various types of electronic control systems (including related components): <ul style="list-style-type: none"> ○ Engine management systems ○ Transmission control systems ○ Chassis stability control systems ○ Cruise control systems ○ Air bag control • Master the application and data analysis skills of various types of measuring/ diagnosis equipment, such as oscilloscopes and on-board diagnostic devices. <p>2. Performance (Inspection, fault diagnosis and analysis of electrical and electronic systems)</p> <ul style="list-style-type: none"> • Conduct inspection, fault diagnosis and analysis procedures according to fault symptoms (including recurrent or intermittent defects) of electronic control systems, such as: <ul style="list-style-type: none"> ○ Power system defects, such as stalling, weak accelerating, rough engine running or excessive fuel consumption, ○ Transmission system defects, such as incorrect shift points, incorrect power splitting and harsh gear shifting, ○ Chassis stability control system defects, such as inoperative anti-lock brake, acceleration skidding and instable high-speed cornering, etc ○ Cruise control system defects, such as inoperative speed control • Conduct inspection, fault diagnosis and analysis procedures according to fault symptoms (including recurrent or intermittent defects) of multiplexing systems and

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	<p>related components, such as failure or distortion of signal. transmission and optical fibre damages.</p> <ul style="list-style-type: none"> • Conduct inspection, fault diagnosis and analysis procedures according to fault symptoms (including recurrent or intermittent phenomena, and visual warnings, etc.) of electrical systems, such as starting system, charging system, heating, ventilation and air conditioning system, and vehicle body electrical devices. • Review the causes of defects and diagnostic methods; submit report to seniors covering preventive measures, instructions on inspection and maintenance as well as suggestions for improvement.
<p>Assessment Criteria</p>	<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 mastering the structure, functions, controlling and operating principles of various electrical and electronic systems to enhance the efficiency and accuracy of inspection and complicated fault diagnosis; • Capable of mastering electrical and electronic theories as well as impact of the application of multiplexing on electronic systems to solve the complicated technical problems, such as engine stall, heating, ventilation and air conditioning failure etc., effectively and accurately; and • Capable of compiling reports covering preventive measures, instructions on inspection and maintenance as well as providing suggestions for improvement, etc. according to the specific defects relating to respective electrical and electronic systems.
<p>Remark</p>	<p>The credit for this competency unit assumes that the practitioner already has possessed extensive knowledge of automotive, vehicle repair and testing procedures.</p>

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Title	Master the complicated techniques of vehicle body and frame
Code	108739L4
Range	This unit of competency is applicable to technicians working at vehicle servicing and inspection departments. Practitioners should be able to master the effect of vehicle body and frame affecting driving stability, noise, seepage and compartment appearance to enhance the efficiency and accuracy of complicated defects inspection.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Relevant vehicle body and frame)</p> <ul style="list-style-type: none"> • Materials for vehicle body and frame <ul style="list-style-type: none"> ○ Good understanding of the characteristics and adaptive ranges of different metals, non-metals and plastics ○ Master the joining methods of different materials, their strength and application limits ○ Master the methods of damage testing of different materials (e.g. fractures and ageing) ○ Rectification of vehicle body and frame ○ Good understanding of the principles of rectification and repair, such as ductility and heating, etc., for deformed or damaged materials; as well as the impact on strength of the material due to the incident and repair process ○ Master the standard specifications of reference points locations for vehicle frame or structural panels ○ Good understanding of the relationship between wheel alignment and the orientation of vehicle frame or structural panels, as well as its impact on driving stability • Sealing of compartment <ul style="list-style-type: none"> ○ Understand the causes and sources of abnormal noises when vehicle running, such as clashing, vibrating and loosening of related devices inside or outside the cabin, and air current ○ Understand the conditions for aligning vehicle doors and windows, as well as the functions of plastic pads and rails • Painting and protection of vehicle body and frame <ul style="list-style-type: none"> ○ Master the protective paints applied on various kinds of materials for vehicle body or frame, their characteristics and spraying methods ○ Good understanding of the characteristics, application and handling methods of various kinds of vehicle paints ○ Master the colour tuning of paints, colour matching and treatment of glossy surface ○ Good understanding of the characteristics and application of different fillers • Master the relevant laws and regulations governing the dimensions of various types of vehicle bodies. <p>2. Performance (Inspection and defect analysis of vehicle body and frame)</p> <ul style="list-style-type: none"> • Conduct inspection and defect analysis on respective vehicle body and frame according to abnormal symptoms of driving instability, such as yawing.

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	<ul style="list-style-type: none"> • Conduct inspection and defect analysis on respective vehicle body and frame according to abnormal symptoms of noise or seepage when vehicle running caused by unsatisfactory compartment sealing. • Conduct inspection and defect analysis according to symptoms of abnormal compartment appearance, such as: <ul style="list-style-type: none"> ○ Uneven discolouration of coating and colour fading ○ Abnormal rustiness • Review the causes of defects and diagnostic methods; submit report to seniors covering preventive measures, instructions on inspection and maintenance as well as suggestions for improvement. • Provide appropriate repairing guidelines according to the extent of rustiness or damages of vehicle frame or structural panels, such as specification of materials, welding methods and joining standards, to guarantee that the structural strength (including the dimension of vehicle body) can be recovered to the original standard of manufacturer and met with respective legislative requirements.
<p>Assessment Criteria</p>	<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 mastering the structure and functions of vehicle body and frame (including compartment trim, etc.) to enhance the efficiency and accuracy of complicated defects inspection, such as driving stability, noise, seepage and compartment appearance; • Capable of mastering the characteristics and application limits of different materials of vehicle body and frame as well as the impact of joining methods on the structure and cabin appearance, etc., to solve the complicated technical problems, such as yawing and colour fading, etc., effectively and accurately; • Capable of mastering the strength of vehicle frame or structural panels required by the vehicle manufacturer and respective regulations; compiling appropriate repairing guidelines; and • Capable of compiling reports covering preventive measures and providing suggestions for improvement, etc. according to the specific defects found in respective vehicle body and frame (including the compartment trim).
<p>Remark</p>	<p>The credit for this competency unit assumes that the practitioner already has possessed extensive knowledge of automotive body construction and knowledge of vehicle body repair (body correction, welding and painting).</p>

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Title	Conduct quality check on vehicle examination
Code	108740L4
Range	This unit of competency is applicable in vehicle examination workplaces. Practitioners should be able to conduct quality check on vehicle examination according to instructions of respective regulations on vehicle examination.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicle examination and quality verification)</p> <ul style="list-style-type: none"> • Be familiar with respective regulations on vehicle examination. • Good understanding of quality monitoring to facilitate the quality verification in vehicle examination. • Good understanding of the concept of customer services. <p>2. Performance (Conduct quality verification on vehicle examination)</p> <ul style="list-style-type: none"> • Conduct quality verification on vehicle examination in accordance with instructions of respective regulations such as: <ul style="list-style-type: none"> ○ Monitor the operation of vehicle examination ○ Approve and record daily documents relating to vehicle examination ○ Conduct random check on vehicles • Handle complaint cases such as conduct vehicle re-examination. • Review the quality of vehicle examination as to minimise differences between testers in compliance with respective regulations. • Execute and release updated instructions. • Monitor and maintain testing instruments and equipment and confirm that they are appropriate for the use in vehicle examination. • Other operations related to the quality verifying of vehicle examination. • Determine if the quality of vehicle examination can meet the statutory requirements.
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 quality verification on vehicle examination according to instructions of respective regulations; and • Capable of approving and releasing documents relating to vehicle examination according to respective regulations.
Remark	<p>The credits value of this unit of competency assumes that the practitioner has already possessed knowledge on vehicle servicing and the capability of vehicle examination.</p> <p>The major legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Road Traffic Ordinance • Road Traffic (Construction and Maintenance of Vehicles) Regulations

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Title	Master the complicated techniques of alternative power systems
Code	108741L4
Range	This unit of competency is applicable to technicians working at vehicle servicing and inspection departments. Practitioners should be able to master the operating principles of various types of alternative power systems to enhance the efficiency and accuracy of inspection and complicated fault diagnosis.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Electric and hybrid systems)</p> <ul style="list-style-type: none"> • The principles of electrical engineering: <ul style="list-style-type: none"> ○ Master basic electric theory ○ Good understanding of the working principles of DC and AC motors, generator and alternator, their output characteristics, and relevant electricity supply control methods • Electric energy management: <ul style="list-style-type: none"> ○ Master the performance, structure, operating principles and applicative limitations of different kinds of secondary batteries, such as lead acid battery, nickel-based battery and lithium-based battery ○ Good understanding of the methods of battery charging management, the structure and operating principles of all related components ○ Good understanding of the structure, operating principles and applicative limitations of various kinds of fuel cells, fuel cell systems and related components • Electric vehicles: <ul style="list-style-type: none"> ○ Good understanding of the layout, characteristics, structure and operating principles of different transmission systems ○ Master the control principles of electricity supply and regeneration as well as the structure, functions and operating principles of their related circuits and components • Hybrid systems: <ul style="list-style-type: none"> ○ Master the definition, operating characteristics, structure and control methods of various types of hybrid systems, such as the operating sequence of engine, alternator and electric motor ○ Good understanding of the structure and operating principles of power splitting devices of transmission system ○ Master the control principles of electricity supply and regeneration as well as the structure, functions and operating principles of their related circuits and components ○ Good understanding of the electric supply and control methods of motors and various electrical accessories <p>2. Performance (Inspection, fault diagnosis and analysis of electric and hybrid systems performance)</p> <ul style="list-style-type: none"> • Conduct inspection, fault diagnosis and analysis procedures according to fault symptoms (including recurrent or intermittent defects) of electric systems and related components, such as: <ul style="list-style-type: none"> ○ Efficiency declining in charging and discharging of battery

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	<ul style="list-style-type: none"> ○ Declining in acceleration and speed of vehicle ○ Shortened driving range ○ Inaccurate or unstable vehicle speed control ○ Abnormal operating temperature, such as motor, battery or fuel cell ● Excessive fuel consumption. ● Occurring of abnormal operating noise or vibration. ● Conduct inspection, fault diagnosis and analysis procedures according to fault symptoms (including recurrent or intermittent defects) of electrical system of hybrid vehicles, their auxiliary systems and related components, such as: <ul style="list-style-type: none"> ○ Engine defects, such as stalling, insufficient power, weak acceleration, rough engine running or excessive fuel consumption, etc. ○ Declining charging and discharging efficiency of battery, including the efficiency of electricity regeneration ○ Instable control of engine power cut-in and cut-out patterns ○ Abnormal operating temperature, such as motor, battery or engine, etc. ○ Declining acceleration power and speed of vehicle ○ Occurring of abnormal operating noise (including detonation) or vibration ● Review the causes of defects and diagnostic methods; submit report to seniors covering preventive measures, instructions on inspection and maintenance as well as suggestions for improvement.
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 mastering the structure, functions, control and operating principles of electric vehicle systems (including battery or fuel cell), their auxiliary systems and related components to enhance the efficiency and accuracy of inspection and complicated fault diagnosis; ● Capable of mastering the structure, functions, control and operating principles of hybrid vehicle systems (including battery and engine), their auxiliary systems and related components to enhance the efficiency and accuracy of inspection and complicated fault diagnosis; ● Capable of mastering the principle of electric vehicle systems as well as the factors affecting vehicle power output, such as motor control efficiency, electric energy management and regeneration, etc., to solve the complicated technical problems effectively and accurately, such as short driving range and weak acceleration; ● Capable of mastering the principle of hybrid vehicle systems as well as the factors affecting vehicle power output and charging performance, such as efficiency of electric management, motor and engine control, etc., to solve the complicated technical problems effectively and accurately, such as fuel consumption, battery performance decay and lack of vehicle power output; and ● Capable of compiling report covering preventive measures, compiling instructions on inspection and maintenance as well as providing suggestions for improvement, etc. according to specific defects found in respective power systems.
Remark	<p>The credit for this competency unit assumes that the practitioner already has possessed extensive knowledge of electric and hybrid vehicles and understands how the system works for electric and hybrid vehicles.</p>

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Title	Master the complicated techniques of exhaust emission control
Code	108742L4
Range	This unit of competency is applicable to technicians working at vehicle servicing and inspection departments. Practitioners should be able to master the operating principles of exhaust emission control systems and their effectiveness in pollutant treatment to enhance the efficiency and accuracy of inspection and fault diagnosis on exhaust emission problems.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Pollutants generated by vehicles)</p> <ul style="list-style-type: none"> • Master the pollutants generated during normal or abnormal fuel oxidization process. • Good understanding of the impact of different fuels on the generation of pollutants. • Good understanding of the harm of various kinds of pollutants. • Master the causes and sources of various kinds of pollutants generated in internal combustion engines. • Good understanding of the sources of vehicle pollutants. • Good understanding of the methods of reducing vehicle pollutants, including driving patterns, design of power systems and after-treatment of exhaust emission. • Good understanding of the testing methods of exhaust emission level, including the selection and use of related equipment as well as measuring methods. • Master the standards of vehicle manufacturers on pollutants emission level, and governing regulations set by Environmental Protection Department. • Understand the structure, functions, control methods and operating principles of various kinds of emission control systems (including related components) such as exhaust gas recirculation, valve timing control, evaporative emission control, catalytic converter, particulate filter and selective catalytic reduction. <p>2. Performance (Inspection, fault diagnosis and analysis of the emission control systems performance)</p> <ul style="list-style-type: none"> • Conduct fault diagnosis and analysis procedures according to the performance inspection results of evaporative emission control systems and related components. • Conduct inspection, fault diagnosis and analysis procedures for various emission control and after-treatment systems (including sub-systems and related components) and engine performance according to the pollutants concentrations in exhaust gas. • Review the causes of defects and diagnostic methods; compile report covering preventive measures, instructions on inspection and maintenance as well as suggestions for improvement.
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 mastering the structure, functions, control methods and operating principles of various kinds of emission control systems (including related components and sub-systems) to enhance the efficiency and accuracy of inspection and complicated fault diagnosis; • Capable of mastering the factors affecting pollutant emission control such as the causes of pollutants generation, emission control methods, engine design and exhaust gas

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	<p>after-treatment to solve the complicated technical problems effectively and accurately such as pollutant emission reduction and power lose; and</p> <ul style="list-style-type: none">• Capable of compiling report covering preventive measures, compiling instructions on inspection and maintenance as well as providing suggestions for improvement, etc. according to specific defects found in respective emission control systems.
Remark	<p>The credit value of this competency unit assumes that the practitioner has already possessed extensive knowledge of automobile construction and understanding on how the various systems of vehicle work.</p>

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Title	Execute performance tests on vehicles
Code	108743L4
Range	This unit of competency is applicable to the engineering staff in the vehicle servicing and inspection departments. Practitioners should be able to execute performance tests on vehicles according to testing procedures and methods established by the organisation, so as to ascertain the serviceability of vehicles.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Procedures for vehicle performance tests)</p> <ul style="list-style-type: none"> • Master the vehicle performance test procedures and methods established by the organisation. • Master specifications of vehicles and the standard parameters of performance tests (e.g. the manufacturer standard, approved international standard and respective regulations). • Master the operation, maintenance and calibration of various kinds of equipment for vehicle testing. <p>2. Performance (Execute vehicle performance test)</p> <ul style="list-style-type: none"> • Execute the performance test procedures and record all data in qualified workplace equipped with adequate facilities according to the characteristics and standards of various testing items, such as tests on: <ul style="list-style-type: none"> ○ braking efficiency ○ vehicle body tilt ○ illumination and aim alignment ○ engine power and fuel consumption ○ exhaust emission ○ working noise ○ automatic shift • Review the efficiency of the testing procedures, such as, work flow, accuracy, human resources and compile report to make improvement suggestions on the testing or measuring methods for submission to seniors.
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 executing vehicle performance tests (including the preparation before the test, and environmental requirements) according to the testing procedures and methods established by the organization, and recording all relevant data for submission to senior engineering staff to ascertain the serviceability of vehicles; and • Capable of making improvement suggestions on the testing and measuring methods according to the efficiency of the testing procedures.
Remark	The credit value of this competency unit assumes that the practitioner has possessed a certain understanding of the structure of the car, the working principle of each system and diagnosis.

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Title	Optimise the performance of vehicle systems
Code	108744L5
Range	This unit of competency is applicable to the engineering staff in the vehicle servicing and inspection departments. Practitioners should be able of master the structure, control methods and operating principles, of various vehicle systems, and enhance the performance of vehicles according to the suggestions and respective instructions on vehicle performance optimisation.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicle systems performance and related technology)</p> <ul style="list-style-type: none"> • Master the structure, functions, control methods, operating principles and standard parameters (e.g. manufacturer standard, approved international standard, and respective regulations) of various vehicle systems (including related components). • Master vehicle performance tuning and testing equipment application techniques. • Master the suggestions and respective instructions on vehicle systems performance optimisation. <p>2. Performance (Optimise the performance of vehicle systems)</p> <ul style="list-style-type: none"> • Conduct research and make improvement for the necessary systems according to the established suggestions and respective instructions on vehicle performance optimisation, such as: <ul style="list-style-type: none"> ○ Poor performance of the chassis stability control system, e.g. insufficient braking power, wheels locked when braking, low response, abnormal noises, drifting or excessive vehicle body rolling when cornering, skid when accelerating, weak impact and vibration absorptions ○ The vehicle body unable to maintain the up-right condition at specified inclined angle, unbalanced axle loading and low steering stability ○ Incorrect lighting intensity and aim alignment, overspread of light scattering and aim direction failed to follow the change of steering angle ○ Insufficient engine power, rough running, hesitates to accelerate, warm stalling, cold start difficulty, abnormal noise and high fuel consumption ○ Emission problems caused by substandard pollutants emission level, high concentration at idle, high speed or high load running, the power system performance and after treatment devices efficiency ○ Excessive working noise caused by the muffling effect of exhaust system, the vehicle body shape and sound-proofing effect, component structure or installation problems ○ Weak acceleration, excessive fuel consumption and shifting shock, etc. caused by incorrect shifting speed or working pressure of automatic transmission • Review the effectiveness of performance optimisation of vehicle systems, compile report and submit to seniors for improvement suggestions.
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 mastering the structure, control methods, operating principles and standard parameters of various vehicle systems, and enhancing the performance of vehicle systems according to the suggestions and respective instructions on performance optimisation; and

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	<ul style="list-style-type: none">• Capable of suggesting methods for improvement of work according to the effectiveness of vehicle system optimisation.
Remark	The credit value of this competency unit assumes that the practitioner has possessed a certain understanding of the vehicle structure, the working principle and performance of each system.

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Title	Establish the testing procedure for vehicle performance
Code	108745L6
Range	This unit of competency is applicable to the senior engineering staff of the vehicle servicing and inspection departments. Practitioners should be able to master the standards and methods of various vehicle performance tests to establish qualified testing procedure with approved testing equipment.
Level	6
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Standards and vehicle performance test)</p> <ul style="list-style-type: none"> • Fully master the standard parameters (e.g. the manufacturer standard, approved international standard and respective regulations), testing methods, the requirements on the operating equipment and testing environments of various vehicle performance test items, such as: <ul style="list-style-type: none"> ○ Braking efficiency ○ Tilt limit of vehicle body ○ Illumination and aim alignment ○ Engine power and fuel consumption ○ Exhaust emission ○ Working noise ○ Effectiveness of automatic shift <p>2. Performance (Establish the testing procedure for vehicle performance)</p> <ul style="list-style-type: none"> • Draw up the items for vehicle performance test according to job requirements, such as test of: <ul style="list-style-type: none"> ○ Braking efficiency ○ Vehicle body tilt ○ Illumination and aim alignment ○ Engine power and fuel consumption ○ Exhaust emission ○ Working noise ○ Automatic shift • Establish testing procedure and supporting requirements according to the characteristics and standard of various testing items, including: <ul style="list-style-type: none"> ○ The specifications of testing equipment ○ Obligatory preparation prior to test ○ Testing procedure and safety measures ○ Records of data and other information • Review the effectiveness and the methods of the testing procedure and being able to make adjustments or improvements.
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 mastering the standard and methods of various vehicle performance tests and establishing qualified testing procedure, including the preparation requirements prior to the test and environmental requirements to obtain recognised testing data; and • Capable of reviewing the effectiveness of the testing procedure and methods and making adjustments or improvements.

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Remark	The credit value of this competency unit assumes that the practitioner has possessed a certain understanding of the structure of the car, the working principle and testing of each system.
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Title	Analyse the vehicle test result and evaluate the performance
Code	108746L6
Range	This unit of competency is applicable to the senior engineering staff of the vehicle servicing and inspection departments. Practitioners should be able to master the standards of various vehicle specifications and performance, analysing data, evaluating the performance of vehicle systems and suggesting optimisation to enhance vehicle performance.
Level	6
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Testing standards and vehicle specifications)</p> <ul style="list-style-type: none"> • Master the methods of handling testing data, such as the reliability assessment, data integration, quantification and presentation. • Fully Master the standard parameters of various vehicle specifications and performance tests (e.g. manufacturer standard, approved international standard and respective regulations). <p>2. Performance (Analyse results, evaluate performance and make optimisation suggestions)</p> <ul style="list-style-type: none"> • Integrate, quantify and ascertain the reliability of data obtained from various testing items, and analyse the causes for discrepancies according to standard parameters. • Evaluate the performance and make optimisation suggestions, such as: <ul style="list-style-type: none"> ○ The effect of chassis stability control affected by the braking, suspension, steering and traction control systems ○ The anti-roll ability affected by factors of systems layout and vehicle body ○ The accuracy of illumination and aim alignment ○ The impact of the performance of the engine and its sub systems on power output and fuel consumption ○ The impact of the performance of emission control and after-treatment systems as well as the engine and its sub systems on the emission of pollutants concentration ○ The suppression effect of working noise ○ The smoothness and accuracy of automatic shift • Review the effectiveness of respective analysis and evaluation, and able to make adjustments or improvements.
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 mastering the techniques of testing data handling and analysing, comparing the data with the standard parameters to ascertain the performance of the testing items, and analysing the causes of discrepancies; and • Capable of effectively evaluating the performance of vehicle systems and suggesting optimisation to enhance vehicle performance.
Remark	The credit value of this competency unit assumes that the practitioner has possessed a certain understanding of the structure of the car, the working principle and testing of each system.

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Title	Offer servicing advice and consulting services
Code	108747L3
Range	This unit of competency is applicable in vehicle service/servicing centres. Practitioners should be able to offer services and servicing advice to customers, follow up the services and ensure customers satisfaction.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Offer servicing advice and consulting services)</p> <ul style="list-style-type: none"> • Master basic customer service knowledge and understand its importance. • Master the vehicle manufacturer's requirements of brand/product services. • Master the main characteristics, range and charges of the organisation's products/services. • Master the flow and progress of the organisation's products/services and maintain contact with customers. • Good understanding of customer satisfaction concept and index. <p>2. Performance (Implement offer servicing advice and consulting services)</p> <ul style="list-style-type: none"> • Base on the vehicle manufacturer guidelines on brands/product services and that of the organisation, receive customers and understand their needs as well as offer advice, price estimation and services under different circumstances/ situations including: <ul style="list-style-type: none"> ○ Record customers' requirements and demands in a professional manner; and offer appropriate advice on products/services ○ Explain the characteristics, range and charges of relevant products/services ○ Maintain contact with customers to make appropriate price estimation and quotation with acquisition of information on the supply and progress of the products, parts and services of relevant departments ○ Monitor the supply and progress of relevant departments; and coordinate the work arrangement of different parties ○ Follow up the quality of services to ensure they can meet customers' demands and requirements; and maintain communication and good relationship with customers ○ Capable of answering customers' further enquiries
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 receiving customers responding to their needs according to the organisational regulations and guidelines under different situations/circumstances; and offering appropriate products/services or advice to satisfy customers' needs; and • Capable of monitoring the progress and quality of services to ensure that customers' requirements are met.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle service/servicing.

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Title	Handle after-sales warranty claim
Code	108748L3
Range	This unit of competency is applicable in vehicle service/servicing centers. Practitioners should be able to assess if the defects of customers' vehicles are covered within the vehicle manufacturer's coverage of warranty by individual cases in accordance with organisational procedure. They should also submit report on the description of defects, and coordinate with the service advisor to arrange with customers for the manufacturer's warranty-claim services.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (After-sales warranty claim services)</p> <ul style="list-style-type: none"> • Master the vehicle manufacturer's maintenance requirements for vehicles as well as the warranty coverage, terms and policy for vehicle faults and damages. • Master the causes of vehicle faults and damages and also analyse the liabilities involved. • Master the procedure of vehicle servicing and its workflow. • Master the application procedure for warranty claims of defects and submission of the required information. • Master the arrangement and procedure of the manufacturer's warranty campaign services. <p>2. Performance (Handle after-sales warranty claim)</p> <ul style="list-style-type: none"> • Evaluate the vehicles fault or damage and assess whether it fulfills the manufacturer warranty requirement, policy and coverage. • Arrange necessary repair work according to the assessment. • Analyse the causes for vehicles fault or damage according to the defect of different vehicles and submit report to relevant departments. • Coordinate with service advisors to arrange maintenance and repair according necessary maintenance procedure. • Submit application for warranty claims of repair, compile damage and services report. • Coordinate with the service advisor to make arrangement with customers for the manufacturer's warranty-claim services.
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 assessing the need for repair or services and making necessary arrangements according to the manufacturer's coverage and terms of warranty on defects of vehicles; and • Capable of coordinating and making arrangement for the services/repair required for respective vehicles according to the vehicle manufacturer's warranty campaign services.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of vehicle inspection and servicing.

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Provide services on the repair quotation of insurance/claims for compensation
Code	108749L3
Range	This unit of competency is applicable in vehicle service/servicing centers. Practitioners should be able to provide necessary information on the repair quotation of insurance, claims for compensation and application procedure under different situations/circumstances according to organisational procedure. They should also make appropriate judgment and proposals to help customers and provide the services required.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Repair quotation of insurance and claims for compensation)</p> <ul style="list-style-type: none"> • Master respective local legislative provisions governing issues such as traffic accidents and the use of roads. • Master the types of vehicle insurance in Hong Kong, the requirements of different vehicle types as well as the procedure and requirements of claims for compensation with respect to different types of insurance. • Master the procedure for handling traffic accidents, including accidents involving/not involving injury or death. • Master the procedure and documents required for application of vehicle insurance, repair quotation of insurance and claim for compensation. • Master the division of work and workflow of the departments within the organisation. • Master the calculation of the repair quotation including cost and profits. <p>2. Performance (Provide consultant services on repairs, and services on repair quotation of insurance/claims for compensation)</p> <ul style="list-style-type: none"> • Receive customers and provide consultant services and proposals, such as the application procedure for claiming compensation of vehicle insurance/repair of vehicles. • Conduct preliminary assessment of traffic accidents for customers; make objective analysis/assessment with respect to different circumstances and situations; and provide or make appropriate suggestions/arrangements. • Provide customers with information on the procedure for handling the situation after the occurrence of traffic accident, including: <ul style="list-style-type: none"> ○ Make analysis for customers on how to handle the incident and see if it is necessary to report to the police; and how to notify the respective insurance institution to declare for claims ○ Make detailed repair estimates for the vehicle involved; calculate the time and expenses required; and make detailed report ○ Contact respective insurance institution upon obtaining customers' authorisation and arrange claims adjuster to make fair assessment; and discuss with the insurance institution on issues such as repair estimates and charges, etc. according to fair assessment ○ Understand the supply of parts and the progress of repairs in different departments; coordinate the work of different departments; obtain accurate information; and make appropriate report and follow up actions • Find, contact and arrange other product/service suppliers to provide products/services when the organisation failed to provide the required parts/products; coordinate the arrangement and progress of different parties; and calculate the cost, profits and charges involved.

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Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is: <ul style="list-style-type: none">• Capable of making judgment and proposals as well as provide consultant services with respect to the types of vehicle insurance, coverage and the procedure for declaration/claims for compensation;• Capable of understanding and analyzing independently the procedure taken by customers after the occurrence of the incident and providing relevant professional and objective advice; and• Capable of contacting respective insurance institution and claims adjusters to take follow-up action on the declaration for repair and claims for compensation.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of vehicle service and servicing.

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Functional Area - Vehicle Servicing

Title	Promote repair/maintenance services and consulting services
Code	108750L3
Range	This unit of competency is applicable in vehicle service/servicing centers. Practitioners should be able to receive customers according to the organisation's established procedure and capable of understanding customers' requirements for vehicle services/maintenance. They should also be able to employ communication skills to promote products/services to customers and provide suitable suggestions to facilitate transactions.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Repair and maintenance services and consulting services)</p> <ul style="list-style-type: none"> • Master the influence of personal appearance and inter-personal communication skills of services consultants on matters of confidence and image building of the organisation. • Master about customer psychology. • Good understanding of market trend and the characteristics of the organisation and other competitors in the market. • Good understanding the provision of other products/services in the market and contact other product/service supplier to arrange the relevant procedure for provision of products/services. <p>2. Performance (Promote repair and maintenance and consulting services)</p> <ul style="list-style-type: none"> • Receive customers under different situations/circumstances according to organisational instructions and understand customer needs; provide suggestions on repair and maintenance and services of vehicles; also understand customer psychology so as to promote products/services to customers, including: <ul style="list-style-type: none"> ○ The characteristics, workflow and charges of the products/services provided by the organisation and other competitors in the market; and obtain detailed information so as to sell and promote products/services to customers ○ The psychology of different customers on the products/services required; make different suggestions and analysis according to the needs of different types of customers; and develop corresponding marketing and promotion strategies ○ The products/services provided by different departments and the progress; coordinate the work of different departments; obtain accurate information and maintain contact with customers to make appropriate report and follow-up actions ○ Source, contact and arrange other product/service suppliers to provide products/services when the organisation failed to provide the required products/services; coordinate the arrangement and progress of different parties; and calculate the charges, cost and profits involved ○ Take follow-up actions on the quality of respective products/services to ensure that the products/services can meet customer needs and demands; and maintain contact and good relationship with customers
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 providing advice on vehicle services under different situations/circumstances according to organisational instructions and requirements; provide suggestions

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	<p>according to customer needs; and arranging different products/services to meet customer needs;</p> <ul style="list-style-type: none">• Capable of understanding the psychology and requirements of customers on products/services; and employing communication and psychological skills to promote sales and facilitate transactions; and• Capable of following-up on the progress and quality of services provided to ensure the services provided can meet customers' requirements.
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 servicing.</p>

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Functional Area - Vehicle Servicing

Title	Handle complicated technical servicing problems
Code	108751L4
Range	This unit of competency is applicable in vehicle servicing workplaces. Practitioners should be able to conduct comprehensive investigation into technical servicing problems that cannot be solved by general servicing staff. They may be required to coordinate other staff from vehicle manufacturer or technicians within the organisation to handle technical servicing problems.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Operating principles of various vehicle systems)</p> <ul style="list-style-type: none"> • Master the operating principles of various vehicle systems. • Master the interaction among various vehicle systems and their relationship. • Be familiar with the vehicle manufacturer's manual and updated information. • Master the communication pattern with respective technical support departments of the vehicle manufacturer. <p>2. Performance (Handle complicated technical servicing problems)</p> <ul style="list-style-type: none"> • Collect information and data on the faults. • Analyse the causes for faults with reference to the manufacturer's manual and updated information with knowledge of various vehicle systems. • Conduct in-depth investigation with the technicians to analyse the causes of faults found. • Communicate with the technical support department of the vehicle manufacturer on unsettled complicated technical servicing problems under inherent servicing information condition and provide the information and data of faults found. • Implement related suggestions on servicing, conduct test and review effectiveness upon completion of work. • Compile a full servicing report after completion of the problem.
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 handling complicated servicing problems of various vehicle systems and components; and • Capable of compiling a full servicing report.
Remark	The credits value of this unit of competency assumes that the practitioner has already possessed the capability to conduct fault diagnosis on various vehicle systems.

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Functional Area - Vehicle Servicing

Title	Contact vehicle manufacturers and overseas organisations for business and technical exchange
Code	108752L5
Range	This unit of competency is applicable in vehicle service/servicing centres. Practitioners should be able to reflect problems of customers' vehicles to vehicle manufacturers, sharing and exchanging technical knowledge with them; coordinating with servicing and technical staff to arrange appropriate training included technical training for them.
Level	5
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicle manufacturer contacts, and overseas organisations for business and technical exchange)</p> <ul style="list-style-type: none"> • Good Understand of the inter-relationship and communication channels between vehicle manufacturers and service/servicing centres. • Master the warranty coverage, terms and policy of protection set by the vehicle manufacturers for their vehicles. • Master the causes for vehicle faults/ damages and analyse respective repair reports. • Good Understand of the trend of new vehicle design and the direction of technical development. <p>2. Performance (Contact vehicle manufacturers and overseas organisations for business and technical exchange)</p> <ul style="list-style-type: none"> • Maintain close relationship and communication with vehicle manufacturers and respective organisations/departments to exchange the business and technical problems; have timely discussions on urgent matters, such as recovery of vehicles, technical problems that cannot be solved by distributors and the impact of new regulations. • Assess reports of individual vehicle faults/damages and decide whether the cases should be forwarded to the vehicle manufacturers or respective organisations/departments for follow-up actions. • Arrange relevant training according to the technical report and training elements provided by vehicle manufacturers and respective organisations/departments. • Arrange respective staff members to visit the manufacturers' factories and respective organisations/departments for business and technical exchange and training in accordance with the technical level of the service/servicing centres.
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 maintaining close and effective contact with the manufacturers or respective organisations/departments and making timely communication in solving problems; and • Capable of arranging respective staff members to visit the manufacturers' factories and respective organisations/ departments for business and technical exchange and training according to the technical level and needs of the service/servicing centres.
Remark	The credit value of this competency unit assumes that the practitioner has possessed a certain understanding of the vehicle structure, the working principle and performance of each system.

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Functional Area - Vehicle Servicing

Title	Provide services on value assessment and trade-in of vehicles
Code	108753L3
Range	This unit of competency is applicable in vehicle showrooms or exhibition venues. Practitioners should be able to provide customers with services on value assessment and trade-in of vehicles according to organisational guidelines.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Value assessment of vehicles)</p> <ul style="list-style-type: none"> • Master the calculation method for value assessment of vehicles, including second hand market and their prices. <p>2. Performance (Provide services on value assessment and trade-in of vehicles)</p> <ul style="list-style-type: none"> • Master vehicle trade-in transactions; capable of calculating the cost of used vehicles and understand the handling procedure, including estimation of general vehicle serving charges, interests and second-hand market. • Ascertain the legality of trade-in vehicles, such as any illegal modification or prohibition order received. • Provide services on value assessment of vehicles to customers according to organisational guidelines. • Provide customers with suggestions on value assessment and trade-in of vehicles • Handle the trade-in vehicle to the best benefit of the organisation.
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 evaluating vehicle values and facilitating trade-in of vehicles according to organisational guidelines; and • Capable of handling trade-in used vehicles of depreciated value.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of vehicle servicing.

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Functional Area - Vehicle Servicing

Title	Verify cases of vehicle insurance claims
Code	108754L4
Range	This unit of competency is applicable to the assessors of damages for vehicle insurance claims entrusted by the insurance company. Practitioners should be able to verify the cases of vehicle insurance claims by simple visual inspection.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The terms of insurance policy)</p> <ul style="list-style-type: none"> • Good understanding of every detail of the terms of the vehicle insurance policy, such as: <ul style="list-style-type: none"> ○ Period of the insurance coverage ○ The insured vehicle's particulars ○ Period and scope of insurance coverage ○ Driver/insurer/car owner's information • Master the terms of the vehicle insurance policy and judge its validity, coverage, the rights and obligations of all parties concerned. • Good understanding of typical relevant documents such as vehicle registration document, insurance policy, police record, etc. to be able to identify the authenticity of documents. • Be familiar with the Road Safety Ordinance to understand the rights and obligations of road users. <p>2. Performance (Verify cases of insurance claims)</p> <ul style="list-style-type: none"> • Being capable of employing good communication skills to meet with the claimants or witnesses related to the cases; retrieve police or hospital records, etc.; collect related information from different locations to get an understanding of the time, location, environment, the course of the incident, the people involved, the nature and causes of the accident, etc.; and make preliminary analysis on the accident to reject fraudulent insurance claims. • Check the vehicle to verify that it is the one insured in accordance with the relevant documents such as vehicle registration document, etc. is the damaged vehicle located on site of the incident. • Examine the time, location of the incident and the vehicle involved according to objective evidences such as official records, etc. on site where the damaged vehicle is located so as to verify that the claim is within the insurance coverage. • Examine the details of the policy terms according to established evidences and verify that the claim of the claimant is within the insurance coverage of respective insurance policy. • Disregard the pressure from the claimant, the insurance company, vehicle servicing practitioner and respective executive staff and their inter-relationship to make a fair, just, honest, objective and independent assessment and make decision impartially. • Uphold noble morality and integrity to safeguard an independent and professional image. • Protect the legal rights of both the claimant and the insurance company.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of employing good communication skill to collect extensive information and evidences related to the claims of vehicle insurance at the site where the damaged vehicle is located, analysing the time, location, people, the vehicle involved, environmental factors, etc. of the incident to judge whether the case was reasonable and rejecting any fraudulent insurance claims, or confirming the inclusion within the scope of the insurance coverage;• Capable of examining the details of policy terms and verifying that the claims filed by the claimants are within insurance coverage according to established evidences; and• Capable of upholding noble morality and integrity to make a fair, just, honest and objective assessment and making decision impartially to safeguard the legal rights of all parties concerned.
Remark	The credit value of this competency unit assumes that the practitioner has already possessed extensive knowledge of automobile construction and understanding how the various systems of the vehicle work

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Title	Evaluate the repair cost for accidental damages of vehicles
Code	108755L4
Range	This unit of competency is applicable to the assessors of damages for vehicle insurance. Practitioners should be able to evaluate the repair cost of damaged vehicles objectively by visual inspection of the damaged vehicles at different situations/locations with the aid of appropriate information.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicle repairing)</p> <ul style="list-style-type: none"> • Understand the structure and functions of vehicle components and be familiar with the detailed functions, assembling methods, mechanical functions, etc. of various types of vehicle bodies, chassis and suspension systems. • Good understanding of the procedures, methods, work duration and materials required for rectification of vehicle body, vehicle parts and other structures. • Good understanding of the procedures, methods, work duration and materials required for surface treatment of vehicle body, polishing, painting. <p>2. Performance (Estimate the repair cost for accidental damages of vehicles)</p> <ul style="list-style-type: none"> • Conduct visual inspection on the damaged vehicle with reference to the time, place, people, vehicle involved in the incident and the environmental factors to accurately list out the damages on the vehicle body and other parts due to the incident as well as those damages which are not caused by the incident. • Estimate the budget for replacing, repairing or fine-tuning of damaged vehicle parts. • Be familiar with the source of supply, price, quantity of supply and related information of various kinds of spare parts; and make appropriate suggestions. • Assess the man-hours required for the working procedures stated on the repair list according to the instructions on servicing man-hours specified by the manufacturers or standard flat rate guide along with the exercise of objective and reasonable judgement. • Calculate the cost of each working procedure in terms of the labour cost of servicing work, the cost of spare parts and consumables; and thereby making a detailed repair list to come up with the total amount of the entire repair cost objectively. • Make use of computer quotation software, internet or electronic information database to retrieve relevant information whenever necessary so as to enhance the efficiency and accuracy in estimation of the repair cost.
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 listing out in detail accurately the damages done to the vehicle body and other parts of the damaged vehicle at the incident by visual inspection, and making reasonable recommendations on replacement and repair according to the depreciation of the vehicle and individual damaged items; • Capable of understanding the price and quantity of supply of various kinds of spare parts to make appropriate suggestions; • Capable of assessing the labour required for servicing according to the labour time manual published by the manufacturer or other acceptable standard flat rate guide; and summing up the cost of labour, parts and consumables etc. to make a detailed list of the service items and the total amount; and

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	<ul style="list-style-type: none">• Capable of making use of relevant computer quotation software when necessary to enhance the efficiency and accuracy of cost estimation
Remark	The credit value of this competency unit assumes that the practitioner has already possessed extensive knowledge of vehicle construction, the working principles of the various systems of the vehicle and the maintenance of the vehicle body.

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Functional Area - Vehicle Servicing

Title	Coordinate insurance claims of vehicle damages
Code	108756L4
Range	This unit of competency is applicable to the assessors of damages for vehicle insurance entrusted by the insurance company or customers. Practitioners should be able to collect and analysing the information relating to the incident of vehicle damages, identifying the responsibility of the claimant, writing objective vehicle damage assessment report and coordinating among the claimant, vehicle service provider and the insurance company.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Understand the terms of insurance policy)</p> <ul style="list-style-type: none"> • For comprehensive insurance claim, practitioners should master the terms of the vehicle insurance policy in detail, such as: <ul style="list-style-type: none"> ○ Scope of insurance coverage ○ The upper limit of compensation ○ The responsibility of the claimant ○ Depreciation rate ○ Fraudulent identification • Good understand of the validity and coverage of the insurance policy as well as the rights and obligations of all parties concerned. • Understand the content of the documents related to typical vehicle damages assessment such as police record of accidents, quotations of servicing estimates, etc. to facilitate analysis and decision making. <p>2. Performance (Integrate the information to make analysis and write reports)</p> <ul style="list-style-type: none"> • Be familiar with various price information such as the market price of used cars, the cost for reconditioned spare parts, the total amount required for vehicle servicing, etc. to assess the salvage value of the damaged vehicle; and understand the responsibility of the claimant to calculate the total amount of compensation according to the terms of the insurance policy. • If the insurance claim is established, practitioners should be capable of employing good negotiation techniques to communicate effectively with the parties concerning among the claimant, the servicing workshop, and the insurance company, etc. to arrive at a compensation amount acceptable to all parties. • Master general imaging techniques such as drawing and photography to clearly record the images or photographs/short videos to facilitate the writing of assessment report on vehicle damages. • Employ good clerical skills to integrate various information such as official record of accidents, suspicious points of fraudulent declaration, professional evaluation report, photographs, the course of the accident, time, place, environment, people involved, the details of the vehicle, etc. to prepare a clear and objective report on insurance claims according to the requirements of respective insurance company or customers. • Coordinate the claimant, the vehicle servicing provider and the insurance company during the entire process of the case. • Disregard the pressure of the claimant, the insurance company, vehicle servicing practitioner and respective executive staff and their inter-relationship to make a fair, just, honest, objective and independent assessment and make decision impartially. • Uphold noble morality and integrity to safeguard an impartial and professional image.

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	<ul style="list-style-type: none"> • Ensure that the legal rights of both the claimant and the insurance company are protected.
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 understanding thoroughly various price information to assess the salvage value of the damaged vehicle and identifying the responsibility of the claimant; calculating the total amount of compensation according to the terms of the policy and making a compensation proposal acceptable to all parties concerned through negotiation and coordination; • Capable of exercising good clerical skills and imaging techniques etc. to prepare a clear and impartial report on insurance claims; and coordinating all parties concerned during the entire process of the case; and • Capable of upholding noble morality and integrity to make a fair, just, honest and objective assessment and making decision to safeguard the legal rights of all parties concerned.
Remark	The credits value of this unit of competency assumes that the practitioner has already possessed the capability to assess the maintenance cost for accidental damages of vehicles.

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Functional Area - Vehicle Servicing

Title	Use general materials and tools for vehicle body assembling
Code	108757L1
Range	This unit of competency is applicable in vehicle body assembling workshops. Practitioners should be able to use general materials and tools correctly in a familiar working environment.
Level	1
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Performance and characteristics of materials and the functions of tools)</p> <ul style="list-style-type: none"> • Understand the performance and characteristics of vehicle body materials, such as metal and non-metal material. • Understand how to select adhesive agents, filling materials, securing and locking devices. • Understand the purposes and functions of general tools, such as: <ul style="list-style-type: none"> ○ Hand tools ○ Pneumatic tools ○ Electric tools ○ Measuring tools ○ Other related tools <p>2. Performance (Select and use general materials and tools)</p> <ul style="list-style-type: none"> • Select and use general vehicle body materials correctly in a familiar working environment according to instructions,. • Select and use general vehicle tools correctly in a familiar working environment according to their purposes.
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 understanding the use of general materials and tools for vehicle body assembling; and • Capable of selecting and using general vehicle materials and tools correctly in a familiar working environment.
Remark	<p>The major relevant legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Factories and Industrial Undertakings (Lifting Appliances and Lifting gear) Regulations

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Functional Area - Vehicle Servicing

Title	Apply basic vehicle body building techniques
Code	108758L2
Range	This unit of competency is applicable in vehicle body building workshops. Practitioners should be able to select suitable parts to build vehicle body according to design drawing and providing written report after the work.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Vehicle body building)</p> <ul style="list-style-type: none"> • Understand the content of general vehicle body working drawing, including vehicle body layout, symbols, installation guidelines and the specification of installation and commissioning. • Understand the properties and characteristics of general vehicle body materials, such as metal, wood, plastic, glass fibre, glass and filling materials. • Understand the properties of materials with regard to water-proofing, rust proofing, noise reduction, vibration dampening and heat-insulating. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Select the materials and tools required for vehicle body building)</p> <ul style="list-style-type: none"> • In accordance with working instruction set out in the vehicle manufacturer's installation / servicing manuals, select suitable tools, materials, and procedure to assemble vehicle body according to design drawing. • 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 selecting suitable tools and materials correctly to perform vehicle body building duty according to working instructions and design drawing, and providing written report; and • Capable of preparing the required materials correctly for vehicle body building job.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the basic knowledge of tools and materials.

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Title	Build the body frame
Code	108759L2
Range	This unit of competency is applicable in vehicle body building workshops. Practitioners should be able to build the body frame in accordance with working instructions and working drawing as well as actual worksite condition and providing written report.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure of vehicle body)</p> <ul style="list-style-type: none"> • Understand different methods of connecting vehicle body components. • Understand the structure of original chassis and the body frame to be built. • Understand the procedure for processing original chassis and body frame building. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Build the body frame)</p> <ul style="list-style-type: none"> • Safely build the body frame according to the content in the working drawing and the requirements of occupational safety and health as well as that of environmental protection, including: <ul style="list-style-type: none"> ○ Observe actual worksite condition to ensure that the building procedure is carried out in a proper working environment ○ Select and use appropriate personal protective equipment and the safety equipment for working at height ○ Select suitable tools and materials, including the use of fixtures, to perform vehicle body building duty ○ Align body frame according to specification. • Inspect and measure the work-piece upon completion of work to ensure that the requirements of manufacturing specification are met and provide written report.
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 selecting suitable tools and materials correctly according to the content in the working drawing; • Capable of building the body frame according to working procedure and working instructions; and • Capable of inspecting and measuring the work-piece upon completion of work, providing written report after the work
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of how to read working drawing, select tools and materials as well as welding techniques.

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Functional Area - Vehicle Servicing

Title	Assemble the floor, windows, passageways, stairs and doors of vehicle
Code	108760L2
Range	This unit of competency is applicable in vehicle body building workshops. Practitioners should be able to assemble the floor, passageways, stairs as well as routine and emergency doors of vehicle in accordance with working instructions and working drawing as well as actual worksite condition, providing written report after the work
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Drawings of general floor, passageways, stairs and doors of vehicle.)</p> <ul style="list-style-type: none"> • Understand the content of the working drawings of general floor, passageways, stairs and doors of vehicle, including layouts, symbols, installation guidelines as well as installation and commissioning specifications. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Assemble general floor, passageways, stairs and doors of vehicle)</p> <ul style="list-style-type: none"> • Safely assemble the floor, passageways, stairs and doors of vehicle according to the content in the working drawing and the requirements of occupational safety and health as well as that of environmental protection, including: <ul style="list-style-type: none"> ○ Observe actual worksite condition to plan the procedure for assembling the floor, passageways, stairs and doors of vehicle. ○ Select and use appropriate personal protective equipment correctly ○ Select suitable tools as well as securing and locking devices to perform the duty of assembling the floor, passageways, stairs and doors of vehicle. ○ Select suitable materials to perform the duty of assembling the floor, passageways, stairs and doors of vehicle. ○ Rectify and match the positions according to specification • Capable of inspecting and measuring the work-piece upon completion of work to ensure that the requirements of manufacturing specification are met and providing written report.
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 selecting suitable tools and materials correctly according to the content in the working drawing; • Capable of assembling the floor, passage-way, stairs and doors of vehicle, etc. according to working procedure and working instructions; and • Capable of inspecting and measuring the work-piece according to manufacturing specification, providing written report after the work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of how to read working drawing.

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Functional Area - Vehicle Servicing

Title	Assemble seats and interior fittings
Code	108761L2
Range	This unit of competency is applicable in vehicle body building workshops. Practitioners should be able to carry out assembling procedure for general seats and interior fittings in accordance with working instructions and working drawing as well as actual worksite condition, providing written report after the work.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operation of the seats and interior fittings of vehicles)</p> <ul style="list-style-type: none"> • Understand the structure of vehicle body. • Understand the structure and basic operation of the seats and interior fittings of vehicles. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Assemble the seats and interior fittings of vehicles)</p> <ul style="list-style-type: none"> • Safely assemble the seats and interior fittings of vehicles according to the content in the working drawing and the requirements of occupational safety and health as well as that of environmental protection, including: <ul style="list-style-type: none"> ○ Observe actual worksite condition to ensure that the assembling procedure for the seats and interior fittings of vehicles is carried out in a proper environment ○ Carry out the assembling procedure according to the respective rules of the workshops ○ Use correct methods to connect relevant wires • Capable of inspecting and measuring the work-piece upon completion of work to ensure that the requirements of manufacturing specification are met and provide written report.
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 selecting suitable tools and materials according to the content in the working drawing; • Capable of assembling the seats and interior fittings of vehicles according to working procedure and instructions; and • Capable of inspecting and measuring the work-piece upon completion of work, providing written report after the work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of how to read working drawing and select tools as well as the basic knowledge of vehicle electric systems.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Assemble air-conditioning systems
Code	108762L2
Range	This unit of competency is applicable in vehicle body building workshops. Practitioners should be able to carry out assembling procedure for air-conditioning systems in accordance with working instructions and working drawing as well as actual worksite condition, providing written report after the work.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of air cooling and air-conditioning systems in vehicles)</p> <ul style="list-style-type: none"> • Understand the characteristics of refrigerants, relevant handling procedure and legal requirements. • Understand the structure and basic operating principles of air cooling and air-conditioning systems in vehicles. • Understand the installation and inspection procedure for air cooling and air-conditioning systems in vehicles according to manufacturer's instructions. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Carry out the assembling procedure for air-conditioning systems in vehicles)</p> <ul style="list-style-type: none"> • Safely assemble the air-conditioning systems in vehicles according to relevant legislative provisions, instructions in the manufacturer's assembling manual and the requirements of occupational safety and health as well as that of environmental protection, including: <ul style="list-style-type: none"> ○ Assemble air-conditioning systems in vehicles ○ Carry out the assembling procedure according to the respective rules of the workshops and instructions ○ Use prescribed tools and instruments to charge the refrigerants into the air-conditioning systems correctly to ensure that the refrigerants will not leak out; and conduct leakage test ○ Connect relevant wires and pipes. • Capable of inspecting and testing the systems upon completion of work to ensure that the requirements of manufacturing specification are met and provide written report.
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 selecting suitable tools and materials correctly according to the content in the manufacturer's assembling manual; • Capable of assembling air-conditioning systems in vehicles according to the content in the manufacturer's assembling manual; • Capable of charging refrigerants into the air-conditioning systems and conducting leakage test; and • Capable of inspecting and testing the systems upon completion of work and providing written report
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of how to repair vehicle electric systems and handle refrigerants.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Assemble lighting and indicating systems
Code	108763L2
Range	This unit of competency is applicable in vehicle body building workshops. Practitioners should be able to assemble the lighting, signalling as well as various meter and indicating systems in accordance with working instructions and the content in the lighting and indicating systems assembling manual. They should also be capable of conducting basic tests on components upon completion of work, and providing written report after the work
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure and basic operating principles of lighting, signalling as well as various meter and indicating systems in vehicles)</p> <ul style="list-style-type: none"> • Understand the legal requirements for lighting, signalling and indicating systems in vehicles under respective local legislative provisions. • Understand the structure and basic operating principles of lighting, signalling as well as various meter and indicating systems in vehicles. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Carry out the assembling procedure for lighting, signalling as well as various meter and indicating systems in vehicles)</p> <ul style="list-style-type: none"> • Safely assemble the lighting, signalling as well as various meter and indicating systems according to the instructions in manufacturer's servicing manual and the requirements of occupational safety and health as well as that of environmental protection, including: <ul style="list-style-type: none"> ○ Capable of selecting appropriate personal protective ○ Capable of assembling the lighting, signalling as well as various meter and indicating systems correctly ○ Carry out the assembling procedure according to the respective rules of workshops ○ Connect relevant wires and plugs correctly • Conduct basic tests on components upon completion of work and provide written report.
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 selecting suitable tools and materials correctly according to the content in the manufacturer's assembling manual; • Capable of assembling the lighting, signalling as well as various meter and indicating systems according to the content in the manufacturer's assembling manual; and • Capable of inspecting and testing the components upon completion of the assembling procedure and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of vehicle electronic and electric systems servicing.

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for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Produce vehicle body building fixtures
Code	108764L2
Range	This unit of competency is applicable in vehicle body building workshops. Practitioners should be able to produce vehicle body building fixtures and devices in accordance with working instructions, production and design drawings, and providing written report after the work.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (General production and design drawings)</p> <ul style="list-style-type: none"> • Understand the content of general production and design drawings for vehicle body, such as selecting materials, tools, instruments, production process and establish acceptance criteria. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Produce general vehicle body assembling fixtures)</p> <ul style="list-style-type: none"> • Carry out the procedure for producing vehicle body assembling fixtures in accordance with working instructions, production drawings and design drawings, including: <ul style="list-style-type: none"> ○ Select appropriate personal protective equipment correctly ○ Observe worksite condition to ensure that the procedure for producing vehicle body assembling fixtures is carried out in a proper working environment ○ Select suitable materials, tools and instruments to produce the main piece of vehicle body and capable of minimizing material consumption ○ Capable of using suitable measuring tools to ensure that the fixtures are produced according to acceptance criteria • Conduct basic tests on components upon completion of work and provide written report.
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 understanding the content of general production and design drawings for vehicle body; and • Capable of selecting suitable materials, tools and instruments correctly to produce vehicle body assembling fixtures according to production drawings, design drawings and working instructions. • Capable of inspecting and testing the components upon completion of the assembling procedure and providing written report.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed basic knowledge of how to handle general materials as well as read production and design drawings.

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Vehicle Servicing

Title	Assemble vehicle body panels
Code	108765L2
Range	This unit of competency is applicable in vehicle body building workshops. Practitioners should be able to assemble vehicle body panels onto the frame in accordance with working drawing and actual worksite condition, providing written report after the work.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Install vehicle body panels)</p> <ul style="list-style-type: none"> • Understand various kinds of securing and locking methods for vehicle body panels. • Understand the installation procedure for vehicle body panels. • Understanding of the relevant legal requirements on road and vehicle safety and environment protection. <p>2. Performance (Assemble vehicle body panels)</p> <ul style="list-style-type: none"> • Safely assemble vehicle body panels according to the content in the working drawing and the requirements of occupational safety and health as well as that of environmental protection, including: <ul style="list-style-type: none"> ○ Observe actual worksite condition to ensure that the assembling procedure for vehicle body panels is carried out in a proper working environment ○ Select and use appropriate personal protective equipment and the safety equipment for working at height ○ Select suitable tools and materials to perform the duty of assembling vehicle body panels ○ Carry out the work of water-proofing, rust proofing, noise reduction, vibration dampening and heat-insulating ○ Align panels according to specification. • Inspect and measure the work-piece upon completion of work to ensure that the requirements of manufacturing specification are met and provide written report.
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 selecting suitable tools and materials correctly according to the content in the working drawing; • Capable of assembling vehicle body panels according to working procedure and instructions; and • Capable of checking and measuring the work-piece upon completion of work. Providing written report after the work.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner concerned has already possessed the knowledge of how to read working drawing and select tools and materials.

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Provide quotation for vehicle body building work
Code	108766L4
Range	In the body building workshop, practitioners should be able to receive customers according to the established procedures of the organization, providing body assembly quotes, making appropriate recommendations to assist customers, providing relevant services and preparing quotations.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Providing quotation for vehicle body building work)</p> <ul style="list-style-type: none"> • Good understand of the requirements of respective local legislative provisions on the dimension of vehicle body and the use of roads. • Good understand of the distribution and scope of work of various vehicle body building departments. • Master the specification and cost of body building parts. <p>2. Performance (Provide quotation service to customers)</p> <ul style="list-style-type: none"> • Receive customers according to organisational procedure; understand customer needs and give suggestions on vehicle body building. • Master the distribution of work and the workflow of each department; calculate the costs, profits and charges of vehicle body building work. • Complete quotation form.
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 receiving customers according to organisational procedure, providing quotation for vehicle body building work and giving appropriate suggestions; and • Capable of understanding the distribution of work and the workflow among the departments as well as calculating the costs, profits and charges.
Remark	The credit value of this competency unit assumes that the practitioner has possessed knowledge of the car body structure.

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Unit of Competency

Functional Area - Vehicle Servicing

Title	Design the loading compartments of trucks
Code	108767L5
Range	This unit of competency is applicable to the builders of loading compartments of trucks or respective engineering staff. Practitioners should be able to master the specification requirements on the construction of loading compartments, preparing the design drawings on the basis of intact chassis of truck by means of appropriate drafting software, and listing the material required.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure of trucks)</p> <ul style="list-style-type: none"> • Fully understand the overall structure and respective technical parameters of trucks (including chassis and cab), such as wheel base, wheel span, axle load, the dimension of cab, the shape and dimension of the frame. • Master the characteristics, application standard, joining methods and costs etc. of the construction materials for various kinds of loading compartments. • Master the construction process of the loading compartment, such as material shaping, construction and fixation of the skeleton, rust-proof, painting and installation of supplementary facilities. • Master requirements of customers on loading compartments, such as categories, sizes and weights of goods, interior environment of the loading compartment (including temperature, humidity, fire prevention, water-proof, vibration-proof, protection from electric shock and collision, etc.), security, loading and unloading locations of goods and appearance. • Master requirements of customers on the supplementary facilities inside and outside the loading compartment, such as the lifting tail gate, crane, dump truck and refrigerated truck. • Good Understand of legislative standards on truck body, such as lighting and warning lamps, reversing buzzer, dimension. <p>2. Performance (Design the loading compartment)</p> <ul style="list-style-type: none"> • Define the design objectives and technical specifications, and categorize the drawings for different sections by integrating the specification requirements of customers, legislative standards, chassis limitations and cost on the basis of intact chassis of truck. • Apply appropriate drafting software to prepare the design engineering drawings for the loading compartment according to the established design objectives while taking the possibility of supplementary facilities installation into account. • Compile the list of the materials required according to the design engineering drawing, and evaluate the man-hours required for construction, working procedures and costs to ensure that requirements of parties concerned are met. • Widely accept opinions from all concerned parties (such as builders, material suppliers and customers, etc.) and revise the design details when necessary without deviating from the design objectives. • Ensure that the design, appearance and safety standards of the loading compartment comply with respective legislative requirements.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none">• Capable of mastering requirements of customers and respective regulations on loading compartments, and defining the design objectives and technical specifications based on an intact chassis of truck; and• Capable of applying appropriate drafting software to prepare the design engineering drawings for the loading compartment and compiling the list of required materials to ensure that the requirements on design objectives, technical specifications and costs are met.
Remark	<p>The credit value of this competency unit assumes that the practitioner has possessed knowledge of the car body structure.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none">• Road Traffic (Construction and Maintenance of Vehicles) Regulations

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Functional Area - Vehicle Servicing

Title	Design the carriages of passenger vehicles
Code	108768L5
Range	This unit of competency is applicable to the builders of the carriages of passenger vehicles or respective engineering staff. Practitioners should be able to master the specification requirements on the construction of carriages of passenger vehicles, preparing design drawings on the basis of intact chassis of passenger vehicles by means of appropriate drafting software, and listing the materials required.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Structure of passenger vehicles)</p> <ul style="list-style-type: none"> • Fully understand the detailed overall structure of passenger vehicles and the inter-relationships of various systems (e.g. power, transmission, suspension, steering, braking, electric, heating, ventilation and air conditioning, vehicle frame and interior trim) and master the technical parameters of vehicles (e.g. wheel base, wheel span, axle load, the shape and dimensions of the frame). • Master with the construction process of carriage, such as material shaping, construction of the skeleton, panelling, rust-proof, painting, assembling, installation of supplementary facilities and inspection. • Master the characteristics, application standards, joining methods and costs, etc. of different construction materials for the carriage. • Fully master requirements of customers on carriages, such as vehicle load, the dimension and location of baggage compartment, interior environment of the carriage and facilities (including views, light filtration, sound-proof, heat-proof, heating, ventilation and air conditioning, audio-visual systems, reversing visual display, storage shelf and toilet, etc.), security, entrance/exit locations and emergency exit doors for passenger as well as appearance. • Good Understand of legislative requirements on the standard of the interior design of the carriages of passenger vehicles, such as the dimensions and location of entrance/exit (including stairs) and emergency exit doors for passengers, the dimension and anti-skidding requirements of passageway, the dimensions and legroom of seat, seat belts, the locations and the requirements on surface treatment of handrails, headroom and driving cabin. • Good Understand of the legislative requirements on the passenger vehicle body, such as mirror, lighting and warning lamp, dimension, emergency stop button, colour (applicable to public service vehicles only). • Good Understand of the legislative requirements on the passenger vehicle safety, such as load distribution, the ability to withstand turnover (restrictions on the height of the centre of gravity) and overall dimensions. <p>2. Performance (Design the carriage)</p> <ul style="list-style-type: none"> • Define the design objectives and technical specifications, and categorize the drawings for different sections by integrating the quality requirements of customers, legislative standards, chassis limitations and cost on the basis of intact chassis of passenger vehicle. • Apply appropriate drafting software to prepare the design engineering drawings for the carriage according to the established design objectives while taking the possibility and rationality of supplementary facilities installation into account.

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Functional Area - Vehicle Servicing

	<ul style="list-style-type: none"> • Compile the list of the materials required according to the design engineering drawing, and evaluate the man-hours required for construction, working procedures and costs to ensure that requirements of parties concerned are met. • Widely accept opinions from all concerned parties (such as builders, material suppliers and customers, etc.) and revise the design details when necessary without deviating from the design objectives. • Ensure that the interior design, appearance and safety standards of the carriage of passenger vehicles comply with respective legislative requirements.
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 mastering requirements of customers and respective regulations on carriage, and defining the design objectives and technical specifications on the basis of intact chassis of passenger vehicle; and • Capable of applying appropriate drafting software to prepare the design engineering drawings for different sections of the carriage and compiling the list of required materials to ensure that the requirements on design objectives, technical specifications and costs are met.
Remark	<p>The credit value of this competency unit assumes that the practitioner has possessed knowledge of the car body structure.</p> <p>The major legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Road Traffic (Construction and Maintenance of Vehicles) Regulations

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Unit of Competency

Functional Area - Common Competency

Title	Judge the legitimacy of vehicle usage under laws and regulations (transport, environmental protection and road safety)
Code	108769L3
Range	This unit of competency is applicable in workplaces relevant to the purchase of vehicles and auto parts and accessories as well as vehicle sales and servicing. Practitioners should be able to familiarize with Hong Kong's regulation on vehicles in aspects such as traffic, environmental protection and road safety. They should also be capable of determining the legality of the use of vehicles/parts and accessories under legislative regulation with adequate information.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Regulation and respective legislations on vehicles)</p> <ul style="list-style-type: none"> • Master the scope of regulations on vehicles in Hong Kong. • Be capable of access relevant information and relevant laws and regulations. • Good Understanding of local laws and regulations on the structure of vehicles (e.g. mechanical and vehicle body.), pollution (e.g. noise, emission.) and road safety. • Good Understanding of the statutory requirements and relevant policies on pollution generated by vehicles (e.g. emission) in Hong Kong and other countries. <p>2. Performance (Determine the legality of the use of vehicles under respective laws and regulations)</p> <ul style="list-style-type: none"> • Determine the legality of vehicles/parts and accessories being sold and used in Hong Kong according to respective laws and regulations with adequate information, including: <ul style="list-style-type: none"> ○ The structure of vehicles ○ Pollution ○ Road safety
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 understanding the regulatory categories, respective laws and regulations on vehicles (traffic, environmental protection and road safety); and • Capable of determining the legality of the use of vehicles under the respective ordinances and regulations on condition that adequate information is available.
Remark	The credits value of this unit of competency is set on the presumption that the practitioner being assessed has already possessed basic knowledge of vehicle.

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Unit of Competency

Functional Area - Common Competency

Title	Promote the culture of quality management in elementary level staffs
Code	108770L4
Range	This unit of competency is applicable to managerial staff in workplaces of the automotive industry. Practitioners should be able to promote and fostering the culture of quality management in elementary level staffs and capable of handling various suggestions on quality improvement when discharging their duties of quality management.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Concept of quality management)</p> <ul style="list-style-type: none"> • Good understanding of the detailed procedure for implementing organisational quality management system in one's department. • Fully master thoroughly the daily operation of the department under one's supervision. • Good understanding of the quality of sales and after-sales services and its unique and close relationship in duties of elementary level staffs. <p>2. Performance (Promote and foster the culture of quality management in elementary level)</p> <ul style="list-style-type: none"> • Promote the culture and the importance of quality management to elementary level staffs, such as: <ul style="list-style-type: none"> ○ Provide on-job training to elementary level staffs on the cognition of quality ○ Set up quality monitoring group among elementary level staffs to facilitate the culture of quality management ○ Organise activities related to quality management for elementary level staffs, such as quiz, quality circle, visits, seminars. • Conduct departmental discussion meetings for the quality monitoring group at appropriate times according to the workflow of sales and after-sales; and collect, analyse and screen suggestions from elementary level staffs on the improvement of sales and after-sales services; and report to the management level if the proposals are practicable and can tie in with organisational culture and policy.
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 instilling quality management culture to the minds of elementary level staffs so that they can understand the close relationship between elementary level duties and the quality of sales and services; • Capable of organising activities related to quality management so as to foster elementary level quality management culture; and • Capable of collecting, analyzing suggestions from elementary level staffs on the improvement of quality management and reporting to management level according to organisational mechanism.
Remark	

Specification of Competency Standards
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Unit of Competency

Functional Area - Common Competency

Title	Coordinate and implement quality management systems
Code	108771L4
Range	This unit of competency is applicable to the staff promoting quality management in the automotive industry. Practitioners should be able to explain to the heads of sales and after-sales departments as well as staffs at all levels the method of implementation of quality management systems in daily operation according to their in-depth knowledge on quality management systems.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Quality management and organisational operation)</p> <ul style="list-style-type: none"> • Master the organisational quality management system, including the structure of quality management, document and filing system, management policy, effectiveness measurement, management objectives, evaluation, auditing, improvement measures, training, communication mechanisms. • Good understanding of the entire operation of sales and after-sales departments and their flow of coordination. • Good understanding of the operation of the information management system in the organisation. <p>2. Performance (Coordinate quality management systems)</p> <ul style="list-style-type: none"> • Capable of communicating with the heads of sales and after-sales departments as well as staffs at all levels; understand their daily operation and explain to them the quality management systems; coordinate and establish working instructions and working procedure practicable in their daily operation and can tie in with quality management systems. • Explain to staffs at all levels the document management system and effectiveness measurement mechanism. • Communicate with the information management system department to facilitate the integration of quality management systems. • Collect or coordinate information so as to implement the effectiveness measurement mechanism. • Report to the management level on the progress of the implementation of quality management.
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 communicating with a broad range of staff according to one's in-depth knowledge on quality management systems and the operation of different departments so as to coordinate and establish working instructions or working procedure that are practicable which can be tied in with quality management systems; • Capable of explaining to staff at all levels the implementation of quality management systems; and • Capable of collecting and compiling information so as to implement effectiveness measurement mechanism and report to the management level.
Remark	

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Functional Area - Common Competency

Title	Monitor the quality of servicing work
Code	108772L4
Range	This unit of competency is applicable to the managerial staff in vehicle servicing workshops. Practitioners should be able to understand the daily operating procedure of familiar workplaces and implementing quality control and quality assurance systems so as to ensure high quality services.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Respective working procedure and the key points of quality monitoring)</p> <ul style="list-style-type: none"> • Good understanding of the entire structure of vehicles and the functioning of the systems to an extent that can understand the impact of departmental procedure on the safety and performance of vehicles. • Master the details of the operating procedure in the department to which one belongs to. • Good understanding of the key points of quality monitoring and the requirements of each working procedure, including inspection procedure, servicing procedure and reviewing procedure. <p>2. Performance (Implement quality control and quality assurance system)</p> <ul style="list-style-type: none"> • Compare the quality of work delivered by subordinate staff and the standard required by the quality management system on the quality monitoring points so as to judge if the prescribed requirements have been met. • Provide supervision for rectification when confirming “non-compliance” cases so as to avoid repetition of work and waste of resources. • Employ one’s experience to judge the standard of work delivered by subordinate staffs for working procedures without clearly stipulated monitoring standard such as the accuracy of inspection result, the working hours required for non-standard servicing work, the performance of used cars; and offer assistance whenever necessary including provision of training.
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 understanding the structure and functions of vehicles, the details of the working procedure of the department to which one belongs to, the key points to note for monitoring and the requirements of quality management systems; • Capable of comparing the quality of work of subordinate staffs with that of the standard to determine if the servicing work can meet the requirements; • Capable of employing his experience to make judgment for working procedure without clearly stated standard; and • Capable of providing supervision or assistance when non-compliance cases arise.
Remark	

Specification of Competency Standards
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Unit of Competency

Functional Area - Common Competency

Title	Conduct preliminary analysis on procedural deficiencies
Code	108773L4
Range	This unit of competency is applicable to the middle managerial staff in vehicle servicing workshops of the automotive industry. Practitioners should be able to record procedural deficiencies, making preliminary analysis and recording data according to the key points of quality monitoring when discharging their duties of quality management.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Quality assurance and the respective procedure)</p> <ul style="list-style-type: none"> • Good understanding of quality assurance procedure and the details of specification of the quality management system. • Good understanding of the daily operation of the department to which one belongs to and the established quality requirements of each procedure. <p>2. Performance (Record the quality of various working procedures and the problems detected)</p> <ul style="list-style-type: none"> • Implement quality assurance system according to quality management plan and get a thorough understanding of the specification for quality check so as to conduct strict quality check with respect to the key points of quality monitoring; compare the results with the required standard and record various procedural deficiencies and problems detected for preliminary analysis to be made, such as: <ul style="list-style-type: none"> ○ Faulty inspection and judgement ○ Wrong maintenance procedure ○ Poor standard of work ○ Insufficient provision of spare parts ○ Insufficient equipment ○ Lack of coordination and communication ○ Instrumental deviation ○ Ineffective monitoring ○ Lack of technical support, etc. • Quantify and sort out the situation of quality management and the problems detected to provide clear data or information to the management level for compiling relevant report.
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 inspecting various working procedures according to established quality assurance procedure; comparing the results with the required standard and recording the problems with quality of work to make preliminary analysis; quantify and sort out the data and information; and • Capable of providing clear data to the management so as to objectively reflect the problems with the quality of work.
Remark	

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Unit of Competency

Functional Area - Common Competency

Title	Compile report on quality issues
Code	108774L5
Range	This unit of competency is applicable to the managerial staff performing quality management duty in sizable enterprises of the automotive industry. Practitioners should be able to perform quality management duties by analysing the data/information obtained from the monitoring points of quality management, the quality and problems of respective procedures so as to compile the report on quality issue.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Content of report on quality issues)</p> <ul style="list-style-type: none"> • Master the detailed workflow regarding sales and after-sales services of each department in collaboration with the organisational quality management system. • Good understanding of the purpose, format and key points of respective reports. • Good understanding of in general the theory, statistics and their applications. <p>2. Performance (Compile report on quality issues)</p> <ul style="list-style-type: none"> • Analyse various quality management audit reports and summarise the problems of various procedures and their causes such as insufficient monitoring, under-trained technicians, instruments and equipment problems, lack of technical information, weak communication and coordination; quantify the condition and the problems of quality management; analyse data or information and draw the conclusion. • Consolidate the quality issue and problems on procedures of sales and after-sales; report to the management level of the organisation in the form of reports.
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 understanding the internal operation of the organisation and the details of the quality management system; analyzing the parameters of the monitoring points in each quality control audit report, quantifying them to make a summary; and • Capable of summarizing the quality and problems of various procedures in the organization, compiling an overall quality reports for submission to the management level.
Remark	

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Unit of Competency

Functional Area - Common Competency

Title	Conduct quality audit
Code	108775L5
Range	This unit of competency is applicable to the quality management staff in sizable enterprises of the automotive industry. Practitioners should be able to master the auditing techniques of quality management and conduct internal quality audit.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Quality management system for the automotive industry and auditing techniques)</p> <ul style="list-style-type: none"> • Master the departmental workflow for the sales and after-sales of vehicles and the requirements on quality management. • Master the auditing techniques of quality management. • Good understanding of the areas and issues of the automotive industry that must pay special attention to in quality management, such as the proportion of human factors and the uniqueness of individual pre-sales and after-sales services. • Good understanding of how the organisational quality management system can be implemented in daily operation. • Good understanding of the theory, statistics and application of general quality inspection. <p>2. Performance (Conduct internal quality audit)</p> <ul style="list-style-type: none"> • Formulate internal auditing plans, including: <ul style="list-style-type: none"> ○ Identify the primary responsibility and work of the audited department ○ Analyse the major working procedures and division of work in the department ○ Determine the control method and procedures of the work flow, including the quality monitoring points, and formulate the quality control table ○ Ensure smooth operation of the systems of working procedures, working instructions and document control, and provide the necessary training • Conduct quality audit <ul style="list-style-type: none"> ○ Compile auditing procedures ○ Compile the time-table for interviews with staff ○ Conduct departmental auditing exercise in accordance with the auditing plan, ensure that the various quality control tables are adequately completed ○ Identify if the operation of departmental systems can meet the requirements of the quality management system with reference to relevant records and documents, current practice, audited working procedures and interviews with staffs ○ Follow up and handle non-compliance items, the procedures include <ul style="list-style-type: none"> ▪ identify the discrepancy between the non-compliance items and the required standard, the range of the non-compliance items and the possible consequences ▪ make suggestions for improvements ▪ trace and follow up the improvement measures for rectifying non-compliance items • Compile audit reports according to the observations made during the auditing process.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of formulating a systematic and efficient quality audit plan for the vehicle sales and after-sales departments;• Capable of effectively conducting internal quality audit; and• Capable of effectively tracing and following up on the non-compliance items.
Remark	

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Functional Area - Common Competency

Title	Design quality management courses
Code	108776L5
Range	This unit of competency is applicable to staff of providing training on quality management in sizable enterprises of the automotive industry. Practitioners should be able to focus on the common weaknesses in quality management, designing and delivering quality management courses and training programmes to enhance staff awareness on quality management through staff training.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Concept and culture of quality management)</p> <ul style="list-style-type: none"> • Good understanding of organisational quality management system and the internal operation of the sales and after-sales services to an extent that the level of familiarity must be mastered in the overall perspective of quality management system in the organisation. • Good understanding of the concept and culture of quality management such as the quality cycle of “plan – do - check - act”. • Good understanding of general quality control theory, design and applications. <p>2. Performance (Design and deliver quality management courses and training programmes)</p> <ul style="list-style-type: none"> • Define the objectives for quality management courses. For example, focus can be given on typical weaknesses in quality management on vehicle sales and after-sales services. Design basic quality management courses and training programmes such as the basic quality management for each working procedure, including inspection, maintenance, tuning, evaluation. • Design basic courses on quality management cycle of “Plan-do-check-act” for individual sales and after-sales department. • Regularly review the quality management courses and suggest for improvement and update when necessary.
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 designing basic quality management courses and training programmes with a focus on the weaknesses in quality management for the sales and after-sales services of the organisation; and • Capable of reviewing the effectiveness of the quality management programmes, making suggestions for improvement and updating programmes when necessary.
Remark	

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Functional Area - Common Competency

Title	Implement the ISO quality management standard
Code	108777L5
Range	This unit of competency is applicable to the quality management staff of the organisation in the automotive industry adopting the ISO quality management standard. Practitioners should be able to implement the ISO quality management standard in familiar workplaces.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (ISO quality management standard)</p> <ul style="list-style-type: none"> • Master the overall operation of vehicle sales and after-sales services of the organisation. • Master the content and the knowhow of implementation in the organisation of the latest ISO9001 standards quality management and quality assurance series. <p>2. Performance (Implement the ISO quality management standard)</p> <ul style="list-style-type: none"> • Implement the standards of ISO9001 quality management and quality assurance series, including: <ul style="list-style-type: none"> ○ The quality management duty of all levels of staff ○ Quality assurance system ○ Document and information management mechanism ○ Purchase management mechanism ○ Working procedure auditing mechanism ○ The control and rectifying system for sub-standard items or product ○ Quality record control system ○ Internal quality management auditing system • Communicate and coordinate with the heads of various departments to promote the integration of ISO9001 quality management system requirements in the organization. • Explain to the employees at all levels the document structure of the ISO9001 quality control system, including the quality manual, procedure documents and work specifications.
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 fully understanding the details of the ISO9001 quality management series and respective document procedure as well as the overall operation of the sales and after-sales services of the organization, understanding how the two may integrate, and explaining how to operate to all levels of staff; • Capable of implementing the technical requirements of the ISO9001 quality management series; and • Capable of coordinating with department heads to implement the ISO9001 quality management series in sales and after-sales services.
Remark	

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Functional Area - Common Competency

Title	Implement the quality management standard specified by the vehicle manufacturer
Code	108778L5
Range	This unit of competency is applicable to the internal quality management staff of the franchised agents for vehicle manufacturers. Practitioners should be able to fully understand the quality management standard specified by the vehicle manufacturer and implementing such standard in familiar workplaces.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Quality management standard specified by the vehicle manufacturer)</p> <ul style="list-style-type: none"> • Master the quality management system specified by the vehicle manufacturer. • Master the overall operation mechanism of the sales and after-sales services of the brand agent as well as the responsibilities of all parties concerned. <p>2. Performance (Implement the specified quality management standard)</p> <ul style="list-style-type: none"> • Communicate with the quality management representatives of the vehicle manufacturer to understand the specified requirements. • Liaise with the department heads of sales and after-sales services to facilitate the implementation of the specified quality management. • Implement the quality management system specified by the vehicle manufacturer, such as: <ul style="list-style-type: none"> ○ Document and information management mechanism ○ Workplace equipment and specification management mechanism ○ Technical staff ranking management mechanism ○ Workflow and auditing mechanism ○ Purchase management mechanism ○ The control and rectifying systems for sub-standard items or products ○ Quality assurance system ○ Quality record management system
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 fully understanding the quality management standard specified by the vehicle manufacturer, the operating system and the responsibility of the agent; and • Capable of implementing the quality management system specified by the vehicle manufacturer in one's organisation.
Remark	

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Functional Area - Common Competency

Title	Implement quality management training courses
Code	108779L5
Range	This unit of competency is applicable to the quality management training staff in sizable enterprises of the automotive industry. Practitioners should be able to master the knowledge and techniques of quality management and implementing quality management training courses.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Quality management system)</p> <ul style="list-style-type: none"> • Master the detailed operation of the vehicle sales and after-sales services of the organisation. • Master the quality management system adopted by the organisation and the implementation details, such as: <ul style="list-style-type: none"> ○ ISO 9001 ○ The quality management standard specified by the vehicle manufacturer ○ Total Quality Management System ○ Quality Circle ○ Business Process Re-engineering • Understand the objectives and content of the established quality management courses. <p>2. Performance (Implement quality management training courses)</p> <ul style="list-style-type: none"> • Implement basic quality management courses or training programmes to enhance staff awareness on quality management, such as: <ul style="list-style-type: none"> ○ The basic requirements and range of application for the ISO 9001 quality management standard and quality assurance series ○ The structure of the quality management system specified by the vehicle manufacturer ○ How to implement the broad sense of quality management concept in the organisation ○ The effectiveness of the reviewing and improvement procedures in the quality management setup • Select the teaching methods of quality management courses, such as: <ul style="list-style-type: none"> ○ Lecturing ○ Interaction ○ Topical study ○ Evaluation • Explain clearly to students the course content, such as the main systems in the quality management setup: <ul style="list-style-type: none"> ○ Working procedures system ○ Working instruction system ○ Document control system • Review the effectiveness of completed quality management courses: <ul style="list-style-type: none"> ○ Collect the opinion of the learners on the courses using questionnaires ○ Evaluate the progress of the participants with respective department heads after receiving the training courses
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of grasp the detailed operation of the vehicle sales and after-sales services and its implementation in the quality management setup;• Capable of grasp the objectives and content of the established quality management courses; selecting teaching methods and explaining clearly to learners the course content; and• Capable of reviewing the effectiveness of completed quality management courses.
Remark	

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Functional Area - Common Competency

Title	Formulate plans to enhance staff awareness on quality management
Code	108780L5
Range	This unit of competency is applicable to the managerial level responsible for quality management in sizable organisations of the automotive industry. Practitioners should be able to analyse where employees need to be strengthened in quality control, and formulating plans to enhance staff awareness on quality management.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Quality management system and its objectives)</p> <ul style="list-style-type: none"> • Master quality management theory. • Master organisational quality. management system and its objectives. • Master the implementation of quality management system in the daily operation of vehicle sales and after-sales services. <p>2. Performance (Formulate plans to enhance staff awareness on quality management and review the effectiveness)</p> <ul style="list-style-type: none"> • Analyse staff opinion on quality management system. • Identify the discrepancy between organisational objectives and staff performance in quality management; and explain to staff the relation between performance indicators and various working procedures. • Analyse organisational quality management culture and devise methods to enhance staff awareness on quality management with emphasis on their weaknesses, such as organise training courses, implement reward mechanism, quiz, seminars, quality circles. • Select appropriate plans to enhance staff awareness on quality management and its content should include objectives, implementation method, expected results, financial budget, methods to measure effectiveness. • Evaluate and review the effectiveness of the plans upon implementation.
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 analyzing the organisational objectives of quality management and its implementation in daily operation; • Capable of explaining to staff the relation between quality indicators and various working procedures as well as the discrepancy between staff performance and its objectives; and • Capable of drafting proposals on enhancement of staff awareness of quality management; evaluating and reviewing their effectiveness upon implementation.
Remark	

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Functional Area - Common Competency

Title	Formulate quality management policy
Code	108781L6
Range	This unit of competency is applicable to the managerial staff of sizable enterprises in the automotive industry. Practitioners should be able to fully master the knowledge and techniques of quality management, organisational operation strategy and the culture of quality management to formulate forward-looking quality management policy.
Level	6
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Objectives of quality management)</p> <ul style="list-style-type: none"> • Master the relationship of service performance, cost of quality, customer satisfaction and corporate image. • Master the quality management system specified by the vehicle manufacturers. • Good understanding of the characteristics and basic ideology of different quality management systems, such as accreditation methods, their popularity in the automotive industry, reputation, the supply of manpower familiar with respective quality management system, the integration with computer system, implementation cost, substantive effectiveness. <p>2. Performance (Formulate quality management policy)</p> <ul style="list-style-type: none"> • Select the quality management system suitable for the organisation in accordance with the overall operation and development strategy of the organisation, such as ISO9001, QS9000, VDA6.2, the quality management system specified by the manufacturers, etc.; and select the suitable accreditation organisation and consultant company. • Analyse the discrepancy between the objectives of quality management and current quality management system, the quality control culture of the organisation and the cost of quality to formulate quality management policy, including: <ul style="list-style-type: none"> ○ Quality management policy ○ The objectives of quality management ○ The operation method of quality management system under the quality management policy ○ Measurement of the effectiveness of quality management system ○ Review mechanism ○ Improvement mechanism ○ Communication channel • Compare the organisation's substantive ability in quality management with other enterprises with outstanding performance in quality management and hence consider participating in the campaign for the award of outstanding quality management e.g. Hong Kong Award for Industry.
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 fully understanding the quality management culture and operation strategy of the organisation and selecting the quality management system for the organisation; and • Capable of formulating quality management policy in view of the discrepancy between the objectives of quality management and current quality management system of the organization, and cultivating confidence and determination in policy

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Unit of Competency

Functional Area - Common Competency

Remark	
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Functional Area - Common Competency

Title	Implement total quality management strategy
Code	108782L6
Range	This unit of competency is applicable to the decision-making management of sizable enterprises in the automotive industry. Practitioners should be able to master the knowledge and skills of total quality management, organisational operation strategy and the culture of quality control to implement total quality management strategy in the organisation.
Level	6
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Theory of total quality management)</p> <ul style="list-style-type: none"> • Master the methods and skills of Total Quality Management (TQM), such as: <ul style="list-style-type: none"> ○ Quality Function Deployment ○ Business Process Re-engineering ○ Process Improvement ○ Strategic Outsourcing ○ Rapid Product Development • Good understanding of the concept of quality economics, including: <ul style="list-style-type: none"> ○ Cost on quality ○ The quality cost system by calculation in quality economics <p>2. Performance (Implement total quality management strategy)</p> <ul style="list-style-type: none"> • Implement total quality management strategy in the organisation: <ul style="list-style-type: none"> ○ Apply the TQM method in the sales and after-sales services departments to facilitate the implementation of TQM strategy ○ Attend to customer needs, including: <ul style="list-style-type: none"> ▪ customer requirements ▪ customer satisfaction ▪ customer loyalty ▪ the significance of customers to the organisation • Apply the concept of quality economics to analyse cost on quality and implement the quality cost system by calculation in quality economics; and incorporate the economic value of customer and staff loyalty into the system. • Continuously improve the quality management system through continuous learning: <ul style="list-style-type: none"> ○ Continuously improving the quality management system through learning and updating organisational quality management ○ Continuously improving the quality management system by improving the management methods and employee empowerment • Integrate and analyse various sorts of information for compiling of a proposal for implementation of the TQM system that can meet actual organisational operation.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of preparing a proposal for implementation of TQM on customer service bases by applying the TQM method; and • Capable of analyzing the cost on quality by applying the concept of quality economics.
Remark	

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Functional Area - Common Competency

Title	Draw up procedure of housekeeping in motor vehicle environments
Code	108783L1
Range	This unit of competency is about the routine maintenance of the workplace, carrying out basic, non-specialist checks of relevant workplace equipment, cleaning the work area and using resources as directed.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Personal Protective Equipment)</p> <ul style="list-style-type: none"> • Know to select and use suitable personal protective equipment throughout all housekeeping and equipment maintenance activities. <p>2. Performance (draw up housekeeping in motor vehicle environments)</p> <ul style="list-style-type: none"> • Select and use cleaning equipment which is of the right type and suitable for the task. • Use resources as directed and for their intended purpose only following workplace procedures. • Follow workplace policies, schedules and manufacturers' instructions when cleaning and maintaining equipment. • Ensure your equipment maintenance activities keep your equipment fit for purpose. • Clean the work area(s), for which you are responsible, at the specified time and frequency. • Store your equipment in a safe manner which permits ease of access and identification for use. • Carry out housekeeping activities safely which minimises inconvenience to customers and staff. • Ensure your housekeeping activities keep your work area clean and free from debris and waste materials. • Dispose of used cleaning agents, materials and debris to comply with relevant legal, environmental and workplace requirements. • Report any faulty or damaged equipment to the relevant person(s) clearly and promptly. • Report any anticipated delays in completion to the relevant person(s) promptly.
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 effectively using suitable personal protective equipment; and • Capable of using resources to carry out housekeeping activities effectively and safely.
Remark	

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Functional Area - Common Competency

Title	Carry out maintenance procedure in service workshops
Code	108784L1
Range	This unit of competency is applicable to all vehicle service workshops such as body repairing workshops, general mechanical service workshops, vehicle servicing pits, LPG vehicle service workshops, vehicle painting workshops. Practitioners should be able to carry out maintenance duty in servicing workshops according to instructions and under supervision.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Operation of facilities in vehicle service workshops)</p> <ul style="list-style-type: none"> • Understand the building services provisions of different areas in vehicle service workshops such as illumination, ventilation, drainage, air-conditioning and etc. It should include waste handling and related procedures as well. • Understand good environmental protection practice so as to meet or surpass the requirements of the regulations. <p>2. Performance (Carry out the established maintenance procedure in vehicle service workshops)</p> <ul style="list-style-type: none"> • Safely carry out the maintenance procedures in vehicle service workshops in accordance with the given instruction and environmental protection requirements,. • Use pollution prevention equipment in relevant maintenance work. • Comprehend the fundamental operation of building services provisions in vehicle service workshops, and report to the supervisor immediately when anomaly is found.
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 safely carrying out the maintenance work in vehicle service workshop in accordance to established procedures; and • Capable of reporting to the supervisor when problems are detected.
Remark	

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Functional Area - Common Competency

Title	Transport vehicles
Code	108785L1
Range	This unit of competency is applicable to all vehicle service workshops and car parks for the new and used vehicles indoor or outdoor. Practitioners should be able to drive the vehicles for collection and storage.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Storage of vehicle)</p> <ul style="list-style-type: none"> • Understand the various risks caused by vehicles such as traffic accident. accumulation of vehicle exhaust fumes. • Understand the special measures against storage of vehicles for a long period in indoor and outdoor environment and the measures against different means of vehicle delivery. <p>2. Performance (Carry out the procedure of transport vehicles)</p> <ul style="list-style-type: none"> • Fill in relevant record in accordance with the established procedure in collection and storage of vehicles and its keys. • Verify the existence of documents of vehicle registration document and third-party insurance. • Drive the vehicles safely and park at designated location accurately within congested area. • Observe relevant traffic regulations and complete the vehicle collection and storage procedure. • Use T-plate correctly.
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 performing the special measures against storage for a long period in indoor and outdoor environment and the measures against different means of vehicle delivery; • Capable of verifying the existence of vehicle registration document and third-party insurance; • Capable of following the procedure of the collection and storage of vehicles and its keys; and • Capable of driving vehicles to a destination safely.
Remark	The practitioner with this capability should possess valid local driving license for the type of vehicle concerned.

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Functional Area - Common Competency

Title	Carry out maintenance work for the equipment inside the operating places
Code	108786L2
Range	This unit of competency is applicable in vehicle operating places (e.g. various kinds of servicing workshops, warehouse of new and old parts and vehicle storage warehouse). Practitioners should be able to understand the operation of respective equipment and carry out simple maintenance work according to instructions.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Operating methods of the equipment within the vehicle operating places)</p> <ul style="list-style-type: none"> • Good Understand of the use, operating methods, required performance standard and potential dangers of the respective equipment within the vehicle operating places. <p>2. Performance (Carry out maintenance work)</p> <ul style="list-style-type: none"> • Conduct inspection in accordance with instructions and established inspection method; and compare the result with the required performance standard to determine if the functions of the equipment are normal. • Carry out simple maintenance work according to instructions, such as replace filter units and conduct in-house cleaning. • If the respective equipment should be repaired by the organisation, then trace out where the problem lies and replace or tune relevant components to resume normal functioning of respective equipment under clear instructions; and complete maintenance record.
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 understanding the detailed operation and performance of respective equipment; • Capable of carrying out simple maintenance work for respective equipment according to instructions; and • Capable of safely carrying out maintenance work for the equipment which is on the list to be repaired by the organisation itself to resume its normal functioning; and complete maintenance record.
Remark	

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Functional Area - Common Competency

Title	Control vehicle servicing workflow
Code	108787L3
Range	This unit of competency is applicable to vehicle servicing workshops. Practitioners should be able to communicate with staffs in different departments effectively and obtain various information on service workshops and vehicle servicing processes. They should also exercise flexible deployment of vehicle servicing logistics to effectively control vehicle servicing process.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Servicing workshops)</p> <ul style="list-style-type: none"> • Good Understanding of with the work areas and duration required for various servicing procedure. • Master the specific functions of different areas within the servicing. workshop and its manpower availability. • Good Understanding of with the storage capacity and characteristics of servicing workshops and related car park. <p>2. Performance (Define the vehicle servicing workflow and coordinate the processes)</p> <ul style="list-style-type: none"> • Define the workflow for each vehicle base on service requirements. • Maximise the workshop productivity by flexible arrangement base on the utilization level of different areas within the servicing workshops, the servicing procedures required by different vehicles, the supply of spare parts and servicing staffs, the target completion date of different vehicles and the authorisation of relevant servicing orders. • Communicate with staffs in different departments to obtain relevant information to facilitate deployment decision. • Coordinate security measures in the monitoring of vehicles to ensure that vehicles are stored safely and properly in the course of servicing. • Flexibly implement established contingency measures under special circumstances.
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 communicating with staffs in different departments effectively to obtain information on vehicle servicing, such as the utilization level of servicing areas, the arrangement of servicing staffs and spare parts, target completion date and the authorisation of servicing orders; and obtain the resources required for various servicing procedures to make flexible deployment of vehicle servicing logistics; and • Capable of coordinating the storage of vehicles in different areas to attain good vehicle security.
Remark	

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Functional Area - Common Competency

Title	Handle general accidents at work
Code	108788L3
Range	This unit of competency is applicable to the workplaces of the automotive industry (e.g. vehicle servicing workshops and vehicle parts stores/ warehouses). Practitioners should be able to handle and take follow-up action in the event of accidents.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Typical accidents at work)</p> <ul style="list-style-type: none"> • Good understanding of the categories and causes of typical accidents in the automotive industry, such as crush, injury, cut, burnt, fire accident, direct contact of chemicals by skin or eyes, electric shock, explosion, gas leakage and fall from height and be familiar with their severity and immediate potential risks. • Know about the organisation's emergency and contingency measures, such as fire prevention apparatus, the location of first-aid kit and emergency exit. <p>2. Performance (Handle typical accidents)</p> <ul style="list-style-type: none"> • Collect relevant information when the accident occurs and understand the severity and immediate potential risks of the accident so as to make appropriate decision according to organisational guidelines, such as: <ul style="list-style-type: none"> ○ Immediate in-house treatment ○ Sent to hospital ○ Call the police ○ Emergency evacuation. • Handle the case according to organisational guidelines, such as report to supervisor as soon as possible and complete relevant record.
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 understanding the categories and nature of typical accidents at work; and • Capable of making suitable adjustment and arrangement with respect to the severity and immediate risks of the accident occurred according to organisational guidelines, emergency and contingency measures in a familiar working environment.
Remark	

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Functional Area - Common Competency

Title	Establish procedures for parking, flow control and security of vehicles
Code	108789L4
Range	This unit of competency is applicable to various kinds of vehicle servicing workshops and car parks in the automotive industry. Practitioners should be able to understand the characteristics of different types of vehicles and the environmental requirements of car parks. They should also be capable of establishing the procedures for parking, flow control, security, contingency measures, monitoring of vehicles.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Characteristics of different types of vehicles and the environmental requirements of car parks)</p> <ul style="list-style-type: none"> • Good understanding of the environmental requirements for parking different vehicle types or for servicing work, such as outdoor or indoor parking, ventilation, lighting requirements and floor height clearance. • Master about the security/anti-theft facilities in car parks. <p>2. Performance (Establish the procedures for parking, flow control and security of vehicles)</p> <ul style="list-style-type: none"> • Assess the storage capacity with respect to its vehicle types in car parks or operating places. • Assess the characteristics of different zones in the operating places, such as the potential risks concerning the entrance and exit of vehicles and the flexibility of parking different vehicle types. • Understand the preparatory measures required for transportation of vehicles on trucks, prolonged parking outdoor or indoor and establish implementation guidelines. • Compile record on the entrance/exit and custody of vehicles; draw up vehicle security measures; and establish custody system of car keys so as to tie in with the custody of vehicles. • Draw up instructions and authorise respective staff to perform the duties of daily vehicle flow control, transportation of vehicles, custody of car keys and car park security. • Establish monitoring procedure to get hold of the vehicle storage in the parking and the workflow; and formulate contingency measures. • Establish procedure to ensure that the specification of the operating places and the use of land can meet relevant statutory requirements.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is :</p> <ul style="list-style-type: none"> • Capable of understanding the characteristics of different types of vehicles and the environmental requirements of parking and in the course of work; • Capable of assessing the parking capacity and functions of the operating places so as to establish the procedures for parking, flow control, security and contingency measures; • Capable of establishing monitoring procedure to get hold of the daily operation of the operating places; and • Capable of formulating procedure to ensure that the specification of the operating places can meet statutory requirements.
Remark	

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Functional Area - Common Competency

Title	Investigate typical accidents at work
Code	108790L4
Range	This unit of competency is applicable to various kinds of workplaces in the automotive industry (e.g. vehicle servicing workshops, car parks). Practitioners should be able to investigate typical accidents at work and writing relevant reports.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (The causes of accidents)</p> <ul style="list-style-type: none"> • Master about the operation of related workplaces. • Know about the definition of accident and the cause theories, such as the theory of domino effect. • Good understanding of the typical categories of accidents and their causes, such as crush injury, wounded, incised wound, sprained, burnt, fire, contact of chemicals with skin or eyes, electric shock, explosion, gas leakage and fall from height. • Good understanding of the investigation procedure for accidents: classification of accidents, collection of information, reporting to related departments and compilation reports. <p>2. Performance (Investigate the accidents)</p> <ul style="list-style-type: none"> • Implement the investigation procedure for accidents according to organisational instructions, such as: <ul style="list-style-type: none"> ○ Classification of accidents ○ Objectively trace the persons, machineries and objects involved in the accident as well as the environment, time, location and process of the accident, etc.; and conduct interviews, take photographs, set questionnaires, etc. whenever necessary • Analyse the causes for accidents with reference to past records and make suggestions for improvement whenever necessary so as to reduce the chance of reoccurrence. • Implement related administrative procedure such as writing investigation report on the accident.
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 understanding thoroughly the operation of related workplaces, the categories and causes of typical accidents; • Capable of classifying accidents, collecting information, and analysing the causes of typical accidents in general industry-related workplaces according to organisational guidelines and implementing relevant administrative procedure such as writing investigation report on the accident; and • Capable of making analysis with reference to past accident records and making suggestions for improvement when necessary.
Remark	

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Title	Establish equipment management system
Code	108791L5
Range	This unit of competency is applicable to sizable vehicle servicing workshops, parts warehouses. Practitioners should be able to understand the operation of various workplaces, the characteristics and potential risk of individual equipment. They should establish appropriate management system according to the actual situation of the organisation to provide reliable equipment for the workplaces.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Equipment provided in the workplaces)</p> <ul style="list-style-type: none"> • Good understanding of the equipment provided in the workplaces and their functions, and identify those governed by the regulations listed out in the column “Remarks” below; and understand the respective provisions of the ordinances. • Good understanding of the potential risks of individual equipment (e.g. load-carrying facilities, lifting equipment). • Good understanding of the equipment that are critical or irreplaceable. <p>2. Performance (Formulate equipment management plan for the workplaces)</p> <ul style="list-style-type: none"> • Capable of listing out the equipment in different workplaces such as testing instruments, vehicle lifting equipment, specialised computer and software for inspection and maintenance purposes, special tools. • Capable of formulating equipment management plan for the workplace according to actual organisational needs and the established list of equipment while taking into account the factors of significance, complexity, servicing time required, stability, replacement alternative for example: <ul style="list-style-type: none"> ○ Budgeting for maintenance ○ Arranging for testing and commissioning ○ Define access authority ○ Plan for cleaning, maintenance and routine inspection procedure ○ Select maintenance scheme ○ Plan for training in operation and maintenance ○ Monitor maintenance record ○ Audit the obsolete equipment reports ○ Define system for the purchase, storage, utilisation/replacement, obsolescence for consumables • Whenever necessary, conduct detail analysis on critical and complicated equipment by retrieving major parameters such as utilisation rate, mean down-time, consumable expenditure, maintenance expenditure, servicing time required; monitor and suggest improvement proposals to enhance stability. • Conduct risk assessment for specialised computer system for inspection and maintenance purposes so as to formulate contingency plan; for example, prepare data back-up, operate without computer. • Establish management procedure to ensure that the equipment (e.g. jacks and vehicle lifting equipment) abided by regulations confirm with statutory requirements. • Establish environmental protection practice to achieve the results of energy saving, waste minimisation.

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Functional Area - Common Competency

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 grasp the specific functions, significance, stability and potential risks of the equipment in different workplaces; • Capable of formulating an appropriate equipment management plan with regard to actual organisational situation, such as the expenditure on maintenance, cleaning and inspection, access authority, servicing, consumables; • Capable of conducting detail analysis on complicated or critical equipment to enhance the stability when necessary; and • Capable of ensuring the operation of the equipment complying with respective statutory requirements.
Remark	<p>The respective legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Factories and Industrial Undertakings (Spraying of flammable liquids) Regulations • Factories and Industrial Undertakings (Dangerous Substances) Regulations • Dangerous Goods Ordinance • Gas Safety Ordinance • Factories and Industrial Undertakings (Lifting appliances and Lifting Gear) Regulations • Factories and Industrial Undertakings (Asbestos) Regulations • Occupational Safety and Health Ordinance • Code of Practice on Control of Air Impurities (Chemical Substances) in the Workplace

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Functional Area - Common Competency

Title	Establish management system for servicing workshops
Code	108792L5
Range	This unit of competency is applicable to sizable servicing workshops (e.g. vehicle body servicing workshops, general mechanical workshops, service pits, LPG vehicle service workshops, painting workshops). Practitioners should be able to understand the operation of different vehicle servicing works and formulate appropriate management plans for the workshop regarding actual organisational situation to ensure the servicing workshop is under effective and safe operation and in compliance with statutory requirements.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Operation of various kinds of servicing workshops)</p> <ul style="list-style-type: none"> • Master the daily operation, specific functions and potential risks of various servicing workshops. • Good understanding of the provisions of respective regulations applicable to servicing workshops such as fire services, industrial undertakings, occupational safety and health, environmental protection, labour. <p>2. Performance (Establish management systems and plans for servicing workshops)</p> <ul style="list-style-type: none"> • List out the appropriate environmental requirements as provided under the legislative requirements in the Remark Column for different kinds and sizes of vehicle servicing workshops such as lighting, ventilation & air-conditioning, sound-proofing, fire prevention, electricity supply, floor loading capacity, exhaust gas extraction, floor height clearance, drainage provisions, alarming apparatus, information network. • Base on the established environmental requirement with reference to the scale of the organisation, formulate the appropriate management system for the workshop such as inspection frequency, testing methods, deployment of inspection staffs, cleaning, service & maintenance plans, maintenance budget, etc, and compile regular inspections table for various servicing workshops. • Define the workshop setup for every workshop to ensure smooth traffic flow, work safety, environmental protection operation and maximum productivity. • Establish daily maintenance procedure regarding the operation of individual workshop and arrange appropriate resources to meet operation needs. • Establish management procedure for servicing workshops such as entry and exit, utilization, security measures, etc. so as to ensure that the equipment in the workshops confirm with respective statutory regulations of security, fire services, factories & industrial undertaking, environmental protection, labour. • Establish environmental protection practice on domestic water consumption, electricity, fuels so as to achieve the results of energy saving, waste minimisation.
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 grasp the specific requirements, environmental standards and the facilities requirement in various kinds of vehicle servicing workshops; • Capable of formulating appropriate management methods for the workshops concerning actual organisational situations to optimise the planning and setting of the workshop; establishing procedures for daily maintenance, entry and exit, utilisation and security to provide a safe and good working place; and

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	<ul style="list-style-type: none"> • Capable of maintaining the operation of the servicing workshops in compliance with respective statutory requirements.
Remark	<p>The respective legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Factories and Industrial Undertakings (Spraying of flammable liquids) Regulations • Factories and Industrial Undertakings (Dangerous Substances) Regulations • Dangerous Goods Ordinance • Gas Safety Ordinance • Factories and Industrial Undertakings (Lifting appliances and Lifting Gear) Regulations • Factories and Industrial Undertakings (Asbestos) Regulations • Occupational Safety and Health Ordinance • Code of Practice on Control of Air Impurities (Chemical Substances) in the Workplace • Factories and Industrial Undertakings Ordinance • Code of Practice – Safety and Health at Work for Gas Welding and Flame Cutting Work • Code of Practice – Safety and Health at Work for Manual Electric Arc Welding

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Functional Area - Common Competency

Title	Attend to Customers
Code	108793L2
Range	This unit of competency is applicable in vehicle showrooms / exhibition venues or servicing centres. Practitioners should be able to employ simple communication skills to receive customers according to the organisation's established procedure and standard and can understand customers' requirements to give appropriate feedback.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Attend to customers)</p> <ul style="list-style-type: none"> • Good Understand of the basic knowledge of attend to customers, including: <ul style="list-style-type: none"> ○ The organisation's procedure and standard on one's individual appearance ○ The organisation's procedure and standard on serving customers ○ Oral communication and interpersonal skills • Good Understand of customers' preference and demand for vehicle products, including: <ul style="list-style-type: none"> ○ Good Understand of the characteristics of different types of customers ○ Good Understand of customers' needs on products regarding environmental protection <p>2. Performance (Attend to customers)</p> <ul style="list-style-type: none"> • Capable of managing one's individual appearance meeting the organisation's established procedure. • Serve customers according to the organisation's established procedure: <ul style="list-style-type: none"> ○ Respond to customer enquiries on vehicle products with courtesy and professionally ○ Maintain relationship with customers and capable of collecting their contact information according to the organisation's established procedure; and report to supervisor ○ Take follow-up action with respective information department to obtain latest and accurate information, including product knowledge • Employ good communication skills with customers. • Receive customers with proper customer service attitude, such as provide services in a friendly manner to give customers good impression, and adequate product knowledge. • Bear the corporate image when receiving customers.
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 understanding customers' preference and demand for vehicle products to give appropriate responses; and • Capable of employing simple communication skills to receive customers according to the organisation's procedure and requirements and with the bearing of corporate image.
Remark	

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Functional Area - Common Competency

Title	Manage customer relationship
Code	108794L3
Range	This unit of competency is applicable in workplaces relevant to vehicle sales and its after-sales services. Practitioners should be able to employ customer relationship management techniques appropriately to maintain good relationship with customers to strengthen the company's business and reputation.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Customer relationship management)</p> <ul style="list-style-type: none"> • Understand customer relationship management theory, such as: <ul style="list-style-type: none"> ○ Customer knowledge ○ Customer satisfaction ○ Establishment of customer relationship ○ The ethical concept of customer relationship • Master customer relationship management techniques. • Good understanding of the vehicle manufacturer's policy on brands/product services and organisational policy on customer relationship management. • Good understanding of general customer information and management of information system including privacy protection and regulations. <p>2. Performance (Manage customer relationship)</p> <ul style="list-style-type: none"> • Establish and maintain stable and permanent relationship with customers according to the guidelines and policies of the vehicle manufacturer and the organisation, such as: <ul style="list-style-type: none"> ○ Routine customer interaction management, e.g. visits, mails and other electronic communications ○ Communication and interaction record management, e.g. conversations, phone calls, emails and letters ○ Maintain record of customers' crucial information ○ Monitor reports on customer relationship, such as: <ul style="list-style-type: none"> ▪ Answer enquiries, make quotation and verification ▪ Keep promises ▪ Handle customers' complaints ○ Customer evaluation and classification ○ Handle general customer information system management, such as: <ul style="list-style-type: none"> ▪ Keep customer information on file ▪ Retrieve data base and data ▪ Update data ▪ Analyse relationship ▪ Compile reports ▪ Make back-up ▪ Maintain close contact with other departments in the organisation (e.g. service department or sales department) to fully utilise customer information
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 understanding customer relationship management theory; and

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	<ul style="list-style-type: none">• Capable of employing customer relationship management techniques appropriately to maintain good relationship with customers; and fully utilising customer information to strengthen and enhance business.
Remark	The practitioner concerned already understand the Data Privacy Ordinance

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Functional Area - Common Competency

Title	Manage customer services
Code	108795L4
Range	This unit of competency is applicable in workplaces providing vehicle sales and after-sales services. Practitioners should be able to employ customer services management techniques to facilitate staff to serve customers according to the customer services plan of the organisation to enhance business.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Customer services management)</p> <ul style="list-style-type: none"> • Master the customer services management theory, such as: <ul style="list-style-type: none"> ○ Customers' expectation ○ Value-added services for customers ○ The culture of customer services ○ The degree of customer satisfaction ○ The directional guides on customer services provided by the manufacturing plant of the vehicle brand and the organisation • Good understanding of the respective rules that must be observed by customer services staff in the industry, such as: <ul style="list-style-type: none"> ○ Rules on discipline and services ○ The concept of service ethics ○ Privacy Protection Ordinance <p>2. Performance (Manage customer services)</p> <ul style="list-style-type: none"> • Perform the general duty of customer services management according to the disciplinary requirements and rules of services provided by the brand itself and the organisation for customer services staff. <ul style="list-style-type: none"> ○ Supervise and train staff ○ Establish customer services performance indicators ○ Analyse and handle complaint cases ○ Manage customer services during the pre-sales, sales and after-sales phases ○ Manage service quality records ○ Handle general customer files and message management ○ Handle general electronic customer services management ○ Enforcement and implementation of the Privacy Protection Ordinance • Improve customer services regularly according to organisational assessment criteria and feedback mechanism. • Arrange reports on a regular basis; report to and communicate with the manufacturing plant of the vehicle brand and relevant departments in the organisation; and demand for enhancement and improvement.
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of managing customer services according the instructions provided by the vehicle manufacturer and the organisation; providing good customer services for enhancement and improvement to consolidate and foster business.
Remark	

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Functional Area - Common Competency

Title	Handle customers' complaints
Code	108796L4
Range	This unit of competency is applicable to the managerial staff responsible for customer services or sales in various workplaces of the automotive industry. Practitioners should be able to handle and following up customers' complaints on the quality of vehicle products or services independently and appropriately according to the internal guidelines of the organisation. They should also be capable of making evaluation to improve the quality of customer services.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Organisation's procedure in handling customers' complaints)</p> <ul style="list-style-type: none"> • Master the organisation's established guidelines and regulations in handling customers' complaints on the quality of vehicle products or services, such as: <ul style="list-style-type: none"> ○ Understand the nature and causes of complaints ○ The staff authorised by the organisation to settle customers' complaints and their scope of authority ○ Understand the organisation's established procedure in referring cases to be settled by appropriate persons ○ Understand organisational procedure in recording actions taken when settling complaints ○ Understand communication skills, such as: theory and application of psychoanalysis <p>2. Performance (Handle customer's complaints on the quality of vehicle products)</p> <ul style="list-style-type: none"> • Conduct appropriate investigation and analysis into customers' complaints on the quality of vehicle products in accordance with the organisation's internal guidelines, including: <ul style="list-style-type: none"> ○ Understand customer complaints in person and be able to calm down customer emotions by effective communication skills ○ Analyse the cases submitted by subordinates with regard to customers' complaints on the quality of vehicle products or services ○ Classify the complaints and refer them to relevant departments/staff to follow up as appropriate ○ Analyse the causes for customers' complaints on quality and settle the problems in collaboration with relevant departments; and update relevant information record ○ Effectively handle and answer customers' complaints on the quality of vehicle products and services • Review customers' complaints on vehicle products and the quality of services, including: <ul style="list-style-type: none"> ○ Analyse satisfaction of customers on customers' complaints via questionnaires ○ Review the methods and efficiency regarding the handling of complaints • Hold regular meetings to review the customer services to recurrence of the same complaints and to improve the quality of customer services.
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 effectively handling and analyzing customers' complaints on the quality of vehicle products and services; and

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	<ul style="list-style-type: none">• Capable of drafting a review proposal regarding customers' complaints on product quality to improve the quality of customer services.
Remark	

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Functional Area - Common Competency

Title	Formulate customer services plan
Code	108797L5
Range	This unit of competency is applicable in workplaces providing vehicle sales and after-sales services. Practitioners should be able to formulate customer services plans to provide quality services to enhance organisational image and business.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Customer's requirements on the services provided by the automotive industry)</p> <ul style="list-style-type: none"> • Master the industry's criteria and requirements of high-quality customer services. • Master the customer services indicators set by the vehicle manufacturers for the brands and products. • Good understanding of the objectives of comprehensive organisational strategy, the available resources of the organisation and the strengths and weaknesses of each department. • Master the expectation of the market and customers. • Good understanding of the policy on strengthening the customer services and trend for future standard of services. • Master changes in the automotive industry and market environment. <p>2. Performance (Formulate customer services plan)</p> <ul style="list-style-type: none"> • Formulate customer services plan for the automotive industry. • With reference to the vehicle manufacturer's requirements and instructions in this regard and considering the special conditions of the organisation and local market: <ul style="list-style-type: none"> ○ Devise services operation system <ul style="list-style-type: none"> ▪ system blueprint and structure ▪ key service staff scheme ▪ support of organisational resources ○ Understand the daily operation of the organisation, such as: <ul style="list-style-type: none"> ▪ rules of customer services and discipline of staff ▪ duties of customer services ▪ design the workflow, operation and steps of standard services ▪ services and facility management, such as allocation of equipment, installation, maintenance and operation training ▪ service environment management ○ Positioning of customer services and identify target customers ○ Establish improvement mechanism for customer services ○ Establish appraisal system on customer services and commend those staff with good performance ○ Formulate electronic customer services plan for the organisation, such as: <ul style="list-style-type: none"> ▪ set up data base in the website of the organisation ▪ handle electronic enquiry ▪ provide electronic customer services ○ Understand changes in the market and customer needs, conduct regular reviews and adjust customer services plan ○ Assess operation efficiency and communicate with respective departments that have contacts with customers ○ Submit relevant reports to seniors and the vehicle manufacturer

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Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is: <ul style="list-style-type: none">• Capable of formulating customer services plan and monitoring the operation to strengthen and enhance business of the organisation; and• Capable of understanding changes in the automotive industry, adjusting customer services plan and maintaining close interaction with different partners.
Remark	

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Functional Area - Common Competency

Title	Formulate customer service management strategy
Code	108798L6
Range	This unit of competency is applicable in workplaces relevant to the customer service management of vehicle sales and after-sales services. Practitioners should be able to formulate customer service management strategy in accordance with organisational mission and objectives to fulfill customer needs and facilitate the enhancement of organisational brands and business expansion.
Level	6
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Customer service management)</p> <ul style="list-style-type: none"> • Master the significance of customer service management strategy to the reputation, achievements and profits of the entire organisation. • Master the theory of customer service management strategy, such as: <ul style="list-style-type: none"> ○ Comprehensive customer service package ○ The concept of service market e.g. market opportunity ○ Service operation strategy e.g. analysis of the allocation of resources ○ Delivery Total Service Package ○ Identify target customers ○ Customer services and communication management portfolio • Good understanding of service needs and supply strategy. • Good understanding of the measurement of service quality. • Good understanding of different customer service management strategies. <p>2. Performance (Formulate customer service management strategy)</p> <ul style="list-style-type: none"> • Master the theory of customer service management along with the knowledge on the characteristics of customers in the vehicle market to formulate effective strategy of customer service market portfolio: <ul style="list-style-type: none"> ○ Guide subordinate staff to formulate overall customer service management plan, budgets and other supporting requirements, such as: <ul style="list-style-type: none"> ▪ service management operation ▪ customer service hardware management ▪ customer service education ▪ promotion of customer service, e.g. set up vehicle fan club ▪ coordination between the sales And service departments ▪ internal staff training ▪ allocation of and human resources and associated hardware ▪ guide subordinate staff to formulate logical strategy for external and internal service management to change the service culture of the organisation ▪ change the strategies of organisational structure or systems e.g. recruitment, training, punishment and reward and staff commitment. ▪ customer service communication portfolio, including electronic and networking services ▪ guide subordinate staff to determine the scope of customer services audit, e.g. customers, staff, management level, external stake holders

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	<ul style="list-style-type: none"> • Guide subordinate staff to set the yardstick of service quality, find out the deficiencies in customer services, formulate policies to work for structural quality improvement so as to establish customer service quality assurance system. • Instruct subordinate staff to formulate plans for recruiting public relations agency to cope with extra demands e.g. organise large-scale vehicle exhibition • Instruct subordinate staff to formulate customer services budget. • Examine the overall resources of the organisation and allocate appropriate resources support. • Assess the effectiveness of customer service operation and its impact on the entire organisation from information on the submitted reports and data.
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of instructing subordinate staff to formulate effective customer service management strategy in accordance with organisational mission and objectives so as to fulfill customer needs, protect organisational reputation and safeguard its achievements and profits.
Remark	

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Functional Area - Common Competency

Title	Formulate customer relation management strategy
Code	108799L6
Range	This unit of competency is applicable in workplaces relevant to the customer relation management of vehicle sales and after-sales services. Practitioners should be able to formulate effective customer relation management strategy in accordance with organisational mission and objectives to maintain existing customers, attract new customers, source potential customers to enhance business.
Level	6
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Customer relation management)</p> <ul style="list-style-type: none"> • Master the significance of customer relation management to the reputation, achievements and profits of the entire organisation. • Master customer relation management: <ul style="list-style-type: none"> ○ Market orientation and customer orientation ○ Interests of customer relation ○ Purposes of customer relation ○ Characteristics of customer relation • Master customer relation management strategy, including: <ul style="list-style-type: none"> ○ Transaction management ○ Relation management ○ Suppliers and customers promotion • Good understanding of data base system for customer information. <p>2. Performance (Formulate customer relation management strategy)</p> <ul style="list-style-type: none"> • Through mastering the theory of customer relation management and the knowledge of the characteristics of customers in the vehicle market, coach subordinate staff to formulate customer relation management strategy suitable for the organisation: <ul style="list-style-type: none"> ○ Establish the structure of customer relation management system ○ Establish the methods, procedure and workflow for maintaining customer relation management, such as: <ul style="list-style-type: none"> ▪ selection criteria of customers ▪ methods to source new customers ▪ classification of customers ▪ assess customer loss and take remedial measures ▪ procedures for handling and following up on customer's complaints ▪ take the edge of customer relation to create and maintain customer relation ▪ explore and strengthen customer relation ▪ apply data base techniques to implement customer relation strategy ▪ departmental coordination and cooperation ▪ resources requirement and budget estimates ▪ reporting format, content and mechanism • Demand regular submission of reports and data to assess the effectiveness of the customer relation operation and its impact on the entire organisation.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of mastering the professional knowledge and techniques of customer relation management; and• Capable of leading subordinate staff to formulate effective customer relation management strategy in accordance with the overall objectives of the organisation to enhance the image of the organisation and foster business; and protect and safeguard the reputation, achievements and profits of the organisation to facilitate long-term development.
Remark	

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Functional Area - Common Competency

Title	Identify typical dangerous chemicals and understand their characteristics
Code	108800L1
Range	This unit of competency is applicable to general mechanical workshops, vehicle body and painting workshops, LPG vehicle service workshops, testing sites; car cleaning shops, car parks, parts warehouses. Practitioners should be able to identify typical dangerous chemicals and understand their characteristics to enhance their awareness in a familiar working environment.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Categorisation of dangerous chemicals and their characteristics)</p> <ul style="list-style-type: none"> • Understand the labelling system of dangerous chemicals and their different degrees of danger; also understand the hazard and characteristics of dangerous chemicals mentioned in the Safety Data Sheet (SDS). • Understand the characteristics of typical dangerous chemicals in gas, liquid and solid phases in the industry. • Understand the regulations of environmental protection, dangerous goods and the organisational requirement on environmental protection. <p>2. Performance (Identify various kinds of typical dangerous chemicals)</p> <ul style="list-style-type: none"> • Capable of noticing the existence of typical inflammable substances or combustible gases by visual, smell or direct contact in the absence of relevant labels. • Capable of identifying the typical chemicals used in automotive industry such as fuel, paint, thinner, various kinds of lubricants, coolant, hydraulic oil, cleanser, sulphuric acid, etc. from the inventory record; also capable of identifying the categories and labels of chemicals stipulated in the Dangerous Goods (General) Regulations. • Identify the possible risk of dangerous goods in vehicle parts. • Identify the potential danger of vehicle exhaust. • Identify the dangerous chemicals in the vehicles. • Identify various kinds of pressure vessels and the related accessories in different worksites and understand their dangerous nature. • Capable of protecting the safety of oneself and others with enhanced awareness upon knowing the existence of dangerous chemicals.
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 identifying typical dangerous chemicals and understand their dangerous nature so as to enhance awareness in a familiar industry-related working environment despite the absence of clear labels; • Capable of identifying the dangerous chemicals existing in parts or in vehicles; also capable of identifying the potential danger of vehicle exhaust; and • Capable of identifying the categories and labels of dangerous goods stipulated in the Dangerous Goods (General) Regulations.
Remark	<p>The major relevant legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Waste Disposal (Chemical Waste) (General) Regulation • Dangerous Goods Ordinance

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Functional Area - Common Competency

Title	Apply the laws and regulations and management system of environmental protection
Code	108801L1
Range	This unit of competency is applicable to all levels of employees within the workplaces of the automotive industry. Practitioners should possess general environmental protection concept and able to apply the environmental protection management system set by the organization in the course of the daily work in familiar working environment.
Level	1
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Environmental protection concept)</p> <ul style="list-style-type: none"> • Understand the infrastructure and operating system of environmental protection, such as: the collection and treatment of sewage, solid waste and chemical waste. • Be familiar with the basic concept of environmental regulations, such as: <ul style="list-style-type: none"> ○ Noise Control ○ Waste Disposal ○ Water Pollution Control ○ Ozone Layer Protection ○ Dumping at Sea ○ Air Pollution Control ○ Environmental Impact Assessment • Understand the importance of environmental protection, good environmental management rules and comprehensive environmental protection management system set by the organization. • know that different vehicles may have different requirements on noise and exhaust emissions. <p>2. Performance (Implement environmental protection practice)</p> <ul style="list-style-type: none"> • Possess environmental protection concept in the daily working procedure, such as: save energy, save water, reduce paper consumption, reduce wastes, etc., to meet the organization's comprehensive environmental protection management policy. • Comply with regulations of environment protection by understanding the scope of his or her daily work under the environmental protection regulations in a familiar working environment; and seek advice from the supervisor in case of uncertainty. • Familiar with the relationship of environmental protection and the automotive industry, and to implement environmental protection operation in the capacity to which one belongs.
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 complying with environmental protection regulations by understanding the requirements of those relevant regulations involved in the automotive industry, the organization and the department; and • Capable of implementing the environmental protection practice set by the organization for the department to which one belongs and in the designated capacity and bringing it to realisation in the daily work.
Remark	The major relevant legislation/rule involved in this unit of competency is as follows:

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	<ul style="list-style-type: none">• Waste Disposal (Chemical Waste) (General) Regulation
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Title	Carry out the operation guidelines on occupational safety and health
Code	108802L2
Range	This unit of competency is applicable in workplaces relevant to vehicle servicing workshops and storage warehouses. Practitioners should be able to perform routine working process according to the established operation guidelines on occupational safety and health in familiar workshops or warehouses.
Level	2
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Occupational safety legislations)</p> <ul style="list-style-type: none"> • Understand the functions of the Occupational Safety and Health Council, Occupational Safety and Health Ordinance and the basic requirements of the Factories and Industrial Undertakings Ordinance, such as the general responsibilities to be fulfilled by employers and employees; also know about the prevention of accidents, fire prevention measures, the hygienic condition of the working environment, first-aid, manual handling operation, as well as the use of display devices. • Understand the different statutory fire prevention installations and equipment in the operating places of the automotive industry; and familiar with the emergency and contingency measures to be implemented in one's capacity. • Understand that LPG vehicles and the relevant workshops and technicians are subject to control under the Gas Safety Ordinance and relevant legislations. • Understand that the categorisation, manufacture, use, storage, recovery, disposal and transportation of dangerous chemicals are subject to control under the Dangerous Goods Ordinance. <p>2. Performance (Comply with the operating guidelines on occupational safety and health)</p> <ul style="list-style-type: none"> • Comply with the organisation's established safety operating guidelines to perform job duties safely so as to safeguard individual and others' safety, such as: <ul style="list-style-type: none"> ○ Ensure that relevant work is carried out in an appropriate working area ○ Understand the potential risks of carrying out relevant work ○ Determine if one possesses the capability to carry out the work ○ Ensure that work is carried out under authorisation ○ Familiar with relevant emergency and contingency measures • Ensure that the work is carried out according to the requirements under the Occupational Safety and Health Ordinance, such as: <ul style="list-style-type: none"> ○ The environmental requirements of workshops ○ The use of personal protective equipment ○ The management of dangerous chemicals ○ The requirements of weight equipment • Understand the different risks involved in different regions within the operating places; and familiar with the risks involved in one's capacity.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of complying with the job-related rules and legislations on occupational safety and health in routine work to prevent accidents;

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	<ul style="list-style-type: none">• Capable of mastering the risks involved in the operating places and the work carried out therein; also familiar with the emergency and contingency measures to be implemented in one's capacity;• Capable of ensuring that work is carried out according to the requirements under the Occupational Safety and Health Ordinance; and• Capable of ensuring that work is carried out under authorization and undertaken in appropriate working areas.
Remark	

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Title	Handle typical dangerous chemicals, pollutants and waste
Code	108803L3
Range	This unit of competency is applicable to general mechanical workshops, vehicle body and painting workshops, LPG vehicle service workshops, testing sites, car cleaning shops, new/old vehicles and parts warehouses. Practitioners should be able to store, deliver, utilise, recover or dispose dangerous chemicals, pollutants and waste appropriately according to the organisation's established procedure for handling chemicals, pollutants and waste.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Dangerous chemicals, pollutants and waste)</p> <ul style="list-style-type: none"> • Good understanding of the typical dangerous chemicals in the automotive industry, their labelling system and characteristics. • Good understanding of the potential problems of typical pollutants in the automotive industry. • Good understanding of the definition of waste. • Base on the organisational guidelines and rules, participant should understand the responsibilities and requirements of employers and employees under the Occupational Safety and Health Ordinance; and the technical requirements in relation to one's capacity under the Dangerous Goods Ordinance; the Factories and Industrial Undertakings (Dangerous Substances) Regulations and the Waste Disposal Ordinance. <p>2. Performance (Correct handle typical dangerous chemicals, pollutants and waste)</p> <ul style="list-style-type: none"> • According to the established definition of categorisation by organisation, identify typical dangerous chemicals, pollutants and waste; also understand their potential risks. • Be familiar with typical dangerous goods such as fuel, organic solvent, paint, lubricants, strong acid, compressed gas cylinders, etc.; capable of reading and understanding their meaning in the Safety Data Sheet (SDS); and understand that there are specific requirements on their storage quantity, storage methods, storage locations, utilization level and place of utilization. • Evaluate one's own capability in handling dangerous chemicals, pollutants and waste, such as respective knowledge, experience, protective equipment, manpower requirements, emergency and contingency measures as well as first-aid knowledge. • Be familiar with the application of different personal protective equipment and select appropriate equipment according to different circumstances. • Under the circumstances of definite safe and abundant resources, safely handle dangerous chemicals, pollutants and hazardous waste including storage, delivery, utilisation, recovery and disposal of them according to organisational guidelines. • Be familiar with established measures in handling accidents, emergency and contingency and be equipped with basic first-aid knowledge; and be capable of implementing them at appropriate time. • Be familiar with the potential hazard and polluting nature of typical pollutants; understand that there are specific requirements on the storage, utilization, disposal and delivery of pollutants; and handle them appropriately according to environmental protection requirements. • Comply with the procedure for recovery, temporary storage and disposal of waste; and handle all wastes according to environmental protection requirements.

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Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the assessee shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of identifying typical dangerous chemicals, pollutants and waste; and capable of reading and understanding the Safety Data Sheet (SDS) of the chemicals; • To the extent that safe and adequate resources are guaranteed, capable of selecting appropriate protective equipment to store, deliver, utilise, recover or dispose dangerous chemicals, pollutants and hazardous waste safely according to organisational guidelines; • Capable of handling all wastes in accordance with the procedure for recovery, temporary storage, disposal of waste and the requirements of environmental protection; • Capable of being familiar with the knowledge of handling accidents and basic first-aid procedure; implementing emergency and contingency measures; and • Capable of understanding the responsibilities and requirements of employers and employees under the Occupational Safety and Health Ordinance; and the technical requirements under the Dangerous Goods Ordinance, the Factories and Industrial Undertakings (Dangerous Substances) Regulations and the Waste Disposal Ordinance.
Remark	<p>The credits value of this unit of competency is established under on the presumption that the practitioner being assessed has already possessed the capability to identify typical dangerous chemicals in the automotive industry and Be familiar with relevant requirements on environmental protection.</p> <p>The major relevant legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Waste Disposal (Chemical Waste) (General) Regulation

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Title	Fulfil the requirements on environmental protection (electrical and mechanical servicing)
Code	108804L3
Range	This unit of competency is applicable to technical personnel in various kinds of electrical and mechanical servicing workshops of the automotive industry. Practitioners should be able to understand the environmental protection concept and comply with environmental protection requirements when working in a familiar vehicle servicing workshop.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Environmental protection concept)</p> <ul style="list-style-type: none"> • Good understanding of the statutory requirements on environmental protection ordinances applicable to the department which one belongs to. • Good understanding of organisational instructions on the requirements of environmental protection. <p>2. Performance (Comply with requirements on environmental protection)</p> <ul style="list-style-type: none"> • Comply with organisational instructions on environmental protection in familiar electrical and mechanical servicing workshops; and cautiously carry out the procedure that may cause pollution so as to protect the environment, such as: <ul style="list-style-type: none"> ○ Prevent leakage of engine oil, fuel, gearbox oil, organic dissolvent, paint, engine coolant and various kinds of hydraulic oil into the land and prevent discharge of these pollutants into sewer, river, stream or sea. Relevant work should be carried out on the floor coated with leak-proofing material or covered with leak-proofing canvas. All procedures should be handled according to the Code of Practice for Chemical Waste Producers ○ Prevent disposing empty utensils containing organic substances (e.g. abandoned oil container, abandoned oil filter and washing cloth, etc.) together with general waste ○ Testing of engines or vehicle emission should be carried out in indoor workshops with exhaust gas extraction system so as to reduce the nuisances caused by exhaust gas ○ Collect all refrigerants by approved refrigerant recycling equipment before opening up of the refrigerant lines. Take precaution measures to prevent leakage of refrigerant in the process and maintain records on utilisation of refrigerants. ○ Work that will generate large amount of effluent such as car or engine washing should be carried out in workshops with Water Pollution Control Ordinance Licence; and should keep the utilisation of cleansers, chemicals and fresh water under control ○ Use vacuum cleaning equipment, cleansers and containers for collection purposes in carrying out procedures that generate suspended particles such as brakes and clutches repairing etc. so as to avoid tiny particles suspended in the air or dropping of contaminated solvent on the shop floor. ○ Works that generate noise, such as testing of engines, or exhaust gas, and use of pneumatic tools, should be carried out in indoor workshops within specified timeframe to avoid causing noise nuisances ○ Works involving dangerous chemicals and pollutants should be carried out according to procedures

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	<ul style="list-style-type: none"> ○ Sort, recycle and handle the wastes or recyclable parts according to established instructions prior to disposal. • Be familiar with the organisation's contingency measures on pollutant leakage and capable of handling the situation and efficiently so as to minimize danger and pollution. • Confirm the compliance with the statutory requirements on handling chemical wastes, waste water discharge and utilization of refrigerants.
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 fully understanding the environmental protection ordinances and organisational requirements on environmental protection; and carry out the work carefully to protect the environment; • Capable of carrying out the duties involving dangerous chemicals, pollutants, recoverable parts and waste according to established procedure in a familiar electrical and mechanical servicing workshop; and • In case of pollutant leakage, capable of implementing the contingency measures safely and efficiently in handling and following up, so as to minimize danger and pollution.
Remark	<p>The major relevant legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Waste Disposal (Chemical Waste) (General) Regulation

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Title	Fulfil the requirements on environmental protection (vehicle body servicing)
Code	108805L3
Range	This unit of competency is applicable to technical personnel in various kinds of vehicle body servicing workshops (including painting workshops) of the automotive industry. Practitioners should be able to understand environmental protection concept and comply with environmental protection requirements when working in a familiar servicing workshop.
Level	3
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Environmental protection concept)</p> <ul style="list-style-type: none"> • Good understanding of the statutory requirements of environmental protection ordinances applicable to the department which one belongs to. • Good understanding of organisational instructions on the requirements of environmental protection. <p>2. Performance (Comply with environmental protection requirements)</p> <ul style="list-style-type: none"> • Comply with organisational instructions on environmental protection in a familiar vehicle body servicing workshop; and cautiously carry out the procedure that may cause pollution so as to protect environment, such as: <ul style="list-style-type: none"> ○ Prevent leakage of chemicals such as paint and organic solvent etc. into the land and prevent discharge of these pollutants into sewer, river, stream or sea. Relevant work should be carried out according to the Code of Practice for Chemical Waste Producers. ○ Prevent disposing empty utensils containing organic substances (e.g. abandoned oil container, abandoned oil filter and washing cloth, etc.) together with general waste. ○ Works that release smells or organic particles, such as vehicle painting, etc., should be carried out in workshops equipped with air treatment facilities. ○ Works that produce smoke, powder and dust, such as vehicle body polishing, metal cutting and welding should be carried out in indoor workshops equipped with air treatment facilities. Workshop cleanliness should also be emphasised so as to prevent dust, smell, smoke, ozone, suspended particles and powder suspending in the air. ○ Works that generate large amount of effluent such as car or engine washing should be carried out in workshops with Water Pollution Control Ordinance Licence; and should keep the utilisation of cleansers, chemicals and fresh water under control. ○ Works that generate noise, such as the hitting and striking procedure and use of pneumatic tools, should be carried out in indoor workshops within specified timeframe to avoid causing noise nuisances. • Works involving dangerous chemicals and pollutants should be carried out according to procedure. • Sort, recycle and handle the waste or recyclable parts according to established instructions prior to disposal. • Be familiar with the organisation's contingency measures on pollutant leakage; and capable of handling the situation safely and efficiently so as to minimize danger and pollution.

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	<ul style="list-style-type: none"> • Confirm the compliance with the statutory requirements on handling chemical wastes and waste water discharge.
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 fully understanding the environmental protection ordinances and organisational requirements on environmental protection; and carry out the work carefully to protect environment; • Capable of carrying out the duties involving dangerous chemicals, pollutants, recoverable parts and wastes according to established procedure in a familiar vehicle body servicing workshop; and • In case of pollutant leakage, capable of implementing the contingency measures safely and efficiently in handling and following up, so as to minimize danger and pollution.
Remark	<p>The major relevant legislation/rule involved in this unit of competency is as follows:</p> <ul style="list-style-type: none"> • Waste Disposal (Chemical Waste) (General) Regulation

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Title	Monitor occupational safety and health systems
Code	108806L4
Range	This unit of competency is applicable to middle managerial staffs in various servicing workshops and warehouses in the automotive industry. Practitioners should be able to monitor the daily work and working procedure of the staffs in their departments according to working instructions on occupational safety and health.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Relevant occupational safety and health ordinances as well as organisational instructions)</p> <ul style="list-style-type: none"> • Good understanding of organisational guidelines on occupational safety and health. • Good understanding of Occupational Safety and Health Ordinance, Factories and Industrial Undertakings Ordinance as well as related labour regulations. • Good understanding of the daily operation and detailed working procedures in one's department. <p>2. Performance (Monitor the daily work and safety equipment in their departments)</p> <ul style="list-style-type: none"> • Inspect the daily works and working procedures of the staffs in their department to ensure that organisational guidelines on occupational safety and health have been met, such as the authorities on use of various facilities or equipment and its operating systems, the applications of personal protection equipment, the ventilation within the premises and its potential danger, working underneath the car, working at height, handling of pollutants and dangerous chemicals, waste disposal, the cleanliness of workshops and warehouses, methods of manual lifting, blasting by abrasives or the use of abrasive wheels, painting with flammable liquids, machine operation and protection, the use of lifting appliances and lifting gear as well as gas welding and flame cutting. • Participate in the investigation of accidents/incidents occurred within the area that one monitors and follow up the improvement proposals. • Review the incident reporting mechanism, report to supervisors when appropriate and complete relevant records. • Inspect the emergency exit to make sure the passageway is free from obstacle and firefighting devices are installed. • Inspect the first-aid equipment in one's department. • Review to ensure that incidents are properly reported according to statutory requirements, such as injury at work and serious incidents. • Record cases not complying with respective rules/instructions and notify the people concerned; formulate improvement mechanism and compile comprehensive report regularly.
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 understanding Occupational Safety and Health Ordinance, Factories and Industrial Undertakings Ordinance, labour legislations, detailed working procedures in one's department and organisational instructions on occupational safety and health; • Capable of monitoring various working procedures in one's department to see if they can meet organisational instructions on occupational safety and health, so as to safeguard the well-being and safety of staff to avoid injury at work or occupational diseases; and

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	<ul style="list-style-type: none">• Capable of formulating improvement mechanisms and compiling comprehensive report on non-compliance cases.
Remark	

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Title	Monitor and manage environmental protection operations
Code	108807L4
Range	This unit of competency is applicable to middle managerial staff in various servicing workshops and warehouses in the automotive industry. Practitioners should be able to understand relevant environmental protection regulations and organisational requirements in familiar workplaces so as to monitor the working procedure in the departments/workshops under their supervision to ensure that requirements of relevant environmental protection regulations and management systems have been met.
Level	4
Credit	3 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Relevant environmental protection regulations and organisational requirements)</p> <ul style="list-style-type: none"> • Good understanding of organisational requirements on environmental protection. • Good understanding of the environmental protection regulations involved in the work of one's department. • Good understanding of the daily operation and various details of working procedures in one's department. <p>2. Performance (Monitor environmental protection management systems)</p> <ul style="list-style-type: none"> • Inspect the daily working procedures of subordinates for confirmation of meeting the organisational guidelines on environmental protection, such as procedures on handling waste engine oil, lubricants, waste paints, organic dissolvent, wash cloth and abandoned containers, the utilisation and handling of refrigerants, the handling of recyclable parts, waste separation and recycling, wastewater treatment, asbestos waste treatment, vehicle emission, consumption of energy and consumables. • Inspect the mechanism for handling pollutant leakage and review the respective measures taken for confirmation of compliance with the working instructions given. • Inspect relevant environmental protection equipment under one's scope of authority for confirmation of normal functioning, such as refrigerant recovery machine, exhaust extraction system, recycling equipment for various kinds of organic substances or its containers, wastewater treatment systems as well as waste and its sorting systems. • Inspect the work of the subordinates for confirmation of meeting the requirements of environmental protection regulations and improve respective mechanisms. • Record cases not complying with respective rules/instructions and notify the people concerned; formulate improvement mechanism and compile comprehensive report regularly.
Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are that the practitioner shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of monitoring the working procedures in various departments and ensuring that environmental protection measures are implemented; • Capable of monitoring the working procedures in various departments and ensuring that legislative requirements on environmental protection are met; • Capable of monitoring relevant environmental protection devices and ensuring that they are functioning normally; and • Capable of formulating improvement mechanisms for non-compliance cases and compiling comprehensive report.

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Remark	
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Title	Formulate management procedure for dangerous chemicals, pollutants and waste
Code	108808L4
Range	This unit of competency is applicable to general mechanical workshops, vehicle body and painting workshops, LPG vehicle service workshops, testing sites; car cleaning shops, car parks for new/used cars and new/used parts warehouses in the automotive industry. Practitioners should be able to conduct risks assessments on typical dangerous chemicals, pollutants and waste. They should also be able to formulate management procedure and provide a safe working environment.
Level	4
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Definition, characteristics and related regulations on dangerous chemicals, pollutants and waste)</p> <ul style="list-style-type: none"> • Master the application, labelling system and characteristics of typical chemicals used in the organisation. • Good understanding of the definitions and categories of dangerous chemicals, pollutants and waste. • Good understanding of statutory requirements on the delivery, transportation, utilisation, recycling and disposal of dangerous chemicals, pollutants and wastes as well as the content in the Safety Data Sheet (SDS). • Good understanding of the potential risks of various kinds of pollutants in the organisation and related regulations. • Good understanding of different waste treatment methods employed by the organisation. • Good understanding of the responsibilities of employers and employees stipulated in the Occupational Safety and Health Ordinance. <p>2. Performance (Formulate working instructions and management plans)</p> <ul style="list-style-type: none"> • Formulate storage management system, delivery procedure, application guidelines, monitoring systems, disposal and recycling procedure for related dangerous chemicals, such as: <ul style="list-style-type: none"> ○ Conduct assessment on the dangerous chemicals in the organisation, such as paints, fuel, organic solvent, strong acids, engine lubricants, automatic gearboxes lubricants, various types of hydraulic oil, pressurised cylinders, refrigerants, coolants, etc. List out the categories, inventory level, storage methods, storage places, consumption level and application locations for all dangerous chemicals ○ Verify that the storage of all dangerous chemicals can fulfil the statutory requirements in terms of inventory level and storage specifications of different dangerous chemicals ○ Collect the Material Safety Data Sheet (MSDS) for each type of dangerous chemical and establish relevant database. ○ Draw up a simple map that listing out the storage, delivery routes and the locations of those dangerous chemicals in use ○ Assess the risks involved in various kinds of dangerous chemicals such as the time exposed to dangerous chemicals, the frequency of respective procedure and analyse the consequences of failure in rectifying the danger upon occurrence of incidents

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	<ul style="list-style-type: none"> ○ Formulate emergency and contingency plans in accordance with the storage, consumption, delivery, recycling and disposal of dangerous chemicals; and determine the responsibilities by posts, such as implementation of evacuation procedure, contact of emergency service departments and the provision of first-aid services. ● Formulate handling procedure and monitoring system for typical pollutants, such as vehicle emission, dusts, effluent, polluting waste. ● Formulate procedure to ensure that recoverable waste such as waste tyres, waste batteries, waste oil, waste paper, refrigerants, plastics, metals and polluting waste, etc. are separated for recycling; and temporary storage of those non-recyclable wastes for collection. ● Draw up training mechanism to equip staffs with the knowledge of the established management policies on dangerous chemicals, pollutants and wastes. ● Establish management systems on equipment to ensure that relevant resources are adequate and appropriate, such as personal protection equipment, instruments required for first-aid as well as emergency and contingency measures, equipment required for handling pollutants, facilities for temporary storage, disposal and waste recycle. ● Ensure that the various procedures and instructions formulated are synchronised with organisational operation and meet vehicle manufacturer's standard as well as the statutory requirements of fire prevention, environmental protection, occupational safety and health and related regulations.
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 formulating management systems and working instructions on the delivery, transportation, consumption, recovery and monitoring of dangerous chemicals used in the organisation; drawing up working instructions as well as emergency and contingency plan by various posts; and ensuring that management systems and working instructions can comply with the requirements of Dangerous Goods Ordinance, Factories and Industrial Undertakings (Spraying of Flammable Liquids) Regulations as well as Factories and Industrial Undertakings (Dangerous Substances) Regulations; ● Capable of formulating the handling procedure and monitoring system for typical pollutants and waste according to the requirements of environmental protection and waste disposal ordinances; ● Capable of establishing management system for related devices to ensure adequate supply of resources; and ● Capable of establishing training mechanisms to equip staffs with the knowledge of the operation of dangerous chemicals, pollutants and wastes as well as deriving emergency and contingency plan in their own working unit.
Remark	<p>The relevant legislations involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> ● Factories and Industrial Undertakings (Dangerous Substances) Regulations ● Dangerous Goods Ordinance ● Factories and Industrial Undertakings (Asbestos) Special Regulations ● Occupational Safety and Health Ordinance ● Waste Disposal Ordinance ● Factories and Industrial Undertakings (Spraying of Flammable Liquids) Regulations

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Title	Establish occupational safety and health management system
Code	108809L5
Range	This unit of competency is applicable to the managerial staffs of operating workplaces in the automotive industry. Practitioners should be able to understand respective regulations of occupational safety and health to establish occupational safety and health management system for familiar workplaces under their supervision.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Regulations of occupational safety and health as well as the respective operation of workplaces)</p> <ul style="list-style-type: none"> • Fully understand the responsibilities of employers and employees stipulated in the following ordinances, such as: <ul style="list-style-type: none"> ○ Occupational Safety and Health Ordinance ○ Factories and Industrial Undertakings Ordinance as well as its related regulations ○ Related issues stipulated in the Fire Services Ordinance ○ Issues relating to LPG vehicles stipulated in the Gas Safety Ordinance ○ Related issues stipulated in the Dangerous Goods Ordinance ○ Respective labour regulations • Good understanding of the operation and human resources supply of each department within the organisation. • Master the long-term and short-term objectives established by the organisation for occupational safety and health as well as the performance indicators. • Good understanding of the content of the risk assessment report. <p>2. Performance (Establish occupational safety and health management system)</p> <ul style="list-style-type: none"> • Formulate evaluation procedure for performance indicators according to the policy requirements of occupational safety and health, such as evaluation methods, choice of persons and frequency, and compile regular inspection tables for occupational safety, and health. • Formulate working instructions on occupational safety and health management according to the analysis of the risk assessment report and comprehensive policy, such as the authority to use equipment, the instructions on safety operation of complicated equipment; establish monitoring systems; devise reporting mechanism for incidents and compile records of documents. • Establish respective staff training procedure according to the human resources supply and actual operation of the organisation, such as resources arrangement, choice of persons to be trained and training proposals. • Review and analyse the effectiveness of the occupational safety and health management system and revise it when necessary. • Establish emergency and contingency measures to ensure smooth operation or minimise loss. • Review the established measures and confirm the compliance with statutory requirements.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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	<ul style="list-style-type: none">• Capable of establishing a management system on occupational safety and health applicable to workplaces under their supervision according to comprehensive organisational policy and monitoring its operation; and• Capable of reviewing and optimizing the occupational safety and health management system.
Remark	<p>The respective legislations involved in this unit of competency are as follows:</p> <ul style="list-style-type: none">• Occupational Safety and Health Ordinance• Factories and Industrial Undertakings Ordinance• Fire Services Ordinance• Gas Safety Ordinance• Dangerous Goods Ordinance• Waste Disposal Ordinance

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Title	Establish environmental protection management system
Code	108810L5
Range	This unit of competency is applicable to the managerial staff of operating workplaces in the automotive industry. Practitioners should be able to understand regulations of environmental protection relevant to the workplaces and possess good environmental management concept to establish a feasible environmental protection management system for the workplaces under their supervision.
Level	5
Credit	6 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Regulations of environmental protection and respective operation of the workplaces)</p> <ul style="list-style-type: none"> • Understand the responsibilities of employers and employees stipulated in the following ordinances: <ul style="list-style-type: none"> ○ Related issues stipulated in the Noise Control Ordinance ○ Related issues stipulated in the Waste Disposal Ordinance ○ Related issues stipulated in the Water Pollution Control Ordinance ○ Related issues stipulated in the Ozone Layer Protection Ordinance ○ Related issues stipulated in the Dumping at Sea Ordinance ○ Related issues stipulated in the Air Pollution Control Ordinance ○ Related labour regulations • Understand the operation and human resources supply of each department within the organisation. • Master the long-term and short-term objectives established by the organisation for environmental protection as well as the performance indicators. • Understand the content of the risk assessment report. • Understand the concept of good environmental protection practice. <p>2. Performance (Establish environmental protection management system)</p> <ul style="list-style-type: none"> • Formulate evaluation procedure for performance indicators according to the requirements of comprehensive environmental protection policy, such as evaluation methods, choice of persons and frequency. • Formulate operational requirements and instructions on environmental protection applicable to various workplaces according to the analysis of the risk assessment report and comprehensive organisational policy; establish monitoring systems and compile records of documents; specific issues involved including: <ul style="list-style-type: none"> ○ Chemical waste such as waste oil and organic solvent, etc. ○ The utilisation and recycling of refrigerants ○ Exhaust gas emission from workshops ○ Recycle of fuels, filter units for lubricants, waste engine oil, waste paints or organic solvent and their empty containers ○ Handle the cloth stained with paints, engine oil, organic solvent, etc. ○ Recyclable parts, such as waste batteries, waste tyres and waste brake pads, etc. ○ Asbestos waste ○ Waste separation, recycle and disposal ○ Workshop waste water ○ Noise

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Functional Area - Common Competency

	<ul style="list-style-type: none"> ○ Air pollutant such as volatile organic chemical, dusts, awful smell ● Formulate good environmental management rules applicable to individual workplace according to the comprehensive environmental protection policy of the organisation, such as: <ul style="list-style-type: none"> ○ Indoor air quality ○ Energy efficiency ○ Environmental protection of consumables ○ Green procurement ● Establish respective staff training procedure according to human resources and actual operation of the organisation, such as resources arrangement, choice of persons to be trained and training proposals. ● Establish verifying procedure for the details of environmental protection management according to the actual situation of the organisation so as to ensure the implementation of the environmental protection system. ● Review and analyse the effectiveness of the environmental protection system and revise it when necessary. ● Review the established measures or instructions and confirm the compliance with respective statutory requirements on environmental protection.
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 establishing an environmental protection management system applicable to workplaces under their supervision according to comprehensive organisational policy as well as monitoring its operation; and ● Capable of reviewing and optimizing the system.
Remark	<p>The major legislations involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> ● Noise Control Ordinance ● Waste Disposal Ordinance ● Water Pollution Control Ordinance ● Ozone Layer Protection Ordinance ● Air Pollution Control Ordinance ● Occupational safety and health Ordinance

Specification of Competency Standards
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Unit of Competency

Functional Area - Common Competency

Title	Formulate comprehensive occupational safety and health policy for the enterprise
Code	108811L6
Range	This unit of competency is applicable to the managerial staff of sizable enterprises in automotive industry. Practitioners should be able to formulate comprehensive occupational safety and health policy for the enterprise.
Level	6
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Statutory requirements on occupational safety and health)</p> <ul style="list-style-type: none"> • Master the statutory requirements on occupational safety and health, related knowledge and future trend. • Master the overall operation strategy of the enterprise, market positioning and corporate image. • Good understanding of the key of success for organisations with distinctive achievements in occupational safety and health. <p>2. Performance (Formulate comprehensive occupational safety and health policy for the enterprise)</p> <ul style="list-style-type: none"> • Fully understand the internal and external factors when formulating the comprehensive occupational safety and health policy for the enterprise: <ul style="list-style-type: none"> ○ Select the appropriate occupational safety and health system for the enterprise ○ Define relevant performance indicators ○ Establish long-term and short-term objectives • Understand the discrepancy between the expected achievement and current performance by analysing so as to set up relevant management systems, such as: <ul style="list-style-type: none"> ○ Prepare the required resources ○ Monitor the operation of the systems ○ Establish internal communication channels ○ Review effectiveness and suggest improvement measures when appropriate • Take appropriate actions ensuring that the occupational safety and health policy and its effectiveness can meet relevant statutory requirements.
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 fully understanding the statutory requirements of occupational safety and health and related knowledge to formulate the occupational safety and health policy to meet the practical need of the enterprise in a forward-looking manner; and • Capable of taking appropriate actions to ensure that the occupational safety and health policy of the enterprise and its effectiveness shall meet relevant statutory requirements.
Remark	<p>The relevant legislations involved in this unit of competency are as follows:</p> <ul style="list-style-type: none"> • Occupational Safety and Health Ordinance • Factories and Industrial Undertakings Ordinance • Factories and Industrial Undertakings (Safety Management) Regulation • Code of Practice on Safety Management

Specification of Competency Standards
for the Automotive Industry
Unit of Competency

Functional Area - Common Competency

Title	Formulate comprehensive environmental protection policy for the enterprise
Code	108812L6
Range	This unit of competency is applicable to the managerial staff of sizable enterprises in the automotive industry. Practitioners should be able to obtain a wide scope of environmental protection information to formulate a comprehensive environmental protection policy that can meet the practical operation of the enterprise and statutory requirements.
Level	6
Credit	9 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Obtain a wide scope of environmental protection information)</p> <ul style="list-style-type: none"> • Master the statutory requirements on environmental protection, the code of practice on environmental protection and the future trend. • Master the comprehensive operation strategy, marketing position and corporate image established by the enterprise. • Good understanding of the environmental protection policies and systems established by the vehicle manufacturers. • Good understanding of the international standard of environmental protection and respective regulations. • Good understanding of the successful elements of organisations with outstanding achievements in the industry. • Good understanding of the content of risk assessment reports. <p>2. Performance (Formulate comprehensive environmental protection policy for the enterprise)</p> <ul style="list-style-type: none"> • Fully understand the internal and external factors so as to formulate a comprehensive environmental protection policy that can meet the actual operation of the enterprise: <ul style="list-style-type: none"> ○ Cope with the skill-upgrading trend in the industry ○ Incorporate environmental protection techniques into the overall business/operation ○ Select the environmental protection system suitable for the organisation ○ Establish good relationship with environmental protection groups ○ Define respective performance indicators ○ Define long-term and short-term objectives • Identify and analyse the discrepancy between the anticipated objectives and current performance so as to: <ul style="list-style-type: none"> ○ Set up relevant management system ○ Prepare the required resources ○ Establish the auditing procedure ○ Monitor the operation of the systems ○ Build internal communication channels ○ Review the effectiveness and make suggestions for improvement measures to be taken • Take appropriate action ensuring that the environmental protection strategy of the enterprise and its achieved effectiveness can meet respective statutory requirements on environmental protection.
Assessment Criteria	The integrated outcome requirements of this unit of competency are that the practitioner being assessed shall prove that he/she is:

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Functional Area - Common Competency

	<ul style="list-style-type: none">• Capable of formulating a comprehensive environmental protection policy in line with the actual situation of the organization; and• Capable of ensuring that the enterprise's environmental protection policies and the results achieved shall meet the environmental statutory requirements.
Remark	<p>The major legislations/rules involved in this unit of competency are as follows:</p> <ul style="list-style-type: none">• Noise Control Ordinance• Waste Disposal Ordinance• Water Pollution Control Ordinance• Ozone Layer Protection Ordinance• Air Pollution Control Ordinance• Occupational Safety and Health Ordinance

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Unit of Competency

Functional Area - Common Competency

Title	Maintain Working Relationships in the Motor Vehicle Environment
Code	108813L2
Range	This unit of competency is about maintaining good working relationships with all colleagues in the working environment by using effective communication and support skills.
Level	2
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Maintaining good working relationships with colleagues)</p> <ul style="list-style-type: none"> • Understand how to maintain effective communication and cooperate with colleagues <p>2. Performance (Maintaining good working relationships with colleagues)</p> <ul style="list-style-type: none"> • Contribute to team work by initiating ideas and co-operating with colleagues. • Respond promptly and willingly to the requests for assistance from colleagues should they be permitted to do so in accordance with the job responsibilities and personal capabilities • Able to refer colleagues to the responsible persons of appropriate job areas correctly for follow-up work • Able to give colleagues sufficient and accurate information and support • Able to make clear and courteous requests for assistance from colleagues • Respect the views and opinions raised by other colleagues
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of maintaining good relationships with all colleagues in the working environment by using effective communication and support skills.
Remark	

Specification of Competency Standards
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Functional Area - Common Competency

Title	Conduct demonstration of technical skills
Code	108814L3
Range	The practitioner should be able to conduct demonstration of technical skills properly in a safe and undisturbed environment, taking into account the different learning ability and progress of learners and be able to respond to the questions raised.
Level	3
Credit	1 (For Reference Only)
Competency	<p>Performance Requirements</p> <p>1. Knowledge (Technical demonstration skills)</p> <ul style="list-style-type: none"> • Understand the detailed steps to perform each task, and how to split various. technical tasks for demonstration purpose • Know the difference in progress of learners in the learning process. • Know how to teach learners to ask questions at appropriate stages. • Know the ways to respond to learners' questions <p>2. Performance (Conduct technical demonstrations safely and effectively)</p> <ul style="list-style-type: none"> • Carry out demonstration of technical skills for various work procedures • Observe the progress of the learners and supplement with appropriate explanations • Ensure the learners can learn in an undisturbed environment • Ensure the demonstration be carried out in a safe environment, and allow learners to see the demonstration clearly
Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is that the practitioner being assessed shall prove that he/she is:</p> <ul style="list-style-type: none"> • Capable of conducting technical demonstration properly and safely.
Remark	

Vocational Qualifications Pathway for Automotive Industry 汽車業職業資歷階梯									
Functional Area 職能範疇	Vehicle Sales 汽車銷售	Vehicle Parts Sales 零件銷售	Vehicle Servicing & Testing 汽車維修及檢測						
QF Level 級別									
QF Level 5 資歷架構第五級	Sales Manager 銷售經理	Parts Manager 零件銷售經理	Service Manager 維修經理						
	↑	↑	↑						
QF Level 4 資歷架構第四級	Sales Executive 銷售主任	Parts Executive 零件主任	Service Executive (Workshop Manager, Supervisor, Foreman) 維修主任(工場經理、監工、領班)						
	↑	↑	↑						
			<div style="border: 1px solid black; padding: 2px; display: inline-block;">Vehicle Damage Assessor 汽車損毀估價員</div>						
QF Level 3 資歷架構第三級	Salesman 汽車銷售員	Partsman 零件銷售員	Service Advisor / Technician (Testing & Diagnostic) 維修顧問 / 技術員(測試及診斷)						
	↑	↑	↑						
QF Level 2 資歷架構第二級	Sales Assistant 助理汽車銷售員	Parts Assistant 助理零件銷售員	Mechanic (MC) 技工(電單車)	Mechanic (BB) 技工(車身建造)	Mechanic (CV) 技工(商用汽車)	Mechanic (EV) 技工(電動車)	Mechanic (B&P) 技工(車身及噴塗)	Mechanic (M&E) 技工(機/電)	Service Advisor / Technician Trainee 受訓維修顧問 / 技術員
			<div style="border: 1px solid black; padding: 2px; display: inline-block;">透過培訓或能力評估以符合專門能力要求</div>				<div style="border: 1px solid black; padding: 2px; display: inline-block;">符合汽車維修技工基本能力要求</div>		
QF Level 1 資歷架構第一級			Mechanic Apprentice / Assistant Mechanic 技工學徒 / 助理技工						

Units of Competency 能力單元 Vehicle Mechanic (Mechanical and Electrical) (QF Level 2) 車輛維修技工〔機械及電氣〕〔資歷架構 2 級〕	
Code of UoC 單元編號	Name of UoC 單元名稱
108800L1	Identify typical dangerous chemicals and understand their characteristics 識別常見危險化學品及理解其特性
108638L1	Handle chemicals 處理化學品
108633L1	Know about the structure and basic operation of vehicles and components 認識汽車和組件的結構及基本應用
108634L1	Employ general vehicle servicing tools and equipment 使用一般汽車維修工具和設備
108635L1	Dismantle, replace and re-assemble general vehicle system components 拆卸、更換和重裝一般汽車系統組件
108801L1	Apply the laws and regulations as well as management system of environmental protection 應用環保法規及管理系統
108636L1	Dismantle and replace various kinds of vehicle electric systems and accessories 拆裝、更換各類汽車電器系統與附件
108641L1	Carry out simple vehicle maintenance work 簡單保養汽車
108647L2	Check and repair engines 檢修引擎
108648L2	Check and repair various types of vehicle fuel supply systems 檢修汽車各類燃料供應系統
108649L2	Check and repair vehicle various types of vehicle braking systems 檢修汽車各類制動系統
108650L2	Check and repair vehicle chassis units and components 檢修汽車底盤系統及其配件
108645L2	Use special tools and equipments for vehicle servicing 使用汽車維修特別工具和設備
108646L2	Check, repair and replace tyres 檢修及更換輪胎
108671L2	Inspect vehicles for regulations compliance 檢測汽車組件不符法規的缺陷
108651L2	Check and repair vehicle battery, charging and starting systems 檢修汽車電池、充電系統及起動系統
108652L2	Check and repair vehicle lighting and signalling systems as well as the meters and indicating systems 檢修汽車照明、訊號系統及各儀錶與指示系統
108653L2	Check and repair vehicle wiper, electric door and power window systems 檢修汽車水撥系統及電動門窗系統

Units of Competency**能力單元****Vehicle Mechanic (Mechanical and Electrical) (QF Level 2)****車輛維修技工〔機械及電氣〕〔資歷架構2級〕**

Code of UoC 單元編號	Name of UoC 單元名稱
108654L2	Check and repair vehicle anti-theft, audio and video systems 檢修汽車防盜、音響及視訊系統
108655L2	Check and repair vehicle electronic control systems and devices 檢修汽車電子控制系統及設備
108670L2	Use specialised instruments and equipment for vehicle inspection 應用汽車檢測專用儀器和設備
108656L2	Check and repair vehicle air cooling and air-conditioning systems 檢修汽車冷氣及空調系統
108793L2	Attend to customers 接待顧客
108783L1	Jot down the procedure of housekeeping in workshop 筆錄有關整理工作場所的程序
108802L2	Carry out the operation guidelines on occupational safety and health 執行職安健作業指引
108813L2	Maintain good working relationships with colleagues 能與同事維繫良好工作關係
108814L3	Conduct demonstration of technical skills 進行技術示範

Units of Competency

能力單元

Vehicle Mechanic (Body Repair and Paint) (QF Level 2)

車輛維修技工〔車身維修及噴塗〕〔資歷架構 2 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108634L1	Employ general vehicle servicing tools and equipment 使用一般汽車維修工具和設備
108635L1	Dismantle, replace and re-assemble general vehicle system components 拆卸、更換和重裝一般汽車系統組件
108637L1	Replace metallic panels and accessories of vehicle body 更換車身金屬板及配件
108800L1	Identify typical dangerous chemicals and understand their characteristics 識別常見危險化學品及理解其特性
108633L1	Know about the structure and basic operation of vehicles and components 認識汽車和組件的結構及基本應用
108801L1	Apply the laws and regulations as well as management system of environmental protection 應用環保法規及管理系統
108638L1	Handle chemicals 處理化學品
108639L1	Store paints 貯存油漆
108640L1	Wax vehicle body 運用車身打蠟技術
108643L2	Use general welding equipment 使用一般焊接設備
108644L2	Vehicle body welding 車身焊接
108657L2	Dismantle and install the windows and doors as well as their components 拆裝門窗及組件
108658L2	Check and repair front and rear windscreens 檢修前後擋風玻璃
108659L2	Check and repair vehicle seats and interior fittings 檢修座位及內部裝置
108661L2	Check and mend the metallic panels of vehicle body 檢查及修補車身金屬板
108662L2	Measure vehicle body and chassis 量度車身和底盤

Units of Competency

能力單元

Vehicle Mechanic (Body Repair and Paint) (QF Level 2)

車輛維修技工〔車身維修及噴塗〕〔資歷架構 2 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108710L3	Rectify large-scale structural damages 修正大型結構性的損毀
108669L2	Carry out car detailing work 護理車身及車廂
108660L2	Check and mend the glass fibre panels of vehicle body 檢查及修補車身玻璃纖維板
108672L2	Motor vehicle body mechanical fastening operations 進行汽車車身機械繫穩作業
108663L2	Use and maintain general painting equipment 使用及維護一般噴塗設備
108664L2	Remove paint and process surface treatment on metallic panel 去除舊漆膜及金屬表面處理
108665L2	Carry out body filling and sanding 進行填灰及研磨工序
108666L2	Carry out painting process 進行噴塗工序
108667L2	Carry out body masking procedure 進行車身貼紙工序
108668L2	Mix paints 調配漆油
108673L2	Working with Plastic Components in the Motor Vehicle Body(Painting) 進行汽車車身塑料配件作業(噴塗)
108709L3	Measure vehicle body/chassis with specialised electronic instruments 應用電子儀器量度車身/底盤
108713L3	Remedy paint defects (spot painting) 修補面漆
108712L3	Master the techniques of blending 掌握駁口噴塗處理技術
108717L3	Establish Defects on Motor Vehicles Body Paint Work 界定汽車車漆的缺失
108793L2	Attend to customers 接待顧客

Units of Competency**能力單元****Vehicle Mechanic (Body Repair and Paint) (QF Level 2)****車輛維修技工〔車身維修及噴塗〕〔資歷架構 2 級〕**

Code of UoC 單元編號	Name of UoC 單元名稱
108783L1	Jot down the procedure of housekeeping in workshop 筆錄有關整理工作場所的程序
108802L2	Carry out the operation guidelines on occupational safety and health 執行職安健作業指引
108813L2	Maintain good working relationships with colleagues 能與同事維繫良好工作關係
108814L3	Conduct demonstration of technical skills 進行技術示範

Units of Competency

能力單元

Vehicle Mechanic (Motorcycle Repair and Diagnostics) (QF Level 2)

車輛維修技工〔電單車維修及診斷〕〔資歷架構 2 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108800L1	Identify typical dangerous chemicals and understand their characteristics 識別常見危險化學品及理解其特性
108634L1	Employ general vehicle servicing tools and equipment 使用一般汽車維修工具和設備
108801L1	Apply the laws and regulations as well as management system of environmental protection 應用環保法規及管理系統
108642L1	Know about the structure and basic operation of motorcycle and components 認識電單車和組件的結構、功能及基本應用
108674L2	Carry out Routine Motor Motorcycle Maintenance 進行定期電單車保養
108675L2	Carry Out Motorcycle Pre-delivery Preparation and Inspections 進行電單車交車準備及檢查
108675L2	Remove and Replace Motorcycle Engine Power-train Units and Components 拆卸更換電單車發動機動力傳動裝置及部件
108677L2	Remove and replace motorcycle electrical units and components 拆卸、更換電單車電器裝置及部件
108678L2	Remove and replace motorcycle chassis units and components 拆卸、更換電單車底盤裝置及部件
108679L2	Remove and replace motorcycle driveline units and components 拆卸、更換電單車傳動裝置及部件
108680L2	Remove and fit non-welded, non-structural motorcycle body panel 拆卸及裝配非焊接及非結構性電單車車身配件
108681L2	Inspect, repair and replace motorcycle tyres 檢查、修理及更換電單車輪胎
108682L2	Overhaul Motorcycle Mechanical Units 大修電單車機械裝置
108718L3	Diagnose and Rectify Motorcycle Engine and Component Faults 故障診斷及修正電單車發動機及其配件
108719L3	Diagnose and Rectify Motorcycle Chassis System Faults 故障診斷及修正電單車底盤系統
108720L3	Diagnose and Rectify Motorcycle Transmission and Driveline System Faults 故障診斷及修正電單車變速箱及傳動系統
108721L3	Diagnose and Rectify Motorcycle Electrical System Faults 故障診斷及修正電單車電氣系統

Units of Competency**能力單元****Vehicle Mechanic (Motorcycle Repair and Diagnostics) (QF Level 2)****車輛維修技工〔電單車維修及診斷〕〔資歷架構 2 級〕**

Code of UoC 單元編號	Name of UoC 單元名稱
108793L2	Attend to customers 接待顧客
108783L1	Jot down the procedure of housekeeping in workshop 筆錄有關整理工作場所的程序
108802L2	Carry out the operation guidelines on occupational safety and health 執行職安健作業指引
108813L2	Maintain good working relationships with colleagues 能與同事維繫良好工作關係
108814L3	Conduct demonstration of technical skills 進行技術示範

Units of Competency
能力單元
Vehicle Mechanic (Commerical Vehicles) (QF Level 2)
車輛維修技工〔商用車維修〕〔資歷架構 2 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108800L1	Identify typical dangerous chemicals and understand their characteristics 識別常見危險化學品及理解其特性
108638L1	Handle chemicals 處理化學品
108633L1	Know about the structure and basic operation of vehicles and components 認識汽車和組件的結構及基本應用
108634L1	Employ general vehicle servicing tools and equipment 使用一般汽車維修工具和設備
108635L1	Dismantle, replace and re-assemble general vehicle system components 拆卸、更換和重裝一般汽車系統組件
108801L1	Apply the laws and regulations as well as management system of environmental protection 應用環保法規及管理系統
108636L1	Dismantle and replace various kinds of vehicle electric systems and accessories 拆裝、更換各類汽車電器系統與附件
108641L1	Carry out simple vehicle maintenance work 簡單保養汽車
108670L2	Use specialised instruments and equipment for vehicle inspection 應用汽車檢測專用儀器和設備
108671L2	Inspect vehicles for regulations compliance 檢測汽車組件不符法規的缺陷
108683L2	Carry out routine commercial motor vehicle maintenance 進行定期商用汽車保養
108684L2	Carry out pre-delivery preparation and inspection of commercial motor vehicle 進行商用汽車交車準備及檢查
108685L2	Remove and replace commercial motor vehicle engine units and components 拆卸、更換商用汽車發動機裝置及部件
108686L2	Remove and replace commercial motor vehicle electrical auxiliary units and components 拆卸和更換商用汽車電器輔助裝置及部件
108687L2	Remove and replace commercial motor vehicle chassis units and components 拆卸和更換商用汽車底盤裝置及部件
108793L2	Attend to customers 接待顧客
108783L1	Jot down the procedure of housekeeping in workshop 筆錄有關整理工作場所的程序
108802L2	Carry out the operation guidelines on occupational safety and health 執行職安健作業指引

Units of Competency

能力單元

Vehicle Mechanic (Commerical Vehicles) (QF Level 2)

車輛維修技工〔商用車維修〕〔資歷架構 2 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108813L2	Maintain good working relationships with colleagues 能與同事維繫良好工作關係
108814L3	Conduct demonstration of technical skills 進行技術示範

Units of Competency
能力單元
Vehicle Mechanic (Electric Vehicles) (QF Level 2)
車輛維修技工〔電動車〕〔資歷架構 2 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108800L1	Identify typical dangerous chemicals and understand their characteristics 識別常見危險化學品及理解其特性
108638L1	Handle chemicals 處理化學品
108633L1	Know about the structure and basic operation of vehicles and components 認識汽車和組件的結構及基本應用
108634L1	Employ general vehicle servicing tools and equipment 使用一般汽車維修工具和設備
108635L1	Dismantle, replace and re-assemble general vehicle system components 拆卸、更換和重裝一般汽車系統組件
108801L1	Apply the laws and regulations as well as management system of environmental protection 應用環保法規及管理系統
108636L1	Dismantle and replace various kinds of vehicle electric systems and accessories 拆裝、更換各類汽車電器系統與附件
108641L1	Carry out simple vehicle maintenance work 簡單保養汽車
108688L2	Non-high energy electrical system related operation on electric and hybrid vehicles 執行電動車及混合動力汽車非高壓電系統相關工作
108689L2	Carry out work on broken down and damaged electric and hybrid vehicles 執行電動車及混合動力汽車機械故障及損壞檢修工作
108690L2	Isolate and reinstate electric system of electric and hybrid vehicle 隔離及恢復電動及混合動力汽車載電系統
108691L2	Service and repair non-live electric and hybrid vehicle systems 維護及修理電動及混合動力汽車非帶電系統
108692L2	Dismantle and repair electric and hybrid vehicle traction motors, electrical control and management systems 拆裝及維修電動及混合動力汽車的牽引電動機、電能控制及管理系統
108693L2	Dismantle and repair electric and hybrid vehicle air-conditioning, cooling and power steering systems 拆裝及維修電動及混合動力汽車的空調、冷卻及動力轉向系統
108694L2	Dismantle and repair electric and hybrid vehicle WiFi, General Pocket Radio Service (GPRS) and various sensors for vehicle control 拆裝及維修電動及混合動力汽車的無線上網 (WiFi)、通用封包無線電服務 (General Pocket Radio service-GPRS) 及各種車輛感應器

Units of Competency
能力單元
Vehicle Mechanic (Electric Vehicles) (QF Level 2)
車輛維修技工〔電動車〕〔資歷架構 2 級〕

108670L2	Use specialised instruments and equipment for vehicle inspection 應用汽車檢測專用儀器和設備
108671L2	Inspect vehicles for regulations compliance 檢測汽車組件不符法規的缺陷
108725L3	Diagnose, test and repair electric and hybrid vehicle high voltage batteries 診斷、試驗及修維電動及混合動力汽車高壓電池
108699L3	Conduct fault diagnosis on electric and hybrid vehicles 診斷電動及混合動力汽車故障
108793L2	Attend to customers 接待顧客
108783L1	Jot down the procedure of housekeeping in workshop 筆錄有關整理工作場所的程序
108802L2	Carry out the operation guidelines on occupational safety and health 執行職安健作業指引
108813L2	Maintain good working relationships with colleagues 能與同事維繫良好工作關係
108814L3	Conduct demonstration of technical skills 進行技術示範

Units of Competency

能力單元

Vehicle Body Building Mechanic (Commercial Vehicles) (QF Level 2)

汽車車身建造技工 (商用車輛) [資歷架構 2 級]

Code of UoC 單元編號	Name of UoC 單元名稱
108800L1	Identify typical dangerous chemicals and understand their characteristics 識別常見危險化學品及理解其特性
108633L1	Know about the structure and basic operation of vehicles and components 認識汽車和組件的結構及基本應用
108801L1	Apply the laws and regulations as well as management system of environmental protection 應用環保法規及管理系統
108757L1	Use general materials and tools for vehicle body assembling 使用車身裝嵌的一般物料及工具
108643L2	Use general welding equipment 使用一般焊接設備
108644L2	Vehicle body welding 車身焊接
108758L2	Apply basic vehicle body building techniques 運用基本車身組裝技術
108759L2	Build the body frame 組裝車身框架
108760L2	Assemble the floor, windows, passageways, stairs and doors of vehicle 組裝地板、車窗、通道、梯級及車門
108761L2	Assemble seats and interior fittings 組裝座位及內部裝置
108762L2	Assemble air-conditioning systems 組裝空調系統
108763L2	Assemble lighting and indicating systems 組裝照明及顯示系統
108764L2	Produce vehicle body building fixtures 製作車身夾具
108765L2	Assemble vehicle body panels 組裝車身板
108672L2	Motor vehicle body mechanical fastening operations 進行汽車車身部件繫穩作業
108673L2	Spray paint on plastic components of vehicle body 在汽車車身塑料配件進行噴塗工序
108803L3	Handle typical dangerous chemicals, pollutants and waste 處理常見危險化學品、污染物及廢物
108695L3	Monitor and maintain instruments and equipment 監察及保養車身維修儀器及設備
108769L3	Determine the legality of the use of vehicles under respective laws and regulations (traffic, environmental protection and road safety) 判斷汽車在有關法規（交通、環保及道路安全）下使用的合法性

Units of Competency**能力單元****Vehicle Body Building Mechanic (Commercial Vehicles) (QF Level 2)****汽車車身建造技工 (商用車輛) [資歷架構 2 級]**

Code of UoC 單元編號	Name of UoC 單元名稱
108793L2	Attend to customers 接待顧客
108783L1	Jot down the procedure of housekeeping in workshop 筆錄有關整理工作場所的程序
108802L2	Carry out the operation guidelines on occupational safety and health 執行職安健作業指引
108813L2	Maintain good working relationships with colleagues 能與同事維繫良好工作關係
108814L3	Conduct demonstration of technical skills 進行技術示範

Units of Competency
能力單元
Service Advisor (QF Level 3)
汽車維修顧問〔資歷架構 3 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108590L3	Implement market research plan 執行市場調查計劃
108747L3	Offer servicing advice and consulting services 提供維修建議及諮詢服務
108794L3	Manage customer relationship 管理顧客關係
108803L3	Handle typical dangerous chemicals, pollutants and waste 處理常見危險化學品、污染物及廢物
108749L3	Provide services on the repair quotation of insurance/claims for compensation 提供保險估價/索償服務
108750L3	Promote repair/maintenance services and provide advice on vehicle services 推廣維修銷售及顧問服務
108753L3	Provide services on value assessment and trade-in of vehicles 提供汽車估值及折舊貼換交易服務
108701L3	Test drive and report the condition of vehicles 測試和報告車輛行駛狀況
108755L4	Evaluate the repair cost for accidental damages of vehicles 評估車輛意外損毀的維修費用
108754L4	Verify cases of vehicle insurance claims 核實汽車保險索償個案

Units of Competency**能力單元****Technician (Testing & Diagnostics) (QF Level 3)**
汽車維修技術員〔測試及診斷〕〔資歷架構3級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108696L3	Conduct fault diagnosis on various vehicle fuel supply systems 診斷汽車各類燃料供應系統故障
108697L3	Conduct fault diagnosis on vehicle engine units and components 汽車引擎及其附屬系統的故障診斷
108698L3	Conduct fault diagnosis on vehicle chassis units and components 汽車底盤系統及其配件故障診斷
108700L3	Conduct fault diagnosis on vehicle transmission systems 診斷汽車傳動系統故障
108703L3	Conduct fault diagnosis on vehicle battery, charging and starting systems 診斷汽車蓄電池、充電系統及起動系統故障
108704L3	Conduct fault diagnosis on vehicle lighting systems, signalling systems, meter instruments and displaying systems 診斷汽車照明、訊號系統及各儀錶與指示系統故障
108726L3	Provide technical support and advice to colleagues in vehicle environments 對同事提供技術支援及建議
108727L3	Liaise with vehicle and product manufacturers on technical matters 與產品製造商作技術上的聯繫
108728L3	Conduct diagnostic consultations with customers in vehicle environments 為顧客提供診斷上的諮詢
108729L3	Check and repair vehicle intelligent control systems and devices 檢修汽車智能控制系統及設備
108725L3	Diagnose, test and repair electric and hybrid vehicle high voltage batteries 診斷、試驗及維修電動及混合動力汽車高壓電池
108699L3	Conduct fault diagnosis on electric and hybrid vehicles 診斷電動及混合動力汽車故障

Units of Competency**能力單元****Technician (Testing & Diagnostics) (QF Level 3)**
汽車維修技術員〔測試及診斷〕〔資歷架構3級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108733L4	Master complicated techniques of power systems 掌握動力系統複雜技術
108734L4	Master the complicated techniques of transmission systems 掌握傳動系統複雜技術
108735L4	Master the complicated techniques of chassis units and components 掌握底盤穩定控制的複雜技術
108736L4	Master the complicated techniques of steering 掌握轉向的複雜技術
108737L4	Master the complicated techniques of suspension systems 掌握懸掛系統的複雜技術
108738L4	Master the complicated techniques of electrical and electronic systems 掌握電器及電子系統複雜技術
108740L4	Conduct quality check on vehicle examination 審核汽車檢驗品質

Units of Competency
能力單元
Vehicle Damage Assessor (QF Level 4)
意外損毀評估員〔資歷架構 4 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108633L1	Know about the structure and basic operation of vehicles and components 認識汽車和組件的結構及基本應用
108769L3	Judge the legitimacy of vehicle usage under laws and regulations (traffic, environmental protection and road safety) 判斷汽車在有關法規（交通、環保及道路安全）下使用的合法性
108753L3	Provide services on value assessment and trade-in of vehicles 提供汽車估值及折舊貼換交易服務
108754L4	Verify cases of vehicle insurance claims 核實汽車保險索償個案
108755L4	Evaluate the repair cost for accidental damages of vehicles 評估車輛意外損毀的維修費用
108756L4	Coordinate insurance claims of vehicle damages 協調汽車損毀保險索償

Units of Competency
能力單元

Service Executive (Workshop Manager, Supervisor, Foreman) (QF Level 4)
維修主任 (工場經理, 監工, 領班) [資歷架構 4 級]

Code of UoC 單元編號	Name of UoC 單元名稱
108748L3	Handle after-sales warranty claim 處理售後保用服務
108796L4	Handle customers' complaints 處理顧客投訴
108751L4	Handle complicated technical servicing problems 處理複雜維修技術問題
108795L4	Manage customer services 管理顧客服務
108695L3	Monitor and maintain instruments and equipment 監察及保養儀器及設備
108714L3	Examine vehicle of its roadworthiness 驗檢車輛行車安全標準
108806L4	Monitor occupational safety and health systems 監察職安健管理系統
108807L4	Monitor and manage environmental protection operation 監察環保法規及管理
108808L4	Formulate management procedure for dangerous chemicals, pollutants and waste 制定危險化學品、污染物及廢物管理程序
108730L4	Formulate rules of safety operation for vehicle servicing work 制定汽車維修工作安全守則
108731L4	Conduct risk assessment on vehicle servicing work 為汽車維修工序進行風險評估
108732L4	Monitor, arrange and coordinate the progress and workflow of the operation in the workshop 監察安排及協調工場運作進度及流程
108740L4	Conduct quality check on vehicle examination 審核汽車檢驗品質

Units of Competency
能力單元
Service Manager (QF Level 5)
維修經理〔資歷架構5級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108568L4	Appraise staff performance and professional knowledge 評核員工工作表現及專業知識
108569L4	Draw up staff training programme 編制員工培訓計劃
108570L4	Arrange filling of job vacancies 安排填補職位空缺
108770L4	Promote the culture of quality management in elementary level staffs 推廣基層品質管理文化
108771L4	Coordinate and implement quality management systems 協調落實品質管理系統
108772L4	Monitor the quality of servicing work 監控維修工序質素
108773L4	Conduct preliminary analysis on procedural deficiencies 初步分析工序失誤
108809L5	Establish occupational safety and health management system 制定職安健管理系統
108810L5	Establish environmental protection management system 制定環保理系統
108563L5	Assess the risks of accident at work within the workplace 評估營運場所工作意外的風險
108791L5	Establish equipment management system 制定設備管理系統
108792L5	Establish management system for servicing workshops 制定維修工場的管理系統
108562L5	Compile financial reports applicable to the automotive industry 制定財務管理方案
108564L5	Formulate a comprehensive scheme for organisational operation management 制定機構營運管理整體計劃方案
108571L5	Assess human resources market and establish remuneration system 評估人力市場及確立薪酬制度

Units of Competency
能力單元
Service Manager (QF Level 5)
維修經理〔資歷架構 5 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108565L6	Formulate risk management plans 制定風險管理方案
108798L6	Formulate customer service management strategy 制定顧客服務管理策略
108799L6	Formulate customer relation management strategy 制定顧客關係管理策略

Units of Competency**能力單元****Parts Salesman (QF Level 3)**

零件銷售員〔資歷架構3級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108793L2	Attend to customers 接待顧客
108601L2	Accept, deliver and transport parts and accessories 交收及運送零部件
108602L2	Identify/confirm vehicle parts and accessories 辨識/確定零部件
108604L2	Sell vehicle parts online 在線銷售汽車零部件
108590L3	Implement market research plan 執行市場調查計劃
108606L3	Carry out the procedure for return of purchase 執行退貨程序
108607L3	Order parts and accessories 訂購零配件
108794L3	Manage customer relationship 管理顧客關係
108591L3	Implement marketing plans 執行市場推廣計劃
108620L3	Carry out purchasing procedures for auto parts and accessories (for designated motor agents) 執行零部件採購程序 (汽車代理商的零部件採購)
108621L3	Carry out the purchasing procedure for auto parts and accessories (for non designated motor agents) 執行零部件採購程序 (非汽車代理商的零部件採購)
108603L2	Participate in motor vehicle parts stocktaking activities 執行汽車零部件盤點工作
108628L3	Manage warehouse facilities 管理倉庫設施
108629L3	Fulfil the requirements on environmental protection (parts management) 執行環保作業要求(零部件管理)
108605L3	Implement inventory control of vehicle parts 執行汽車零部件庫存監控工作

Units of Competency
能力單元
Parts Executive (QF Level 4)
零件銷售主任〔資歷架構 4 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108606L3	Carry out the procedure for return of purchase 執行退貨程序
108611L3	Store vehicles, auto parts and accessories 儲存汽車及零部件
108612L3	Condemn the inventorial stock 處理註銷庫存品
108613L4	Establish the procedures for the receipt, dispatch and delivery of parts and accessories 制定零配件交收及運送程序
108614L4	Monitor the delivery process of parts and accessories 監控零部件運送流程
108630L4	Establish the procedure for the storage and retrieval of parts and accessories 制定零部件存取程序
108615L4	Manage the documentary system for auto parts and accessories inventory 管理汽車零部件庫存文件系統
108622L4	Select suppliers of parts and accessories 甄選零部件供應商
108623L4	Purchase renovated parts and accessories 採購翻新零部件
108624L4	Establish methods to assess the applicability of non OEM parts and accessories 制定非原廠零部件適用性的評估方法
108625L4	Conduct green procurement 執行環保採購
108559L4	Establish the handling procedures for various kinds of payment methods 制定各種付款形式的處理程序
108796L4	Handle customers' complaints 處理顧客投訴
108608L4	Establish and manage the documentary system for the sale of auto parts and accessories 制定及管理汽車零部件銷售文件系統系統

Units of Competency
能力單元
Parts Manager (QF Level 5)
零件銷售經理〔資歷架構 5 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108806L4	Monitor occupational safety and health systems 監察職安健管理系統
108807L4	Monitor and manage environmental protection operations 監察環保法規及管理
108808L4	Formulate management procedure for dangerous chemicals, pollutants and waste 制定危險化學品、污染物及廢物管理程序
108613L4	Establish the procedures for the receipt, dispatch and delivery of parts and accessories 制定零部件交收及運送程序
108630L4	Establish the procedure for the storage and retrieval of parts and accessories 制定零部件存取程序
108568L4	Appraise staff performance and professional knowledge 評核員工工作表現及專業知識
108569L4	Draw up staff training programme 編制員工培訓計劃
108570L4	Arrange filling of job vacancies 安排填補職位空缺
108609L5	Establish a procedure for the return of parts and accessories 制定零部件退貨程序
108616L5	Establish the monitoring system for the delivery of parts and accessories 制定零部件運送監控系統
108593L5	Formulate market research plans 制定市場調查計劃
108626L5	Formulate purchasing strategy of parts and accessories 制定零部件採購策略
108631L5	Design the storage zone for parts and accessories 設計零部件儲存區
108617L5	Establish the procedure for stock condemnation 制定庫存品註銷程序

Units of Competency
能力單元
Parts Manager (QF Level 5)
零件銷售經理〔資歷架構 5 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108618L5	Formulate inventory level policy 制定庫存量的政策
108619L5	Establish guidelines to protect the stock 制定保護存貨的指引
108562L5	Compile financial reports applicable to the automotive industry 制定財務管理方案
108564L5	Formulate a comprehensive scheme for organisational operation management 制定機構營運管理整體計劃方案
108610L6	Formulate sales strategy for parts and accessories 制定零部件銷售策略
108632L6	Formulate management strategy for auto parts and accessories warehouse 制定汽車零部件倉庫管理策略

Units of Competency

能力單元

Vehicle Salesman (QF Level 3)

汽車銷售員〔資歷架構 3 級〕

Code of UoC 單元編號	Name of UoC 單元名稱
108793L2	Attend to customers 接待顧客
108573L2	Perform selling of vehicles 銷售汽車
108572L1	Introduce to customers the characteristics of different types of vehicles and their accessories 向顧客介紹不同類型汽車的特性及附件
108576L2	Perform cold calls to potential/target customers to diversify sales opportunities 對潛在/目標客戶進行推銷令銷售機會增加
108794L3	Manage customer relationship 管理顧客關係
108575L2	Provide supporting services to vehicle selling 提供銷售支援
108580L3	Arrange financial loan for vehicles 安排汽車財務信貸
108581L3	Arrange for vehicle insurance 安排汽車保險
108597L2	Arrange for acceptance, delivery and transportation of vehicles 安排交收及運送汽車
108578L3	Arrange vehicle testing for customers 安排顧客測試車輛
108579L3	Implement sales plan for vehicle products 執行汽車產品營銷計劃
108753L3	Provide services on value assessment and trade-in of vehicles 提供汽車估值及折舊貼換交易服務
108582L3	Arrange receipt, and delivery procedures of imported new vehicles 安排新車交收程序
108747L3	Offer servicing advice and consulting services 提供維修建議及諮詢服務
108769L3	Determine the legality of the use of vehicles under respective laws and regulations (traffic, environmental protection and road safety) 判斷汽車在有關法規（交通、環保及道路安全）下使用的合法性

Units of Competency**能力單元****Vehicle Sales Executive (QF Level 4)****汽車銷售主任〔資歷架構 4 級〕**

Code of UoC 單元編號	Name of UoC 單元名稱
108590L3	Implement market research plan 執行市場調查計劃
108591L3	Implement marketing plans 執行市場推廣計劃
108600L4	Display vehicles 展示/陳列汽車
108795L4	Manage customer services 管理顧客服務
108796L4	Handle customers' complaints 處理顧客投訴
108592L4	Formulate marketing plans 制定市場推廣計劃
108583L4	Purchase used vehicles 採購舊車
108584L4	Purchase new vehicles 採購新車
108599L4	Establish procedures for the receipt, dispatch and delivery of vehicles 制定車輛交收及運送程序

Units of Competency 能力單元 Sales Manager (QF Level 5) 銷售經理〔資歷架構 5 級〕	
Code of UoC 單元編號	Name of UoC 單元名稱
108568L4	Appraise staff performance and professional knowledge 評核員工工作表現及專業知識
108569L4	Draw up staff training programme 編制員工培訓計劃
108570L4	Arrange filling of job vacancies 安排填補職位空缺
108770L4	Promote the culture of quality management in elementary level staffs 推廣基層品質管理文化
108771L4	Coordinate and implement quality management systems 協調落實品質管理系統
108772L4	Monitor the quality of servicing work 監控維修工序質素
108773L4	Conduct preliminary analysis on procedural deficiencies 初步分析工序失誤
108593L5	Formulate market research plans 制定市場調查計劃
108797L5	Formulate customer services plan 制定顧客服務計劃
108594L5	Write promotion script for the marketing of vehicle products 撰寫汽車產品市場推廣文稿
108585L5	Formulate sales estimates of vehicle products 制定汽車產品銷售預算
108586L5	Formulate marketing plans for vehicle products 制定汽車產品營銷計劃
108562L5	Compile financial reports applicable to the automotive industry 制定財務管理方案
108564L5	Formulate a comprehensive scheme for organisational operation management 制定機構營運管理整體計劃方案

Units of Competency 能力單元 Sales Manager (QF Level 5) 銷售經理〔資歷架構 5 級〕	
Code of UoC 單元編號	Name of UoC 單元名稱
108798L6	Formulate customer service management strategy 制定顧客服務管理策略
108799L6	Formulate customer relation management strategy 制定顧客關係管理策略
108595L6	Formulate marketing strategy 制定市場推廣策略
108588L6	Formulate management strategy for salespersons of vehicle products 制定汽車產品銷售人員管理策略