



مجلس أبوظبي للجودة والمطابقة
ABU DHABI QUALITY & CONFORMITY COUNCIL

ABU DHABI OCCUPATIONAL TERMS

Automotive Technician Level 4 - Mechanic



31 JANUARY 2017
ADOT 66/2017
FIRST EDITION



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Amendment Page

This Amendment Page is updated and issued with each set of revised and/or new pages of the document to help ensure that each copy of this Abu Dhabi Occupation Term (ADOT) contains a complete record of amendments.

This Occupational Term is a live document which can be amended when necessary. QCC operates an Occupational Standards Working Group that has prepared this document, and can review stakeholder comments in order to review and amend this document; ultimately resulting in an issuance of an updated version, if necessary.

Log of Amendments						
Amendment			Discard		Insert	
No.	Date	*Sections Changed	Page(s)	Issue No.	Page(s)	Issue No.
1	xxx	Document launched				



About the Abu Dhabi Quality & Conformity Council

The Abu Dhabi Quality and Conformity Council (QCC) was established by law No. 3 of 2009, issued by His Highness Sheikh Khalifa Bin Zayed Al Nahyan, President of the UAE. QCC is responsible for the development of Abu Dhabi Emirate's Quality Infrastructure, which enables industry and regulators to ensure that products, systems and personnel can be tested and certified to UAE and International Standards.

Products and services certified by QCC receive the Abu Dhabi Trustmark. The Trustmark is designed to communicate that a product or system conforms to various safety and performance standards that are set by Abu Dhabi regulators.

Foreword

The QCC Car Workshops Personnel Occupational Terms Working Group was initiated in January 2017 in order to establish occupational terms for workers in the car workshops sector in Abu Dhabi to elevate the quality of services provided in the sector and to promote the productivity of personnel.

The occupational terms are professional standards that specialist personnel must meet in order to perform the jobs they are assigned to produce quality outcomes. The Government of Abu Dhabi, under the leadership of His Highness Sheikh Khalifa bin Zayed Al Nahyan, President of the UAE and Ruler of Abu Dhabi, and His Highness Sheikh Mohamed bin Zayed Al Nahyan, Crown Prince of Abu Dhabi, Deputy Supreme Commander of the UAE Armed Forces and Chairman of the Abu Dhabi Executive Council, has invested heavily, and at high levels of professionalism and safety, in the Infrastructure of Abu Dhabi. Therefore, it is crucial and obligatory to encourage the presence of skilled workmanship to maintain the quality infrastructure value in the Emirate of Abu Dhabi in particular and the United Arab Emirates in general.



Acknowledgments

The QCC would like to thank the members of the working group listed below:

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34	Mohamed Al Mosaabi	Electra Auto
35	Syed Naveed	Bin Hamooda Auto
36	Rodyney Ghosn	Al Tayer Group



Occupational Terms

No.	Field	Details												
1.	Occupation (Standard Unit)	Automotive Technician Level 4 - Mechanic												
2.	Description	This standard specifies the outcome required to perform general repair and routine servicing and maintenance (including mechanical components) of vehicles												
3.	Unit type	<input type="checkbox"/> Knowledge and Skills OR <input checked="" type="checkbox"/> Application												
4.	Elements	<table border="1"> <thead> <tr> <th>No.</th> <th>Element</th> </tr> </thead> <tbody> <tr> <td>E1</td> <td><i>Assist in performing diagnosis of vehicle for repair requirements</i></td> </tr> <tr> <td>E2</td> <td><i>Carry out routine service and minor repairs of mechanical and electrical components</i></td> </tr> <tr> <td>E3</td> <td><i>Plan and organize work to meet expected outcomes</i></td> </tr> <tr> <td>E4</td> <td><i>Work effectively in a team</i></td> </tr> <tr> <td>E5</td> <td><i>Maintain a healthy, safe and secure working environment</i></td> </tr> </tbody> </table>	No.	Element	E1	<i>Assist in performing diagnosis of vehicle for repair requirements</i>	E2	<i>Carry out routine service and minor repairs of mechanical and electrical components</i>	E3	<i>Plan and organize work to meet expected outcomes</i>	E4	<i>Work effectively in a team</i>	E5	<i>Maintain a healthy, safe and secure working environment</i>
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		E4	<i>Work effectively in a team</i>											
E5	<i>Maintain a healthy, safe and secure working environment</i>													
5.	QF Emirates level	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10												
6.	Function	<input type="checkbox"/> Policy and strategy QF 9-10 <input type="checkbox"/> Managing QF 7-8 <input type="checkbox"/> Specifying QF 6-7 <input type="checkbox"/> Controlling QF 6 <input type="checkbox"/> Maintaining capability QF 4-6 <input checked="" type="checkbox"/> Performing/carry out QF 1-4												
7.	Entry information and prerequisites	High School Diploma/Industrial Training/Diploma (mechanical, electrical, automobile) Engineering												



No.	Field	Details	
8.	Grading	Application unit: <i>Competent/Not Yet Competent</i>	
9.	Industry sector	Automotive	
10.	Developed by	Government Entities	Abu Dhabi Quality & Conformity Council, Zones Corp, Abu Dhabi Department of Economic Development, Abu Dhabi Urban Planning Council, Abu Dhabi Municipality, OSHAD, Center of Waste Management, Abu Dhabi Chamber, Health Authority Abu Dhabi, ACTVET, National Qualification Authority, SAAED for Trafficking Systems and the Ministry of Human Resources & Emiratisation
		Private Sector	Al Tayer Group, Emirates Motor Company, Ali & Sons Group, Al Futtaim Automobile and Prestige Car Services
11.	Endorsement date	11 April 2017	
12.	Frequency of review	Annually	
13.	Version No.	1	
14.	ISCO-88	7231 Motor Vehicle Mechanics & Repairers	

Terms & Conditions

Term	Description
Dealership	A business established or operated under an authorisation to sell or distribute an automotive company's goods and services
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organization
Performance Criteria	Performance Criteria are statements that together specify the standard of performance required when carrying out a task
OEM	Original Equipment Manufacturer
Vehicle	Mode of personal transport including 2-wheelers, 3-wheelers and 4- wheelers



Performance Criteria

Element	1. Assist in performing (mechanical) diagnosis of vehicle for repair requirements
PC 1.1	Understand the auto component manufacturer specifications related to the various components/ components in the vehicle
PC 1.2	Understand the functioning of each system, component and aggregate (including both mechanical and electrical components) of a vehicle
PC 1.3	Follow standard operating procedures for using workshop tools and equipment for fault diagnosis or troubleshoot problem in a vehicle
PC 1.4	Conduct test drives to assist the Senior Technician in finding the fault basis the performance of the vehicle during the test drive
PC 1.5	Review the job card and understand customer complaints
PC 1.6	Follow standard operating procedure set out for diagnosing faults under the supervision of a Senior Technician
PC 1.7	Follow instructions of seniors for specific tasks related to diagnosing faults in the various sub-assemblies and components in a vehicle
PC 1.8	Use checklists and standard OEM operating procedures to understand if the fault is because of improper servicing, or low levels of oils, coolants, grease etc. or poor quality oil/ air filters etc.
PC 1.9	Dismantle and assemble components
PC 1.10	Ensure any malfunctions observed in tools and equipment are reported to the concerned persons
PC 1.11	Ensure any malfunctions or repair requirements observed in vehicles (and beyond own scope of work) are reported to the concerned person
PC 1.12	Understand the various precautions to be taken to avoid damage to the vehicle and its components while working on diagnosis or troubleshooting the vehicle or any faults
PC 1.13	Ensure safe movement and parking of the vehicle in the workshop especially in case some aggregate to be diagnosed had been disassembled
PC 1.14	Ensure that trainings organized by the OEM (or equivalent) from time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes) – including online courses
PC 1.15	Drive a relevant 2/3/4 wheeler vehicle which is an important part of the diagnosis of the type of vehicle that is dealt by the relevant OEM
PC 1.16	Have the ability to use the Engine Component Measurements
PC 1.17	Assist in removal and replacement related work under supervision of Senior Body Technician, i.e: transfers and decals of mechanical units/assemblies



Element	2. Carry out routine service and minor repairs of mechanical components
PC 2.1	Understand the auto component manufacturer specifications related to the various components/ components in the vehicle
PC 2.2	Follow standard operating procedures for using workshop tools and equipment for service and minor aggregate repairs in the vehicle
PC 2.3	Conduct test drives to assess need for repairs, calibration or any other adjustments in the electrical/ mechanical components in the vehicle
PC 2.4	Review the job card and understand work to be carried out
PC 2.5	Ensure OEM recommended procedure and checklist is followed for routine servicing in case of non-routine service or repair, confirm tasks to be carried out with superior
PC 2.6	Calibrate, align and adjust settings, alignment and other routine service and maintenance of various parts and components
PC 2.7	Ensure that for routine maintenance and service, the correct spare parts and appropriate grade of lubricants, coolant, oils and grease required have been obtained
PC 2.8	Ensure all dismantled components (including mechanical and electrical components) are cleaned and conditioned prior to reassembly
PC 2.9	Identify and change components requiring change due to continuous wear and tear including: oil and air filters, wiper blades, belts, brake linings and pads and drive
PC 2.10	Ensure disposal of materials (including waste oil, scrap of failed parts/ components) in accordance with the Emirate's policies
PC 2.11	Understand the various precautions to be taken to avoid damage to the vehicle and its components while working on other components
PC 2.12	Record all service and repairs carried out and ensure completeness of tasks assigned before releasing vehicle for the next procedure
PC 2.13	Ensure all workshop tools, equipment and workstations are adequately maintained by carrying out scheduled checks, calibration and timely repairs where necessary
PC 2.14	Ensure any malfunctions observed in tools and equipment are reported to the concerned persons
PC 2.15	Ensure any other repair requirements observed in the other components/ components systems (like engine, gear box etc.) while repairing/ overhauling of braking systems are reported to supervisor/ service advisor for further inspection by other specialists
PC 2.16	Measure/inspect the machining or any other repair done from an outside source/local machining garages
PC 2.17	Ensure that trainings organized by the OEM from time-to-time are attended and knowledge levels are upgraded (esp. in case of newly launched products, product refreshes)
PC 2.18	Understand the any leaks reason, diagnoses, and how to perform the generic fix



Element	3. Plan and organize work to meet expected outcomes
PC 3.1	Keep immediate work area clean and tidy
PC 3.2	Treat confidential information as per the company's guidelines
PC 3.3	Work in line with company's policies and procedures
PC 3.4	Work within the limits of the job role
PC 3.5	Obtain guidance from appropriate people, where necessary
PC 3.6	Ensure work meets the agreed requirements
PC 3.7	Establish and agree on work requirements with appropriate people
PC 3.8	Manage time, materials and cost effectively
PC 3.9	Use resources in a reasonable manner

Element	4. Work effectively in a team
PC 4.1	Maintain clear communication with colleagues (by all means including face-to-face, telephonic as well as written)
PC 4.2	Work with colleagues to integrate work
PC 4.3	Pass on information to colleagues in line with organizational requirements both through verbal as well as non-verbal means
PC 4.4	Work in ways that show respect for colleagues
PC 4.5	Carry out commitments made to colleagues
PC 4.6	Let colleagues know in good time if cannot carry out commitments, explaining the reasons
PC 4.7	Identify problems in working with colleagues and take the initiative to solve these problems
PC 4.8	Follow the company's policies and procedures for working with colleagues

Element	5. Maintain a healthy, safe and secure working environment
PC 5.1	Comply with the Emirate's current health, safety and security policies and procedures
PC 5.2	Report any identified breaches in health, safety, and security policies and procedures to the designated person/authority
PC 5.3	Coordinate with other resources at the workplace to achieve the healthy, safe and secure environment for all incorporating all government norms esp. for emergency situations like fires, earthquakes etc.
PC 5.4	Identify and correct any hazards like illness, accidents, fires or any other natural calamity safely and within the limits of individual's authority
PC 5.5	Report any hazards outside the individual's authority to the relevant person, and warn other people who may be affected
PC 5.6	Safe handling of basic and simple vehicle systems, functions and standard equipment and instruments
PC 5.7	Identify and recommend opportunities for improving health, safety, and security to the designated person
PC 5.8	Complete all health and safety records



Cont.	
PC 5.9	Understand the safety dress & PPE types and adhere to the proper dress code & PPE requirements in the work area

Knowledge & Understanding

- *To assist in performing (mechanical) diagnosis of a vehicle for repair requirements, the user/individual on the job must know and understand:*
 1. Standard operating procedures of the Organisation/ Dealership for inspection and diagnosis of faults in a vehicle as prescribed by the OEM/ Component Manufacturer
 2. Standard operating procedures recommended by the Dealership/Suppliers/OEM for using tools and equipment for diagnosis or troubleshooting of various components
 3. Standard operating procedures for rectification of errors in information (e.g. rectification of job card, reissue of correct tools and equipment etc. during the diagnosis)
 4. Safety requirements for equipment and components during the diagnosis or troubleshooting the various components for root cause analysis of the fault
 5. Documentation requirements for each procedure carried out as part of roles and responsibilities as specified by OEM/ auto component manufacturer for the diagnosis of troubleshooting the vehicle for faults
 6. Organisational and professional code of ethics and standards of practice
 7. The basic technology used in and functioning of various components and components of the vehicle
 8. The tools used to assess and confirm technical faults that cannot be determined through a visual inspection
 9. The various sources of information available for assessing service and repair requirements of the vehicle
 10. Typical symptoms of common technical faults in a vehicle
 11. The various values and tolerance limits of various components across the mechanical/ electrical components

- *To carry out routine service and minor repairs of mechanical components, the user/individual on the job must know and understand:*
 1. Standard operating procedures of the Organisation/ Dealership for inspection and diagnosis of faults in a vehicle as prescribed by the OEM/ Component Manufacturer
 2. Standard operating procedures recommended by the Dealership/Suppliers/OEM for using tools and equipment for diagnosis or troubleshooting of various components



3. Standard operating procedures for rectification of errors in information (e.g. rectification of job card, reissue of correct tools and equipment etc. during the diagnosis)
 4. Safety requirements for equipment and components during the diagnosis or troubleshooting the various components for root cause analysis of the fault
 5. Documentation requirements for each procedure carried out as part of roles and responsibilities as specified by OEM/ auto component manufacturer for the diagnosis of troubleshooting the vehicle for faults
 6. Organisational and professional code of ethics and standards of practice
 7. Safety, health, environmental policies and regulations for the workplace as well as for Automotive trade in general (e.g. safe practices while working in pits/under vehicles)
 8. The basic technology used in and functioning of various components and components of the vehicle
 9. The tools used to assess deviations from specifications during routine servicing
 10. How to select the right materials for the job such as seals, sealants, fittings, gaskets, joints, fasteners etc.
 11. How to carry out routine maintenance
 12. The various sources of information available for assessing service and repair requirements of the vehicle
 13. Procedures recommended by the OEM and Dealership to be used during routine
 14. servicing
 15. The type and quality of components specified by the OEM for use as replacement parts
 16. The grade of lubricants, oils, coolants and grease as specified by the OEM for use
 17. Typical causes and symptoms of operational faults and failures of a vehicle
 18. Corrective action to be taken for common engine and aggregate system faults and failures
 19. Faults and failures that necessitate replacement of components/ aggregate (including mechanical & electrical assemblies) and other units
 20. How to dispose -off replaced failed components and changed oil, lubricant, grease etc. in accordance with safety, health and environmental policies and regulations
- *To plan and organize work to meet expected outcomes, the user/individual on the job must know and understand:*
1. The company's policies, procedures and priorities for area of work, role and responsibilities in carrying out that work
 2. The limits of responsibilities and when to involve others
 3. Specific work requirements and who these must be agreed with
 4. The importance of having a tidy work area and how to do this
 5. How to prioritize workload according to urgency and importance and the benefits of this



6. The company's policies and procedures for dealing with confidential information and the importance of complying with these
 7. The purpose of keeping others updated with the progress of work
 8. Who to obtain guidance from and the typical circumstances when this may be required
 9. The purpose and value of being flexible and adapting work plans
 10. How to complete tasks accurately by following standard procedures
 11. Technical resources needed for work and how to obtain and use these
 12. Time management Key Performance Indicators for accurate customer invoicing and estimation/quotes
 13. Computer literacy at the minimum level of competencies of email/google search and MS office (Outlook/word/Excel)
- *To work effectively in a team, the user/individual on the job must know and understand:*
1. The company's policies and procedures for working with colleagues, role and responsibilities in relation to this
 2. The importance of effective communication and establishing good working relationships with colleagues
 3. Different methods of communication and the circumstances in which it is appropriate to use these
 4. The importance of creating an environment of trust and mutual respect
 5. The implications of own work on the work and schedule of others
 6. Different types of information that colleagues might need and the importance of providing this information when it is required
 7. The importance of helping colleagues with problems, in order to meet quality and time standards as a team
- *To maintain a health, safe and secure working environment, the user/individual on the job must know and understand:*
1. Legislative requirements and organisation's procedures for health, safety and security and individual's role and responsibilities in relation to this
 2. What is meant by a hazard, including the different types of health and safety hazards that can be found in the workplace
 3. How and when to report hazards
 4. The limits of responsibility for dealing with hazards
 5. The company's emergency procedures for different emergency situations and the importance of following these
 6. The importance of maintaining high standards of health, safety and security
 7. Implications that any non-compliance with health, safety and security may have on individuals and the organisation
 8. Different types of breaches in health, safety and security and how and when to report these



9. Evacuation procedures for workers and visitors
10. How to summon medical assistance and the emergency services, where necessary
11. How to use the health, safety and accident reporting procedures and the importance of these

Other Skills

Writing Skills

- *To be competent, the user/individual on the job needs to:*
 - Record and document the basic details of repairs and maintenance performed on various components/ components
 - Record all diagnostics done by senior technicians as per the prescribed format recommended by the OEM/ auto-component manufacturer
 - Write in at least one language
 - Complete written work with attention to detail

Reading Skills

- *To be competent, the user/individual on the job needs to:*
 1. Read the basic specification of a vehicle or any other component or part
 2. Read work orders, specifications etc. related to the job including instructions mentioned on the job card
 3. Read the service circulars/ sign boards placed in the workshop with respect to the overall process to be followed for service, repair and maintenance of the vehicle
 4. Read any specific safety related guideline

Listening & Speaking Skills

- *To be competent, the user/individual on the job needs to:*
 1. Clearly communicate workplace information and ideas with colleagues (verbal and non- verbal)
 2. Use terms, names, grades, and other nomenclature pertaining to the Automotive trade, tools, specific workshop equipment etc.
 3. Communicate with colleagues and customers to handle verbal enquiries, such as clarifying indicated faults and problems indicated on a job card which would lead to the proper diagnosis of the issue to do an effective root cause analysis
 4. Communicate to the supervisor and service advisor, the results of the test performed and appropriate values to find the root cause of the problem



5. Interact with the customer through Service Advisor/ Supervisor in case any additional work needs to be done on the vehicle which may not have been indicated in the job card and found during the work being carried out as per the job card
6. Understand and promote the brand image with respect to reliability and economy

References

<http://www.ukstandards.org.uk>

www.nsdcindia.org/nos